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Benchmarking the sustainable banking performance of Indian commercial banks

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Abstract: The objective of the study is to suggest a Global Reporting Initiative (GRI)-G4-based hybrid framework for Indian commercial banks to determine their sustainability disclosure practices. Twenty-eight Indian commercial banks were investigated based on their contribution to environmental, economic, social, and governance indices of sustainable practices selected from the GRI-G4 sustainability reporting guidelines. Content analysis through Python software was employed to extract data for a period of three years ranging from 2018 to 2021 exploring the ways Indian banks are embracing sustainable practices. The study has utilised the Mann-Whitney U test to estimate the disparate functioning of commercial banks on the sustainability dimensions. The research findings indicated that private banks outperform public banks on the adopted framework. The ranking results show 'Yes Bank' as the top performer among all selected commercial banks setting a benchmark for other lagging banks to enhance their sustainable performance.

Keywords: green banking; sustainability reporting; social performance; environmental performance; governance.

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1 Introduction

Sustainability has gained prominence in various aspects of businesses as it appraises the present needs without capitulating to the prerequisites of the succeeding generations. A sustainability-driven approach is widely adopted by institutions given the changing demands for more transparency on social, governance, and environmental concerns. Sustainable strategies contribute to brand valuation, enhance efficiency, and offer new opportunities while incapsulating both qualitative and quantitative performance. Environment and society being pivotal in sustainable businesses addresses several critical problems for instance climate change, human rights, gender inequality and fosters longevity of firms.

The banking sector has a significant role in promoting sustainable development as banks are instrumental in the development of an economy (Jan et al., 2019b). Banks have increased perceptivity for sustainable finance while ensuring the progression of the real economy. Although, the global financial crisis banking on short-term economic goals affected the stability of the banking industry. Consequently, the global banking industry witnessed pressure to be more accountable and transparent for economic, social, and governance (ESG) implications of their business interests. Meanwhile, the embarkment of non-financial reporting through sustainability report (SR), business responsibility report (BRR), and corporate social responsibility (CSR) activities in the past few years has shown engagement of all the stakeholders in information promulgation and communicating the non-financial practices of the banks. As the financial system and economic development are intertwined, there is a growing need to empirically determine the leading banks' disclosure standards. Non-financial reporting has received relatively less attention in connection with regulatory monitoring and norms, whether mandated or voluntary, compared to financial reporting by banks, which has been thoroughly studied and codified (Kumar and Prakash, 2019). Even though numerous studies have been conducted on sustainability disclosure specifically, in developing nations, there is a dearth of empirical data on the amount of SR by the banking industry in emerging economies.

1.1 SR in the Indian context

In the past few years, sustainability has gained momentum in Indian banking practices (Rebai et al., 2014). Green banking has been adopted to promote environment-friendly banking practices emphasising environmental management and reduction of carbon footprints as its prime business (Bose et al., 2017). However, green banking focuses solely on the environmental dimensions of banking sustainability for instance internet banking, paperless banking, ATMs, and solar panel installation (Dewi and Dewi, 2017). In India, sustainable banking enfolds the dimensions of ethical banking, social banking, green banking, and CSR. Community development programmes, incorporation of business values and ethical practices, and abstaining from financing environmentally friendly industries are some of the initiatives taken to embrace sustainability in the ambit of banking operations (Weber and Feltmate, 2016).

As demands for corporate transparency and accountability for ESG practices have significantly increased over the past few decades, Indian banks have taken initiatives toward intrinsic development by utilising sustainable and socially responsible policies and have disclosed them to remain competitive. ESG reporting has also been referred to

as non-financial reporting, CSR disclosure, and economic, governance, social, and environmental reports (Jain et al. 2016).

Previously, the Indian Government has also introduced several frameworks to induce businesses to adopt sustainability practices. The Ministry of Corporate Affairs in India announced guidelines for reporting on ESG in 2011. These standards established a reporting format that requires disclosures on sustainability practices. Following this, SEBI (2012) ordered the addition of corporate responsibility (CR) reporting in annual reports of listed businesses from an ESG viewpoint in August 2012. While ESG disclosure in the form of a BR report is required for the demanded 100 listed companies on the two national stock exchanges namely BSE and NSE. Hence, large Indian banks have begun to divulge their sustainability efforts in the form of BR reports in annual reports.

