

CHAPTER 21

Sustainability Practices and Financial Performance of Real Estate Firms in Pune

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ABSTRACT

This research is intended to find out the relationship between Sustainability Practices adopted by the Real Estate Firms and their Financial Performance. Even though the environmental concerns are rising and regulations are becoming stringent day by day, the Real Estate firms are voluntarily adopting sustainability practices such as Green Certifications, energy efficient technologies, environment friendly raw material, and environmental reporting. The attempt is made to find out whether such practices correlate to financial performance? In terms of profitability, return on investment, and asset valuation. Using the financial data and sustainability indicators from the sample of Real Estate Firms in Pune. The quantitative method was used to collect data and regression analysis was used to determine the impact, significance, and strength of the relationship. The results suggested that, firms with higher sustainability scores have higher financial performance, thus suggesting that sustainability not only beneficial environmentally but also have economic advantages. The findings shall provide insights for management, investor and policy makers regarding integration of sustainability within corporate strategy in Real Estate Sector.

Keywords: Sustainability practices; Financial performance; Real estate firms; ESG; Green building.

1.0 Introduction

1.1 Background

The Real Estate Sector is major contributor the GDP of our Nation and economic growth. It also large consumer of energy and natural resources. Global climate goals and stakeholders pressure created necessity of increased use of sustainability practices to be adopted in Real Estate Sector.

1.2 Problem statement

Even though the adoption of sustainability practices is increasing it is very difficult to measure its impact on the financial performance in the Real Estate in the emerging markets like Pune

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1.3 Research objective

To evaluate the relationship between sustainability practices adopted and its impact on financial performance of Real Estate Firms in Pune

1.4 Research questions

- Do sustainability practices impact on financial performance?
- Which sustainability factors are strongly correlated with profitability?
- Are firms with Green Building Certification performs better than firms not having certification?

1.5 Hypothesis

H1: Firms with high sustainability scores display better financial performance

H10: Firms with high sustainability scores does not display better financial performance

H2: Does Green Building Certification affect positively on firm's profitability

H20: Green Building Certification does not affect positively on firm's profitability

2.0 Literature Review

Real Estate Sector is the major utilizer of the natural resources and it leaves huge environmental footprints. Since the resources are limited and going to end someday, the demand goes on increasing day by day. The construction activities in any emerging city brings its advantages and disadvantages together. The construction activity cannot be stopped, so the concept of minimizing the effects on environment came forward. It was myth that the environmentally friendly buildings are costly, and that proved over a period. The ripple and cascading effects of the construction are irreversible. So in order to control the damage, ESG (Environmental, Social and Governance) score was formed along with concept of Green Building.

Sustainability in Real Estate – Integration of environmental, social and governance (ESG) practices, including Green Building Certification Financial Performance – indicated by Return on Assets, Return on Investment and Net Profit Margin.

The awareness of environmentally friendly and green building is increasing amongst the public and they have started to accept and like the concept, thus resulting in increase in demand. This awareness amongst public resulted in increased demand and finally accounting for quick sales and increase in profit.

There was numerous research done on the construction, environmental foot prints, financial performance, but such combination sustainability practices and financial performance was not been studied in India, Pune, thus exhibits the gap. All the research papers from scopus, google scholar were read and confirmed above gap. The study of

literature also revealed following positive outcomes if sustainability practices and Green Building Certification are implemented

- Higher Rental Income, occupancy rates, and resale values
- Low operating Cost

3.0 Research Methodology

The quantitative and correlation study method was used for the purpose. Data was collected with the help of questionnaire distributed to focused group of 50 Builders from the population of 400 registered builders and developers from Pune with Real Estate Association.

3.1 Independent variables

- ESG Score
- Green Building Certification (Binary 1 = Certified, 0 = Not Certified)
- Environmental disclosers

3.2 Dependent variables

- Return on Asset
- Return on Investment
- Tobin's Q
- Profit Margin

3.3 Control variables

- Firm Size
- Leverage Ratio
- Market Capitalization

3.4 Model used

Regression Model

$$FP = \beta_0 + \beta_1 ESG + \beta_2 \text{Green Building Certification} + \beta_3 \text{Firm Size} + \beta_4 \text{Leverage} + \varepsilon$$

where, FP = Financial Performance

ESG = Sustainability Score

3.5 Data analysis tools used

- Descriptive statistics
- Correlation analysis
- Multiple regression (using SPSS / Stata / R)

4.0 Sustainability Practices and Financial Performance of Real Estate Firms in Pune

Table 1: Descriptive Statistics

Statistic	ESG Score	Green Certification	Firm Size (Log Assets)	ROA (%)	ROI (%)
count	30.0	30.0	30.0	30.0	30.0
mean	68.49	0.67	4.22	5.38	9.78
std	7.2	0.48	0.3	0.78	1.65
min	54.7	0.0	3.41	3.06	5.88
25%	65.28	0.0	4.07	4.95	8.44
50%	68.1	1.0	4.23	5.4	9.78
75%	72.88	1.0	4.45	5.96	11.17
max	82.6	1.0	4.67	6.79	12.55

