The Effect of Sustainability Reporting on Firm Value: Insights from Leading Indian Public Banks

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KEYWORDS

Sustainability Disclosure, Public Banks, Market Value, Financial Performance.

ABSTRACT:
The present study investigated the effects of sustainability disclosure on the market value of selected Indian public banks over the course of seven years (2017-2023). It also establishes the association between the variables of firm value and sustainability disclosures. It also emphasizes the framework for gaining access to the link among sustainability disclosures and firm value along with details of dependent, independent and control variables. The study analyzed data of selected Indian public banks from the moneycontrol and additional secondary sources. The study employed descriptive analysis methods to examine the required sustainability disclosures adopted by banks and conducted causal research to assess the influence of voluntary disclosures on financial variables. This research investigates the impact of sustainability disclosure practices among selected Indian banks. The analysis incorporated firm-specific dependent variables, including Tobin- Q, alongside three control factors: firm size, firm age, and market capitalization. Using a fixed effects panel regression model, the study found a significant association between sustainability reporting disclosure and financial performance. The study also offers valuable insights for banking professionals, fosters customer loyalty by promoting transparency and maintain trust and good relations with investors and creditors that will invest in the company. The confidence feeling of investors and creditors in the corporate accountability will enhance the company's reputation or image.

1. INTRODUCTION

In recent years, the global emphasis on sustainability has driven organizations to adopt practices that are not only economically viable but also socially and environmentally responsible. Sustainability reporting, a tool that enables firms to disclose their environmental, social, and governance (ESG) practices, has gained significant importance as stakeholders increasingly demand transparency and accountability Maurya, S., & Singh, R. S. (2022). This reporting serves as a critical medium through which companies communicate their efforts in addressing sustainability challenges, thereby reinforcing trust among investors, customers, and regulatory bodies. In the banking sector, which plays a pivotal role in driving economic growth, sustainability reporting has emerged as a key factor in shaping perceptions of a firm's value. Public banks in India, being major financial intermediaries, are under constant scrutiny to align their operations with sustainable development goals (SDGs). The Reserve Bank of India (RBI) and other regulatory bodies have also emphasized the integration of ESG considerations into banking practices, further highlighting the importance of sustainability reporting Rastogi, S., & Singh, K. (2023).

The banking sector in India have an pivotal role in promoting the socio-economic development and have a vital responsibility in promoting sustainability, which benefits both banks and the economy. Although sustainable banking in India is still in its developing stage, but several major banks have reached significant milestones in the sustainability transformation journey. The awareness of sustainability is growing within the Indian banking sector as institutions acknowledge their role in future well-being. The necessity for sustainability reporting has become increasingly evident in recent years, as the growing recognition among stakeholders of environmental and social issues, prompting heightened demands for transparency and accountability from corporations regarding their sustainability practices. This heightened awareness stems from concerns over environmental degradation, social inequality, and ethical business conduct, compelling stakeholders such as investors, consumers, employees, and regulatory bodies to seek greater disclosure of companies' environmental, social, and governance (ESG) performance (Adams, C. A., 2002). Sustainability reporting have the pivotal role in risk management and reputation preservation. Companies that neglect to report on their sustainability performance risk alienating investment opportunities from funds that prioritize socially responsible investing (Marquis and Qian, 2014). The role of banks in society is currently going through a conversion that shows important opportunities. Sustainability is now increasingly recognized as central to the growth of emerging markets. The financial sector enters a bit later in this arena but recently it emerges as an important driver for a stable economy. In the banking sector, new standards and codes of conduct promote corporate accountability, transparency, and consideration of impacts on the environment and society. Banks are a vital part of the financial system in the economy. Banks are those business organizations that deal in financial resources. In this study, on the basis of market capitalization banks are selected. This study carried out with a sample size is of 20 banks which bifurcated into public and private banks. Banks are business enterprises that deal in finances and provide financial services for a price known as interest. Banks accept deposits from the public for the purpose of lending. The main thrust of banks in today’s time is to report on sustainability. The role of banks in society is currently undergoing a transformation that presents significant opportunities. Sustainability is increasingly recognized as a central component of growth in emerging markets. Banks play a vital role in the financial system and the economy. In the banking sector, new standards and codes of conduct are promoting corporate accountability, transparency and a focus on the environmental and social impacts of their operations. Today, a key priority for banks is to report on sustainability and integrate it into their practices. Sustainability reporting displays your organization commitments to transparency which helps in establishing trust between organization and its stakeholders.