Despite several sustainability initiatives, the literature has not enfolded sustainability adoption in Indian commercial banks. Most of the research focused on the function of green banking in the environmental management and societal operations of Indian banks. The literature has witnessed research carried out on the topic of sustainable banking in industrialised nations (Weber, 2016; Roca and Searcy, 2012; Scholtens, 2009), however, very limited studies explored sustainable banking adoption in developing countries specifically the Indian banking sector. Additionally, there is no generalised framework that has incorporated environmental, economic, social, and governance (EESG) indicators using sustainability to gauge how much banks have adopted sustainable banking practices. The inclusion of corporate governance is influential as it generates an ecosystem of trust, moral and ethical conduct. Well-grounded governance is critical for every section of society and maintains a trade-off between economic and social interests. Corporate governance offers sustainable value and long-term benefits (Aras et al., 2017). The existing research has attempted to fill this research gap by proposing a multidimensional paradigm for determining the initiatives taken by Indian banks embracing sustainability in their regular business operations. The suggested framework is based on GRI-G4 guidelines adopted by about 93% of the world's top 250 companies in more than 100 countries. Further, the sustainable performance of Indian banks is examined to determine the differential pattern of disclosures which would be purposeful for banks in benchmarking the sustainability practices of leading banks on selected parameters. The study would contribute to the corpus of academic literature by investigating the extent of sustainability disclosure practices of Indian commercial banks on the proposed sustainability dimensions incorporating economic, social, environmental, and governance and the ways their SR differs on the suggested indicators. Therefore, the objectives of the study are as follows:

- 1 To suggest a GRI-G4 reporting-based multidimensional sustainability disclosure index for Indian Banks.
- 2 To determine the extent of reporting of Indian commercial banks on the suggested framework.
- 3 To prioritise the sustainability performance of the Indian commercial banks.
- 4 To ascertain the variation of sustainability disclosure practices of the commercial banks.

The study would be purposeful for banking management in understanding the ways the banking sector is catalysing the sustainable development of the economy. The proposed framework will serve as a baseline for the disclosure of Indian commercial banks' sustainability initiatives. Additionally, the inputs of the study would facilitate the regulators to improvise the guidelines of SR.

The remaining study is structured and as mentioned: Section 2 has revisited the evolution of the GRI framework and existing literature on sustainable reporting. Section 3 has discussed the research methodology. The research findings are exhibited in Section 4. The results and discussions are covered in Section 5. Conclusion, research implications, limitations, and scope of future studies are discussed in Section 6.

2 Review of past literature

The section deals with the historical background of the GRI framework and reviewed the study on SR incorporating EESG dimensions.

2.1 Progression of the GRI framework

GRI originated in Boston in 1997. The goal of its institution was to create an accountability framework, which was eventually extended to embrace ESG issues so that firms could adhere to principles of responsible environmental conduct. The first worldwide reporting system for sustainability, the GRI Guidelines (G1), was released in its initial form in 2000. The following year, GRI became a stand-alone, non-profit corporation. The first revision of the guidelines (G2) was introduced in 2002, the same year that GRI moved to Amsterdam and The Netherlands. The guidelines were updated and expanded with growing organisations' interest in GRI reporting leading to its expansion in G3 (2006) and G4 (2013).

The GRI principles are widely used in the literature on environmental disclosure, CSR reporting, green reporting, and SR. It is acknowledged that the GRI serves as a crucial standard for triple bottom line reporting (Munjal et al., 2019). Moreover, in SR, GRI rules have been associated with numerous international reporting frameworks (Wagner and Seele, 2017). The GRI standard is followed by most Fortune 500 firms, demonstrating its strength in terms of stakeholder diversity and corporate leadership accountability. Judge and Douglas (1998) demonstrated the ways GRI rules have created a very helpful instrument for reporting and analysing financial and non-financial events of organisational performance and competitiveness. Weber et al. (2008) emphasise that using GRI has certain advantages because it offers measurable indicators that decision-making authorities can employ. The four reporting elements of economic, environmental, social, and governance (EESG) reporting have been integrated into the GRI rules, which have progressed toward a more standardised format (Dissanayake et al., 2019). The Sustainability Reporting Guidelines and Financial Services Sector Supplement (GRI 2011) includes factors specific to the financial industry, such as client interactions concerning social and environmental risks and opportunities and financial products and services that incorporate sustainability indicators. The development of the GRI reporting system is depicted in Figure 1.

