

Evaluating ESG Disclosure: A Cross-Sectoral Study of Auto Ancillary and Pharma Companies

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Abstract: The study focuses on a comparative analysis of Environmental, Social, and Governance (ESG) disclosure practices between the auto ancillary and pharmaceutical industries in India. With ESG becoming a critical measure of corporate accountability and sustainability, this research evaluates sector-wise disclosure patterns using CRISIL's ESG scores. The auto ancillary sector, while demonstrating consistency in governance practices, shows weaker performance in environmental and social dimensions. In contrast, the pharmaceutical industry displays higher average scores across all three dimensions, particularly in social and governance aspects, though variations exist between firms. This analysis highlights how industry-specific factors shape ESG disclosure priorities and outcomes. The findings reveal that while auto ancillary firms must strengthen environmental and social practices to remain competitive in the sustainability landscape, pharmaceutical companies need to address inconsistencies to achieve sector-wide improvement. The comparative approach underlines the importance of ESG as not merely a compliance tool but as a strategic driver of long-term trust, competitiveness, and value creation. By identifying gaps and strengths across sectors, the study provides insights useful to policymakers, investors, and corporate leaders in promoting responsible business practices aligned with global sustainability standards.

Keywords: ESG Disclosure, Auto Ancillary Industry, Pharmaceutical Industry.

INTRODUCTION

In recent years, Environmental, Social, and Governance (ESG) disclosure has emerged as a critical dimension in corporate reporting and sustainable business practices. ESG represents a comprehensive framework that evaluates a company's commitment to reducing environmental impact, addressing social responsibilities, and ensuring sound governance practices. With growing stakeholder awareness,

investors, regulators, and customers are increasingly demanding transparent disclosures that go beyond financial performance, providing a holistic picture of a company's long-term sustainability and ethical conduct. ESG disclosures act as a vital communication tool between corporations and their stakeholders. They help companies demonstrate accountability in areas such as climate change initiatives, employee well-being, diversity, ethical supply chain management, and compliance with governance codes. These disclosures also reduce information asymmetry in the market, enabling investors to assess risks and opportunities more effectively. As global capital flows increasingly shift towards ESG-compliant firms, industries that lag in disclosures risk losing investor confidence and market competitiveness.

The auto ancillary sector, which supports the automobile industry by manufacturing components, plays a pivotal role in the transition towards sustainable mobility. With rising concerns about vehicular emissions, supply chain efficiency, and resource optimization, stakeholders expect auto ancillary firms to adopt ESG-focused practices. Disclosures in this sector often highlight efforts in energy conservation, waste management, adoption of clean technologies, employee safety, and ethical labor practices. Given the global push for electric vehicles and green supply chains, ESG reporting has become essential for auto ancillary firms to remain relevant and competitive. The pharmaceutical sector has unique ESG disclosure requirements because of its direct impact on public health and safety. Companies in this industry are expected to be transparent about issues such as ethical drug trials, affordability of medicines, intellectual property rights, patient safety, and responsible sourcing of raw materials. Environmental disclosures cover waste management

of chemical byproducts and sustainable manufacturing practices, while governance aspects include regulatory compliance, ethical marketing, and anti-corruption measures. For pharma firms, strong ESG disclosures not only enhance trust but also strengthen their social license to operate.

Although both auto ancillary and pharmaceutical industries face mounting ESG pressures, their disclosure priorities differ based on sectoral characteristics. For auto ancillary firms, environmental performance and supply chain sustainability are at the forefront, while for pharmaceutical companies, social impact and ethical governance dominate the ESG narrative. A comparative analysis of disclosure practices across these two industries highlights sector-specific challenges and opportunities in aligning with global ESG standards. It also sheds light on how each sector balances profitability with long-term sustainability. The increasing emphasis on ESG disclosure in India, driven by SEBI's Business Responsibility and Sustainability Reporting (BRSR) framework, makes it imperative to examine industry-wise practices. Auto ancillary and pharmaceutical industries, being vital contributors to the Indian economy and global supply chains, must adopt robust ESG practices to attract responsible investment and build stakeholder confidence. Studying ESG disclosure trends in these sectors not only provides insights into their preparedness for a sustainable future but also helps policymakers, investors, and corporate leaders identify gaps and design strategies for improvement.

