

The Economic Dimension of Corporate Sustainability: A Study on Realty Sector in India

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Abstract

Purpose: The success across three dimensions of corporate sustainability i.e. economic, social and environmental can be achieved by fulfilling the requirements of the various stakeholders. A business entity, an economic entity which draws its resources from the economy is also required to meet the economic priorities along with maximizing its shareholders wealth. A corporate entity in India, a developing country which envisions to move ahead in its developmental parameters is expected to contribute to the economy's Gross Domestic Product and generate employment and also maximizing the return to its capital providers, thereby making effective utilization of the capital employed in the business. This study makes an attempt to evaluate the economic performance of select companies in realty sector on these lines.

Design/Methodology: The real estate sector in India is expected to touch a US\$ 1 trillion market size by 2030, accounting for 18-20% of India's GDP (as per IBEF report). Thus, this sector requires due attention in terms of sustainability in business. The measures used to evaluate the economic performance of the companies includes Return on Capital Employed (ROCE), Value Added Income Generation Ability (VAIGA) and Employment Generation Ability (EGA). The research work makes use of secondary data from ProwessIQ database managed by Centre for Monitoring Indian Economy (CMIE). The study is based on NIFTY Realty Index comprising of ten firms and the time period of study extends over five years from 2017-18 to 2021-22. The statistical tools used for analysis includes median and arithmetic means. The methodology adopted for calculation for composite performance score is similar to the one used for computation of Human Development Index by United Nations Development Programme (UNDP).

Findings: Sobha Ltd. is the most efficient company in terms of making effective utilization of capital employed in the business and meeting the priorities of the Indian economy whereas Indiabulls Real Estate Ltd. is found to be the worst performer in terms of its economic performance. The average performance score for the realty sector calculated over the years 2017-18 to 2021-22 shows an upward rising trend for the sector.

Originality: Our research work intends to revisit the economic dimension of corporate sustainability and evaluating corporate performance in terms of economic performance and not by financial performance only as given by the existing literature. The originality of this research lies in including economic performance along with financial performance, thereby giving a different perspective to the economic dimension of corporate sustainability.

Keywords: performance score, economic performance, sustainability, composite performance, value added income, realty sector, shareholders wealth

1. Introduction

The concept of corporate sustainability is receiving exponentially increasing attention in the field of corporate performance evaluation in recent years. The success in sustainability can be associated with the requirements of the stakeholders being fulfilled (Norman and MacDonald, 2003). India, with its GDP growth rate for the year 2022-23 of 7.2% (Forbes India, 2023) envisions to move ahead in its developmental parameters and contribute to the national Gross Domestic Product (hereafter, GDP) with its high growth activities. Over the years, the focus of a business entity has shifted from fulfilling the requirements of only shareholders to the various stakeholders. The performance of a business enterprise, an economic unit is no longer limited to its financial performance rather it has extended to social performance. The approach of the corporate enterprises in enhancing its efficiency has changed from focussing on shareholders (increase economic capital only) to the stakeholders (increase economic, ecological, and social capital). The sustainability of a corporate entity in India can be achieved through its performance along three dimensions: economic, environmental and social. We recognize the importance of the economic dimension of corporate sustainability, hence an attempt is made to throw more light on it and enrich the existing literature in this regard. The economic dimension of corporate sustainability does acknowledge the importance of profitability of a company but it fails to consider the performance of an enterprise from economy's perspective. Profit earned by a company can be attributed to its shareholders only. However, a company which draws its resources from the economy in which it operates is expected to fulfil the priorities of the economy in course of maximising its profitability. Thus, business enterprises in India, a developing country with abundance of labour and scarcity of capital aim to contribute the most to the country's GDP and generate employment in the country by making effective utilization of financial capital employed. The traditional measures of corporate financial performance focus on profitability thereby maximizing shareholders' wealth. However, apart from shareholders there are various other stakeholders who play an important role in making a contribution to the wealth of the economy. The concept of value-added income generated by a company does recognize the contribution made by debt providers, government and employees along with shareholders in generating wealth in the economy. Although, this concept has limited usage in India as a measure of performance, it has been internationally recognized by way of its inclusion in GRI 201: Economic Performance. The following literature review relates to the use of measures used for evaluating economic performance of a business entity in the context of achieving sustainability.

2. Brief Review of Literature and the Research Gap

Various studies have been conducted in which emphasis has been made on the role of value added as an indicator of efficiency among the tools for appraising 'economic productivity' (Sutherland, 1956; Ponzanelli, 1967). Especially in the industrial sector, the measure used for controlling costs and use of productive factors was value added. In an empirical research carried out in Nigeria on the perceived usefulness of the VAS concluded that it was mainly used in measuring productivity. (Malgwi and Purdy, 2009)

Lieberman & Kang (2008) used the concept of value added for measuring the productivity of a company for higher productivity means more of wealth generated. To assess the performance of a firm, profit cannot be the sole measure especially for young and growing companies, its economic contribution should be assessed. High profitability might be achieved even by an inefficient firm if it has access to low-cost labor, capital or materials. Alternatively, if the input costs of a firm greatly exceed those of its competitors, it may

suffer financial losses even after having high productivity. This study was conducted on Pohang Iron and Steel corporation (POSCO), Korean Company. The authors made a comparative study of POSCO with Nippon Steel and USX, the largest steel producers in Japan and US respectively.