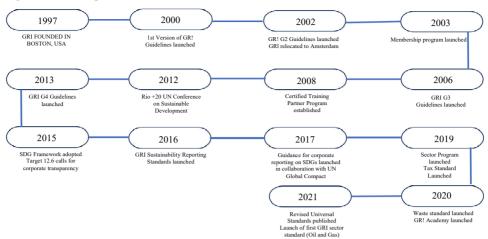


Figure 1 Development of GRI framework (see online version for colours)

2.2 Sustainability performance dimensions

Traditionally, research in strategic management has explored the effect of firm, industry, country and time factors on firms' corporate financial performance recently companies have adopted sustainable practices to ensure that their actions fulfil environmental, social considerations as well as economic goals. To attain long-term development goals, the literature has advocated the inclusion of ESG dimensions in business operations. Tamimi and Sebastianelli (2017) indicated ESG as a widely accepted dimension of a company's long-term viability. Furthermore, it has been found that ESG rankings serve as a baseline for stakeholders while making investment and collaboration decisions (Tamayo-Torres et al., 2018; Wei, 2020). The company's economic value is determined not only by its means of production but accompanied by social activities toward the environment to implement material and human resources offering financial, environmental, and social profitability. This result in a strong synergy between the corporate objectives and its environmental objectives (Wong et al., 2020). It was claimed that apart from financial success, EESG factors must be considered for any company to remain competitive and viable. The banking and financial services sector is responding to sustainability concerns more slowly than other industries (Buallay, 2019). Banks that incorporated sustainable practices into their daily operations and placed a strong emphasis on social, environmental, and governance standards were those that not only survived but also expanded in the wake of the 2008 financial crisis (Buallay et al., 2020).

Over the past two decades, reporting on sustainable practices and the need for corporate sustainability have become of utmost importance. Environmental and social performance disclosure has become a crucial component of the business's overall business strategy (Ghosh, 2017). Over the past three decades, the idea of non-financial reporting has undergone a continual change. From a small handful of sections of the annual report of the company to a separate SR structure, companies have now developed non-financial reporting. Complete disclosures of the company's operations' social and environmental performance are included in such thorough reports (KPMG, 2017). Businesses now use worldwide SR standards like GRI and have grown more responsible.

This produces standards and more transparent disclosure at higher levels (Milne and Gray, 2010). As a result of CSR and SR, numerous studies indicate that organisations can get numerous advantages (Khan et al., 2009). Several studies on the nature and content of CSR disclosure have been conducted in both advanced and emerging nations. Economic and governance elements are major concepts that are used nowadays in addition to environmental and social concerns. Financial organisations, including banks, are increasingly disclosing financial inclusion and literacy activities as part of their non-financial disclosure to convey socially responsible business practices to diverse stakeholders.

2.2.1 Economic practices and bank performance

Economic performance lays the foundation for the long-term performance of an organisation. According to GRI guidelines, economic sustainability is one of the decisive factors impacting local, national, and international economic systems. Corporate economic sustainability is to assess the financial results of an organisation's operations and how these results affect a wide variety of stakeholders (GRI, 2006).

Campbell (2007) explained the dynamics of a competitive economic environment in responding to sustainability practices. It was advocated that a fierce and volatile competitive environment hinders the firms to perform in socially responsible ways. The declining profit margins instigate unethical practices and restrict the quality of disclosures. Slack resources theory (Waddock and Graves, 1997) also highlighted the ways recessive economic environment drives socially irresponsible behaviour. Rising inflation, lower GDP level, and decreasing productivity reduce the resources available for sustainability activities. However, the research investigating the association between economic environment and bank performance is very scarce.