The primary objective of this study is to explore the relationship between sustainability reporting practices and firm value among the top Indian public banks. The study begins by examining the descriptive statistics of the selected banks to provide a comprehensive overview of their financial performance, sustainability practices, and other relevant metrics. This analysis establishes a foundational understanding of the sample and its key characteristics. Subsequently, the research delves into assessing the impact of sustainability reporting on firm value. By evaluating the extent and quality of sustainability disclosures made by these banks, the study aims to determine whether and how such practices influence their market performance and overall valuation. This involves analyzing various dimensions of sustainability reporting, including environmental, social, and governance (ESG) aspects, and correlating them with firm value indicators such as market capitalization, return on assets, and shareholder equity. Finally, the study explores the broader implications of sustainability reporting practices on firm value. This includes understanding how these practices affect stakeholder perceptions, investor confidence, and long-term financial stability. The findings aim to provide valuable insights for policymakers, banking professionals, and investors, emphasizing the critical role of sustainability in shaping the value and reputation of public banks in India.

The findings of this study hold significant implications for policymakers, banking professionals, and investors. As sustainability continues to shape the corporate landscape, understanding its influence on firm value is essential for fostering a sustainable and resilient banking sector in India. Overall, this study underscores the critical role of sustainability reporting in enhancing firm value, offering actionable recommendations for fostering a resilient, transparent, and sustainable banking ecosystem in India.

2. LITERATURE REVIEW

Sustainability reporting has gained significant traction in recent years as firms strive to align their operations with environmental, social, and governance (ESG) criteria. This literature review aims to explore the effects of sustainability reporting practices on the firm value of selected Indian banks, drawing on findings from various studies conducted across different contexts. Numerous studies indicate a positive correlation between sustainability reporting and firm value. For instance, Buallay (2019) found that sustainability reporting, particularly in the context of ESG, is positively associated with firm performance within the European banking sector. This suggests that transparency in sustainability practices can lead to improved market perceptions and ultimately enhance firm value. Similarly, Yoon et al. (2018) corroborated these findings in their research on Korean firms, establishing that sustainability reporting is positively related to market value. This relationship underscores the importance of ESG disclosures in shaping investor perceptions and decision-making. In the context of Turkey, Kuzey and Uyar (2017) demonstrated that both sustainability disclosure and board gender diversity positively impact firm value, further underscoring the multifaceted benefits of comprehensive sustainability practices. Further, supporting the positive relationship between sustainability practices and firm value, Kuzey and Uyar (2017) provide evidence from Turkey, indicating that sustainability reporting is positively related to a firm's market value. This finding aligns with Loh, Thomas, and Wang (2017), who report similar results in their study of Singapore-listed companies, reinforcing the notion that sustainability reporting is a vital factor influencing market perceptions and valuations. This literature review underscores the growing importance of sustainability reporting in enhancing the firm value of banks, particularly in the context of regulatory compliance and investor expectations. Kumar and Bala (2020) examined Indian banks' ESG disclosures and observed that those with detailed sustainability reports exhibited better financial performance and risk management. Another study by Gupta and Sinha (2021) highlighted that sustainability initiatives enhance the reputation and trustworthiness of Indian public banks, positively impacting their firm value. Abdi et al. (2021) assert that higher-quality sustainability disclosures systematically lead to increased equity prices. Their research indicates that the quality and comprehensiveness of sustainability reporting can significantly affect how investors view a bank's value, suggesting that not only the quantity of disclosures but also their quality plays a crucial role in shaping investor sentiment and market outcomes. As the landscape of corporate governance continues to evolve, particularly in emerging markets like India, understanding and leveraging sustainability practices will be crucial for banks aiming to bolster their market valuations and long-term financial performance. Dhaliwal et al. (2011) noted that while sustainability reporting enhances firm value in the long term, it may involve significant initial costs and complexities, potentially deterring firms from adopting comprehensive ESG practices. Furthermore, in emerging economies like India, the lack of standardized reporting frameworks and limited awareness among stakeholders can dilute the effectiveness of sustainability disclosures Chakraborty & Bhattacharjee, (2018).

This literature underscores the nuanced relationship between sustainability reporting and firm value. While existing studies provide valuable insights, there remains a gap in understanding the specific impact of sustainability practices on Indian public banks, which play a crucial role in the country's economic growth. By focusing on the top ten Indian public banks, this study seeks to address this gap and provide empirical evidence on how sustainability reporting influences firm value in the Indian context.

3. RESEARCH METHODOLOGY

3.1 Research Design

The present study carried out on a quantitative approach and causal research design. The study focuses on the top ten Indian public banks, selected based on their market capitalization and overall prominence in the banking sector. This purposive sampling ensures the inclusion of banks with substantial sustainability reporting practices and significant influence on the Indian economy. Data of top ten Indian public banks collected from the moneycontrol.

