International Journal of Computer Information Systems and Industrial Management Applications
ISSN 2150-7988 Volume 18(6s) 2026 pp. 1333-1346
https://doi.org/10.70917/ijcisim-2026-5685
Article

ESG DISCLOSURE AND FINANCIAL PERFORMANCE OF PUBLIC SECTOR BANKS IN INDIA: A COMPARATIVE ANALYSIS BEFORE AND AFTER SEBI'S BRSR FRAMEWORK

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Abstract: In India, the growing importance of corporate reporting and accountability has transformed the way disclosure is made, which has been further strengthened by the guidelines issued by BRSR i.e., Business Responsibility and Sustainability Reporting (BRSR). The BRSR are the vital reporting guidelines/regulations formulated by SEBI. BRSR is a significant step towards the normalisation of quantitative and standardised Environmental, Social and Governance (ESG) disclosure from listed entities such as Public Sector Banks (PSBs). This article explores the trends in ESG disclosure practices of PSBs, as well as their association with financial performance, in the preceding and following BRSR period. A ESG Disclosure Index was created using ESG data from five major PSBs which includes SBI (State Bank of India), BOB (Bank of Baroda), PNB (Punjab National Bank), CB (Canara Bank) and UBOI (Union Bank of India) for the four financial years from 2020-21 to 2023-24 from their annual reports and BRSR filing. The evaluation of financial performance was done through Return on Assets (ROA), Return on Equity (ROE), Net Interest Margin (NIM), Capital Adequacy Ratio (CRAR), and Cost-to-Income indicators. Comparative and trend analysis and descriptive analysis were employed to look into changes within the two regulatory phases. The findings reveal that there has been a clear favourable impact on disclosure of ESG information following the implementation of BRSR, with the majority of banks shifting towards more detailed and systematic reporting. The trend is also improving for a few financial performance indicators including ROA, ROE and CRAR during the post-BRSR period. The evidence across the various comparisons is largely positive, suggesting a relationship amid enhanced ESG disclosure and financial efficiency, but NO cause/effect relationship is found. The study concludes that there is no trade-off between reporting on ESG and financial performance, and that better governance, transparency and accountability structures help to improve financial results. The results highlight the increasing significance of sustainability reporting in the financial industry in India and its role in promoting sustainable growth and trust among stakeholders.
Keywords: ESG Disclosure; BRSR; Public Sector Banks; Financial Performance; Sustainability Reporting; ROA; ROE; Capital Adequacy; Corporate Governance; Indian Banking Sector

1. INTRODUCTION

Background and Rationale

The function of corporations and financial institutions has evolved from profit maximisation to environmental, social and governance considerations, as the close relationship between economic activity and social welfare, environmental sustainability and institutional integrity has been more and more recognised. Concern about Environmental, Social and Governance (ESG) is now becoming a comprehensive lens that assesses the way organisations deal with non-financial risks and opportunities that can have substantial implications on future performance and stability. Banks are a key enabler of this change, as they affect capital allocation, risk management and economic priorities, and are directly impacted by ESG risks in their own business and indirectly through their lending, investment and advisory business. Public Sector Banks (PSBs) hold a unique position in the banking system of India. Due to being government-owned, having a large customer base and being given a developmental responsibility, PSBs have to contend with a range of commercial and social and public policy issues like delivering welfare schemes, financing infrastructure and making priority sector lending a responsibility. Meanwhile, asset quality issues, governance problems and increased regulatory scrutiny have weighed on PSBs. The features of PSBs make them an opportune venue to explore the link between ESG reporting and regulatory changes and institutional performance. As non-financial disclosure began gaining relevance and importance, SEBI gradually stepped up its measures and by the end of 2021 implemented the Business Responsibility and Sustainability Reporting (BRSR) regulations for publicly related companies. BRSR introduced structure, standardisation and quantification in disclosure reporting, instead of the narrative disclosure format, which also applies to the banks, including PSBs. While the literature is in the general consensus that adopting ESG practices affects the financial performance, the insights are inconsistent and not universally applicable, and empirical evidence on Indian public sector banks is still scant, particularly during regulatory changes like the transition from BRR to BRSR. The gap triggers the present study which focuses on the ESG disclosure and financial efficiency of the Indian PSBs in the preceding and following BRSR periods.

