Darshan - The International Journal of Commerce and Management ISSN: 2583-1682 (online) Volume - 4, Issue – I, June-2024
Bi-Annual double-blind peer-reviewed International Journal
Paper Submission Date: 6th Jan 2024 Paper sent back for Revision: 28th Jan 2024 Paper Acceptance Date: 15th Feb 2024

"Value Added (VA) and Profitability: A Correlational Study on Ambuja Cement Ltd"

[1] **Mr. Ashish Premjibhai Chirodiya**

[1]Junior Research Fellow (JRF) & PhD Scholar, Department of Commerce & Business Administration, Saurashtra University,
Rajkot, Gujarat, India.
Email -ashishchirodiya01@gmail.com

Abstract: *This is a correlational study on two variables viz. Value Added (VA) and Profit with special focus on Ambuja Cement Ltd. The main rational of this paper is to know and clarify the difference of Value Added and Profit and to find out if there is any kind of relationship exist between these two or not. For this purpose, data for the 10 years starting from 2012-13 to 2021-22 were taken and Value Added (both GVA and NVA are) Calculated with the assistance of additive method. For fulfilling the objective of knowing the relationship, correlation analysis is used. At the end it was revealed out that there is a strong-positive correlation exist between GVA & Profit and NVA & Profit*.

Key Words: *Value Added (VA), Gross Value Added (GVA), Net Value Added (NVA)*

INTRODUCTION:

In this era of information, people want more information about financial performance of company to invest in it. Problem starts when company is become reluctant to it because of the stressed that this information that they provide others might be used against them by their competitors. So, to solve this problem one of the ways is Value Added Statement (VAS).
Value Added Statement is a statement which provides that how much value is utilized by respective companies during a period. This statement gives more financial information than traditional one and company can make assure that their secret information will be protected. This statement supplements the Income statement.

CONCEPTUAL PART VALUE-ADDED

Value Added means putting or addition of the extra or more value to the basic form. By doing this any product can be made more valuable and can attract more consumers than before. [7],[8]
Value Added is a term used to denominate the situation in which company added value by its operating activities to the different parts of the organization as well the society. [1],[6]
Profit : Profit is actually residual amount of income that remains after deducting the all the expenses. So it is extra amount of income. Profit as term is very vague in nature. Profit can be various types viz. Economic Profit, Gross Profit, Net profit, Accounting Profit etc.

LITERATURE REVIEW:

A. P. Chirodiya, (2022), This research paper is a comparative study on the Ultratech Cement ltd and Ambuja Cement Ltd with the help of the Value Added Ratios. The main aim of this paper is to analyze the financial performance with the help of Value Added Ratios. This research paper shared information that Ultratech Cement Ltd is doing than Ambuja cement Ltd (Chirodiya, 2022). [3]

D.K.Bohra et. al., (2022), This research paper is a comparative analysis of two giant companies of FMCG industry , ITC and HUL. Researchers tried to find that which company's products people uses the most and how this company counter the competition in the market and also analyse the financial performance of the company and it was founded that HUL is better in all aspects than ITC.[2]

M.A. Ali et. al., (2021), This research paper focused on the how Value-Added Statement (VAS) is much more important in financial reporting. Researchers tried to explain that Value Added Statement can done more than only financial reporting and can be used more efficiently as a supplement to traditional financial statements. [1]

A. D. Patel, (2018), This is a research paper in which researcher stated very fundamental details about the Value-Added Statement (VAS). This information includes concept, definition of Value Added (VA). Even methods and technique also been mentioned in this paper. This paper clarifies the understanding and conceptual part as well importance of Value Added Statement (VAS).[4]

C. V. Staden, (2000), This paper states the usefulness of the Value-Added Statement (VAS) in South Africa particularly in the financial reporting. Between 1990-2000 most of the companies in South Africa adopted the Value-Added Statement (VAS). So to measure the usefulness of this statement the researcher conducted this study and found out that Value Added Statement is really useful and give more information to all participants than traditional reporting. [5]

METHOD:

Rationale of the study

Value Addition or Value Added (VA) and Profit these two are For sure different concepts. Unfortunately, many people consider them similar. Profit is residual income after the deduction of all expenses. On the other aspects 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).

Objectives of the study

- To calculate Gross Value Added (GVA) and Net Value Added (NVA) of Ambuja Cement Ltd.
- To find out if there is any relationship exist between Profit and Value Added (VA)

Sample and Sample Selection

It is a case study of Ambuja Cement Ltd. The Main reason to choose the Ambuja Cement Ltd is that it is a leading company in Indian cement industry. Since it has much financial and managerial potential, to analyze this situation Ambuja Cement Ltd is chosen.
Sample is selected with the help of Non-Probability method – Judgmental sampling technique.