2.2.2 Environmental practices and bank performance

Financial organisations are facing the increasingly important but highly difficult task of integrating sustainability into their banking operations (Carlucci et al., 2018). Unlike chemical or energy firms, banks are not thought of as major polluters. However, banks consume a lot of materials like paper, electricity and significantly increase indirect carbon emissions. In financial firms, a contemporary approach to strategic management includes disclosing indirect carbon emissions (Avrampou et al., 2019). Integrating the environmental components into their advances and lending operations shall facilitate banks to select lesser risks and develop an ingenious business plan for borrowers in future (Gangi et al., 2018). Few researchers found that banks' financial performance increases when they engage in environmentally beneficial initiatives. Banks that made disclosures about their efforts to diminish carbon emissions fetch more profits. The market value of the bank enhances with environmental disclosure (UNPRI, 2020). Buallay (2019) analysed the financial results of almost 250 reputed banks between 2007 and 2016 and found that environmental disclosure favourably impacted the banks' return on assets (ROA) and market value. On the same line, between 2002 and 2015, several authors evaluated more than 50 financial institutions in the Europe and US. Miras-Rodríguez et al. (2015) asserted that environmental initiatives have a favourable impact on the market valuation and EPS of the banks. Prior studies analysed the association between ESG practices and financial performance using information from 727 financial

organisations in 22 industrialised nations between 2006 and 2017. The findings showed that increased profitability was associated with higher environmental scores (Crespi and Migliavacca, 2020). The study of Munjal and Sharma (2019) indicated a disparity in the financial performance of Indian public and private sector banks while adopting environmental indicators. Singh et al. (2022) conclude that green banking practices indirectly enhance bank performance. The results of a study by Jan et al. (2019a) further supported the notion that sustainable banking practices and bank performance are positively correlated.

2.2.3 Social practices and bank performance

Social performance has become a critical component of any business's ability to operate efficiently. Sustainable companies consider their long-term goal while making business decisions. Modern corporations are focusing to a greater extent on the social aspects of sustainability as a result of the paradigm change in stakeholder demand from environmental to social challenges (Yawar and Seuring, 2017). Various studies found a favourable relationship between CSR and Bank performance (Liu et al., 2021; Wang and Sarkis, 2017; Zafar et al., 2022; Gangi et al., 2019; Buallay, 2019; Weber, 2017). On the contrary, some authors concluded unfavourable relation between social performance and bank performance (Esteban-sanchez et al., 2017; Saadaoui and Salah, 2022; Tandelilin and Usman, 2022). Research conducted by Zhou et al. (2021) demonstrated an unfavourable short terms influence of CSR on bank financial performance however projected a positive impact in the long run.

2.2.4 Governance and bank performance

Owing to economic integration and the emergence of huge enterprises, corporate governance disclosure has become a concern for managers and stakeholders globally (Singh and Gaur, 2009). The role of governance is critical in businesses as it formulates a framework of rules and guidelines to analyse the operations of businesses and their alignment with the welfare of its stakeholders. A sound corporate governance structure induces ethical behaviour while ensuring financial viability. Corporate governance now extends beyond simply enforcing laws and regulations to examine the conduct of directors and board members (Aboud and Diab, 2018). Kaymak and Bektas (2017) demonstrated a strong link between good corporate governance and a company's CSR actions. The literature showed a favourable relation between bank performance and corporate governance (Handa, 2018; Boachie, 2020; Zhang et al., 2020; Asadi and Ramezankhani, 2022; Bhatia and Gulati, 2021). Strong corporate governance has been found to enhance bank financial performance in the past (Orazalin et al., 2016; Jan et al., 2021). Dhanasekar et al. (2020) found a positive impact of corporate social performance on financial performance and research and development. However, some research could not associate a linkage between corporate governance and banking performance (Molla et al., 2021; Khan and Zahid, 2020; Kumari and Pattanayak, 2017). According to Dey and Sharma (2020), board independence, the board size, board meetings, and board committees all have an adverse impact on financial performance (ROA and ROE). On the other hand, this study discovered a favourable correlation between the number of female directors, both executive and non-executive, and banks' performance metrics. Corporate governance practices including performance-based pay, having women on boards,

possessing a moderately sized board, and anti-takeover measures had no major impact on bank performance during the crisis (El-Chaarani et al., 2022).

Considering a broad range of factors, the assessment of prior literature revealed a significant gap in understanding how sustainable policies affect banking performance. This study proposes a multidimensional paradigm that converges the four elements of sustainability – EESG. The synergistic framework would analyse the responsiveness of Indian commercial banks on GRI-G4 suggested guidelines and distinguish the ways public and private sector banks are performing on sustainability parameters.