The Concept of ESG

ESG is an integrated framework used to evaluate how organisations manage non-financial factors affecting long-term sustainability, risk exposure and value creation. It builds on earlier corporate social responsibility and sustainable development discourse but takes a more structured and measurable form. The environmental pillar concerns climate change mitigation, energy efficiency, emissions, waste disposal, water conservation and biodiversity; these risks are increasingly treated as financial risks, particularly for lending portfolios exposed to climate variation and resource scarcity. The social pillar relates to relationships with employees, customers and communities, and encompasses labour standards, diversity, occupational health and safety, customer protection and financial inclusion – dimensions that are particularly relevant for banks given their role in providing credit and earning customer trust. The governance pillar, often regarded as the most emphasised of the three, concerns board composition and independence, executive compensation, risk management, ethical conduct, transparency and regulatory compliance; historically, governance failures have been closely linked to systemic financial crises.

Theoretically, ESG is based on legitimacy theory, which proposes that organizations adopt ESG practices and disclosures to conform to societal expectations and maintain institutional legitimacy, and stakeholder theory, which maintains that long-term organizational success depends on balancing the interests of multiple stakeholders rather than just shareholders.

Unlike traditional corporate social responsibility, which has often been criticised as philanthropic or symbolic, ESG aims to integrate sustainability into governance structures, operational decision-making and performance evaluation, and has become a key input into investment analysis and regulatory oversight.

Evolution of ESG Reporting in India

Sustainability reporting in India has taken its shape slowly and is largely being fuelled by regulation, as opposed to market forces, in many developed economies. Business Responsibility Reports (BRR) for large listed companies with the encouragement of the National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business began with early efforts. These types of reports were generally principle-based and narrative, which made them confusing in terms of outcomes and of making comparisons. There were irregularities and inconsistency in reporting and the impacts of sustainable efforts have not been easily measured. For these limitations, SEBI formulated the Business Responsibility and Sustainability Reporting (BRSR) standards, laying out structured and quantitative disclosure across leadership indicators, essential indicators and value-chain disclosures that has now become required for the top publicly traded entities in terms of market valuation including PSBs.

Public Sector Banks in India

The foundation of the financial economy is the PSBs. Just over a third are majority state-owned, and have been shaped and moulded by the nationalisation of the big commercial banks in 1969 and 1980 to ensure that banking would support national development policies like the priority sector lending and providing credit to the rural population. PSBs are still leading in terms of number of branches, customer accounts, deposit mobilization and serving as the main delivery mode of government-sponsored measures like direct benefit transfer and financial inclusion. This role is in the public eye, therefore, PSBs are held to higher accountability on issues of ethical conduct, transparency and accountability. Concurrently, PSBs have had periodic asset quality issues, capital inadequacy risks and limitations in their governance frameworks, which have been resolved by recapitalising, consolidating and reforming existing laws and regulations. As PSBs have a commercial and developmental dual mandate, it is a unique context to explore the string amid ESG reporting and institutional efficiency.

The SEBI–BRSR Framework

SEBI has played a central role in strengthening corporate governance, transparency and investor protection in Indian capital markets. Building on the earlier, largely narrative Business Responsibility Reports, SEBI introduced BRSR to provide a more structured, comparable and data-driven disclosure format. BRSR requires listed entities to report how ESG considerations are embedded in strategy, governance, risk management and operations, with a stratified structure comprising leadership and essential indicators as well as value-chain disclosures. For banks, BRSR requires reporting not only on internal ESG practices but also on how sustainability considerations are reflected in lending, investment and risk-assessment decisions, thereby linking sustainability reporting directly to credit-risk and portfolio management. For Public Sector Banks in particular, BRSR raises questions of institutional readiness and compliance capacity alongside its intended benefits of improved transparency and investor confidence.

ESG and Financial Performance: Theoretical Perspectives

Several theories have been applied to elaborate a connection amid ESG practice and financial efficiency. The bankers' stakeholder theory claims companies that develop strong partnerships with their employees, customers, regulators, and communities are more financially successful, particularly in the following future, this being especially true of financial institutions such as banks that rely on the trust of their depositors and regulatory approval. ESG theory of legitimacy mainly argues that the use of ESG is driven by social and regulatory credibility requirements, and especially in more-regulated markets like banking. In resource-based theory, ESG capabilities, such as governance quality, ethical leadership, and a risk-management process, could form part of precious and inimitable organisational resources that motivate sustained strategic advantage. There is still some mixed empirical evidence on the ESG–performance connection. The initial research results were divergent as a result of various methodological approaches, the ESG definition and the sector environment in these studies; more recent research has stressed the role of the quality of governance as a decisive factor of financial efficiency, and has also found that the time horizon analyzed is very relevant as the benefits of investing in ESG are seen in the long term, with a view to reducing risk and making a good reputation with investors. Empirical studies relevant to the Indian public banking context are limited, with few research mainly focussed on private banks or samples including banks from more than one sector, which are not necessarily inclusive of the specific nature of PSB ownership, regulatory intensity and developmental mandate.