LITERATURE REVIEW

1. Arti, & Koli, L. N. (2024), In the research titled "Corporate governance and sustainability reporting: A study of listed pharmaceutical companies in India." The study concluded that corporate governance practices are strongly linked to the quality and extent of sustainability reporting among listed pharmaceutical companies in India. Firms with better governance structures, such as independent boards, higher transparency standards, and strong internal controls, are more likely to provide comprehensive ESG disclosures. The analysis revealed that sustainability reporting

is not just a compliance exercise but a reflection of governance culture, where firms that embrace accountability and ethical practices show better alignment with environmental and social goals. The paper emphasized that improving governance mechanisms enhances trust, reduces reputational risks, and positions companies more favorably with stakeholders, including regulators and investors.

2. Das, S., & Sarkar, A. (2023), In the research titled "Understanding the factors promoting sustainability in the Indian pharmaceutical sector through ESG approach" The findings highlighted that sustainability in the Indian pharmaceutical sector is driven primarily by regulatory pressure, growing investor demand for ethical practices, and the rising importance of global ESG standards. The study concluded that companies adopting the ESG framework demonstrate stronger resilience, higher reputation, and improved long-term growth prospects compared to firms with minimal ESG orientation. Key sustainability factors such as energy-efficient operations, affordable healthcare access, and responsible supply chain practices emerged as critical drivers of ESG adoption. Ultimately, the paper stressed that ESG initiatives are no longer optional but have become essential for pharmaceutical firms seeking to remain competitive and socially responsible in a globalized market.
3. Ghag, M. K. (2024), In the research titled "Determinants of Environmental, Social and Corporate Governance (ESG) disclosure: A study of pharmaceutical companies in India" This study concluded that several determinants—such as firm size, profitability, regulatory compliance, and international exposure—significantly affect the level of ESG disclosure among pharmaceutical companies in India. Larger firms with stronger financial performance and cross-border operations were found to be more proactive in disclosing detailed ESG information compared to smaller firms. The paper suggested that external pressures, including stakeholder activism and investor scrutiny, play a crucial role in shaping disclosure practices. Overall, the research emphasized that ESG disclosure in the pharmaceutical sector is evolving from being

compliance-driven to becoming a strategic tool for reputation building, risk mitigation, and investor attraction.

4. Maheshwari, M., & Priyanka. (2025), In the research titled “Influence of ESG reporting on the financial performance of companies: Insights from the pharmaceutical industry” The research concluded that ESG reporting has a positive influence on the financial performance of pharmaceutical companies, with firms that disclose more comprehensive ESG information enjoying stronger investor confidence, better market valuation, and improved profitability. The findings highlighted that ESG disclosures enhance corporate credibility by demonstrating long-term commitment to sustainability and ethical operations. Investors increasingly consider ESG transparency as a non-financial indicator of future financial stability, pushing companies to integrate ESG into their strategic decision-making. The study reinforced that robust ESG reporting not only fulfills stakeholder expectations but also acts as a driver of competitive advantage and financial growth in the pharmaceutical sector.
5. Srivastava, A., & Kumari, G. (2023), In the research titled “Impact of ESG disclosure on financial performance: A comparative study of listed chemical and pharmaceutical companies in India” This comparative study concluded that ESG disclosure significantly impacts the financial performance of both chemical and pharmaceutical companies in India, though the effect is more pronounced in the pharmaceutical sector. Firms with strong ESG disclosure practices demonstrated higher profitability, better risk management, and improved investor trust compared to those with weaker reporting. The study argued that ESG disclosure reduces information asymmetry, enhances transparency, and attracts responsible investment, which collectively contribute to financial growth. Furthermore, the paper pointed out that while chemical firms face greater environmental scrutiny, pharmaceutical firms are under pressure to maintain strong social and governance standards, making ESG disclosure an indispensable element for long-term financial sustainability in both sectors.

