

AN ELUCIDATIVE ANALYSIS ON VALUE ADDITION: A COMPARATIVE STUDY OF SELECTED CEMENT COMPANIES

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Abstract

The main aim of this study is to make a comparison of Value Addition Capacity of Ultratech Cement Ltd and Ambuja Cement Ltd. For that data of 10 years from 2012-13 to 2021-22 is taken. To make comparison first Gross Value Added (GVA) and Net Value Added (NVA) are find out with the help of Additive Method of Value Addition. For data analysis t-test is used and it was found out that there is significant difference exist in Gross Value Added (GVA) and Net Value Added (NVA) of both companies. Major finding of this study is that Ultratech Cement Ltd is generating more GVA & NVA than Ambuja Cement Ltd. So Ultratech Cement Ltd has more Value Addition Capacity than Ambuja Cement Ltd.

Keywords: Gross Value Added (GVA), Net Value Added (NVA), Value Addition, Ultratech Cement Ltd, Ambuja Cement Ltd.

1. INTRODUCTION

In this informative era, people want more financial information to invest with more trust. Income Statement and other financial statement are limited to provide information to certain extent. On the other hand, Value Added Accounting (Value Added Statement (VAS)) is able to provide more information. It gives information about how much any business generate the Value (Gross and Net). So, it will be more useful to all the stakeholders. If any business has more capacity to generate more value, then in long run it will definitely beneficial to all stakeholders. So, Value Addition gives a glimpse of future success and that is why it is currently becoming more and more famous.

2. REVIEW OF LITERATURE

A.P.Chirodiya,(2022), This is a research paper based on comparative study on Value Added Ratios of Ultratech Cement Ltd. And Ambuja Cement Ltd. For the purpose of analysis Student-t test was used. The period of study was five years (2016-17 to 2020-21). To prepare the Value Added Ratios first Value Added Statement (VAS) of both companies prepared and then test was applied. It was found out that comparatively Ultratech Cement Ltd was in much sound position than Ambuja ltd (Chirodiya, 2022) ^[1]

N. Molaverdi at. el., (2022), This research paper emphasis on the fact that Value Added Statement (VAS) can be more helpful in the integrated reporting. Integrated Reporting is a new concept which goes beyond the financial information but covers all the necessary information that a stakeholder need. Comparatively to any other financial report, Value Added Statement (VAS) can give more and detailed information on it, that fact tried to be clarified in this paper. ^[5]

S. Jauhari, (2012), It is a comparative study on Bharat Petroleum Ltd and Hindustan Petroleum Ltd through the Value Added concept. This paper analyzed the capacity of both companies in value generation and distribution in a period. For that researcher prepared the Value Added Statement (VAS) for 5 years and then compared both company on the basis of that. It was found out that both company is on an average doing good.^[3]

C. Pong at. el., (2005), This paper is about the contribution made by Value Added Statement (VAS) in accounting information disclosure and its history in UK. Value Added Statement (VAS) has a very good influence in the South Africa and UK in 1990. It was more fascinated and new tool for providing the financial information about the business to its relevant stakeholder. It was adopted in very initial stage in South Africa and UK. This paper narrated this situation and shows the gradual improvements in Value Added Statement (VAS).^[6]

E. S. Hendrikson, (1979), It is a review paper on the book “The Value Added Statement” by M. F. Morley. This book is about the basics of Value Added and Value added Statement (VAS). M.F. Morley stated many facts and information related to this statement and also shows that how it is different then traditional accounting statements. So E. Hendrikson wrote a review paper on it and stated important points into his own words related to this book. [2]

3. OBJECTIVES OF THE STUDY

- To calculate Gross Value Added (GVA) and Net Value Added (NVA) of Ultratech Cement Ltd and Ambuja Cement Ltd.
- To compare the magnitude of Value Added (VA) of Ultratech Cement Ltd and Ambuja Cement Ltd.

4. RESEARCH METHODOLOGY

4.1 Rational of Study

Value Addition or Value Added (VA) and Profit these two are totally different concepts. Unfortunately, many people consider them similar. Profit is residual income after the deduction of all expenses. On the other hand Value Added (VA) is the amount of Value that added by company during a particular period of time by its overall business activity. So the main rational of this paper to clarify and state relationship between the profitability and Value Added (VA).

4.2 Sample and Sample Selection

Sample of the study are Ultratech Cement Ltd and Ambuja Cement Ltd. Both companies are leading cement manufacturer in the Indian cement industry.

