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Financial Performance Dynamics: Role of CSR and Leverage in Indian Pharmaceutical Companies

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ABSTRACT
In today's business landscape, CSR reporting has emerged as a vital component of business operations, reflecting a growing emphasis on transparency and responsibility. This research aims to examine the possible financial benefits of CSR reporting in Indian pharmaceutical firms. CSR disclosures were evaluated by content analysis of business sustainability reports, and financial data were sourced from NIFTY Pharma companies. The research used the Generalized Method of Moments (GMM) model to address potential endogeneity, autocorrelation, and heteroscedasticity in the panel data. The study shows that CSRD does not significantly affect ROA and ROE, indicating a minimal effect on the efficiency of assets and shareholder returns. However, CSRD has a significant negative impact on PAT, indicating that CSR-related expenditures reduce net profits in the long term. The results were aligned with Slack Resource Theory, Stakeholder Theory, Institutional Theory, Agency Theory, and Signalling Theory. Companies may use the findings to effectively integrate CSR into their business plan. CSR mandates make Indian pharmaceutical companies more appealing to environmentally and socially conscious investors. Pharmaceutical companies may enhance public trust and brand recognition via CSR disclosure.
Keywords: Sustainability, Return on Equity, CSR, NIFTY, Content Analysis

1. INTRODUCTION

Friedman (1970), emphasizes that ''the only one responsibility of business towards society is the maximisation of profits to the shareholders within the legal framework and the ethical custom of the country''. Friedman's comment effectively conveys the belief that firms have a fundamental need to prioritise the maximisation of shareholder profits, while also adhering to legal and ethical standards. This perspective highlights the importance of profitability for both economic progress and social well-being. However, it has also sparked ongoing discussions regarding the broader responsibilities that enterprises hold within society. In recent years, there has been an increased focus on CSR and Environmental, Social, and Governance (ESG) factors in modern company operations, as they are considered integral parts of business practices. Nowadays, several firms actively participate in programs to tackle social and environmental challenges, asserting that sustainable and ethical practices may also enhance long-term profitability and shareholder value.

One such concept, Corporate Social Responsibility (CSR), has become more significant as corporations globally recognize the significance of ethical practices, sustainability, and social contributions. CSR depicts the way a firm operates in order to be financially viable, compliant with laws, ethical, and supportive of society (Caroll, 1983). (Levy, 1999) highlights the need of aligning social initiatives with business objectives in order to generate profit. This relationship is crucial as it ensures that businesses prioritize servicing society, which is the essence of their existence. Businesses are multifaceted organizations that have an influence not just on their owners, but also on many stakeholders such as workers, creditors, and society as a whole. They have both economic and social-political dimensions (Tarrant, 1976). Companies that participate in initiative concerning social responsibility may improve their public image, gather consumers, acquire funding, and obtain special consideration from government organizations (Spicer, 1978).

Companies that promote CSR are more appealing to prospective workers who are looking to work for socially

conscious companies. This may facilitate the process of attracting and maintaining highly skilled individuals inside the organization (Kapoor S and Sandhu, 2010). The stakeholder theory posits that organizations may achieve a competitive advantage and improve their financial performance by actively involving stakeholders and meeting their interests (Margolis, Elfenbein, & Walsh, 2009). The stakeholder theory is in accordance with the theory of CSR since both highlight the significance of ethical conduct, social accountability, and environmentally friendly business practices. CSR entails taking into account the concerns and well-being of all parties involved, including as workers, customers, suppliers, and the local community. Through active involvement with these organizations, firms may cultivate better ties and promote positive sentiment.

CSR promotes corporations to engage in innovative thinking to determine how they can effectively contribute to society. It can encourage innovation and advancement in the product design, provision of services, and implementation of procedures, thereby supporting the companies in the expansion and development. By following CSR principles, companies may ensure compliance with legislation and standards about social and environmental responsibilities. This, in turn, reduce the risk of facing legal challenges and penalties. Moreover, comprehending and implementing CSR activities not only offers financial advantages to the company but also contributes to social welfare and the sustainability of the environment, reflecting a wider influence that goes beyond financial success.