Sharma (2009) performed a trend analysis of the various components of value added statement of Raymond Ltd. over a period of five years i.e. from 2003-04 to 2007-08 considering the value added income to be a measure of social performance of a firm. It also analyzed the share of the various contributors to the value (wealth) generated by the company. From the study, it was found that Raymond Ltd. fulfilled its social responsibility and distributed its maximum share of value added income to the government.

Mahadevappa and Yogesha (2014) suggested the users of accounting to use value added information for the purpose of decision making. The various ratios were calculated and analyzed for the sample company Indian Oil Corporation Ltd. for the period 2004-05 to 2011- 12.

Sahoo and Pramanik (2017) recommended for an accounting standard to be in place for the standardized presentation of data in VAS so that it can be used for both inter-firm and intra- firm comparison. It was further suggested for stock exchanges to amend their listing agreements wherein VAS would become mandatory to publish.

Jha and Rangarajan (2020) in a paper studied the relationship between corporate sustainability performance and corporate financial performance. The study was conducted on 500 India firms for the years 2008 to 2018. The measures used to evaluate corporate financial performance included both accounting based measures (Return on Assets and Return on Equity and market-based measures (Tobin's Q).

From the above literature review, it can be understood that in the existing literature the term economic performance as one of the dimensions of corporate sustainability includes the measures of financial performance only. The measures of financial performance focus upon shareholders wealth maximization. However, sustainability can be achieved not only by adding wealth to the shareholders but to the economy as well. A corporate entity can sustain itself in business by meeting the priorities of the economy in which it operates in course of fulfilling the expectations of its shareholders. In a country like India, where priorities include contribution to the GDP and generate employment with the effective utilization of capital, the economic performance of a company in India should be evaluated from the perspective of being able to meet such priorities. Thus, in order to fill such gap in the existing literature, the research conducted intends to use Value Added Income as a measure of economic performance and evaluate the performance of the companies on the basis of effective utilization of capital in generating wealth for the capital providers and the economy as well. Hence, the objectives framed were as follows:

3. Research Objectives

- To evaluate the economic performance of select companies in realty sector and make inter- firm comparison.
- To know the share of each of the contributors in value added income of the companies in the Realty sector.
- To calculate the performance score of select companies in India on the basis of economic performance and rank them.

4. Research Methodology

The research conducted is descriptive, analytical and exploratory in nature. India's real estate sector is

expected to touch a US\$ 1 trillion market size by 2030, accounting for 18-20% of India's GDP (as per IBEF report). Moreover, it is the second-highest employment generator in India. Hence, this sector is selected as the sample. The sample data for the sector is extracted for total ten Indian firms in NIFTY Realty Index from ProwessIQ database managed by CMIE (Centre for Monitoring Indian Economy). The time period for which the data is studied is past five years from 2017-18 to 2021-22. The data for these five years was taken as the data available was found consistent for these years only. The statistical calculations and analysis used in the research conducted are done using Microsoft Excel. Median and Arithmetic Mean are taken as measures of statistical average. The three measures of economic performance taken are: Return on Capital Employed (hereafter, ROCE), an accounting based measure, Value Added Income Generation Ability (hereafter, VAI-GA) and Employment Generation Ability (hereafter, EGA). The ratio ROCE: PAT/Capital Employed measured the ability of a company to generate wealth for the economy per rupee of capital employed by it. The ratio was directly extracted from the ProwessIQ database. The ratio as defined in the database took PAT net of prior period and extra-ordinary transactions and Capital employed as funds provided by the shareholders and lenders.

VAI-GA was calculated as Value Added Income/Capital Employed which measured the ability of a company to generate wealth for the economy per rupee of capital employed by it. Value added income was calculated using the distribution side of it as suggested by the ASSC:

$$\text{Compensation to employees} + \text{Taxes} + \text{Interest} + \text{PAT}$$

EGA was calculated as No. of Employees/Capital Employed which measured the ability of a company to generate employment in the economy per rupee of capital employed by it.

The methodology used for calculating the composite score is similar to the one used for computation of Human Development Index by United Nations Development Programme (UNDP). The above mentioned three ratios were the three parameters selected.

At first, the parameters selected were Normalized using Min-Max method.

$$X_i (\text{Normalized}) = \frac{[X_i - X(\text{min})]}{[X(\text{max}) - X(\text{min})]} * 100$$
 where, X_i is the value for a particular parameter $X(\text{min})$ is the minimum value for a particular parameter across all companies in the sector $X(\text{max})$ is the maximum value for a particular parameter across all companies in the sector

The normalization helped the data on each parameter to be converted into numbers between 0 and 100, where 100 indicated the best performer and 0 indicated the worst performer. After normalization, the values were aggregated using Displaced Ideal Method thereby calculating the performance score which was measured as the inverse of the Euclidean distance from the ideal point (100,100, 100).

$$\text{Performance Score} = 100 - \sqrt{[(100-EP1)^2 + (100-EP2)^2 + (100-EP3)^2]} / \sqrt{3}$$
 Finally, on the basis of the performance scores, the companies were ranked. The share of each of the stakeholders was calculated as follows:

Share of Employees: Compensation to Employees/Value Added Income
Share of Government: Total Taxes/Value Added Income

Share of Debt Providers: Interest Expense/Value Added Income
Share of Shareholders: PAT/Value Added Income

For each of the companies in the realty sector, these were calculated for each of the five years and then the values were averaged out.