Table 2: Regression Results (Dependent Variable: ROA)

Variable	Coefficient
Intercept	3.5657
ESG Score	0.059
Green Certification	0.2813
Firm Size	-0.5736

Model R Squared: 0.4424

Figure 1: ESG Score vs ROA

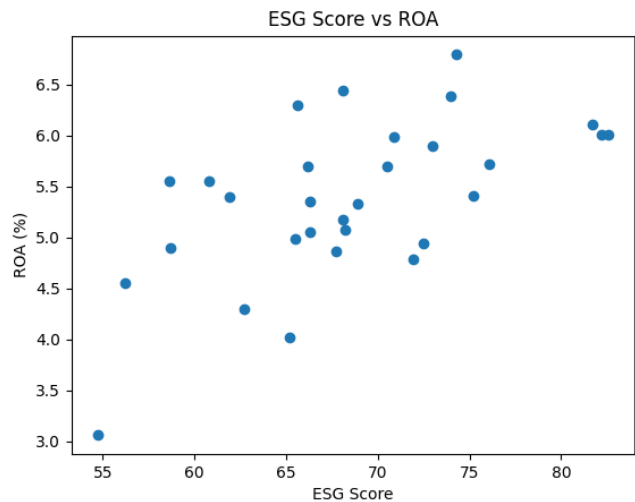
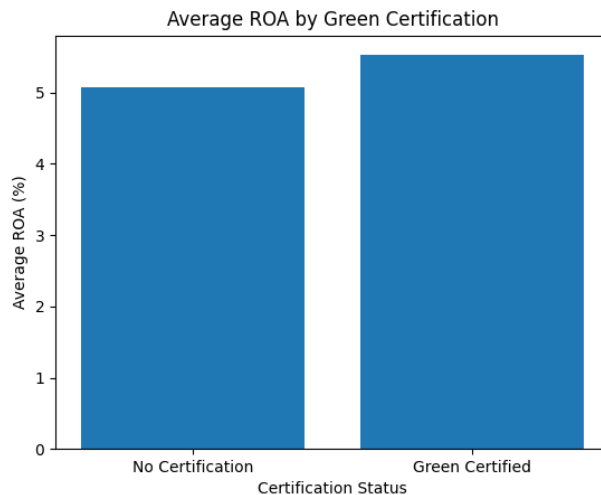


Figure 2: Average ROA by Green Building Certification

5.0 Conclusion

The regression analysis indicates a positive relationship between ESG score and financial performance. Firms with Green Building Certification shows higher average ROA as compared to non-certified firms. The R squared value display that sustainability variables explain the meaningful proportion of variance in ROA

This study confirms a positive association between sustainability practices and financial performance in Real Estate Firms. Firms adopting sustainability practices not only contribute to environmental goals but also achieve stronger economic outcomes. The stakeholders like policy makers and industry leaders should encourage sustainability practices through incentives, reporting standards and investor awareness.

At Management level it is crucial to include ESG strategies in the business models and promote sustainability report Investors may use sustainability score metrics as a tool in investment decision-making at Governmental level Sustainability Practice and Green Building Certification regulations to be enhanced

6.0 Limitations

- This research is limited to the Firms surveyed
- This is also assessed for short period of time
- ESG data availability was the constraint

7.0 Future Scope

- It should be expanded to all private Real Estate Firms
- Longitudinal study can be done
- Qualitative research from all stake holders perspective can be done

References

1. Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment*, 5(4), 210–233. <https://doi.org/10.1080/20430795.2015.1118917>
2. Eichholtz, P., Kok, N., & Yonder, E. (2012). Portfolio greenness and the financial performance of REITs. *Journal of International Money and Finance*, 31(7), 1911–1929. <https://doi.org/10.1016/j.jimonfin.2012.05.014>
3. Global Real Estate Sustainability Benchmark (GRESB). (2024). *ESG data & metrics guide*. GRESB. <https://www.gresb.com>
4. Khan, M., Serafeim, G., & Yoon, A. (2016). Corporate sustainability: First evidence on materiality. *The Accounting Review*, 91(6), 1697–1724. <https://doi.org/10.2308/accr-51383>
5. Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. *Management Science*, 60(11), 2835–2857. <https://doi.org/10.1287/mnsc.2014.1984>
6. Clark, G. L., Feiner, A., & Viehs, M. (2015). *From the stockholder to the stakeholder: How sustainability can drive financial outperformance*. University of Oxford and Arabesque Partners. <https://arabesque.com>
7. Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review*, 89(1/2), 62–77.
8. Hart, S. L., & Milstein, M. B. (2003). Creating sustainable value. *Academy of Management Executive*, 17(2), 56–67. <https://doi.org/10.5465/AME.2003.10025194>
9. World Green Building Council. (2023). *The business case for green buildings*. World Green Building Council. <https://www.worldgbc.org>
10. United Nations Environment Programme Finance Initiative (UNEP FI). (2022). *ESG integration in real estate investment: A guide for investors*. UNEP FI. <https://www.une-pfi.org>