CSR has expanded on a global basis to include the dedication of corporations to promote sustainable development by considering economic, social, and environmental aspects. Studies have shown a direct correlation between the disclosure of CSR practices and financial success in different nations. This suggests an increasing acknowledgement of the global significance of CSR (Aras, Aybars and Kutlu, 2010). CSR methods have globally evolved to prioritise partnerships and collaborations among firms, governments, and civil society to tackle intricate social and environmental issues. However, in India, the expansion of CSR practices has resulted in the establishment of novel CSR models, such as social entrepreneurship and impact investment, with the aim of showcasing sustainable development and inclusive economic growth. On a global scale, the development of CSR practices worldwide and in India demonstrates an increasing acknowledgement of the significance of corporate responsibility in generating lasting value for both enterprises and society. This fosters a more sustainable and fair future (Yusoff et al., 2013)

Pharmaceutical businesses are enhancing their CSR policies by progressively expanding their voluntary disclosure of social initiatives and community engagement over time. These firms prioritize both financial objectives and ethical and social duties in order to cultivate enduring client connections and sustain profitability in the competitive market. The adoption of ethical and socially responsible conduct by these firms represents a notable transformation in their attitude and operational strategies (Malik & Kanwal, 2018).

Companies are now disclosing their adherence to regulatory mandates, particularly those specified in section 135 of the Companies Act. As a result, these companies have formed CSR committees, which demonstrate an increasing variety of members (Paliwal, 2023). India's pharmaceutical industry has seen substantial progress and advancement, with Gujarat emerging as a prominent centre for pharmaceutical businesses in the nation.

Even though pharmaceutical companies have increased their expenditure on CSR, there are questions over the accuracy and transparency of their reporting and disclosure processes. A significant number of companies have received low scores on CSR reporting and disclosure evaluations, suggesting that there exists a need for enhancing openness and accountability within the industry. Regulatory actions are increasingly necessary to guarantee that CSR data given by firms is both relevant and can be accurately measured and relied upon. This data may have a pivotal impact on policy-making and the resolution of significant social challenges that are the focus of CSR operations. Prior research has shown contradictory results about the link between CSR and CFP (Corporate Financial Performance), with some studies demonstrating negative, positive, or inconclusive impacts. There is a debate among academics on the impact of social activities on profits. Others say that these acts might result in expenses that have a detrimental effect on profits (Paliwal, 2023, Moore, 2001; Vance,1975; Wright and Ferris, 1997). On the other hand, other researchers feel that engaging in CSR can provide long-term benefits, including cost savings and strategic advantages (Preston and O'Bannon, 1997; Ruf et al. 2001; Russo and Fouts,1997; Simpson and Kohers 2002; Tsoutsoura, 2004; Waddock and Graves, 1997).

2. RESEARCH QUESTIONS

While several studies have examined CSR reporting procedures, particularly those that examine the relationship between CSR activities and business performance, there is currently no specific research that identifies and examines the CSR reporting patterns of pharmaceutical firms listed on the NIFTY Pharma. Thus, this research aimed to thoroughly evaluate the CSR reporting methods of major pharmaceutical businesses. The primary scope of this study was to examine the association between CSR disclosure and financial success in Indian pharmaceutical companies. Following research question were used to measure the relationship between the two variables:

Does CSRD impact the financial performance of Indian pharmaceutical companies?

Objectives:

To study the extent of CSRD among leading NIFTY Pharma-listed Indian Pharmaceutical companies.

To investigate the impact of CSRD on the financial performance of NIFTY Pharma-listed Indian Pharmaceutical companies.

The remaining paper is divided as follows: Section 2 provides a theoretical literature. Section 3 explains the selection of the sample, measurement of the variable and

the research methodology. Section 4 explains the empirical results of the study. At the end, the paper concluded in Section 5 with limitations and suggestions.