Challenges and Criticisms of ESG Reporting in Banking

Despite its growing acceptance, ESG reporting in banking faces several well-documented limitations. The absence of standardisation across frameworks and jurisdictions reduces comparability, and the coexistence of voluntary and mandatory regimes can encourage selective disclosure. A recurring problem is the divergence between disclosure and real action, sometimes called symbolic compliance or greenwashing, which is especially relevant for banks whose environmental and social impact is transmitted indirectly thru their loan portfolios and not thru direct operations. Because ESG data is typically self-reported and not subject to the same assurance mechanisms as financial data, questions of data quality and credibility persist, and divergence in ESG rating methodologies further limits the usefulness of external ratings. Institutionally, banks — and PSBs in particular — may face capacity constraints in integrating ESG considerations into credit appraisal and risk management, and the short-term orientation of financial performance evaluation can sit uneasily with the longer time horizon over which ESG benefits typically materialise. These limitations emphasize the urgency and relevance for experiential research that moves over and above disclosure analysis to investigate whether ESG reporting, particularly under a mandatory regime such as BRSR, is associated with measurable performance outcomes.

2. REVIEW OF LITERATURE

The writings and studies on ESG and financial efficiency spans foundational international studies, theoretical contributions on stakeholder and legitimacy theory, and a growing body of Indian research examining CSR, sustainability disclosure and, more recently, BRSR.

Foundational and International Studies

In a long-study of 180 firms in the United States that sustained a long track record of data, Eccles, Ioannou and Serafeim (2014) concluded that businesses that made sustainability a fundamental business goal performed better than their counterparts on stock returns, on return on assets and earnings per share, and on governance and stakeholder engagement. Mariana Friede, Daniel Busch and Ulrich Bassen (2015) concluded from more than 2,000 empirical studies conducted in the period 1970 to 2014 that more than 9 out of 10 studies got negative results with regard to the assumption that responsible business practice negatively impacts profitability, while the majority of studies showed positive results. A constructive and favourable correlation amid corporate social accomplishment and financial productivity was also identified by Waddock and Graves (1997), and in a large-scale review by Margolis and Walsh (2003), cautioned that the connection between the two is very complex and sensitive to methodology, sector and time span. From a theoretical perspective, these findings are supported by Freeman's (1984) stakeholder theory, legitimacy theory (Suchman, 1995) and competitive advantage through social responsibility (Porter and Kramer, 2006).

Indian Studies on ESG, CSR and BRSR

A notable body of Indian research has scrutinized CSR and sustainability disclosure prior to and following the introduction of BRSR. Charumathi and Gaddam (2018) examined CSR reporting among Maharatna public sector enterprises; Mahajan (2022), analysing Business Responsibility Reports from 2016–19, found partial compliance and weak environmental and social disclosure relative to governance, with narrative statements dominating over performance measures — evidence that supports the case for a more structured framework such as BRSR. Raghavan (2022) highlighted the growing professional demands ESG reporting places on accounting and finance functions, while Sharma and Shukla (2022) showed that CSR spending shifted markedly toward health, sanitation and education during the COVID-19 global outbreak. Shrivastava (2022) found a strong correlation amid ESG indicators and profitability among Domestic Systemically Important Banks, supporting the case for strategic ESG integration. Singh and Agrawal (2022) synthesized 35 empirical studies and found that the financial effects of sustainability disclosure were ambivalent, which they attributed to different regulatory environments and disclosure credibility.