Period of Study

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

Hypotheses of the Study

- **H_0** = There is no observable relationship exist between Gross Value Added (GVA) and Profitability
- **H_1** = There is an observable relationship exist between Gross Value Added (GVA) and Profitability
- **H_0** = There is no observable relationship exist between Net Value Added (NVA) and Profitability
- **H_1** = There is an observable relationship exist between Net Value Added (NVA) and Profitability

Correlation Analysis

- This is statistical method which mainly used to know whether there is any observable relationship exist between two or more than two variables. Correlational Value is denominated by “r”. The value of “r” determines that if relation exist or not and if there is relationship then if it is positive or negative. The value of “r” is between (-1) to 1.

Darshan - The International Journal of Commerce and Management ISSN: 2583-1682 (online) Volume - 4, Issue – I, June-2024
Bi-Annual double-blind peer-reviewed International Journal
Paper Submission Date: 6th Jan 2024 Paper sent back for Revision: 28th Jan 2024 Paper Acceptance Date: 15th Feb 2024

DATA ANALYSIS & INTERPRETATION:

Table No. 1
Calculation of GVA & NVA of Ambuja Cement Ltd.
With the help of Value Added Statement (VAS)

(Rs. In Crores)

Generation of Value	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**
Sales	9,795.03	9,191.72	9,999.67	9,481.34	20,093.77	23,608.69	26,040.94	27,103.55	24,516.17	28,965.46
add:change in stock	-200.83	118.29	16.22	25.4	-13.17	-77.72	-197.87	143.64	256.45	-530.34
add:other income	348.52	391.33	424.33	353.22	467.85	322.61	371.44	580.74	449.59	352.44
Gross Output	9,942.72	9,701.34	10,440.22	9,859.96	20,548.45	23,853.58	26,214.51	27,827.93	25,222.21	28,787.56
Less: Cost of goods brought in										
(a) Material used	3,015.19	2,720.68	3,068.54	2,858.95	6,336.02	7,804.61	8,895.12	8,953.41	7,360.51	9,970.93
(b) other expenditure	3,896.77	4,413.21	4,432.75	4,511.48	9,231.91	10,357.54	11,564.57	12,126.04	11,042.15	10,845.09
GVA	**3,030.76**	**2,567.45**	**2,938.93**	**2,489.53**	**4,980.52**	**5,691.43**	**5,754.82**	**6,748.48**	**6,819.55**	**7,971.54**
less: Depreciation	568.68	493.67	513.03	629.76	1,460.93	1,219.45	1,153.94	1,152.52	1,161.78	1,152.49
NVA	**2462.08**	**2073.78**	**2425.9**	**1859.77**	**3519.59**	**4471.98**	**4600.88**	**5595.96**	**5657.77**	**6819.05**
Distribution of Value										
To employees	487.94	508.72	586.33	594.05	1,370.07	1,511.24	1,524.37	1,570.75	1,540.40	1,529.15
To providers of loan capital	78.46	66.75	65.55	92.47	152.99	205.78	170.5	169.87	140.22	145.66
To government	603.86	219.87	287.51	365.37	573.77	822.85	-54.15	1,092.15	884.75	1,453.43
To company itself	1,291.82	1,278.44	1,486.51	807.88	1,422.76	1,932.11	2,960.16	2,763.19	3,092.40	3,690.81
NVA	**2,462.08**	**2,073.78**	**2,425.90**	**1,859.77**	**3,519.59**	**4,471.98**	**4,600.88**	**5,595.96**	**5,657.77**	**6,819.05**

(Source : Annual reports of Ambuja Cement Ltd)

Table No. 2 GVA & Profit of Ambuja Cement Ltd.

Years	GVA	Profit
2012-13	3,030.76	1,291.82
2013-14	2,567.45	1,278.44
2014-15	2,938.93	1,486.51
2015-16	2,489.53	807.88
2016-17	4,980.52	1,422.76
2017-18	5,691.43	1,932.11
2018-19	5,754.82	2,960.16
2019-20	6,748.48	2,763.19
2020-21	6,819.55	3,092.40
2021-22	7,971.54	3,690.81

(Source : Annual reports of Ambuja Cement Ltd)