Research Gap: Although the reviewed studies collectively emphasize the significance of ESG disclosure in shaping sustainability, governance quality, and financial performance of pharmaceutical and chemical companies, a clear research gap emerges in terms of depth, scope, and comparative analysis. Most studies are sector-specific and focus largely on pharmaceutical firms, leaving limited exploration of the auto ancillary industry, despite its increasing relevance in sustainability discourse due to supply chain and emission-related concerns. Additionally, existing research tends to highlight determinants and financial impacts of ESG disclosure but provides little evidence on the qualitative aspects such as stakeholder perception, employee engagement, and long-term social outcomes. There is also a lack of longitudinal studies that track changes in ESG practices over time, especially in response to evolving regulatory frameworks like SEBI’s BRSR in India. Moreover, cross-industry comparative analyses remain scarce, creating a need for more integrated research that examines how ESG disclosure practices differ across sectors like pharmaceuticals and auto ancillary, and how these differences affect investor confidence, competitiveness, and overall sustainability performance.

RESEARCH METHODOLOGY

The study adopts a quantitative research methodology, relying on secondary data collected from CRISIL’s ESG scores for selected auto ancillary and pharmaceutical companies as of March 2022. The analysis involves evaluating firm-level ESG performance across environmental, social, and governance dimensions. To test the research hypotheses, paired sample t-tests were employed to compare disclosure scores between the two sectors. This statistical approach helps in identifying significant differences in ESG disclosure practices, enabling sector-wise benchmarking. The methodology ensures a systematic and objective evaluation of ESG practices, providing a reliable basis for drawing meaningful conclusions on industry-specific sustainability performance.

DATA ANALYSIS

Analysis of ESG score of Auto Ancillary Companies

Auto Ancillary Companies: As of March 2022, the Environmental, Social, and Governance (ESG) disclosures of auto ancillary companies are increasingly made available through CRISIL's ESG scoring framework. CRISIL provides comprehensive sustainability assessments of firms across the auto component sector, highlighting their performance on environmental stewardship, social responsibility, and governance practices. This data enables investors,

regulators, and stakeholders to evaluate the ethical standards, operational resilience, and long-term sustainability of these companies. By leveraging CRISIL's ESG insights, auto ancillary firms can demonstrate their commitment to responsible business conduct, effective risk management, and value creation, thereby aligning with the growing emphasis on sustainability within the automotive ecosystem.

Company Name	Environment Score	Social Score	Governance Score	ESG Score
Alicon Castalloy Limited	25	36	61	42
Automotive Axles Limited	27	36	69	46
Banco Products India Limited	25	35	64	43
Bharat Forge Limited	47	55	67	57
Bosch Limited	27	35	68	46
CIE Automotive India Limited	27	34	67	45
Craftsman Automation Limited	31	43	69	49
Endurance Technologies Limited	29	35	67	46
Federal-Mogul Goetze India Limited	26	34	69	45
Fiem Industries Limited	24	34	68	44
Gabriel India Limited	25	32	68	44
GNA Axles Limited	24	33	59	40
Igarashi Motors India Limited	25	35	66	44
Jamna Auto Industries Limited	25	37	70	46
JBM Auto Limited	25	32	64	42

Source: www.crisil.com

The ESG performance of the auto ancillary companies shows considerable variation across the three dimensions, environment, social, and governance. Environmental scores are generally on the lower side, mostly ranging between 24 and 31, indicating limited emphasis on sustainability initiatives. Social scores are moderate, clustered between 32 and 43, suggesting average performance in labor relations, employee welfare, and community engagement. Governance emerges as the strongest pillar, with most companies scoring between 59 and 70, reflecting comparatively better transparency, compliance, and corporate governance practices. As a result, overall ESG scores fall within the range of 40 to 57, with Bharat Forge Limited leading due to relatively balanced performance across all three dimensions, while companies like GNA Axles Limited and Alicon Castalloy Limited remain at the lower end, largely because of weaker environmental and social disclosures. This highlights that the sector is stronger in governance but needs significant improvement in

environmental and social aspects to achieve holistic sustainability.