5. Data Analysis & Interpretation

From the data collected, an analysis was made as follows:

Table 1: Ranking of companies on the basis of average ROCE

Serial No.	Company Name	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Average	Rank
1	Brigade Enterprises Ltd.	0.0473	0.0537	0.0626	0.0342	0.0651	0.0537	1
2	D L F Ltd.	0.003	0.0237	0.035	0.0305	0.0489	0.0305	6
3	Godrej Properties Ltd.	0.0198	0.0354	0.0513	-0.0036	0.0376	0.0354	5
4	Indiabulls Real Estate Ltd.	-0.002	0.0102	-0.0092	-0.0203	-0.0082	-0.0082	10
5	Macrotech Developers Ltd.	0.0273	0.0637	0.0239	0.0035	0.0508	0.0273	8
6	Mahindra Lifespace Developers Ltd.	0.024	0.0289	-0.0038	-0.0325	-0.037	-0.0038	9
7	Oberoi Realty Ltd.	0.0875	0.0754	0.0452	0.0537	0.047	0.0537	1
8	Phoenix Mills Ltd.	0.0487	0.0487	0.0416	0.0122	0.0266	0.0416	3
9	Prestige Estates Projects Ltd.	0.0273	0.0322	0.0255	0.0298	0.0446	0.0298	7
10	Sobha Ltd.	0.0411	0.0602	0.0572	0.0119	0.0259	0.0411	4

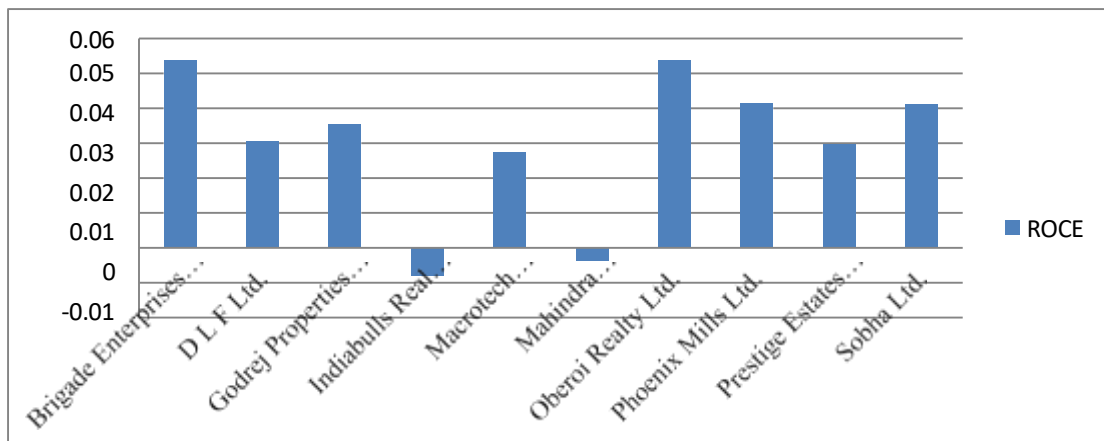


Figure1: Average ROCE

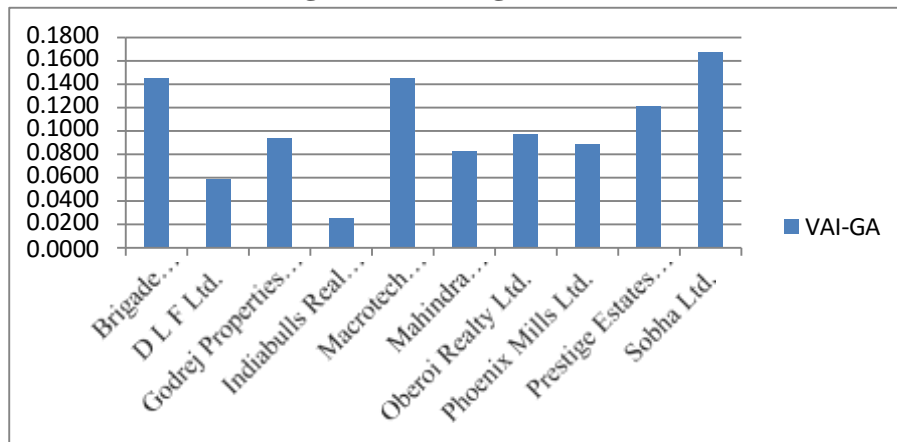
The above table and figure shows that both Brigade Enterprises Ltd. and Oberoi Realty Ltd. provide maximum return per rupee provided by the capital providers. However, Indiabulls Real Estate Ltd. and Mahindra Lifespace Developers Ltd. are found to generate negative return of Re -0.0082 per rupee capital employed in its business.