Theoretical Background and Literature Review:

Theoretical Foundations

The discussion on the association between CSR and Financial Performance (FP) depends on various theoretical perspectives. Friedman's (1970) supremacy of shareholders' perspective claims that CSR is an expense that diminishes shareholder value. Conversely, stakeholder theory (Freeman, 1984) and legitimacy theory (Dowling & Pfeffer, 1975) suggest that CSR programs improve business reputation, bolster stakeholder trust, and promote long-term sustainability. The slack-resources argument asserts that prosperous organizations have the capacity to invest in CSR and convey it effectively, while the "good management" idea suggests that CSR involvement indicates stronger governance. The trade-off theory suggests that engaging in CSR activities can divert company resources from value-generating projects.

Global Evidence

Empirical findings from various studies remain mixed and didn't provide clear conclusion. Some research findings indicates a positive relationship between CSR and CFP, especially when CSR is integrated into core business strategy (Margolis & Walsh, 2003; Orlitzky et al., 2003). In contrast, some studies find an insignificant impact, which means CSR practices have weak institutional support (McWilliams & Siegel, 2000). In this context, CSR disclosure plays a crucial role. High-quality and transparency in CSR reporting helps reduce information asymmetry, builds confidence of investors, and enhances the market valuation (Clarkson et al., 2008). However, inadequate disclosure may weaken stakeholder trust and confidence, thereby diminishing the benefits of CSR initiatives (Michelon et al., 2015). Furthermore, evidence from emerging markets highlights that this significant variation between CSR and CFP is influenced by governance mechanism, the quality of disclosures, and the effectiveness of regulatory enforcement.

CSR in the Indian Context

India presents a unique context due to the mandatory CSR provisions under Section 135 of the Companies Act (2013), which require eligible companies to contribute a minimum of 2% of their average net profit towards CSR initiatives. This regulatory framework shifted a increase in both CSR spending and reporting practices (Kansal et al., 2014). However, some studies considerable variation in the quality of these disclosures, with many companies prioritising regulatory framework above strategically integrating CSR in their decision making (Sarkar & Sarkar, 2015). Thus, there is a huge gap often exists between CSR disclosure and actual CSR expenditures, emphasizing the need to differentiate between commitment (expenditure) and communication (disclosure).

Pharmaceutical Sector Relevance

The pharmaceutical industry is highly relevant to CSR disclosures due to its societal role in healthcare, ethical responsibilities in research, and environmental concerns in production. Previous research indicates that pharmaceutical companies provide comprehensive details about community health initiatives. However, the accuracy and reliability of such CSR disclosures vary significantly (Bhatia & Makkar, 2020). Furthermore, data suggests that while disclosure may not provide instant profitability, it is crucial for maintaining credibility in a highly regulated industry.

Measurement Considerations

CSR performance has been mainly evaluated by (i) CSR disclosure indices that measure the extent and depth of reporting in ESG areas, and (ii) CSR expenditure, which reflects the scale of resource allocation. Disclosure indices align with stakeholder perceptions of CSR but may be undermined by subjective categorisation. CSR expenditures, although more objective, are directly connected to profits according to Indian regulations, resulting in possible endogeneity in profitability regressions (Gujarati & Porter, 2009).

3. RESEARCH GAP

The association between CSR disclosure and financial performance has been thoroughly examined in international literature, yet the findings remain unclear and context-dependent. Although several studies suggested a positive association, while others reveal no substantial correlation or possibly an adverse effect. Significantly, most prior research in the Indian context has focused on CSR expenditures as per the Companies Act, 2013, whereas the quality and amount of CSR disclosures have been subjected to relatively less scrutiny.

Moreover, studies concerning about CSR disclosure often neglects pharmaceutical companies, a highly regulated sector with a direct impact on public health, ethics and social responsibility. The industry-specific analysis is essential because stakeholders may behave differently to CSR disclosures in Pharma sector than in other sectors.