3.2 Study Variables

Independent and control variables

Sustainability disclosure practices have been taken as one of the independent variables and variables such as firm age, firm size, and market cap have been included as controls in the analysis (Maurya & Singh, 2022). The focal independent variable in the test is "Sustainability Report." Sustain-ability reports are manifestations of the TBL approach to sustainability (Wheeler & Elkington, 2001). The firm value of selected Indian banks has been calculated through the most effective and efficient market-based measure, i.e., Tobin-Q. In prior risk disclosure studies, the use of Tobin's Q is popular and effective (Buallay et al., 2021).

3.3 Hypothesis testing

As per literature review, it has been identified that there is dearth of studies focusing on sustainability reporting and firm value in Indian context. Panel data techniques have been applied due to the presence of time series and cross-sectional data to study the outcome of the proposed model (1) estimated as follows:

Firm Value = f (Sustainability Disclosure Reporting, Control Variables (1)

TOBINQit = α + β1 + β2Sustainability reporting+ β3Firm sizeit +β4Enterprise valueit + β5Firm ageit + μit (1)

Where, α = Constant

β = Coefficient of independent variable

μit = Error term of ith Company related to th term

Where the *i* refer to firm and *t* refers to year

Table:1 Descriptions of Variables

Sustainability Reporting Score	Measured by percentage of disclosure scores by creating disclosure index
Tobin-Q	Market value of equity plus book value of total liabilities divided by total book value of assets.
Firm size	Measured by the natural logarithm of total assets
Market cap.	Total value of a publicly traded company
Firm Age	Number of years of incorporation

4. RESULTS

The results of this study provide empirical evidence on the relationship between sustainability reporting practices and the firm value of the top ten Indian public banks. The analysis focuses on descriptive statistics, correlation, and regression outcomes to examine this relationship.

4.1 Descriptive Statistics

The descriptive statistics provide an overview of the financial and sustainability-related variables for the top ten Indian public banks selected for the study. These variables include market capitalization, Sustainability Reporting Score, Firm age, Firm Size. Below is a detailed breakdown of the descriptive statistics:

Table 4.1: Descriptive Statistics of Selected Public Banks

Variables	Unit of Measurement	N	Mean	Max	Minimum	Std. Dev
Sustainability Reporting Score	Disclosure Percentage	50	325.70	501.0	265.0	63.57
Firm age	Rupees	50	100.40	127.0	62.0	18.915
Tobin-Q	Ratio	50	1.7223	1.7861	0.1373	0.3598
Market Cap.	Rupees	50	41455.90	325168.2	2623.930	71433.50
Firm Size	Number of Years	50	856553.5	4543833.	216255.5	988865.3

Source: *Researchers' calculations.*

The results are also close to the mean value calculated by (Charunmathi and Ramesh, 2020). Tobin-Q ratio greater than 1 depicts high growth potential and better investment opportunities and also indicates that the management has performed well with the assets under its command (Tobin and Brainard, 1968). In terms of market cap. the mean value is of 41455.90 with maximum of 325168.2. and minimum of 2623.930 which represents the total value of a banks considered in the study.The average value of company size is Rs 856553.5 Crore, the highest value is Rs 4543833. Crore, and the lowest value is Rs.216255.5 Crore for the control variables. Taking into consideration the next control variable i.e., the firm age, the selected firms have a maximum firm age of 127 years, a minimum age of 62 year, and a mean of 100.40 years with standard deviation value of 18.915 respectively.

4.2 Multiple regression

Multiple regression analysis has been used for the purpose of determining how much an organizations worth is affected by the sustainability disclosure that are followed by selected banks. The research use both cross-sectional and time-series methods to collect data, which ultimately results in the generation of panel data. Panel data regression has been utilized in order to assess the influence of sustainability disclosure on the value of the business. This was done after evaluating the following assumptions:

4.2.1 Stationarity test- panel unit root

It is necessary to carry out a panel unit root test in order to determine whether or not the variables are stationary in order to validate the presumption that the data are stationary. Stationarity test used in two ways to check the unit root in series first in individual and other is group unit root tests Augmented Dickey-Fuller (ADF) test is applied to check the assumptions of stationarity test- panel unit root.

ADF test is conducted with the following assumptions:

Null Hypothesis (HO): Series is non-stationary, or series has a unit root.

Alternate Hypothesis (HA): Series is stationary, or series has no unit root.