Table 2: Ranking of companies on the basis of average VAI-GA

Serial No.	Company Name	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Average	Rank
1	Brigade Enterprises Ltd.	0.1450	0.1553	0.1562	0.1079	0.1360	0.1450	3
2	D L F Ltd.	0.0524	0.0572	0.0907	0.0588	0.0655	0.0588	9
3	Godrej Properties Ltd.	0.1115	0.1054	0.0934	0.0361	0.0721	0.0934	6
4	Indiabulls Real Estate Ltd.	0.0343	0.0418	0.0248	0.0047	-0.0003	0.0248	10
5	Macrotech Developers Ltd.	0.1863	0.1828	0.1453	0.1427	0.1453	0.1453	2
6	Mahindra Lifespace Developers Ltd.	0.0894	0.0836	-0.0798	0.0218	0.0827	0.0827	8

7	Oberoi Realty Ltd.	0.1382	0.1241	0.0883	0.0960	0.0972	0.0972	5
8	Phoenix Mills Ltd.	0.0886	0.0944	0.0779	0.0832	0.0897	0.0886	7
9	Prestige Estates Projects Ltd.	0.0988	0.1278	0.1207	0.1208	0.1882	0.1208	4
10	Sobha Ltd.	0.1540	0.2116	0.2350	0.1524	0.1673	0.1673	1

Figure 2: Average VAI-GA



Sobha Ltd., followed by Macrotech Developers Ltd. and Brigade Enterprises Ltd. is found to be the most efficient company compared to other companies in the sample in terms of its contribution to the wealth of the economy. It is found that Indiabulls Real Estate Ltd. had the least value-added income generation ability.

Table 3: Ranking of companies on the basis of average EGA

Serial No.	Company Name	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Average	Rank
1	Brigade Enterprises Ltd.	0.0166	0.0192	0.0179	0.0139	0.0132	0.0166	4
2	D L F Ltd.	0.0056	0.0059	0.0019	0.0018	0.0028	0.0028	9
3	Godrej Properties Ltd.	0.0272	0.0265	0.0223	0.0266	0.0264	0.0265	2
4	Indiabulls Real Estate Ltd.	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	10
5	Macrotech Developers Ltd.	0.0001	0.0185	0.0159	0.0139	0.0153	0.0153	5
6	Mahindra Lifespace Developers Ltd.	0.0139	0.0186	0.0217	0.0193	0.0210	0.0193	3
7	Oberoi Realty Ltd.	0.0216	0.0139	0.0124	0.0092	0.0086	0.0124	6
8	Phoenix Mills Ltd.	0.0036	0.0031	0.0041	0.0156	0.0102	0.0041	8
9	Prestige Estates Projects Ltd.	0.0114	0.0113	0.0089	0.0137	0.0120	0.0114	7
10	Sobha Ltd.	0.0589	0.0773	0.0590	0.0560	0.0633	0.0590	1

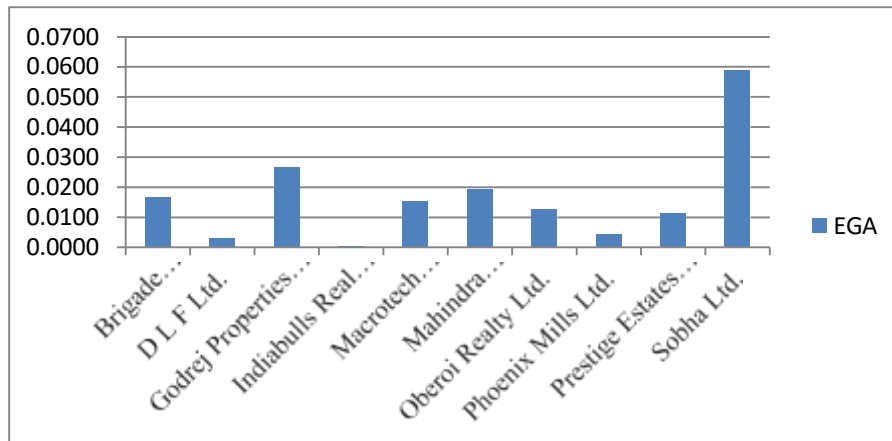


Figure 3: Average EGA

The above table and chart clearly reveals that Sobha Ltd. is the most efficient company in terms of generating employment per rupee of the capital employed in the business whereas Indiabulls Real Estate Ltd. the least efficient.

In the existing literature, the management of competing stakeholder interest has emerged as a topic of importance. The stakeholders who contribute in generating wealth include shareholders, debt providers, employees and government. So, shareholders are only a part of the various stakeholders who contribute in the process of generating wealth. Thus, it is important to know the fairness with which the wealth generated is distributed amongst the competing stakeholders. Considering such importance, the following analysis was made:

Brigade Enterprises Ltd.

Table 4: Share of employees, government, debt providers and shareholders in VAI

	Employees	Government	Debt Providers	Shareholders
Mar-18	0.1458	0.1850	0.3788	0.2904
Mar-19	0.1681	0.1985	0.2755	0.3579
Mar-20	0.1715	0.1901	0.2738	0.3645
Mar-21	0.1797	0.1484	0.3840	0.2879
Mar-22	0.1856	0.1817	0.1957	0.4370
Average	0.1702	0.1807	0.3016	0.3475

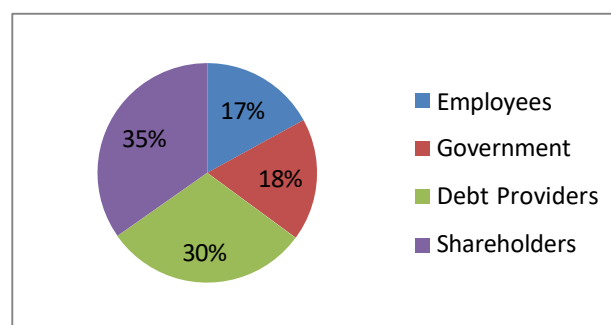


Figure 4: Average share of contributors

D L F Ltd.