Furthermore, most Indian studies use simple regression models which doesn't account for unobserved heterogeneity, autocorrelation, and heteroskedasticity, that may distort findings. GMM model provides a more rigorous research methodology but are still not used in many studies conducting the CSR–performance relationship in the Indian pharmaceutical sector.

Moreover, the moderating influence of financial factors, including leverage, firm size, and sales growth, has rarely been included into the CSR disclosure–performance framework. This creates uncertainty over whether firm-specific finance policies enhance or diminish the potential advantages of CSR reporting.

Therefore, in order to enhance both theoretical and empirical understanding, a comprehensive study is required that utilizes content analysis to assess CSR disclosure, incorporates firm-level financial controls, and applies panel regression techniques in the context of the Indian pharmaceutical industry.

4. METHODOLOGY

Data collection:

The annual reports of 20 Pharma companies listed on NIFTY Pharma were gathered for the period 2013-2023, providing a dataset spanning eleven years. Also, secondary data is acquired from several sources, including research papers published in journals. Using yearly

reports to gather data is advantageous because of its inherent simplicity (Hughes, Anderson, & Golden, 2001). The measurement of CSR disclosure (CSRD) was conducted by content analysis of annual and sustainability reports, a technique recognized in CSR research for its capacity to maintain depth and assess disclosure intensity (McClelland et al., 1992).

Variables:

Dependent variable used in this study is Financial Performance that will be represented by Return on Equity (ROE), Return on Assets (ROA), and Profit After Tax (PAT). Also, CSR Disclosure (CSRD) represented as the independent variable in the study. In addition, firm size, leverage, and sales growth are additional important factors used as control variables that may have a substantial impact on a company's profitability. Firm Size will be assessed by quantifying the total assets used in the company, as done by Wahba and Elsayed (2015) in their research. These control variables helps in reducing any potential biases in the final results (Kaur & Dave, 2020).

CSR measurement:

The acquired data was analyzed using content analysis due to its ability to maintain the depth and complexity of textual interpretations (McClelland et al.,1992). Sustainability reports of pharma companies have been used for the content analysis. The dimensions and topics addressed in the CSR Measurement Instrument are derived from a thorough examination of relevant literature, including works by Abbott and Monsen (1979), Brown (2001), Centre for Corporate Research and Training (2003), Confederation of Indian Industry (2002), Krishna (1992), and Rashid and Ibrahim (2002). The analysis was conducted using a set of indicators that were classified into five distinct categories, as shown in Table 1. The presence or absence of an item has been indicated using a binary scale, where 1 represents presence and 0 represents absence. Initially, researchers review reports and gather information about the indicators included in the measuring scale outlined in Table 1. If a company fails to reveal a specific indication, it is labelled as "0". If the indicator is disclosed with a broad presentation or solely with a quantitative presentation, it is labelled as "1". After calculating the score for each indication for every company in each year, the degree of CSRD is calculated as follows:

$$\text{CSRD score} = \frac{\text{No. of CSR items adopted by a particular company}}{\text{Total no. of CSR items in measurement}}$$

Formula Cited by: (Kapoor and Sandhu, 2010), (Maqbool and Zameer, 2018)

Table 1: CSR items indicator

1	Community involvement	4	Workforce well-being
a	Aid to flood/drought/disaster victims	a	Proper safety measures for accident-prone activities
b	Provision of drinking water facilities	b	Training/development programmes for employees.
c	Construction and maintenance of roads.	c	Providing medical facilities to employees
d	Contributing towards educational institutions	d	Educational facilities to the children of employees
e	Contribution towards healthcare camps and facilities	e	Equal opportunities to women at workplace
2	Responsibility towards Environment	5	Inclusion of diversity
a	Engaged in manufacturing eco-friendly products	a	No child labour in employment
b	Going for rain harvesting programmes	b	Welfare activities for SC/ST/ and disabled persons.
c	Sustainable waste management	c	Membership with NGOs
d	Reduction of carbon emission	d	Introduced scheme for women empowerment
e	Certified under ISO 14000 series	e	Setting of orphanage home
3	Rural Development		
a	Opening up dispensaries, hospitals or organizing medical camps in rural areas		
b	Developing infrastructure in rural areas		
c	Installation of Solar powerplants		
d	Elimination of taboos associated with Women in rural areas		
e	Providing agriculture guidance		

Hypothesis:
H01: There is no significant impact of CSRD activities on ROA.
H02: There is no significant impact of CSRD activities on ROE.
H03: There is no significant impact of CSRD activities on PAT.