Both samples are selected with the help of Non-Probability Sampling method- Judgmental sampling technique. Both samples are selected on the basis of net profit of 2021-22.

4.3 Period of Study

Period of the study is from 2012-13 to 2021-22.

4.4 Hypotheses of the Study

H₀ = There no significant difference in Gross Value Added (GVA) of Ultratech cement Ltd and Ambuja Cement Ltd during the Study period.

H₁ = There is a significant difference in Gross Value Added (GVA) of Ultratech Cement Ltd and Ambuja Cement Ltd during the study period.

H₀= There is no significant difference in Net Value Added (NVA) of Ultratech Cement Ltd and Ambuja Cement Ltd during the study period.

H₁ = There is a significant difference in Net Value Added (NVA) of Ultratech Cement Ltd and Ambuja Cement Ltd during the study period.

4.5 t-test :

t-test is a parametric test which mainly used to compare the means of two samples.

5. DATA ANALYSIS AND INTERPRETATION

Table No.1
GVA & NVA of Ultratech Cement Ltd. (With Additive method)

Years	Profit Before Tax	(+) Cost Of Employees	(+) Depreciation	(+) Interest	Gross Value Added (GVA)	(-) Depreciation	Net Value Added (NVA)
2012-13	3867.21	1042.69	1023.37	252.34	6185.61	1023.37	5162.24
2013-14	2857.6	1104.15	1139	360.95	5461.70	1139	4322.70
2014-15	2985.63	1308.29	1203.42	586.51	6083.85	1203.42	4880.43
2015-16	3421.3	1444.97	1377.17	566.3	6809.74	1377.17	5432.57
2016-17	3872.04	1522.34	1348.41	640.1	7382.89	1348.41	6034.48

2017-18	3301.6	1810.24	1847.93	1237.6	8197.37	1847.93	6349.44
2018-19	3467.91	2291.07	2450.73	1777.86	9987.57	2450.73	7536.84
2019-20	5183.95	2519.86	2722.66	1991.56	12418.03	2722.66	9695.37
2020-21	7855.46	2353.02	2700.23	1485.65	14394.36	2700.23	11694.13
2021-22	8362.7	2534.68	2714.75	944.71	14556.84	2714.75	11842.09

(Source : Annual Reports of Ultratech Cement Ltd.)

Analysis : Table No. 1 shows the Value Addition (VA) done by Ultratech Cement Ltd in last 10 years. Here, Value Addition includes Gross Value Added (GVA) and Net Value Added (NVA).

In the context of Gross Value Added (GVA), it shows the increasing trend during the study period. It suffers a small reduction in the year of 2013-14. Although after that the Gross Value Added (GVA) of Ultratech Cement Ltd. is showing the continually increasing trend. It started with 6185.61 Crores in the year of 2012-13 and it reached at 14556.84 Crores in 2021-22 at the end of the study period, which is more than double as compared to 2012-13.

On the other hand, Net Value Added (NVA) is also showing impressive increasing trend during the research period. Just like in the GVA, NVA also bear a minor reduction in 2013-14. Except that year, Net Value Added (NVA) of Ultratech Cement Ltd was increasing during the study period. It reached to 11842.09 Crores in 2021-22 from 5162.24 in 2012-13.

Table No. 2
GVA & NVA of Ambuja Cement Ltd. (With Additive method)

Years	Profit Before Tax	(+) Cost Of Employees	(+) Depreciation	(+) Interest	Gross Value Added (GVA)	(-) Depreciation	Net Value Added (NVA)
2012-13	1895.68	487.94	568.68	78.46	3030.76	568.68	2462.08
2013-14	1498.31	508.72	493.67	66.75	2567.45	493.67	2073.78
2014-15	1774.02	586.33	513.03	65.55	2938.93	513.03	2425.90
2015-16	1173.25	594.05	629.76	92.47	2489.53	629.76	1859.77
2016-17	1996.53	1370.07	1460.93	152.93	4980.46	1460.93	3519.53
2017-18	2754.96	1511.24	1219.45	205.78	5691.43	1219.45	4471.98
2018-19	2906.01	1524.37	1153.94	170.5	5754.82	1153.94	4600.88
2019-20	3855.34	1570.75	1152.52	169.87	6748.48	1152.52	5595.96
2020-21	3977.15	1540.4	1161.78	140.22	6819.55	1161.78	5657.77
2021-22	5144.24	1529.15	1152.49	145.66	7971.54	1152.49	6819.05

(Source : Annual Reports of Ambuja Cement Ltd.)