Maurya and Singh (2023) study of Bankex-listed banks revealed strongest governance disclosure and weakest environmental disclosure in pre-BRSR period, whereas Saxena and Singh (2023) found that robust financial regulation usually boosts investor confidence and market stability, but regulatory overlap and compliance complexity are still a concern. Acharya, Mohanty, De and Basu (2024) found that governance-related ESG disclosure among S&P BSE 500 firms was linked to profitability, while environmental and social disclosure was not. Anjanappa (2024) demonstrated, through TCFD-aligned modelling, those climate-related risks can have larger financial impact than carbon pricing alone — relevant to how PSBs assess climate risk in lending. Dhuri, Sinha and Shukla (2024) found no significant correlation between CRISIL ESG ratings and financial performance in Indian mutual funds, raising concerns about score-based rather than impact-based reporting. Gupta, Akbar and Shrivastava (2024) found that BRSR improved sustainability and CSR disclosure among ten major Indian companies, though the effect on financial performance was inconsistent. Mohsin (2024) found limited real convergence in corporate governance standards between India, the US and the EU despite formal similarity in codes. Panda et al. (2024) linked stronger pre-merger ESG performance to better post-merger outcomes in Indian M&A deals, relevant to banks' advisory and lending roles. Rizwan, Talib and Akhtar (2024), reviewing Indian sustainability research from 2007–2023, found a shift toward strategic, framework-aligned sustainability, though measurement and integration challenges persisted. Singhal, Paul, Giri and Taneja (2024) found no statistically significant link between CSR/ESG expenditure and profitability among NSE-listed firms, suggesting compliance rather than performance motives.

Agarwal (2025) found firm size and industry, rather than profitability, to be the main drivers of ESG disclosure among NSE-listed companies, with more resilient performance among ESG-strong firms during market uncertainty. Garg et al. (2025), studying 1,012 companies' BRSR disclosures for FY 2022–23, found stronger governance and workforce disclosure than climate or value-chain disclosure. Garg (2025) found BRSR had improved ESG transparency among large firms but identified weaknesses in Scope 3 emissions and community-oriented CSR reporting. Gaur and Singhal (2025) found post-listing financial performance of Indian banks and NBFCs strongly shaped by regulatory intensity. Gehlot and Kalla (2025) found BRSR supportive of transparency in renewable-energy financing, though infrastructure and capital-market barriers persisted. Mandviwala (2025) found disclosure intensity rising steadily after BRSR, shaped by profitability, firm size and ownership. Sengupta, Bhattacharjee and Bhattacharjee (2025) found India's green-bond market under-developed relative to China, the US and the EU, citing regulatory ambiguity. Shivdas (2025) found gradual improvement in Indian banks' sustainability disclosure under BRSR but continuing weaknesses in data consistency and integration into core banking decisions Tandon (2025) discovered a statistically substantial and notable correlation amid ESG disclosure and both financial indicators i.e., ROA and ROE, with governance being the greatest driver, after analyzing 30 commercial banks between 2015 and 2024. Tummarakoti and Vedula (2025) found RBI guidance and the sovereign green-bond framework had encouraged ESG-linked finance, though awareness and funding constraints remained.

Research Gap

The reviewed literature indicates that ESG practice can support financial performance through improved governance, risk management and stakeholder trust, but that the relationship is context-dependent and, in the Indian setting, evidence specific to public sector banks across the BRSR transition remains scarce. Most existing Indian studies examine private firms, cross-sectoral samples or pre-BRSR disclosure alone. This study addresses that gap by comparing ESG disclosure and financial performance of Indian PSBs across the pre- and post-BRSR periods using objective secondary data.

3. RESEARCH METHODOLOGY

Statement of the Problem

While the introduction of BRSR has improved the quality and quantity of ESG disclosure among Indian listed entities, little empirical work examines whether changes in ESG reporting practice are linked to changes in the financial production of Public Sector Banks. Existing literature is concentrated on privately traded firms and developed markets. It reveals a gap in systematic, quantitative comparison of ESG reporting and financial performance of PSBs across the preceding and following BRSR periods.

Scope of the Study

The study investigates the impact of ESG disclosures (annual reports and BRSR) on the Indian PSBs' financial performance indicators that includes Profitability indicators, Asset quality assurance indicators, Capital Sufficiency indicators and Operational efficiency indicators in the context of BRSR. To maintain institutional and regulatory homogeneity, the sample has been kept limited to PSBs and has not included private and foreign banks. The pre-BRSR and post BRSR time frame is the comparative time frame, and the analysis is based on secondary data using ESG disclosure indexing, ratio analysis, trend analysis, and comparative analysis which does not involve primary data collection or macroeconomic modelling.

Objectives of the Study

- To compare the trend of ESG reporting practices of Indian Public Sector Banks' before and after the BRSR period.
- To examine the financial efficiency of PSUs before and after BRSR in India. To study the Level of ESG disclosure by Public-Sector Banks (PS Banks) before and after the introduction of BRSR framework.
- To investigate the linkage amid the ESG Reporting and Financial Efficiency of PS Banks.
- To analyze the influence of BRSR on performance and transparency of PSBs in India.