Table 5: Share of employees, government, debt providers and shareholders in VAI

	Employee	Government	Debt Providers	Shareholders
Mar-18	0.1027	0.0624	0.5956	0.2393
Mar-19	0.1340	0.0226	0.4049	0.4385
Mar-20	0.0727	0.0090	0.1630	0.7553
Mar-21	0.1082	0.0679	0.2611	0.5628
Mar-22	0.1239	0.0246	0.1934	0.6581
Average	0.1083	0.0373	0.3236	0.5308

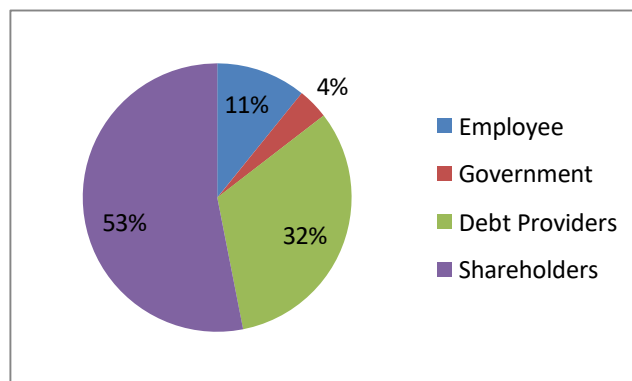


Figure 5: Average share of contributories

Godrej Properties Ltd.

Table 6: Share of employees, government, debt providers and shareholders in VAI

	Employees	Government	Debt Providers	Shareholders
Mar-18	0.1719	0.1391	0.5062	0.1829
Mar-19	0.2206	0.0008	0.4569	0.3218
Mar-20	0.1852	0.0638	0.2844	0.4667
Mar-21	0.5372	0.1003	0.4526	-0.0900
Mar-22	0.0850	0.1741	0.2346	0.5062
Average	0.2400	0.0956	0.3869	0.2775

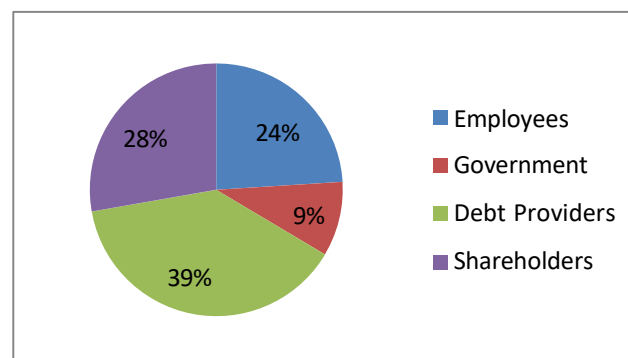


Figure 6: Average share of contributories

Indiabulls Real Estate Ltd.

Table 7: Share of employees, government, debt providers and shareholders in VAI

	Employee	Government	Debt Providers	Shareholders
Mar-18	0.0165	0.0073	1.0331	-0.0568
Mar-19	0.0143	0.0038	0.7419	0.2399
Mar-20	0.0096	0.0028	1.3797	-0.3921
Mar-21	0.0756	0.3004	4.9349	-4.3109
Mar-22	-3.1116	-0.4955	-20.5759	25.1830
Average	-0.5991	-0.0363	-2.4973	4.1326

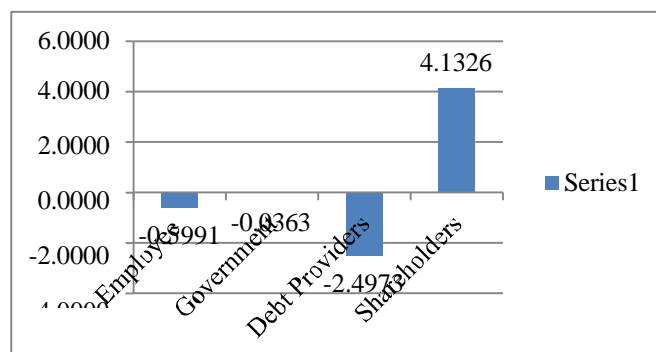


Figure 7: Average share of contributors

Macrotech Developers

Table 8: Share of employees, government, debt providers and shareholders in VAI

	Employees	Government	Debt Providers	Shareholders
Mar-18	0.1515	0.1351	0.5767	0.1367
Mar-19	0.0579	0.0293	0.5843	0.3284
Mar-20	0.0927	0.0377	0.7264	0.1432
Mar-21	0.0996	0.0749	0.7825	0.0430
Mar-22	0.1049	0.0632	0.4863	0.3455
Average	0.1013	0.0680	0.6312	0.1994

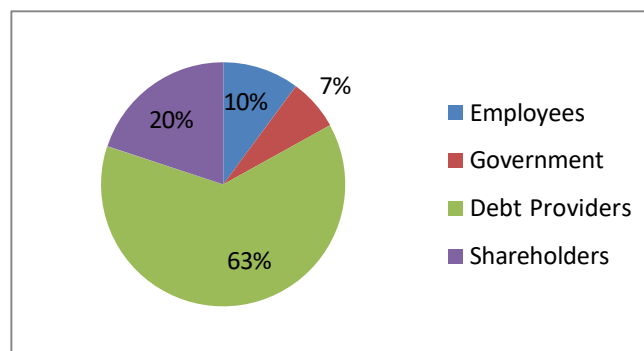


Figure 8: Average share of contributors

Mahindra Lifespace Developers Ltd.