3 Research methodology

The study assessed the sustainability performance of 28 commercial banks operating in India on 40 sustainability parameters based on GRI-G4 principles. The data is extracted for three years from 2018–2021 from the BRR Report, SR, bi-settlement report, and annual reports of the preferred banks by content analysis using Python Software. To determine the functioning of Indian commercial banks on the sustainability indicators, the study has computed the sustainability disclosure index of the banks. Based on the following formula, the item's presence or absence is determined using a scale of 1 and 0:

$$SUSTAINABILITYi = \sum_{1}^{J} \cdot \sum_{i=1}^{n} dij$$

where

j indicates the sample of 33 banks

dij = 0 when the item has not been reported.

dij = 1 if the item has been reported.

N the maximum number of items a bank is expected to disclose.

Subsequently, the sustainability score was converted into percentage terms by using the following formula:

Sustainability score of banks = No. of sustainability indicators employed by a bank / total number of sustainability indicators.

The disclosure score is utilised to ascertain the extent of reporting by dividing them into insignificant adopters, beginners, satisfactory adopters, and substantial adopters categories. Table 1 has depicted the stage-wise categories for determining the existent level of reporting on selected indicators.

The study has also studied the patterns of reporting of Indian public and private sector banks to determine whether there exists a dichotomy in their sustainable banking performance. For attaining this objective, the following hypothesis is framed in the study:

- H0 There is no significant difference in the disclosure practices of sustainability indicators of public and private sector banks in India
- H1 There is a significant difference in the disclosure practices of sustainability indicators of public and private sector banks in India.

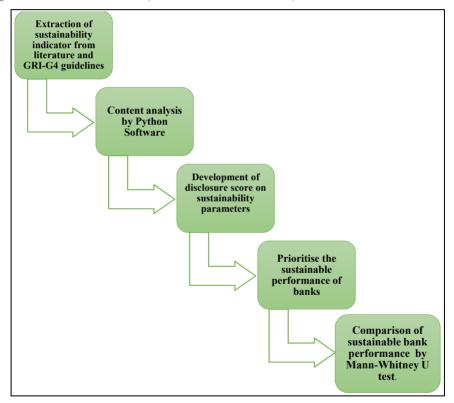
The differential performance of the banks is computed by applying the Mann Whitney U test. Figure 2 has depicted the structure of research followed in the study.

 Table 1
 Adoption level criteria for sustainable bank performance

Categories based on scores for the adoption of sustainable banking practices				
Stages	Score	Adoption level		
First Stage	80–90	Insignificant adopters		
Second stage	91–100	Beginners		
Third stage	101–110	Satisfactory adopters		
Fourth stage	111–120	Substantial adopters		

Source: Own

Figure 2 Structure of research (see online version for colours)



4 Research findings

The study has reported the sustainable performance of 28 commercial banks operating in India for three years from 2018–2021. The collected data from various sources like financial and non-financial reports promote the method the banks are disclosing their initiatives on sustainability parameters.

The findings of the study indicated that SBI and Punjab National Bank are the only public sector banks that publish SR and comply with the GRI-G4 framework. With an average score of 150, the banks have outperformed other public sector banks. The introduction of SEBI and NVGs (2012) guidelines requires the top 100 listed enterprises to release a BRR. Subsequently, most public banks have begun their endeavours for environmental and social disclosures. Figure 4 has prioritised the banks' rankings for sustainable banking performance wherein SBI (105)and PNB (105) are ranked first followed by Canara Bank (97), UCO Bank (90), Central Bank of India (89) and Union Bank of India (89), Bank of Baroda (86), Indian Bank (85), Punjab and Sind Bank (82) and Bank of Maharashtra (81).

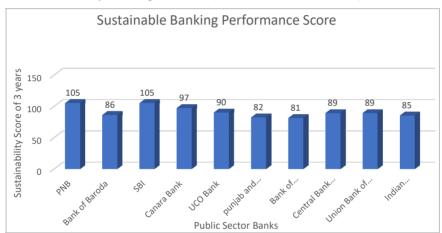


Figure 3 Sustainability score of public banks (see online version for colours)

Figure 3 shows that seven out of ten PSBs obtained an average score of 80–90. The lower contribution shall be attributed to many standards of SR while very few are aligned to the practices of public sector banks. In the Indian context, there is no standard format for reporting on sustainability disclosure which restrains the contribution of banks on sustainability parameters. Additionally, several definitions of indicators impact the scope of reports mandated in the Indian scenario.