5. STATISTICAL TOOL USED

Considering that the dataset comprises a panel of 20 companies across 11 years, panel regression models were used instead of basic cross-sectional regressions. The GMM model is selected in this study due to its ability to simultaneously address time-series and cross-sectional dimensions that provides more accurate and unbiased results than basic multiple and panel regression. Diagnostic tests for heteroskedasticity, autocorrelation, and multicollinearity used in the study to establish robustness in the results. The research models used in the study are as follows:

Model 1:
$ROA_{it} = \beta0 + \beta1\ CSRD_{it} + \beta2\ LEV_{it} + \beta3\ SIZE_{it} + \beta4\ SAGR_{it} + ROA_{i(t-1)} + \epsilon_{iit}$

Model 2:
$ROE_{it} = \beta0 + \beta1\ CSRD_{it} + \beta2\ LEV_{it} + \beta3\ SIZE_{it} + \beta4\ SAGR_{it} + ROE_{i(t-1)} + \epsilon_{iit}$

Model 1:
$PAT_{it} = \beta0 + \beta1\ CSRD_{it} + \beta2\ LEV_{it} + \beta3\ SIZE_{it} + \beta4\ SAGR_{it} + PAT_{i(t-1)} + \epsilon_{iit}$

Where,
LEV = Leverage
SAGR = Sales growth
Ɛ = Standard Error
i = firm, t = year
β0 = Constant
β1: β5 = Parameters for Independent and control variable.
The inclusion of the lagged dependent variable accounts for persistence in financial performance in all three models.

6. DATA ANALYSIS AND FINDINGS

Descriptive Statistics:
Descriptive statistics provide an initial understanding of the data by summarizing its central tendency, variability, and overall distribution of the examined variables. The study performed a descriptive statistic of all variables, including CSRD, financial performance indicators (ROA, ROE, PAT), and control variables (firm size, sales growth, leverage).

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Mean	SD
ROA	20	-0.0700	0.3657	.1174	0.0599
ROE	20	-0.1257	0.6364	.1845	0.0890
PAT	20	-2828.5200	3211.1400	836.16	786.89
SAGR	20	-0.1781	0.8562	.1505	0.1495
LEV	20	0.0000	6641.72	802.55	1299.00
SIZE	20	2.8295	4.9071	3.8230	0.4618
CSRD	20	0.5200	0.9200	.7149	0.1183

The table 2 depicts the descriptive statistics of all the variables. Firms, on average, have a ROA of 11.74% and a ROE of 18.45%. Sales growth is at 15.05%, and CSRD is at 71.49%. The firm size shows significant variation (mean = 3.82). Leverage, in this study, varies significantly that reflects disparities in capital structures. The table highlights how much organizations differ from one another when it comes to profitability, growth, and CSR initiatives.

Correlation Matrix:

Table 3 shows a strong positive relation between ROA and ROE ($r = 0.682$, $p < 0.01$). PAT shows a positive correlation with leverage, sales growth, and firm size that indicates that bigger and growing companies with higher leverage reports higher earnings. Leverage is strongly correlated with firm size and sales growth. Notably, CSRD has poor and negative relationships with financial performance and firm size, indicating a limited integration of CSR into company profitability throughout the research period.