Table 9: Share of employees, government, debt providers and shareholders in VAI

	Employee	Government	Debt Providers	Shareholders
Mar-18	0.3765	0.1535	0.1967	0.2734
Mar-19	0.5355	0.0104	0.0795	0.3745
Mar-20	-0.6581	0.0000	-0.0903	1.7484
Mar-21	2.3027	0.0000	0.2345	-1.5372
Mar-22	0.6252	0.0000	0.0626	0.3122
Average	0.6364	0.0328	0.0966	0.2343

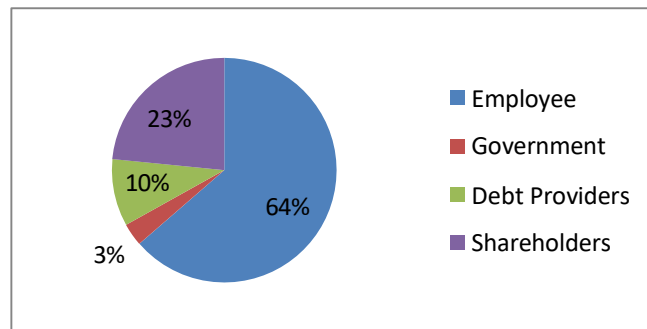


Figure 9: Average share of contributors

Oberoi Realty Ltd.

Table 10: Share of employees, government, debt providers and shareholders in VAI

	Employees	Government	Debt Providers	Shareholders
Mar-18	0.1411	0.2547	0.0388	0.5654
Mar-19	0.1270	0.2403	0.0875	0.5451
Mar-20	0.1648	0.2026	0.1399	0.4928
Mar-21	0.1102	0.1990	0.1093	0.5814
Mar-22	0.0932	0.3483	0.1115	0.4470
Average	0.1273	0.2490	0.0974	0.5264

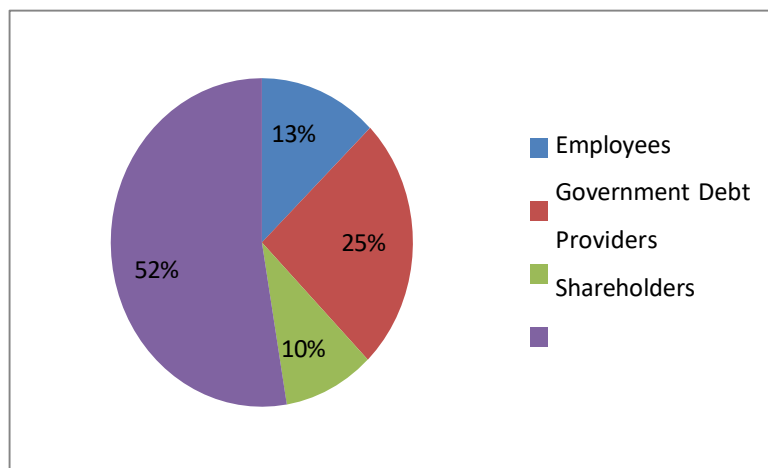


Figure 10: Average share of contributors

Phoenix Mills Ltd.

Table 11: Share of employees, government, debt providers and shareholders in VAI

	Employee	Government	Debt Providers	Shareholders
Mar-18	0.0593	0.1577	0.2489	0.5340
Mar-19	0.0734	0.1683	0.2330	0.5253
Mar-20	0.0823	0.1345	0.2639	0.5193
Mar-21	0.0313	0.0952	0.1521	0.7213
Mar-22	0.0436	0.0655	0.1295	0.7614
Average	0.0580	0.1242	0.2055	0.6123

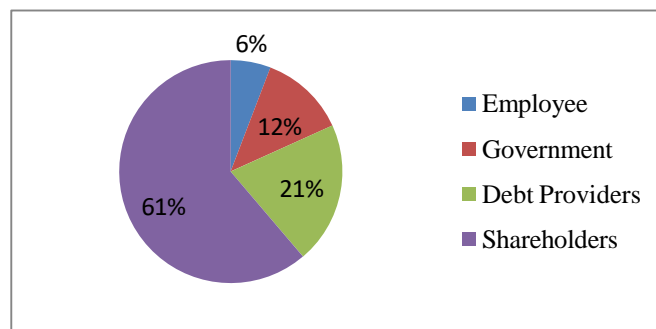


Figure 11: Average share of contributors

Prestige Estates Projects Ltd.