Figure 4 illustrates the performance of the sustainable banking score for the Indian private sector, with private sector banks outperforming public sector banks. According to the sustainable banking performance ranking order, Yes Bank (112) stood first followed by RBL Bank (110), HDFC Bank (109), IndusInd Bank (107), South Indian Bank (105), Axis Bank (102), Jammu and Kashmir Bank (100), City Union Bank and Kotak Mahindra Bank (98), Bandhan Bank(97), ICICI Bank (96), Karnataka Bank (95), CSB Bank (93), Dhanlaxmi Bank (90), IDBI Bank (87), and DSB Bank (83). The high disclosure is endorsing the initiatives of the private banks in pivoting their financing toward sustainable companies.

Figure 4 Sustainability score of private banks (see online version for colours)

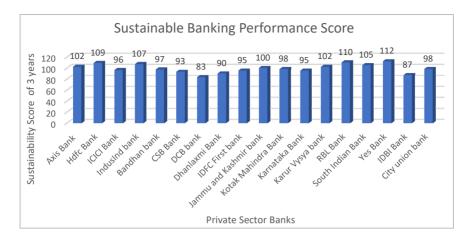


Figure 5 Extent of sustainable banking adoption (see online version for colours)

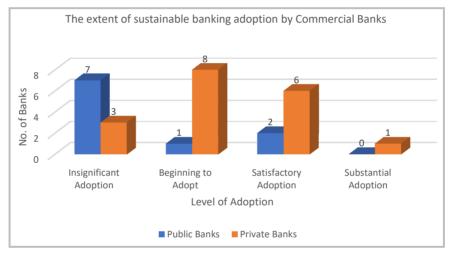


Figure 5 depicts the level of adoption by Indian Banks which is divided into four categories: Insignificant adopters, beginners, satisfactory adopters, and substantial adopters (Kumar and Prakash, 2019). Indian banks categorised under the scores of 80–90 are considered insignificant adopters, 91–100 as beginners, 101–110 as satisfactory adopters, and 111–120 as substantial adopters. Ten banks are classified as 'insignificant adopters', indicating that they are reluctant in implementing sustainable banking strategies. Out of the 28 banks studied, nine (32%) are in the 'beginners' stage. This category includes banks that have begun to implement sustainable practices of banks and report their ESG performance using voluntary criteria such as NVGs. Their efforts, however, are mostly focused on internal environmental management systems and social development programmes. Only YES Bank is a bank in the top group of 'Substantial adopters'. However, eight banks (29%) are categorised as 'satisfactory adopters', implying that they offer pioneering sustainable products, integrate various environmental considerations into their business policy, vigorously participate in upholding international codes of conduct on sustainability, and openly disclose their ESG performance in a

separate report. Ten banks, (36%) of them, have a low adoption rate. This category designates a bank that has successfully carried out practices communicating all facets of sustainability and has achieved well on key sustainability-related performance metrics, including offering a variety of sustainable products and services, engaging in environmental activities, implementing societal projects, and adhering to international GRI G4 Guidelines. Table 2 has presented the average performance score of the selected banks and the extent of adoption of sustainability parameters for three years duration from 2018–2021.

 Table 2
 Extent of Sustainability adoption of Indian commercial banks

Banks	Score	Rank	Level of adoption
Yes Bank	112	1	Substantial adopters
RBL bank	110	2	Satisfactory adopters
HDFC Bank	109	3	Satisfactory adopters
Indus Ind Bank	107	4	Satisfactory adopters
SBI	105	5	Satisfactory adopters
PNB	105	6	Satisfactory adopters
South Indian Bank	105	7	Satisfactory adopters
Axis Bank	102	8	Satisfactory adopters
Karur Vysya Bank	102	9	Satisfactory adopters
J & K Bank	100	10	Beginners
Kotak Mahindra	98	11	Beginners
Citi Union Bank	98	12	Beginners
Canara Bank	97	13	Beginners
Bandhan Bank	97	14	Beginners
ICICI Bank	96	15	Beginners
IDFC First Bank	95	16	Beginners
Karnataka Bank	95	17	Beginners
CSB Bank	93	18	Beginners
UCO Bank	90	19	Insignificant adopters
Dhanlaxmi Bank	90	20	Insignificant adopters
Central Bank of India	89	21	Insignificant adopters
Union Bank of India	89	22	Insignificant adopters
IDBI Bank	87	23	Insignificant adopters
Bank of Baroda	86	24	Insignificant adopters
Indian Overseas Bank	85	25	Insignificant adopters
DCB Bank	83	26	Insignificant adopters
Punjab & Sindh Bank	82	27	Insignificant adopters
Bank of Maharashtra	81	28	Insignificant adopters