Table 3: Correlation coefficient

	Correlation Matrix						
Variables	ROA	ROE	PAT	LEVERAGE	SAGR	SIZE	CSRD
ROA	1.000						
ROE	0.682**	1.000					
PAT	-0.082	-0.068	1.000				
LEV	0.393*	-0.266	0.592**	1.000			
SAGR	0.297	-0.269	0.628**	0.562**	1.000		
SIZE	0.325	-0.307	0.711**	0.617**	0.604**	1.000	
CSRD	-0.016	-0.004	-0.148	-0.346	-0.118	-0.140	1.000

**Correlation is significant at 0.01 level (two-tailed).
*Correlation is significant at 0.05 level (two-tailed).

Diagnostic Tests:

Table 4: Multicollinearity

Variables	VIF
LEV	1.341
SAGR	1.013
SIZE	1.348
CSRD	1.009

Table 4 presents the VIF values for the independent and control variables (LEV, SAGR, SIZE, and CSRD). All VIF measurements are significantly lower than the widely recognized criterion of 10, and even the more cautious criterion of 5, with the maximum value recorded being 1.348. This signifies the absence of significant multicollinearity among the explanatory variables in the regression model

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Table 5: Autocorrelation and Heteroscedasticity test

	Chi-Square	Significance
Breusch–Pagan–Godfrey test	77.2226	0.0000
Breusch–Godfrey LM test	14.994	0.0001

In table 5, the Breusch–Pagan–Godfrey test for heteroscedasticity yields a Chi-Square value of 77.22 with a significance level of 0.0000, signifying the rejection of the null hypothesis of homoscedasticity. This verifies the existence of heteroscedasticity in the dataset. The Breusch–Godfrey LM test for autocorrelation produces a Chi-Square statistic of 14.99 and a p-value of 0.0001, indicating strong significance. The statistical test rejects the null hypothesis of independent residuals, indicating significant serial correlation. Overall, these diagnostics indicates that standard OLS assumptions have been violated, requiring a GMM approach to ensure consistent and robust results.

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Dynamic Panel Model and GMM Estimation:

The diagnostic tests in this study indicated heteroscedasticity and autocorrelation in the panel data. The diagnostic test provided the biased and inconsistent results in the conventional OLS, Fixed Effects, and Random Effects estimates. The study used the Generalized Method of Moments (GMM) method as it is often used in panel data to handle endogeneity, autocorrelation, and heteroscedasticity (Arellano & Bond, 1991; Blundell & Bond, 1998). The GMM method gives a reliable estimate by considering the endogeneity caused by possible correlation between explanatory variables and the error term

Table 6: Dynamic panel-data estimation, two-step robust system GMM

Variables	ROA (Model 1)	ROE (Model 2)	PAT (Model 3)
Lag of ROA, ROE, PAT	0.497402 (0.0000)	0.2590 (0.0000)	0.5104 (0.0000)
CSRD	-0.056777 (0.1298)	0.01500 (0.7574)	-1311.875 (0.0000)
LEV	-6.3200 (0.3314)	-1.8600 (0.0497)	-0.0352 (0.0000)
SAGR	0.0125 (0.6095)	-0.0326 (0.0267)	441.0251 (0.0000)
SIZE	-0.0508 (0.0029)	-0.1228 (0.0000)	192.1705 (0.0931)
Arellano–Bond:AR(1)	-2.072 (0.0382)	-2.2942 (0.0218)	-1.9186 (0.0550)
Arellano–Bond: AR(2)	-1.068 (0.2851)	-0.7911 (0.4288)	-0.6425 (0.5205)
Hansen J Statistic	16.16923 (0.3708)	17.3159 (0.3003)	15.7890 (0.3962)

Source: EViews 12

In Table 6, findings of the GMM yields significant insights into the factors that influence financial performance, evaluated by ROA (Model 1), ROE (Model 2), and PAT (Model 3). The lagged dependent variable is significant and positive in all the three models (ROA: 0.497, $p < 0.01$; ROE: 0.259, $p < 0.01$; PAT: 0.510, $p < 0.01$), which suggests the continuity of financial performance over time. This shows that historical performance significantly influence present results, along with the path-specific characteristics of business profitability (Arellano & Bond, 1991).