Augmented dickey fuller test is applied to check for the assumption of unit root. The Unit Root Test provides you with a tool to test if a series is non-stationary. More specifically, it performs an Augmented Dickey-Fuller (ADF) test of the null hypothesis that a time series has a unit root. A p-value close to 1 indicates that there is likely a unit root. If there is a unit root, the series is not stationary. When p value is closer to 0 so the series is stationarity as data not have the variations so data have no unit root and p value is closer to 1 indicates the series is non -stationarity as data have the variations so data have unit root. If the p-value is small (below 0.05), we reject the null hypothesis, suggesting that the series is stationary. So, results highlighted that the series have no unit root as values are closer to 0 so, it accepts the alternative hypothesis.

Table: 4.2: Result of Augmented Dicky Fuller Unit Root Test of Selected Public Banks

Variables	**ADF (Augmented Dicky Fuller) Panel Unit Root Test**	
	Augmented Dicky Fuller Fisher Chi square**	
	Level Difference	
	t-Statistics	**p-value**
Sustainability Reporting Score	0.008	0.0000*
Tobin-Q	5.12	0.0004*
Firm size	8.65	0.0015*
Firm value	167.9	0.0054*
Firm Age	7.1	0.0000*

*Null Hypothesis: Unit Root, *Test values are significant at 0.01 level.*

***Source**: Researchers' calculations.*

Panel unit root has been tested for the following hypothesis i.e.

H1: The variables are stationary.

From the Table 4.2 it can be inferred that the variables sustainability reporting score, firm size, firm value, firm age and Tobin-Q are stationary at the level difference as the p-value for all the variables are less than 0.05. This signifies that the variables do not have a unit root.

4.2.2 Heteroscedasticity Test

Heteroscedasticity has been tested with the following hypothesis i.e.

H0: The error variances are equal (Heteroscedasticity is not present)

H1: The error variances are not equal (Heteroscedasticity is present)

The results presented in Table above shows that the (p-value = 0.6228) that corresponds to Chi-Square test statistics of Observed R-square is greater than 0.05, which means that it is not significant at 5% significance level. Therefore, the null hypothesis is accepted i.e., there is homoscedasticity meaning by that the error variances are equal.

Table 4.3: Result of Heteroscedasticity Test through Breusch Pagan of selected Public Banks.

Heteroscedasticity Test: Breusch-Pagan			
F-statistic	8.701	Prob. F(4,45)	0.5127
Obs*R-squared	21.807	**Prob. Chi-Square(4)**	0.6228
Scaled explained SS	11.767	**Prob. Chi-Square(4)**	0.6228
R-squared	0.0531	Mean dependent var	300.68
Adjusted R-squared	0.3860	S.D. dependent var	342.07
S.E. of regression	268.76	Akaike info criterion	18.722
Sum squared resid	324.08	Schwarz criterion	18.913
Log likelihood	-463.06	Hannan-Quinn criter.	18.795
F-statistic	8.701	Durbin-Watson stat	1.007
Prob(F-statistic)	0.00027		

***Source**: Researchers' calculations.*

4.2.3 Normality test

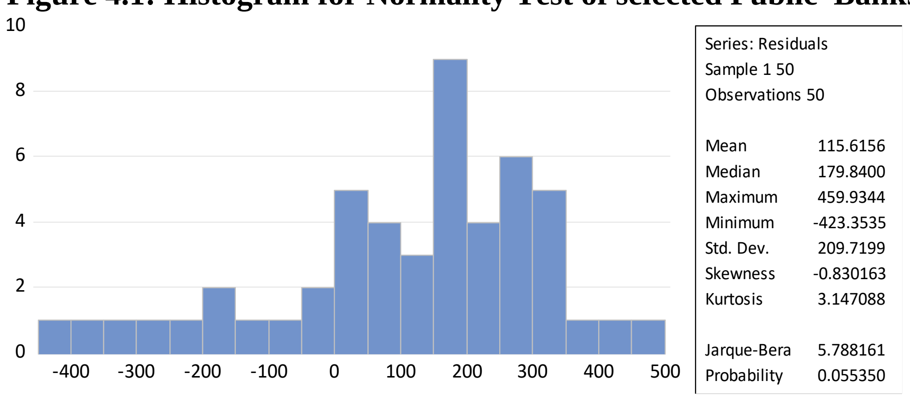
Jarque - Bera test has been applied to test the assumption of normality for the proposed model and the results of the same are depicted in Figure 4.1

Normality has been tested with the following hypothesis i.e.

H0: Data is Normally distributed

H1: The data is not normally distributed

Figure 4.1: Histogram for Normality Test of selected Public Banks



***Source:** Researchers' calculations.*

If the probability value $p \geq 0.05$, then the assumption of normality is fulfilled and if probability $p < 0{,}05$, then the assumption of normality is not fulfilled. The value of $p \geq 0.05$, null hypothesis accepted and data are called as normally distributed.