Analysis of ESG score of Pharma Companies

Pharma Companies: As of March 2022, pharmaceutical companies have been increasingly disclosing their Environmental, Social, and Governance (ESG) practices through platforms such as CRISIL. CRISIL provides detailed sustainability assessments that cover environmental performance, social responsibility, and governance standards, enabling investors and stakeholders to gain transparent insights into the ethical and operational conduct of these firms. By leveraging CRISIL's data, pharmaceutical companies can emphasize their commitment to sustainable practices, sound risk management, and long-term value creation, thereby meeting the growing demand for responsible and accountable corporate behavior in the industry.

Company Name	Environment Score	Social Score	Governance Score	ESG Score
Aarti Drugs Limited	29	45	63	46
Abbott India Limited	38	49	68	53
Advanced Enzyme Technologies Limited	50	66	67	61
Ajanta Pharma Limited	48	63	67	59
Alembic Pharmaceuticals Limited	33	52	65	51
Alkem Laboratories Limited	43	49	67	54
Ami Organics Limited	42	51	68	55
Amrutanjan Health Care Limited	26	49	68	49
Astrazeneca Pharma India Limited.	29	52	69	51
Aurobindo Pharma Limited	47	57	67	57
Biocon Limited	46	65	71	61
Bliss GVS Pharma Limited	26	44	70	48
Caplin Point Laboratories Limited	25	47	71	49
Cipla Limited	59	68	78	69
Dishman Carbogen Amcis Limited	25	49	69	49

Source: www.crisil.com

The ESG scores of pharmaceutical companies reflect a more balanced sustainability profile compared to the auto ancillary sector, with relatively higher performance in environmental and social parameters. Environmental scores range widely from 25 to 59, with Cipla Limited standing out at the top due to its strong focus on green initiatives, while firms like Caplin Point and Bliss GVS remain at the lower end. Social scores are stronger overall, between 44 and 68, showing a sector-wide emphasis on employee welfare, healthcare contributions, and community engagement. Governance is consistently robust, with most companies scoring between 63 and 78, indicating high compliance standards, ethical practices, and strong management structures. As a result, overall ESG scores span from 46 to 69, with Cipla Limited, Biocon Limited, and Advanced Enzyme Technologies leading the sector due to their superior environmental and social performance along with strong governance, whereas smaller players such as Bliss GVS and Caplin

Point record comparatively modest ESG scores. This highlights that the pharmaceutical sector demonstrates a stronger sustainability orientation than auto ancillaries, with governance and social aspects being particularly well-developed, though environmental practices still show scope for improvement across some firms.

OBJECTIVE AND HYPOTHESIS

Objective 1 To study and compare Environmental, Social, Governance disclosure between Auto Ancillary and Pharma companies.

Null Hypothesis H_{01A} : There is no significant difference in Environmental disclosure of auto Ancillary and Pharma companies.

Alternate Hypothesis H_{11A} : There is a significant difference in Environmental disclosure of auto Ancillary and Pharma companies.

To test the above null hypothesis Paired sample test is applied and t-test is obtained. Results are as follows.

Paired Samples Test						
	Paired Differences			t	df	
	Mean	Std. Deviation	Std. Error Mean			P-value
Environment Score of Auto Ancillary sector - Environment Score of pharma sector	-10.267	11.158	2.881	-3.564	14	.003

Interpretation: The above results indicate that calculated p-value is 0.003. It is less than 0.05. Therefore, t-test is rejected. Hence Null hypothesis is rejected and Alternate hypothesis is accepted.