Source: Author's own computation

Figure 6 Sustainability score of Indian banks (see online version for colours)

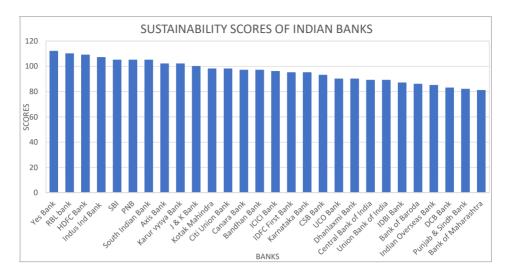


Figure 6 compares the sustainability ratings of public and private Indian commercial banks. Yes Bank, a private bank, has the highest rating, followed by RBL Bank and HDFC Bank. In terms of the performance of sustainable practices being used, Bank of Maharashtra receives the lowest rating. Private banks outperform public sector banks when comparing sustainability performance across the two types of banks.

Table 3 Statistical difference between public and private sector banks towards sustainability practices (Mann-Whitney U test)

Latent variable	Type of banks	N	Mann-Whitney U test	Z-score	Asymp. sig.	Mean	Decision
Sustainability	Private	10				9.8	Supported
score	Public	18	43	-2.25	0.024	17.11	

Note: Author's computation at 0.05 level of significance.

Table 3 has depicted the results of The Mann-Whitney statistical test used to differentiate the performance of banks in the public and private sectors. Test statistics result shows that there exists a difference in public and private sector banks with a mean rank of 9.80 and 17.11, respectively. The findings showed the z value of -2.25, U value = 43 with a significant level of p = 0.024. The probability value (p) is less than or equal to .05 denoting the result to be significant. Hence, the statistical result rejects the null hypothesis and indicates a significant difference in the sustainability practices of public and private sector banks.

5 Results and discussion

Sustainable practices alleviate the implications of climate change, promote socially responsible and ethical practices and facilitate funding for an imminent low carbon economy. With the dearth of literature on EESG disclosure, the study has made an effort to determine the endeavours of 28 commercial banks in inculcating sustainability practices while strategising for the future. The proposed multidimensional paradigm has

presented significant factors to substantiate the efforts of the Indian banking industry in meeting sustainability goals beyond meeting financial viability.

The research results are endorsing the findings of Kumar and Prakash (2019) highlighting the pre-eminent efforts of Yes bank in following the international code of conduct on the adoption of sustainable banking practices. However, the study of Kumar and Prakash (2019) found Indian Overseas Bank least responsive in contributing to sustainability parameters while the current study has ranked Bank of Maharashtra last in prioritising the sustainable Indian commercial bank's performance. The difference in the results may be attributed to the difference in the selected indicators of the multidimensional frameworks.

The study also found private banks outperforming public sector banks strengthening the notion that the banks are slow in adopting sustainable banking practices. The research result also indicates that the sustainable practices of Yes Bank can be used as a benchmark to improvise the performance of sustainability parameters. A step towards sustainability would yield stable profits and stronger growth in the banking industry.

6 Conclusions

The study has made the foremost effort to determine the ways Indian commercial banks are adopting sustainability practices. By employing content analysis, the study has explored the initiatives of the banking sector and highlighted the critical indicators relevant to the Indian banking system. It has also analysed the disparity in the performance of public and private sector banks. However, the research has a few limitations. The SR framework developed by the study is based on GRI-G4 reporting guidelines which can be extended by other research incorporating other international frameworks. While the current study is based on 40 sustainability indicators, potential steps can be taken to integrate other factors to generalise the study findings. Additionally, for the universalisation of the proposed framework, the suggested sustainability indicators can be used by the countries thriving in a similar business environment. The study has paved the way for future research to validate the effect of proposed indicators on banking performance.