4.2.4 Auto correlation test

Autocorrelation can also be referred to as lagged and serial correlation, as it measures the relationships between a variables current value and past value.This study has also checked, whether there is auto correlation. Generally, the problem of auto correlation arises in case of time series data. It can be checked through Breush-Godfrey serial correlation LM test or Durbin Watson test.

Auto correlation has been tested with the following hypothesis i.e.

H0: There exist no auto-correlation

H1: There exist auto-correlation

Table 4.4: Result of Auto correlation Test through Breusch Godfrey of selected Public Banks

Breusch-Godfrey Serial Correlation LM Test			
F-statistic	13.404	Prob. F(2, 96)	0.0000
Obs*R-squared	18.930	**Prob. Chi-Square(2)**	**0.0001**
R-squared	0.370	Mean dependent var	6.229
Adjusted R-squared	0.298	S.D. dependent var	5.99
S.E. of regression	46.046	Akaike info criterion	10.606
Sum squared resid	932.92	Schwarz criterion	10.836
Log likelihood	-136.89	Hannan-Quinn criter.	10.860
F-statistic	8.217	Durbin-Watson stat	1.993
Prob(F-statistic)		0.0000	

***Source**: Researchers' calculations.*

Values of 2 or nearly 2 for the Durbin Watson statistic indicate no auto correlation, so this suggests that the model does not include any auto correlation. In the above table, the value of Durbin Watson is also taken into consideration. Values of 2 or nearly 2 for the Durbin Watson statistic indicate no auto correlation. The value is quite near to 2 in the preceding table. This suggests that the model does not include any auto correlation.

4.5 Panel data regression

After conducting various tests for checking the assumptions which includes, unit root, multicollinearity, heteroskedasticity, normality and auto-correlation and to further check the accuracy of regression, multiple regressions has been applied to check the effect of independent and control variables on the dependent variable. The results have been depict

Table 4.5: Result of Redundant Fixed Effect Test (Public Banks)

Redundant Fixed EffectsTests			
Equation: Untitled			
Test cross-section fixed effects			
Effects Test	**Statistic**	**d.f.**	**Prob.**
Cross section F	9.274	2,192	0.050
Cross-section Chi-square	98.7	2	0.000

Source: Researchers' calculations.

Panel data considering Tobin-Q as dependent variable has been tested first with pooled OLS model. After pooled OLS model, fixed effect model was applied where all the cross sections were assumed to have their own intercept value. Finally, the data was tested through random effect model whereby all the cross sections have a common mean value of the intercept. The outputs of pooled OLS, fixed effect and random effect model have been presented in Table 6.10. To choose the better model amongest the pooled OLS or fixed model, redundant fixed effect test was taken into consideration. To choose among fixed and pooled OLS model the following hypothesis was set.
To choose among fixed and pooled OLS model the following hypothesis was set.
H0: Pooled OLS model is appropriate
H1: Fixed effect model is appropriate
We reject the null hypothesis and accept the alternative hypothesis because both the cross-section F and the cross-section Chi-square have values that are statistically significant (p-value = 0.0001). In light of this comparison between the fixed effect model and the pooled OLS model, it is clear that the fixed effect model is the more suitable of the two.
We reject the null hypothesis and accept the alternative hypothesis because both the cross-section F and the cross-section Chi-square have values that are statistically significant (p-value = 0.0001). In light of this comparison between the fixed effect model and the pooled OLS model, it is clear that the fixed effect model is the more suitable of the two. Further to decide the final acceptable model to test the regression equation, fixed effect model has been compared with the random effect model. Hausman test has been applied to check the most suitable model. The results of Hausman test have been presented in Table 6.9

Table 4.6: Result of Hausman Test (Public Banks)

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test cross-section random effects			
Test summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross section Random	1.133	2	1.0000

Source: *Researchers' calculations*.
The results of Hausman test have been tested for the following mentioned hypothesis:
H0: Random effect model is appropriate
H1: Fixed effect model is appropriate

Table 4.7 Result of Panel Data Regression (Public Banks)

Variables/ Items	Pooled OLS			Random Effect			Fixed Effect		
	Dependent Variable- Tobin-Q			Dependent Variable Tobin-Q			Dependent Variable - Tobin-Q		
	Coefficient	t-Statistic	Prob	Coefficient	t-Statistic	Prob	Coefficient	t-Statistic	Prob
Constant	2.2487	-0.6532	0.3026	28.087	-0.1343	0.451	6.332	-0.4612	0.321***
SRS	0.02265	0.1597	0.2642	0.07612	1.7681	0.253	0.00507	1.1422	0.6432
Firm Size	0.06521	0.1865	0.7829	0.03725	0.04511	0.536	0.01561	2.2235	0.0332***
Firm age	2.111.02	-2.1892	0.0000	1.230.01	2.1673	0.0287	0.0130	2.1531	0.0065
Firm value	0.00065	2.653	0.0000	5.374.11	2.356	0.0009	2.599.06	2.111	0.0322
R-Square	0.26			0.24			0.24		
Adjusted R-Square	0.32			0.24			0.29		
F-statistic	121.1			23.17			23.13		
Prob (F-statistic)	0.000000			0.000000			0.000000		
Panel Observations	50			50			50		
Note:Significant at * i0.10, ** i0.05, *** i0.01 level (two-tailed)									