Conclusion: There is a significant difference in Environmental disclosure of auto Ancillary and Pharma companies.

Findings: To understand the findings of hypothesis, Environmental disclosure of auto Ancillary and Pharma companies.

Paired Samples Statistics				
	Mean	N	Std. Deviation	Std. Error Mean
Environment Score of Auto Ancillary sector	27.47	15	5.730	1.480
Environment Score of pharma sector	37.73	15	10.964	2.831

The paired sample statistics highlight that the pharma sector achieves a higher mean environment score (37.73) compared to the auto ancillary sector (27.47) across the 15 companies studied. This indicates that pharmaceutical firms are relatively more engaged in environmental sustainability practices such as waste management, emission reduction, energy efficiency, and eco-friendly operations. However, the pharma sector also shows a much larger variation (Std. Deviation = 10.964) compared to the auto ancillary sector (5.730), suggesting that while some pharma companies are making significant progress in environmental performance, others lag considerably. On the other hand, auto ancillary firms, though having lower average scores, display more consistency,

reflecting limited but relatively uniform adoption of environmental practices. Overall, the findings suggest that pharma companies are ahead in environmental initiatives, but the sector is uneven in its progress, while auto ancillary firms need to scale up their green strategies to keep pace with global sustainability demands.

Null Hypothesis H_{01B} : There is no significant difference in social disclosure of auto Ancillary and Pharma companies.

Alternate Hypothesis H_{11B} : There is a significant difference in social disclosure of auto Ancillary and Pharma companies.

To test the above null hypothesis Paired sample test is applied and t-test is obtained. Results are as follows.

Paired Samples Test						
	Paired Differences			t	df	P-value
	Mean	Std. Deviation	Std. Error Mean			
Social Score of Auto Ancillary sector - Social Score of pharma sector	-17.333	8.449	2.181	-7.946	14	.000

Interpretation: The above results indicate that calculated p-value is 0.000. It is less than 0.05. Therefore, t-test is rejected. Hence Null hypothesis is rejected and Alternate hypothesis is accepted.

Conclusion: There is a significant difference in social disclosure of auto Ancillary and Pharma companies.

Findings: To understand the findings of hypothesis, social disclosure of auto Ancillary and Pharma companies.

Paired Samples Statistics				
	Mean	N	Std. Deviation	Std. Error Mean
Social Score of Auto Ancillary sector	36.40	15	5.767	1.489
Social Score of pharma sector	53.73	15	8.004	2.067

The paired sample statistics indicate a significant difference in the social scores of the two sectors, with the pharma sector averaging 53.73, much higher than the auto ancillary sector at 36.40. This suggests that pharmaceutical companies place stronger emphasis on social dimensions such as employee welfare, community engagement, workplace safety, and stakeholder relations compared to auto ancillary firms. The higher standard deviation in pharma (8.004) versus auto ancillary (5.767) also shows greater variation in how pharma companies perform on social aspects—some excelling while others lag. In contrast,

the auto ancillary sector has lower and more uniform scores, pointing toward slower adoption of socially responsible practices but with less disparity across firms. Overall, the results highlight that pharma companies are leading in social responsibility initiatives, whereas auto ancillary firms need to enhance their focus on human capital development, workplace equity, and community impact to improve their overall ESG profile.

Null Hypothesis H_{01C} : There is no significant difference in Governance disclosure of auto Ancillary and Pharma companies.

Alternate Hypothesis H_{11C} : There is a significant difference in Governance disclosure of auto Ancillary and Pharma companies.

To test the above null hypothesis Paired sample test is applied and t-test is obtained. Results are as follows.

Paired Samples Test						
	Paired Differences			t	df	P-value
	Mean	Std. Deviation	Std. Error Mean			
Governance Score of Auto Ancillary sector - Governance Score of pharma sector	-2.133	3.796	.980	-2.177	14	.047

Interpretation: The above results indicate that calculated p-value is 0.047. It is less than 0.05. Therefore, t-test is rejected. Hence Null hypothesis is rejected and Alternate hypothesis is accepted.