Table 12: Share of employees, government, debt providers and shareholders in VAI

	Employees	Government	Debt Providers	Shareholders
Mar-18	0.1759	0.1076	0.4544	0.2621
Mar-19	0.1624	0.1691	0.4178	0.2508
Mar-20	0.1584	0.1672	0.4759	0.1985
Mar-21	0.2028	0.0687	0.5199	0.2086
Mar-22	0.1281	0.1678	0.1734	0.5307
Average	0.1655	0.1361	0.4082	0.2902

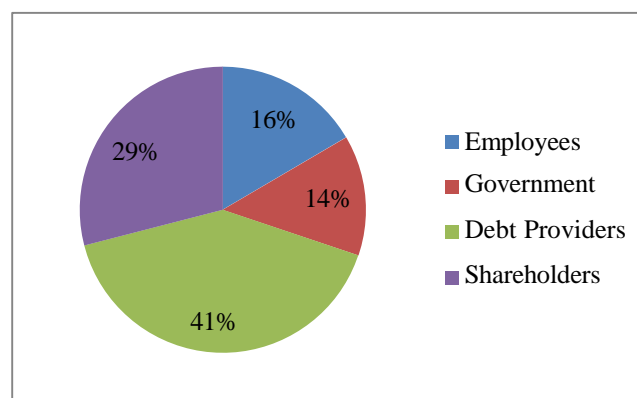


Figure 12: Average share of contributors

Sobha Ltd.

Table 13: Share of employees, government, debt providers and shareholders in VAI

	Employees	Government	Debt Providers	Shareholders
Mar-18	0.2641	0.1474	0.3304	0.2581
Mar-19	0.2412	0.1976	0.2682	0.2930
Mar-20	0.1913	0.0610	0.5230	0.2247
Mar-21	0.2114	0.0436	0.6668	0.0782
Mar-22	0.3154	0.1226	0.3497	0.2124
Average	0.2447	0.1144	0.4276	0.2133

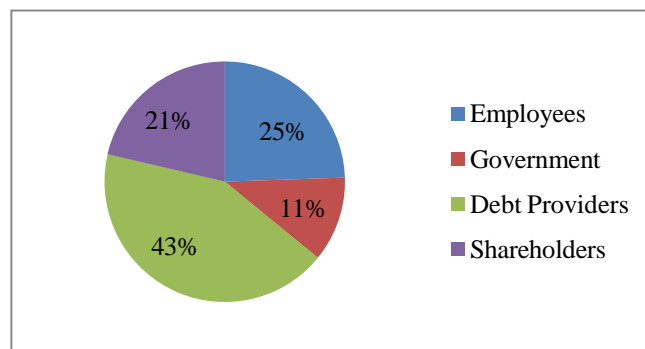


Figure 13: Average share of contributors

Table 14: Realty Sector’s average share of the contributors

Serial No.	Company Name	Employees	Government	Debt Providers	Shareholders
1	Brigade Enterprises Ltd.	0.1702	0.1807	0.3016	0.3475
2	D L F Ltd.	0.1083	0.0373	0.3236	0.5308
3	Godrej Properties Ltd.	0.2400	0.0956	0.3869	0.2775
4	Macrotech Developers Ltd.	0.1013	0.0680	0.6312	0.1994
5	Mahindra Lifespace Developers Ltd.	0.6364	0.0328	0.0966	0.2343
6	Oberoi Realty Ltd.	0.1273	0.2490	0.0974	0.5264
7	Phoenix Mills Ltd.	0.0580	0.1242	0.2055	0.6123
8	Prestige Estates Projects Ltd.	0.1655	0.1361	0.4082	0.2902
9	Sobha Ltd.	0.2447	0.1144	0.4276	0.2133
	Average	0.2057	0.1154	0.3199	0.3591

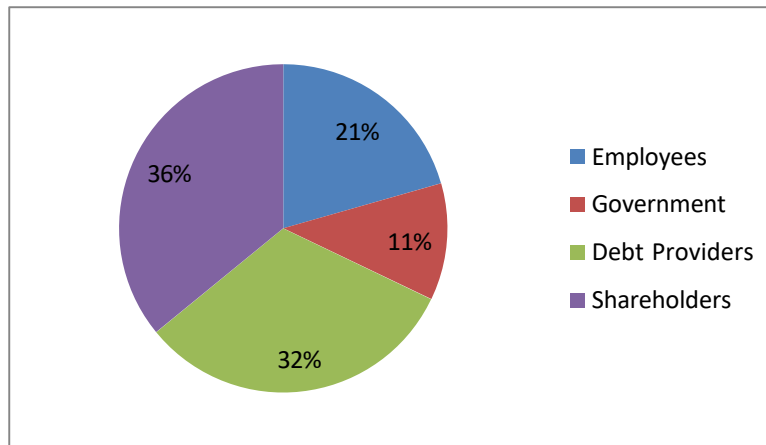


Figure 14: Average share of contributories

The above table excludes Indiabulls Real Estate Ltd. since it is considered to be an outlier when compared to the other sample observations. The analysis of the data shows that in the realty sector, owners and lenders have the majority of the share of the VAI, followed by employees and government.