(Source: Researchers' calculations)

From the above results of Table 6.10.1 and Table 6.10.2, the study assessed the impact of the SR on the firm's FV as measured by Tobin-Q. It is clear that there is a positive influence relationship between SR and FV of firms. Thus, in addition to traditional measures that management is often used to increase company's value and efficiency, SR is a new trend attracting a lot of attention from organizations. Therefore, the application of social responsibility is very necessary for business organizations because it brings benefits to both the organization and the society, especially increases the competitive-ness. Therefore, from now on, there should be actions and policies which facilitate banks to participate in SR activities. Banks need to have a long-term strategy in developing and implementing SR standards. Sustainability reporting plays an important role for related parties and internal businesses. Sustainability reporting, improved transparency and accountability that strengthens the trust of stakeholders and increases credibility. Sustainable business practices are associated with long-term value creation. By integrating sustainability into their business strategies organizations can enhance their resilience. This focus on long-term value creation can be reflected in the organizations financial performance and, consequently, its firm value. Overall, the association between sustainability reporting and firm value underscores the importance of sustainability as a driver of financial performance in today's business landscape. Companies that effectively align their business strategies with ESG principles are likely to realize higher firm value over the long terms.

5. DISCUSSION

Banks which disclosed the well being of employees provide very detailed disclosures for the sustainability disclosures. The study contributes to the existing literature of sustainability reporting by providing empirical evidence of the voluntary reporting of sustainability in Indian banking context.The findings of this research provide further understanding of the pattern in sustainability disclosures. The research suggest that domestic banks need to improve their sustainability disclosure to keep up with the global practice.Banks must now cater to the diverse needs of society, as they are the most powerful group responsible for a banks survival.The disclosure of sustainable information in annual reports is attributed to specific factors identified in prior sustainability disclosure research. These elements include several motives that motivate a banks from disclosing sustainable information. The current study also highlights the association between sustainability reporting practices and firm performance. The results are important for the banks of emerging markets like India where reporting rewarded with increase in the market valuation." A key takeaway from this research is the positive association between sustainability reporting practices and firm performance. The findings suggest that banks adopting robust sustainability practices often experience increased market valuation, driven by enhanced investor confidence and stakeholder trust. This is particularly relevant in emerging markets like India, where sustainability practices are increasingly recognized as drivers of financial performance and long-term value creation.

In conclusion, the findings underscore the importance of sustainability reporting as a strategic tool for Indian banks. By adopting global best practices and addressing the diverse needs of society, banks can improve their sustainability disclosures, enhance firm performance, and contribute to the broader goals of sustainable development. The study provides valuable insights for policymakers, banking professionals, and investors, encouraging a collective effort toward fostering a sustainable banking ecosystem in India.

6. LIMITATIONS OF THE STUDY AND SCOPE FOR FUTURE RESEARCH

This study, while offering valuable insights into the impact of sustainability reporting on the firm value of top Indian public banks, has certain limitations that should be acknowledged.

Firstly, the research is limited to the top ten Indian public banks selected based on their prominence and performance as reported on platforms like Moneycontrol. This focus excludes other public and private sector banks that may exhibit different sustainability reporting practices and financial dynamics. As a result, the findings may not be generalizable to the entire banking sector. Secondly, the study relies primarily on secondary data collected from publicly available sources such as annual reports, sustainability reports, and ESG databases. While these sources provide reliable information, they may not capture all nuances of sustainability practices, particularly those not explicitly disclosed in formal reports. Additionally, the analysis does not consider the recently introduced Business Responsibility and Sustainability Report (BRSR) framework, mandated by the Securities and Exchange Board of India (SEBI). Future research could focus on assessing how the adoption of BRSR impacts sustainability disclosures and firm value, providing a more updated and regulatory-compliant perspective on sustainability practices. The present study is limited to public banks and does not account for private sector banks, cooperative banks, or foreign banks operating in India. With customers increasingly prioritizing sustainability and its impact on returns, future studies could extend the scope to include these categories of banks. This would provide a broader understanding of how sustainability reporting practices vary across different banking sectors and their respective impacts on firm value. Furthermore, comparative studies across industries could offer deeper insights into sustainability reporting practices. Exploring the differences in sustainability disclosures among banking, manufacturing, IT, and service sectors would highlight sector-specific trends and challenges. Lastly, the current research focuses solely on financial metrics to measure firm value. Future studies could integrate non-financial performance indicators such as customer loyalty, employee satisfaction, and societal impact to provide a more holistic view of sustainability's influence on organizational value.