Analysis : Table No. 2 shows the Value Addition done by Ambuja Cement Ltd from 2012-13 to 2021-22.

Ambuja Cement Ltd is experienced the mixed trend during the study period. In the very first year (2012-13), it was 3030.76 Crores then in next year it crumbled down to 2567.45 Crores. Then it improved a bit in 2014-15 to 2938.93 Crores but again it recorded a reduction and ended up at 2489.53 Crores in 2015-16. After that it recorded a good increasing Value Added, it was 5691.43 Crores in 2014-18 and it went up to 7971.54 Crores in 2021-22 (in the last year of study) with continuously increase in Gross Value Added (GVA).

There is nothing different in the Net Value Added (NVA) of Ambuja Cement Ltd during the study period. Net Value Added (NVA) was recorded at 2462.08 Crores in 2012-13 then it fallen to 2073.78 Crores. In the next year it was increased to 2425.90 Crores then again a short fall and it went down to 1859.77 Crores. After that in the year of 2016-17 it was 3519.53 Crores then it started gradually increasing and ended up to 6819.05 in 2021-22.

Table No. 3
Gross Value Added (GVA) of Ultratech Cement Ltd & Ambuja Cement Ltd

Years	Ultratech Cement Ltd (GVA)	Ambuja Cement Ltd (GVA)
2012-13	6185.61	3030.76
2013-14	5461.7	2567.45
2014-15	6083.85	2938.93
2015-16	6809.74	2489.53
2016-17	7382.89	4980.46
2017-18	8197.37	5691.43
2018-19	9987.57	5754.82
2019-20	12418.03	6748.48
2020-21	14394.36	6819.55
2021-22	14556.84	7971.54

Figure No. 1
Comparative Chart of Gross Value Added (GVA) of Ultratech Cement Ltd & Ambuja Cement Ltd

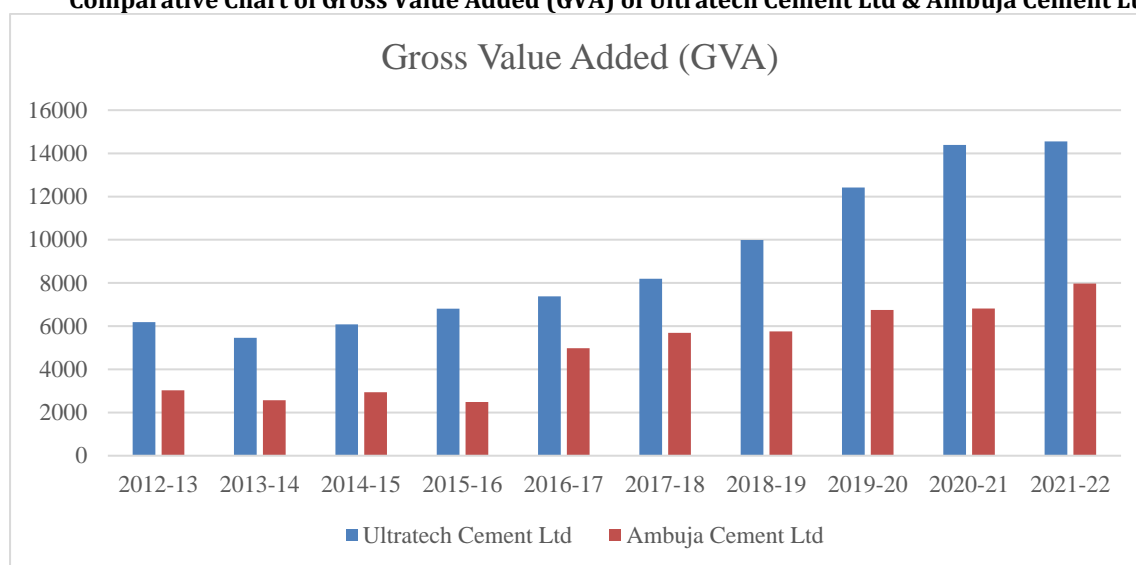


Table No. 4
Net Value Added of Ultratech Cement Ltd & Ambuja Cement Ltd

Years	Ultratech Cement Ltd (NVA)	Ambuja Cement Ltd (NVA)
2012-13	5162.24	2462.08
2013-14	4322.7	2073.78
2014-15	4880.43	2425.9
2015-16	5432.57	1859.77
2016-17	6034.48	3519.53
2017-18	6349.44	4471.98
2018-19	7536.84	4600.88
2019-20	9695.37	5595.96
2020-21	11694.13	5657.77
2021-22	11842.09	6819.05