The coefficient of CSR disclosure (CSRD) has distinct effects among different models. The result shows that CSRD is statistically insignificant for ROA and ROE which shows that CSRD has no direct impact on accounting-based returns. However, CSRD in the PAT model shows a significant negative effect ($\beta = -1311.875$, $p < 0.01$), meaning that more CSR efforts could involve higher costs that may reduce profitability. This aligns with the cost-concern viewpoint of CSR, where investments in social activities might lead to a reduction in short-term profitability (Friedman, 1970; Barnett, 2007).

Leverage shows negative effect on ROE ($\beta = -1.86$, $p < 0.05$) and PAT ($\beta = -0.035$, $p < 0.01$), but shows

insignificant negative impact on ROA. This shows that higher the financial leverage, higher the risk exposure and lower the returns and profitability, aligning with the trade-off thoery of capital structure (Myers, 2001). Furthermore, ROA negatively correlates with financial leverage which indicates that higher debt levels may result in a reduction value of the asset (Javed, 2024).

Sales growth shows a negative relationship with ROE ($\beta = -0.0326$, $p < 0.05$) and a positive relationship with PAT ($\beta = 441.025$, $p < 0.01$). This difference implies that larger sales increases pressure on ROE due to higher reinvestment needs, but improve absolute profitability levels.

Firm size variable shows a statistically significant negative relation with ROA ($\beta = -0.0508$, $p < 0.01$) and ROE ($\beta = -0.1228$, $p < 0.01$) and a positive and weak significant impact on PAT ($\beta = 192.170$, $p \approx 0.09$). This indicates that bigger companies may have diseconomies of scale regarding efficiency ratios, but might achieve greater absolute profit levels due to operational size.

The diagnostic tests validate the reliability of the GMM estimates. The Arellano–Bond tests indicate significant AR(1) effects, although no evidence of AR(2), confirming the lack of second-order serial correlation. Furthermore, the Hansen J-statistics for all models are negligible ($p > 0.1$), supporting the validity of the instruments and relieving concerns about over-identification.

Summary of Hypothesis:

Hypothesis	Result
H01: There is no significant impact of CSRD activities on ROA.	Accepted
H02: There is no significant impact of CSRD activities on ROE.	Accepted
H03: There is no significant impact of CSRD activities on PAT.	Rejected

7. CONCLUSION, PRACTICAL IMPLICATIONS AND LIMITATIONS

The obligatory CSR expenditure and coverage have consistently increased over time. Nevertheless, Indian corporates fall short of meeting expectations when it comes to reporting and disclosing their CSR and associated activities. The inadequate quality of reporting and disclosures raises concerns about their dedication, as well as the overall condition of reporting, transparency, and accountability issues (Paliwal, 2023). Although there is a large amount of research that demonstrates the connection between CSR and firm value, the existing literature does not provide definitive proof. Therefore, this study presents empirical information that might assist in explaining the discrepancy shown in previous research. The research used a panel data set comprising of 20 NIFTY Pharma companies over a span of 11 years. The result from the study demonstrates that CSR has a non-significant influence on ROA and ROE but a significant impact on PAT.

CSR is shown to have a negative association with ROA and ROE, which aligns with the assertions of neoclassical economic theory. This notion suggests that companies pay a direct cost by making expenditures on CSR, which in turn puts them at a competitive disadvantage compared to their counterparts (Aupperle et al., 1985). However, CSRD shows a significant negative effect on PAT, indicating that the spending that link to CSR activities may decrease net profits in the long run. These results can be explained using various theoretical frameworks.

Slack Resource Theory states that companies with limited resources may not always receive financial benefits from CSR initiatives. Moreover, Stakeholder Theory suggests that an imbalance between CSR activities and stakeholder expectations may reduce the profitability of the firm. Institutional Theory further emphasis that when CSR practices which are not fully established, such activities may result in decreased financial performance.