Conclusion: There is a significant difference in Governance disclosure of auto Ancillary and Pharma companies.

Findings: To understand the findings of hypothesis, Governance disclosure of auto Ancillary and Pharma companies.

Paired Samples Statistics				
	Mean	N	Std. Deviation	Std. Error Mean
Governance Score of Auto Ancillary sector	66.40	15	3.135	.809
Governance Score of pharma sector	68.53	15	3.357	.867

The paired sample statistics show that the governance score of the pharma sector (68.53) is slightly higher than that of the auto ancillary sector (66.40) among the 15 companies considered. Both sectors exhibit relatively close governance standards with only a small gap, suggesting that corporate governance practices such as transparency, accountability, compliance, and ethical management are fairly well established in both industries. The standard deviations are also similar (3.135 for auto ancillary and 3.357 for pharma), indicating consistent governance practices within each sector with only minor variations across firms. This reflects that while pharma companies maintain a marginal edge, both industries are giving

due importance to governance, which is a critical component of ESG, ensuring investor trust, regulatory compliance, and long-term sustainability.

Objective 2 To study and compare overall ESG disclosure between Auto Ancillary and Pharma companies.

Null Hypothesis H_{02} : There is no significant difference in overall ESG Score of auto Ancillary and Pharma companies.

Alternate Hypothesis H_{12} : There is a significant difference in overall ESG Score of auto Ancillary and Pharma companies.

To test the above null hypothesis Paired sample test is applied and t-test is obtained. Results are as follows.

Paired Samples Test						
	Paired Differences			t	df	P-value
	Mean	Std. Deviation	Std. Error Mean			
ESG Score of Auto Ancillary sector- ESG Score of pharma sector	-8.867	6.128	1.582	-5.604	14	.000

Interpretation: The above results indicate that calculated p-value is 0.000. It is less than 0.05. Therefore, t-test is rejected. Hence Null hypothesis is rejected and Alternate hypothesis is accepted.

Conclusion: There is a significant difference in overall ESG Score of auto Ancillary and Pharma companies.

Findings: To understand the findings of hypothesis, overall ESG Score of auto Ancillary and Pharma companies.

Paired Samples Statistics				
	Mean	N	Std. Deviation	Std. Error Mean
ESG Score of Auto Ancillary sector	45.27	15	3.900	1.007
ESG Score of pharma sector	54.13	15	6.278	1.621

The paired sample statistics reveal that the pharma sector has a much higher average ESG score (54.13) than the auto ancillary sector (45.27) across the 15 firms studied. This shows that pharmaceutical companies are more proactive in integrating sustainability, social welfare, and governance practices compared to auto ancillary firms. The pharma sector also exhibits greater variation (Std. Deviation = 6.278) in ESG performance, indicating that while some companies are highly advanced in sustainability, others still lag. In contrast, the auto ancillary sector has lower scores with relatively consistent performance (Std. Deviation = 3.900), reflecting slower adoption of ESG initiatives but less disparity among firms. Overall, the findings highlight that pharma is emerging as a leader in ESG adoption, whereas auto ancillary companies need to strengthen their environmental policies, labor practices, and governance frameworks to align with evolving global sustainability expectations.

CONCLUSION

The study concludes that there is a significant difference in ESG disclosure practices between the auto ancillary and pharmaceutical sectors in India. While the pharmaceutical industry demonstrates stronger performance in environmental, social, and governance disclosures overall, the auto ancillary sector lags, particularly in environmental and social aspects. However, both sectors maintain reasonably good governance practices, reflecting transparency and compliance with corporate standards. These findings suggest that auto ancillary firms must adopt more robust sustainability measures, while pharmaceutical companies need to enhance uniformity in their disclosures. Strengthening ESG reporting across both sectors is crucial to attract responsible investments, build stakeholder confidence, and align with global sustainability expectations.

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