In conclusion, while this study lays the groundwork for understanding the relationship between sustainability reporting and firm value in Indian public banks, there remains significant scope for future research to expand the coverage, integrate regulatory frameworks like BRSR, and explore cross-sectoral and non-financial dimensions of sustainability reporting practices.

7. IMPLICATIONS

The adoption of sustainability reporting in the Indian banking sector, based on the national voluntary guidelines, has brought significant implications for the sector. This has increased accountability, making banks more answerable to regulators, investors, and the public. Banks that adopt these frameworks early have gained recognition as leaders in sustainable finance, enhancing their market reputation.This study could be useful for existing, potential investors, as well as regulatory bodies, in terms of understanding the consequences of sustainability disclosures. Considering the potential effect of existing levels of sustainability disclosure on business valuation, the research might be informative for regulators. The study's results will educate businesses on what variables may associate with and affect sustainability disclosure. It is clear from the results of this research that banks which reported on sustainability exposures are secured higher firm value and in turn it enhances the financial performance. The study revels theoretical, methodological and practical implications which may be useful to academicians, researchers, regulatory bodies and various other users of sustainability reporting information. The study has strong implications for the banking industry in specific and society in general. It is apparent that the Indian banks believe that by embracing the spirit of being socially responsible and focusing on sustainability reporting practices, will not only boost the goodwill of banks but will provide added benefits in terms of increased customer satisfaction, investors loyalty and growing financial worth. Consequently, banks would built strong brand image and have edge over other banks through increasing patronage of their services. It is gratifying for the society in general to witness that banks are not only acting as profit makers but also thinking terms of community welfare.

8. REFERENCES

Adams, C. A. (2002). Internal organizational factors influencing corporate social and ethical reporting: Beyond current theorising. *Accounting, Auditing & Accountability Journal*, 15(2), 223-250.

Buallay, A., Fadel, S. M., Alajmi, J., & Saudagaran, S. (2021). Sustainability reporting and bank performance after financial crisis: evidence from developed and developing countries. Competitiveness Review: An International Business Journal, 31(4), 747-770.

Buallay, Amina. (2019). Is sustainability reporting (ESG) associated with performance? Evidence from the European banking sector. Management of Environmental Quality: An International Journal. http://doi.org/10.1108/MEQ-12-2017-0149.

Chakraborty, S., & Bhattacharjee, J. (2018). Challenges in implementing sustainability reporting in emerging economies: Evidence from India. *Journal of Emerging Market Studies*, *5*(3), 45-67.

Charumathi, B. and Ramesh, L., 2020. Impact of voluntary disclosure on valuation of firms: Evidence from Indian companies. Vision, 24(2), pp.194-203.

Dhaliwal, D. S., Li, O. Z., Tsang, A., & Yang, Y. G. (2011). Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. *The Accounting Review*, *86*(1), 59-100.

Flammer, C. (2015). Does corporate social responsibility lead to superior financial performance? A regression discontinuity approach. *Management science*, *61*(11), 2549-2568.

Ghosh, D., Dutta, A., & Dutta, M. (2022). Impact of financial performance on environmental sustainability in the presence of credit constraints: Evidence from Indian manufacturing firms. *Journal of Sustainable Finance and Investment*, 1–17.

Goel, P., & Misra, R. (2017). Sustainability reporting in India: Exploring sectoral differences and linkages with financial performance. *Vision*, *21*(2), 214–224.

Gupta, P., & Sinha, R. (2021). Impact of sustainability reporting on financial performance: Evidence from Indian banks. *Indian Journal of Finance and Banking*, *10*(2), 29-40.

Hardi, E., & Chairina, C. (2019). The effect of sustainability reporting disclosure and its impact on companies financial performance. Journal of Wetlands Environmental Management, 7(1), 67-75.

Ioannou, I., & Serafeim, G. (2012). What drives corporate social performance. The role of nation-level institutions. *Journal of international business studies*, *43*, 834-864.

Khan, P. A., Johl, S. K., & Akhtar, S. (2022). Vinculum of sustainable development goal practices and firms' financial performance: A moderation role of green innovation. *Journal of Risk and Financial Management*, *15*(3), 96.