Research Questions

- How has the level and quality of ESG reporting in PSBs changed in the pre- and post-BRSR period?
- What differences exist in the financial performance (ROA, ROE, NIM, Cost-to-Income Ratio, CRAR) of PSBs before and after BRSR?
- Do there exists noticeable correlation amid the level of ESG disclosures and the financial efficiency score of PS banks?
- To what extent has BRSR improved the clarity, transparency, consistency and analogy of ESG disclosures in PSBs?
- Do improvements in ESG reporting correspond with improvements in financial performance, or are they primarily compliance-driven?

Variables of the Study

The independent construct is ESG reporting, operationalised through a composite ESG Disclosure Index built from environmental, social and governance indicators. The dependent construct is bank performance, measured through ROA, ROE, NIM, the expense-to-Income Ratio and CRAR.

Hypotheses of the Study

H10: There is no significant relationship between ESG disclosure and ROA.

H20: There is no significant relationship between ESG disclosure and ROE.

H30: There is no significant relationship between ESG disclosure and the Cost-to-Income Ratio.

H40: There is no significant relationship between ESG disclosure and CRAR.

H50: BRSR has no significant effect on the performance and transparency of PSBs.

Data Sources and Methodology

The study uses purely secondary data from the annual financial reports, Business Responsibility and Sustainability Reports for the five Public Sector Banks (PSBs): State Bank of India (SBI), Union Bank of India (UBOI), Canara Bank (CB) and Bank of Baroda (BOB), Punjab National Bank (PNB) over four financial years — pre-BRSR period (2020-21 and 2021-22) and the post-BRSR period (2022-23 and 2023-24) in which BRSR was introduced — of the PSBs. The standard banking ratios were used for measuring financial performance, and a composite index for ESG disclosure was used. Changes over time were evaluated using descriptive, comparative and trend analysis and the correlation between ESG index with financial ratios were analyzed on comparative year-wise basis. Throughout the presentations, tables and graphical presentation were used to aid in interpretation. A small selection of 5 Public Sector Banks of which the only banks may not be representative of the whole Indian banking system. Coincidences in terms of BRR and BRSR schedule may prove to be problematic related to separating the unique effect of BRSR.

Limitations of the Study

- Small sample of 5 Public Sector Banks which may not be representative of the entire Indian banking system.
- Sector-specific focus, excluding private and foreign banks, limiting generalizability
- A relatively short study period of four fiscal years.
- Use of only secondary data which may have reporting bias or inconsistency.
- The ESG Disclosure Index is based on selected indicators and may not capture the complexity of ESG practice.
- The study measures disclosure of ESG and not verified ESG performance, which could overstate impact due to symbolic reporting.
- The use of descriptive and comparative methodology without advanced econometric modelling limits causal inference.
- Financial ratios are sensitive to macroeconomic and policy changes that are not controlled for in the study.
- The overlap between the BRR-to-BRSR transition may make it difficult to disentangle the exclusive effect of BRSR.
- Bank differences in reporting formats may affect data comparability.
- Absence of primary data such as interviews limits insight into internal ESG implementation.
- Financial advantages of ESG practice may materialise over the following future than the study period captures.

4. DATA ANALYSIS AND INTERPRETATION

ESG Disclosure Index Construction

An ESG Disclosure Index was then developed to measure the level of environmental, social and governance (ESG) disclosure of the five sampled PSBs. The index uses three indicators i.e., Environmental (E), Social (S) and Governance (G) dimension respectively, and a total of nine indicators. Each indicator worth 1 point when it is clearly mentioned in the bank's annual report or BRSR filing for a given year, and worth 0 when it is not, and the composite indicator results from dividing the total score by the maximum possible score of 9.

Table 1: ESG Disclosure Index Framework

Dimension	Indicator	Description

Environmental	E1	Environmental policy disclosure
Environmental	E2	Energy / resource consumption disclosure
Environmental	E3	Emissions / climate risk disclosure
Social	S1	Employee welfare / diversity disclosure
Social	S2	Training & skill development disclosure
Social	S3	Customer grievance / stakeholder engagement disclosure
Governance	G1	Board composition / independence
Governance	G2	Risk management framework
Governance	G3	Code of conduct / ethics

Bank-wise ESG Disclosure Analysis

The ESG index was computed for each bank across the four financial years. In the pre-BRSR period, disclosure levels varied across banks, largely on account of the environmental dimension — several banks disclosed environmental policies but not energy or emissions data — while social and governance disclosures were comparatively consistent. In the post-BRSR period, all sampled banks disclosed information across all nine indicators, producing uniformly higher composite scores and indicating more standardised reporting.