Additionally, Agency Theory states that CSR activities sometimes show a mismanagement of resources by managers, while Signalling Theory suggests that insignificant CSR initiatives may fail to generate significant financial benefits. Therefore, companies should align CSR initiatives with business objectives, allocate resources wisely, and communicate clearly with stakeholders to improve the efficiency of business. Future researchers may examine the long-term impact, sector-specific variations, and qualitative aspects of CSR to enhance the understanding of its impact on a company's performance.

Furthermore, this study examines the relationship among the two variables by utilizing the data from post-reform years, taking into account the mandated CSR's nature as a result of the amendments implemented by the Government of India in the Companies Act of 2013. The research indicates that although CSRD is essential for upholding ethical and social responsibility, its direct influence on financial performance is not substantial among Indian pharmaceutical businesses listed on the NIFTY Pharma. Companies should maintain their CSR initiatives while simultaneously prioritising effective leverage management, sales growth, and expansion in order to boost their financial performance. Policymakers should contemplate the implementation of incentives that effectively match CSR initiatives with tangible financial advantages in order to foster the adoption of sustainable business practices.

CSR procedures that prioritise social impact and community development may facilitate the establishment of robust partnerships between corporations and local communities, as well as other stakeholders. This favourable reputation may foster enduring alliances, provide entry into untapped areas, and cultivate a favourable brand perception, thus bolstering competitiveness within the sector (Althaf and Dalimunthe, 2022). The findings of the study indicate a

negative association among CSRD and financial performance (ROA and ROE). This indicates that higher levels of CSR disclosures often associated with weaker financial performance in this particular industry. Considering the detrimental effect of CSRD on financial performance, pharmaceutical businesses should exercise caution while implementing and conveying their CSR initiatives. Although CSR is crucial for upholding ethical and social obligations, corporations must also prioritise methods that directly boost financial performance. These initiatives may include enhancing operational efficiency, promoting innovation, and growing market presence. Promoting the incorporation of CSR into the fundamental business plans of firms, while ensuring that profitability is not compromised, may facilitate the attainment of a harmonious equilibrium between corporate responsibility and financial sustainability.

Practical Implications:

CSR activities are crucial for ethical and social purposes. Therefore, companies should allocate their investments in CSR alongside other activities that directly enhance financial performance, so maximising total company sustainability and profitability. Investors who are looking for financial gains may prioritise firms that effectively manage their debt, demonstrate sales growth, and have a large market presence. However, it is also important for investors to take into account a company's CSR efforts since they contribute to long-term risk management and reputation improvement. Policymakers and regulatory agencies should promote CSR by establishing frameworks that link CSR with financial rewards. This would incentivise firms to include CSR into their fundamental strategy without sacrificing financial success.

8. LIMITATIONS

This study covers the NIFTY Pharma-listed Indian pharmaceutical companies, implying that the results may not apply to the whole pharmaceutical industry or other industries.

The study is based on publicly disclosed CSR activities, which may not accurately reflect a company's CSR activities and practices.

CSR disclosure data were collected through content analysis which may involve subjective bias. Furthermore, CSR activities may be undervalued due to variations in disclosure quality and completeness.

The study may not have shown the effect of external factors such as market conditions, regulatory changes, and technological advances that might affect financial performance.

The reliability of the study depends on the accuracy and availability of the company’s financial and CSR data. Any incomplete or inaccurate data may affect the validity of the results.

9. SUGGESTIONS

Future studies can strengthen existing findings by using more comprehensive measures of CSR and incorporating qualitative approaches, such as interviews and case studies, to get a deeper understanding of the motives and perceived outcomes of CSR initiatives. In addition, investigating the impact of CSR initiatives on non-financial benefits such as the satisfaction of employees and brand reputation may provide a broader perspective on the advantages of CSR. Also, expanding the scope of analysis across different sectors and industries can facilitate a comparative comprehension of this relationship. Furthermore, utilising a longitudinal approach would help to show the less visible effects of CSR disclosures, which cannot be seen immediately in short-term analysis.

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