Kumar, R., & Bala, R. (2020). ESG practices and firm value: An analysis of Indian public banks. *Journal of Financial Studies*, *15*(4), 112-127.

Kumar, D. (2022). Economic and political uncertainties and sustainability disclosures in the tourism sector firms. *Tourism Economics*, *0*(0).

Kumar, K., & Prakash, A. (2019). Developing a framework for assessing sustainable banking performance of the Indian banking sector. *Social Responsibility Journal*, *15*(5), 689–709.

Laskar, N. (2018). Impact of corporate sustainability reporting on firm performance: An empirical examination in Asia. *Journal of Asia Business Studies*, *12*(4), 571–593.

M. R., F. K. (2021) Socially Responsible Investing and Sustainable Indices: A Sustainability Agenda. *Indian Journal of Corporate Governance*, *14*(2), 209–225.

Maji, S. G., & Lohia, P. (2023). Environmental, social and governance (ESG) performance and firm performance in India. *Society and Business Review*, *18*(1), 175–194.

Marquis, C., & Qian, C. (2014). Corporate social responsibility reporting in China: Symbol or substance?. *Organization science*, *25*(1), 127-148.

Maurya, S., & Singh, R. S. (2022). Impact of Corporate Attributes on Sustainability (ESG) Reporting: Evidence from Listed Banks in India. *Journal of Business Thought*, 71-83.

Maurya, S., & Singh, R. S. (2022). Impact of Corporate Attributes on Sustainability (ESG) Reporting: Evidence from Listed Banks in India. Journal of Business Thought, 71-83.

Maurya, S., & Singh, R. S. (2022). Impact of Corporate Attributes on Sustainability (ESG) Reporting: Evidence from Listed Banks in India. Journal of Business Thought, 71-83.

Munjal, P., & Sharma, D. (2023). Determining the managerial perception on triple bottom line performance. *Journal of Financial Reporting and Accounting*, *21*(2), 322–343.

Rastogi, S., & Singh, K. (2023). The impact of ESG on the bank valuation: Evidence of moderation by ICT. *Journal of Global Responsibility*, *14*(2), 273–288.

Saha, R., & Kabra, K. C. (2020). Corporate governance and voluntary disclosure: A synthesis of empirical studies. *Business Perspectives and Research, 8*(2), 117–138.

Saha, R., & Kabra, K. C. (2022). Corporate governance and voluntary disclosure: Evidence from India. *Journal of Financial Reporting and Accounting, 20*(1), 127–160.

Sehgal, V., Garg, N., & Singh, J. (2022). Impact of environmental and social reporting and performance on financial performance of a firm: An Indian study. *Paradigm, 26*(2), 99–118. https://doi.org/10.1177/09718907221126429.

Sekhon, A. K., & Kathuria, L. M. (2019). Analyzing the impact of corporate social responsibility on corporate financial performance: Evidence from top Indian firms. *Corporate Governance*, *20*(1), 86–105.

Sharma, V., & Wang, H. (2021). The effect of sustainability reporting on firm performance in emerging economies: Evidence from India. *Journal of International Business Studies*, *52*(7), 1122–1144.

Sharma, G. D., Talan, G., Bansal, S., & Jain, M. (2021). Is there a cost for sustainable investments: Evidence from dynamic conditional correlation. *Journal of Sustainable Finance and Investment*, 1–21.

Singh, P., et al. (2020). Sustainability reporting practices of Indian banks: A GRI-based analysis. Journal of Business Ethics, 165(2), 257-271.

Soriya, S., & Rastogi, P. (2022). A systematic literature review on integrated reporting from 2011 to 2020. *Journal of Financial Reporting and Accounting*, *20*(3/4), 558–579.

Soriya, S., & Rastogi, P. (2023). The impact of integrated reporting on financial performance in India: A panel data analysis. *Journal of Applied Accounting Research*, *24*(1), 199–216.

Srivastava, Ritu. (2016). The Investment Model of Crowdfunding for MSME (Micro, Small and Medium Enterprises) in India. . http://doi.org/10.1108/978-1-78560-315-020151010.

Srivastava, Ritu. (2016). The Investment Model of Crowdfunding for MSME (Micro, Small and Medium Enterprises) in India. http://doi.org/10.1108/978-1-78560-315-020151010.

Tripathi, V., & Kaur, A. (2020). Socially responsible investing: Performance evaluation of BRICS nations. *Journal of Advances in Management Research*, *17*(4), 525–547.

Wheeler, D., & Elkington, J. (2001). The end of the corporate environmental report. Or the advent of cybernetic sustainability reporting and communication. *Business strategy and the environment*, *10*(1), 1-14.