Table 2: Bank-wise ESG Disclosure Index

Bank	2020–21	2021–22	2022–23	2023–24
SBI	0.89	1.00	1.00	1.00
Bank of Baroda	0.78	0.78	1.00	1.00
Punjab National Bank	0.89	0.89	1.00	1.00
Canara Bank	0.89	0.89	1.00	1.00
Union Bank of India	0.89	0.89	1.00	1.00

Pre- and Post-BRSR Comparative Analysis

During the pre-BRSR period, ESG disclosure was present across all sampled banks but varied in completeness, with social and governance information more consistently disclosed than environmental data. In the post-BRSR period, disclosure patterns became uniform across banks, with all nine indicators reported and composite scores reaching the maximum level. The average ESG index rose from 0.86 in the preceding-BRSR period to 1.00 in the following-BRSR period, indicating that the regulatory requirement is associated with materially more complete ESG disclosure.

Table 3: Pre- and Post-BRSR Average ESG Disclosure Index

Period	Average ESG Index
Pre-BRSR	0.86
Post-BRSR	1.00

Financial Performance Analysis of Public Sector Banks

Return on Assets (ROA)

Table 4: ROA Trend (%)

Bank	2020–21	2021–22	2022–23	2023–24

SBI	0.48	0.67	0.96	1.04
Bank of Baroda	0.07	0.57	0.97	1.12
PNB	0.19	0.27	0.18	0.55
Canara Bank	0.22	0.49	0.81	1.02
Union Bank	0.30	0.47	0.68	1.04

Most PSBs show a clear upward ROA trend in the post-BRSR period. SBI shows stable, consistent growth; Bank of Baroda rises from the lowest ROA in the sample to the highest by 2023–24; Canara Bank and Union Bank show steady improvement; PNB records comparatively lower ROA throughout, though it improves in 2023–24. The post-BRSR years are associated with higher ROA across nearly all banks, consistent with — though not proof of — a link between increased ESG disclosure and improved asset-based profitability.

Return on Equity (ROE)

Table 5: ROE Trend (%)

Year	SBI	BOB	PNB	CB	UBOI
2020–21	9.94	1.50	2.64	4.26	5.58
2021–22	13.92	11.86	3.71	8.77	7.49
2022–23	19.43	18.34	2.59	15.55	11.01
2023–24	20.32	18.95	8.17	19.46	16.37

ROE improves markedly across most PSBs, particularly after BRSR. SBI shows a consistent rise, Bank of Baroda a sharp increase after 2020–21, Canara Bank one of the highest 2023–24 values in the sample, and Union Bank steady improvement throughout; PNB recovers only in 2023–24. The pattern suggests association, not causation, between stronger ESG disclosure and governance emphasis on one side and shareholder returns on the other.

Net Interest Margin (NIM)

Table 6: NIM Trend (%)

Year	SBI	BOB	PNB	CB	UBOI
2020–21	3.04	2.71	3.43	3.32	3.03
2021–22	3.12	3.03	2.65	3.06	2.56
2022–23	3.35	3.31	2.59	2.33	2.40
2023–24	3.28	3.18	2.62	2.41	2.56

ROA and ROE show a consistent trend post BRSR but NIM does not. SBI and Bank of Baroda are relatively stable and high. PNB peaks in 2020-21 then declines. Canara Bank and Union Bank show a mild decline then stabilization. This suggests core lending margins are more sensitive to market and interest rate conditions than to ESG disclosure practice.

Expenditure-to-Income Ratio

Table 7: Expenditure-to-Income Ratio Trend (%)

Year	SBI	BOB	PNB	CB	UBOI
2020–21	53.60	49.21	21.71	22.87	23.73
2021–22	53.31	49.24	23.23	29.57	22.33

2022–23	53.87	47.72	24.77	21.72	22.34
2023–24	55.66	47.71	23.70	20.45	21.46

Efficiency patterns are particular to banks. The ratio for BOB, CB and UBOI (Union Bank) has generally fallen (good cost management, especially after BRSR), PNB is largely stable and SBI has a relatively higher and slightly increasing ratio. BRSR may indirectly contribute to operational discipline tho the link to ESG compliance is not direct. Improved governance and transparency structures associated with BRSR may help.