6.1 Managerial implication

The study has proposed a multidimensional framework for the Indian banking sector disclosing their responsiveness to ongoing sustainability concerns. The benchmarked critical sustainability indicators would contribute to fostering customer trust and accountability towards society. This study would facilitate banks in comprehending the gaps in implementing sustainable banking practices and enhance their contribution to meeting sustainability goals.

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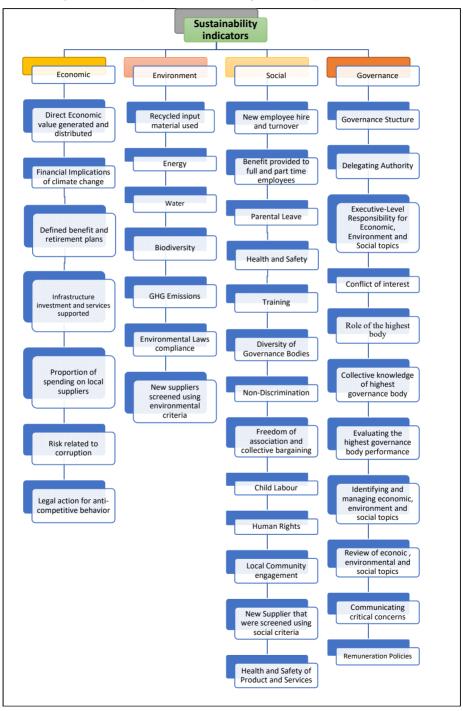
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Annexure

Sustainability indicators (see online version for colours)



Selected GRI indicators

S. no.	GRI indicators	Source
A	Economic indicators	GRI: 200
1	Direct economic value generated and distributed	GRI:201(1)
2	Financial implications and other risks and opportunities due to climate change	GRI:201(2)
3	Defined benefit plan obligations and other retirement plans	GRI:201(3)
4	Infrastructure investments and services supported	GRI:203(1)
5	Proportion of spending on local suppliers	GRI:204(1)
6	Operations assessed for risks related to corruption	GRI:205(1)
7	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	GRI:206(1)
В	Environmental indicators	GRI: 300
1	Recycled input materials used	GRI:301(2)
2	Energy	GRI:302(1)
3	Water	GRI:303
4	Biodiversity	GRI:304(1)
5	GHG emissions	GRI:305(1)
6	Waste generation and significant waste-related impacts	GRI:306(1)
7	Non-compliance with environmental laws and regulations	GRI:307(1)
8	New suppliers that were screened using environmental criteria	GRI:308(1)
C	Social indicators	GRI:400
1	New employee hires and employee turnover	GRI:401(1)
2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	GRI:401(2)
3	Parental leave	GRI:401(3)
4	Workers covered by an occupational health and safety management	GRI:403(8)
5	Average hours of training per year per employee	GRI:404(1)
6	Diversity of governance bodies and employees	GRI:405(1)
7	Non-discrimination	GRI:406(1)
8	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	GRI:407(1)
9	Operations and suppliers at significant risk for incidents of child labour	GRI:408(1)
10	Employee training on human rights policies or procedures	GRI:412(2)
11	Operations with local community engagement, impact assessment, and development programs	GRI:413(1)
12	New suppliers that were screened using social criteria	GRI:414(1)
13	Assessment of the health and safety impacts of product and service categories	GRI:416(1)
14	Substantiated complaints concerning breaches of customer privacy and losses of customer data	GRI:418(1)

Selected GRI indicators (continued)

S. no.	GRI indicators	Source
D	Governance indicators	GRI:102
1	Governance structure	GRI:102(18)
2	Delegating authority	GRI:102(19)
3	Executive-level responsibility for economic, environmental, and social topics	GRI:102(20)
4	Conflicts of interest	GRI:102(25)
5	Role of the highest body in setting purpose, values, and strategy	GRI:102(26)
6	Collective knowledge of highest governance body	GRI:102(27)
7	Evaluating the highest governance body's performance	GRI:102(28)
8	Identifying and managing economic, environmental, and social impacts	GRI:102(29)
9	Review of economic, environmental, and social topics	GRI:102(31)
10	Communicating critical concerns	GRI:102(33)
11	Remuneration policies	GRI:102(35)