Table 15: Ranking of companies on the basis of their economic performance score

Serial No.	Company Name	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Average	Rank
1	Brigade Enterprises Ltd.	48.5895	48.7030	57.1647	51.4391	51.4878	51.4768	2
2	D L F Ltd.	8.8938	12.1796	34.1949	31.3784	32.5475	23.8388	8
3	Godrej Properties Ltd.	39.3029	36.6950	54.7030	33.2079	48.6018	42.5021	5
4	Indiabulls Real Estate Ltd.	0.0787	0.0000	9.7057	4.4844	8.4319	4.5401	10
5	Macrotech Developers Ltd.	30.4197	53.7500	44.9772	44.8760	53.5234	45.5093	4
6	Mahindra Lifespace Developers Ltd.	29.4207	25.7004	13.2719	14.1350	23.3781	21.1812	9
7	Oberoi Realty Ltd.	59.0840	43.9721	45.1405	46.8596	41.8321	47.3776	3
8	Phoenix Mills Ltd.	29.6539	27.6245	36.6452	43.0244	38.8803	35.1657	7
9	Prestige Estates Projects Ltd.	30.7995	31.3418	38.8222	51.8327	51.6738	40.8940	6
10	Sobha Ltd.	67.6562	86.5403	95.6578	72.0032	76.9285	79.7572	1

The above performance score calculated and ranked shows that Sobha Ltd. is the most efficient company in the terms of making effective utilization of capital employed in the business and meeting the priorities of the Indian economy whereas Indiabulls Real Estate Ltd. was found to be the worst performer in terms of its economic performance.

Table 16: Economic Performance score averaged for the years 2017-19 to 2021-22

Serial No.	Company Name	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22
1	Brigade Enterprises Ltd.	48.5895	48.7030	57.1647	51.4391	51.4878
2	D L F Ltd.	8.8938	12.1796	34.1949	31.3784	32.5475
3	Godrej Properties Ltd.	39.3029	36.6950	54.7030	33.2079	48.6018

4	Indiabulls Real Estate Ltd.	0.0787	0.0000	9.7057	4.4844	8.4319
5	Macrotech Developers Ltd.	30.4197	53.7500	44.9772	44.8760	53.5234
6	Mahindra Lifespace Developers Ltd.	29.4207	25.7004	13.2719	14.1350	23.3781
7	Oberoi Realty Ltd.	59.0840	43.9721	45.1405	46.8596	41.8321
8	Phoenix Mills Ltd.	29.6539	27.6245	36.6452	43.0244	38.8803
9	Prestige Estates Projects Ltd.	30.7995	31.3418	38.8222	51.8327	51.6738
10	Sobha Ltd.	67.6562	86.5403	95.6578	72.0032	76.9285
	Average	34.3899	36.6507	43.0283	39.3241	42.7285

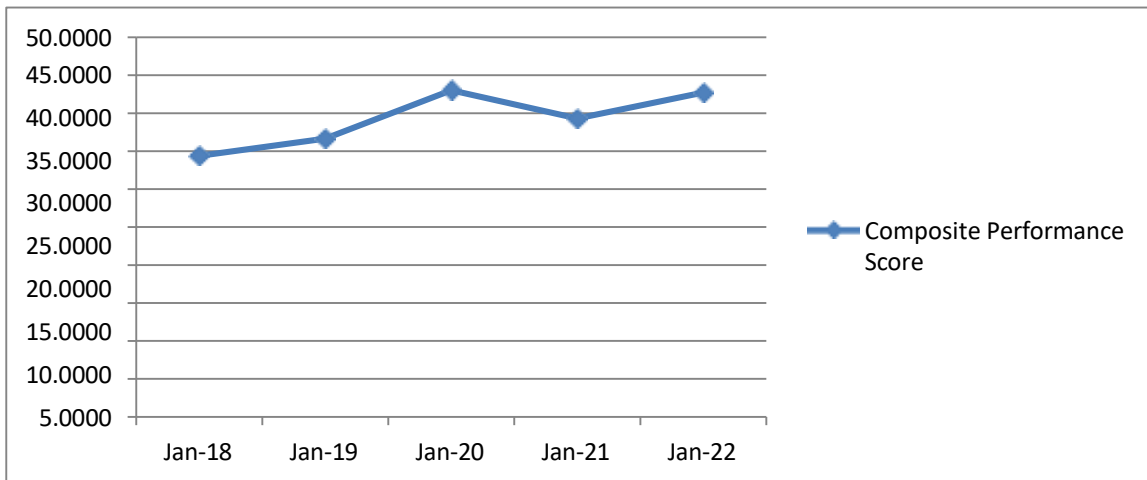


Figure 15: Performance Score of Realty Sector

The average performance score calculated over the years 2017-18 to 2021-22 shows an upward rising trend for the sector.

6. Conclusion

From the research work conducted, it can be concluded that Brigade Enterprises Ltd. and Oberoi Realty Ltd., both provide the maximum return per rupee provided by the capital providers. However, Indiabulls Real Estate Ltd. and Mahindra Lifespace Developers Ltd. are found to generate negative return of Re - 0.0082 per rupee capital employed in its business. Sobha Ltd., followed by Macrotech Developers Ltd. and Brigade Enterprises Ltd. is found to be the most efficient company compared to other companies in the sample in terms of its contribution to the wealth of the economy. It is found that Indiabulls Real Estate Ltd. had the least value added income generation ability. Sobha Ltd. is the most efficient company in terms of generating employment per rupee of the capital employed in the business whereas Indiabulls Real Estate Ltd. the least efficient. The analysis of the data shows that in the realty sector, owners and lenders have the majority of the share of the VAI, followed by employees and government. Sobha Ltd. is the most efficient company in the terms of making effective utilization of capital employed in the business and meeting the priorities of the Indian economy whereas Indiabulls Real Estate Ltd. is found to be the worst performer in terms of its economic performance. The average performance score calculated over the years 2017-18 to 2021-22 shows an upward rising trend for the sector.

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