Capital Adequacy Ratio (CRAR)

Table 8: CRAR Trend (%)

Year	SBI	BOB	PNB	CB	UBOI
2020–21	13.74	14.99	14.32	13.18	12.52
2021–22	13.83	15.68	14.50	14.90	14.48
2022–23	14.68	16.24	15.50	16.68	16.04
2023–24	14.28	16.31	15.97	16.28	16.97

Most PSBs saw their CRAR levels improve over the study period and remain well above the regulatory minimums. Union Bank shows the highest improvement and achieves the highest CRAR in the sample by 2023-24; Bank of Baroda and Canara Bank continue to have high capital buffers; PNB improves at a slow pace; and SBI remains stable throughout. Although CRAR gains cannot be directly attributed to ESG disclosure, better governance and risk-control practices associated with BRSR adoption may help support capital discipline.

Overall Financial Performance Trends

Taken together, profitability (ROA and ROE) improved steadily across most PSBs, particularly post-BRSR; operational efficiency, as measured by the Cost-to-Income Ratio, improved moderately in several banks; NIM remained broadly stable, reflecting sensitivity to market conditions rather than ESG disclosure; and capital adequacy (CRAR) strengthened across nearly all banks. These improvements coincide with the post-BRSR period but reflect association rather than causation, since economic conditions, regulatory reforms and bank-specific strategies also shape financial performance.

Relationship amid ESG Disclosure and Financial Efficiency

ESG Disclosure and ROA

Table 9: ESG Index and ROA Comparison

Year	Average ESG Index	Average ROA (%)
2020–21	0.87	0.25
2021–22	0.89	0.49
2022–23	1.00	0.72
2023–24	1.00	0.95

Both the average ESG index and average ROA rise steadily across the study period, with ESG disclosure reaching full compliance in the post-BRSR years alongside consistently higher ROA. This suggests a impactful alliance amid ESG disclosure and asset-based profitability, though ROA is also shaped by macroeconomic conditions, credit growth and regulatory policy. Based on this pattern, H1 is accepted, indicating a impactful alliance amid ESG disclosure and ROA.

ESG Disclosure and ROE

Table 10: ESG Index and ROE Comparison

Year	Average ESG Index	Average ROE (%)
2020–21	0.87	4.93
2021–22	0.89	9.15
2022–23	1.00	13.38
2023–24	1.00	16.65

ROE rises substantially alongside ESG disclosure, showing a stronger alignment than observed for some other ratios, possibly because governance and transparency — core ESG components — relate directly to how equity capital is managed. The relationship remains associative rather than causal, since ROE is also influenced by credit growth and interest-rate cycles. H2 is accepted, indicating a impactful alliance amid ESG disclosure and ROE.

ESG Disclosure and Expenditure-to-Income Ratio

Table 11: ESG Index and Expenditure-to-Income Comparison

Year	Average ESG Index	Average Cost-to-Income (%)
2020–21	0.87	34.23
2021–22	0.89	35.54
2022–23	1.00	34.14
2023–24	1.00	33.80

While ESG disclosure rises steadily, the Cost-to-Income Ratio shows only a mild decline in the post-BRSR period, and the relationship is weaker and less linear than for the profitability ratios, since operational efficiency is also shaped by technology adoption and branch-network management. H3 is therefore only partially accepted, indicating a modest inverse association between ESG disclosure and the Expenditure-to-Income Ratio.

ESG Disclosure and CRAR

Table 12: ESG Index and CRAR Comparison

Year	Average ESG Index	Average CRAR (%)
2020–21	0.87	13.75
2021–22	0.89	14.68
2022–23	1.00	15.83
2023–24	1.00	15.96

Both ESG disclosure and CRAR rise consistently through the study period, suggesting that clearer reporting and stronger oversight coincide with better capital discipline, although CRAR is also shaped by regulatory capital requirements and balance-sheet restructuring. H4 is accepted, indicating a impactful alliance amid ESG disclosure and CRAR.

5. PRINCIPAL FINDINGS

- ESG disclosure among PSBs increased markedly after BRSR became mandatory. Pre-BRSR disclosure was limited and uneven across banks, whereas post-BRSR reporting became organised, standardised and consistent across environmental, social and governance dimensions.
- Financial performance improved broadly across the study period. Most PSBs show an upward trend in ROA and ROE, particularly post-BRSR, alongside stronger CRAR levels; Cost-to-Income ratios improved moderately in several banks, while NIM remained comparatively stable.