Figure No. 2
Comparative Chart of Net Value Added (NVA) of Ultratech Cement Ltd & Ambuja Cement Ltd

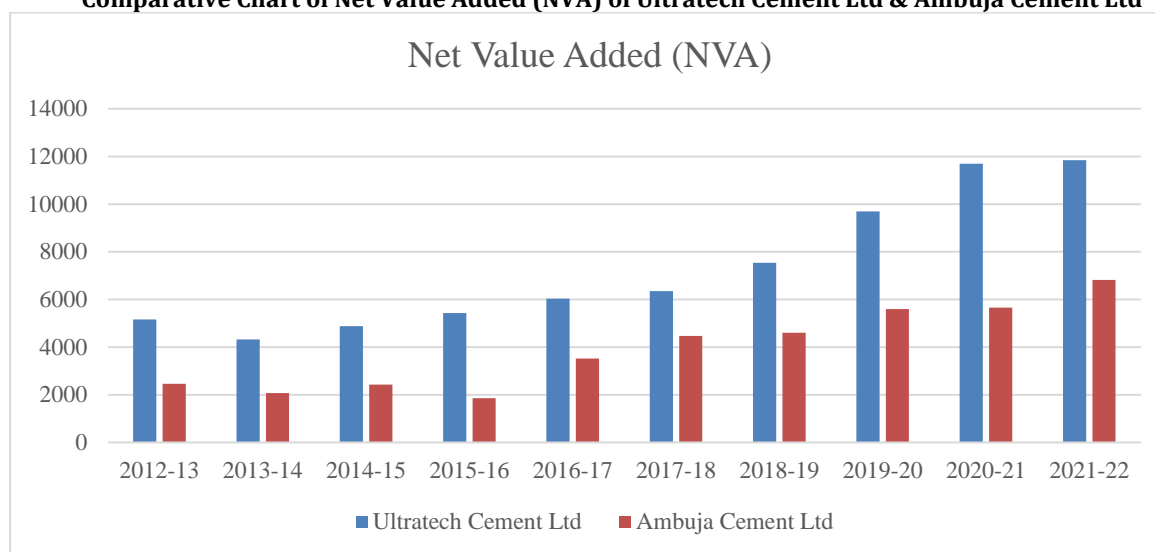


Table No. 5
Application of t-test

Sr No.	Particulars	Calculated Value	Table Value	Result
1	Gross Value Added (GVA)	3.34	2.10	H₀ is REJECTED
2	Net Value Added (NVA)	3.20	2.10	H₀ is REJECTED

Analysis : It is stated in the table that by applying t-test on **Gross Value Added (GVA)** of Ultratech Cement Ltd & Ambuja Cement Ltd with 5 % level of significance, then table value is 2.10 and Calculated Value is 3.34 which is higher than table value. So researcher **failed to accept the null hypothesis** for that and from the data it can be said that there is a significant difference in Gross Value Added (GVA) of Ultratech Cement Ltd and Ambuja Cement Ltd during the study period.

After applying t-test on the **Net Value Added (NVA)** of Ultratech Cement Ltd & Ambuja Cement Ltd with 5 % level of significance, its table value is 2.10 and Calculated Value is 3.20 which is higher than table Value. For that reason researcher is **unable to accept the null hypothesis** and from the data it can be said that there is a significant difference in Net Value Added (NVA) of Ultratech Cement Ltd and Ambuja Cement Ltd during the study period.

7. FINDINGS

- Ultratech Cement Ltd and Ambuja Cement Ltd both are generating an impressive amount of Gross Value Added (GVA) and Net Value Added (NVA).
- Comparatively Ultratech Cement Ltd. is generating more GVA & NVA than Ambuja Cement Ltd. even with more stability.
- There is a significant difference in the Gross Value Added (GVA) and Net Value Added (NVA) of Ultratech Cement Ltd & Ambuja Cement Ltd. during the study.
- Ultratech Cement Ltd. is generating almost twice of Ambuja Cement Ltd (both in Gross Value Added (GVA) & Net Value Added (NVA)).
- Ultratech Cement Ltd has more Value Addition Capacity than Ambuja Cement Ltd.

8. CONCLUSION

The main conclusion of this study is that there is a major difference in magnitude of Value Addition (VA) of both companies in terms of Gross Value Added (GVA) & Net Value Added (NVA). Ultratech Cement Ltd is generating almost double amount of Value than Ambuja Cement Ltd. So, the magnitude of Value Addition of Ultratech Cement Ltd is way higher than Ambuja Cement Ltd.

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