- Comparative analysis confirms a clear rise in ESG disclosure scores in the post-BRSR period, indicating that BRSR has been effective in promoting more systematic sustainability disclosure.
- A positive alliance is observed amid rising ESG disclosure and ROA, ROE and CRAR, consistent with prior literature linking sustainability practice to financial performance, though the relationship is associative rather than causal.
- The post-BRSR period is marked by both enhanced disclosure and improving financial indicators, suggesting that sustainability-oriented governance are not detrimental and does not adversely affect the financial efficiency, even though a direct causal relationship cannot be established from the data.

6. CONCLUSION

The evolution of the ESG disclosure by PS Banks and the link amidst the same and the financial efficiency of PS Banks were investigated in this study as they transitioned from the existing Business Responsibility Reporting regime to the new mandatory Business Responsibility Report and Sustainability Reporting (BRSR) procedures by SEBI. The analysis reveals that in the post-BRSR era, the disclosure of PSBs is significantly broadened in nature and they have started to disclose more comprehensively using an indicator-based structure in BRSR compared to that in the BRR era. This has helped investors to better assess the environmental and social performance of their peers, such as banks, where the environmental and social impact is mediated by the practice of lending. Concurrently, PSBs improved their principal financial performance indicators – ROA, ROE and CRAR – on the whole across the study period while their operational efficiency, measured in terms of Cost-to-Income ratios, also made gradual improvement albeit at a slower pace. While these cannot be linked explicitly to the ESG reporting, the fact that both metrics have improved suggests a positive correlation, as ESG practice, in general, has been linked to increased financial performance, as it enhances governance, risk management and stakeholder trust.

Governance disclosure is also impressive in the PSB space, where regulations have pushed for increased accountability and governance; and financial inclusion and community engagement, which are highlighted in social disclosures, is also seen to bolster institutional legitimacy in an environment heavily targeted by regulations in terms of outputs and services. Note that the findings of this study are associative, and do not necessarily imply a causal relationship. The results of this research should be read with due caution while awaiting the results of more advanced analyses used in this study because of other factors contributing to the noticed improvement in financial indicators, such as regulatory reform, recapitalisation and macroeconomic factors and banking restructuring. However, the study underlines the significance of ESG for the Indian banking sector, along with the materiality of climate, social and governance risks to the financial stability of the nation, and places BRSR in the context of a continued trend to make sustainability a part of the Indian financial and regulatory landscape. For those banks that have a dual mandate of commercial performance and public duty-such banks as banks in the Public Sector Reporting-segment of ESG reporting can help them achieve this dual mandate, as long as there is an explicit link and integration of ESG factors with their lending, risk management, strategic decision making, and gauge, and not simply an exercise of compliance. The overall findings indicate that ESG reporting is increasingly at the core of financial governance and is more than likely to continue to shape disclosure practice and financial institutions' resilience and stakeholder trust in the future in the Indian financial sector.

7. SUGGESTIONS

Public Sector Banks need to move beyond disclosure-based compliance to embed ESG considerations within core banking processes, ensuring that reporting reflects genuine practice rather than a compliance exercise. Based on the core insightss, the following measures are suggested:

- Strengthen the quality and depth of environmental disclosure, particularly on climate risk assessment, carbon exposure and sustainable financing, supported by more quantitative and standardised measurement of lending-book environmental impact.

- Invest in technological infrastructure and data management systems, including digital reporting tools and integrated information systems, help increase ESG data's precision, dependability, and consistency.
- Build employee and management capacity on ESG, climate risk and responsible finance to support effective implementation of evolving regulatory requirements.
- Strengthen internal ESG governance, including board-level sustainability committees, to align ESG objectives with organisational strategy and performance.
- Proactively incorporate ESG considerations into loan and investment choices-based risk assessment models that identify high-risk sectors and support environmentally and socially sustainable projects.
- Pursue independent assurance and verification of ESG disclosures to strengthen credibility, address data-reliability concerns, and mitigate the risk of greenwashing.
- Continue to simplify and refine reporting frameworks such as BRSR, with clearer guidance and greater coordination among regulators, to reduce compliance complexity while maintaining industry relevance.
- Deepen stakeholder engagement by communicating ESG initiatives and outcomes more transparently to investors, customers and the public, thereby strengthening institutional credibility and long-term trust.

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