Analysis: Gross Value Added (GVA) and Profit of Ambuja Cement Ltd is showing mixed trend during the study period. In 2012-13, GVA was 3,030.76 crores at that time profit was 1,291.82 crores. Then in very next year, GVA drops to 2,567.45 crores and profit was also affected adversely and ended to 1,278.44 crores. In 2013-14, GVA increase to 2,938.93 crores, similarly profit also got raised to 1,486.51 Crores. Again in 2015-16, there is a fall in GVA and rest up to 2,489.53 crores but in profit there was a steep fall and ending at 807.88 crores. So, *Drop in Profit was obviously than GVA.* In 2016-17 GVA almost get doubled with 4,980.52 crores and Profit also increased but less than double (1,422.76 crores). In 2018-19, GVA shows a nominal increase compared to 2017-18 but *profit was showing a significant amount raised in it comparing the same year*. Eventually in 2019-20, when GVA raised by almost 1000 crores at the mean time *profit of the company was increased by a minor amount*. Again, in 2020-21 GVA was increased by a minor amount but *profit changes in upward direction by a significant number*. The same was happened in last year of study period.
From the data and analysis, it is confirmed that GVA and Profit both are sharing a positive relationship because almost all the time both of these changes in same direction.

The same thing can be explained more with this graphical representation (Chart No. 1)

Chart No. 1 GVA & Profit of Ambuja Cement Ltd

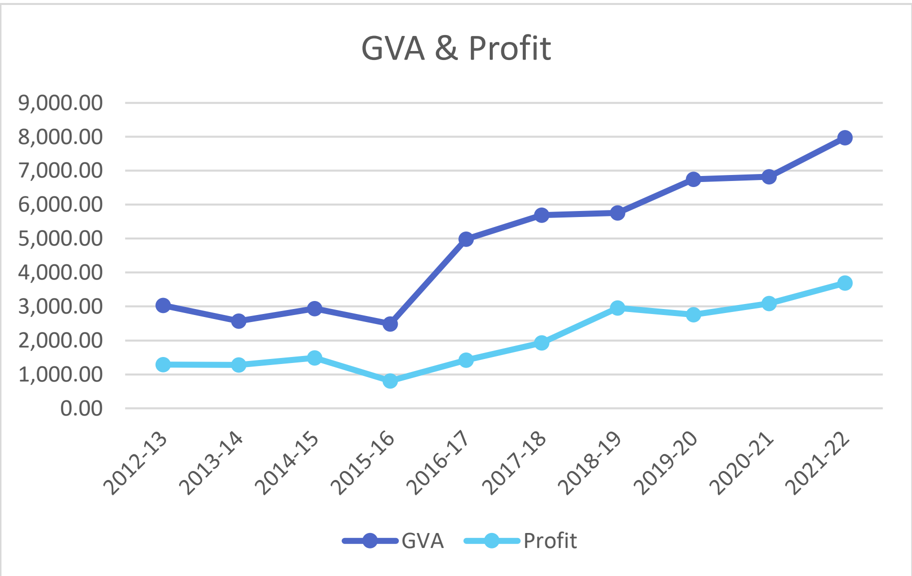


Table No. 3 NVA & Profit of Ambuja Cement Ltd.

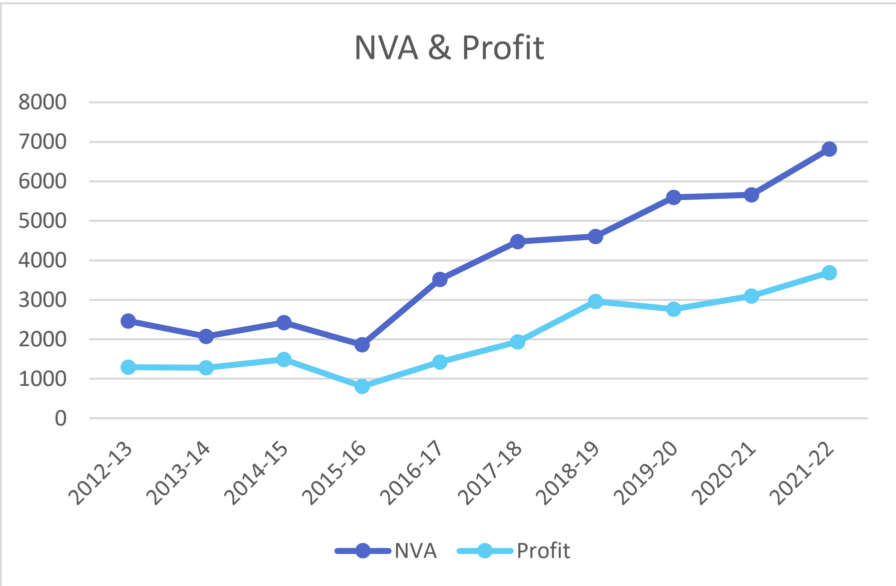
Years	NVA	Profit
2012-13	2462.08	**1,291.82**
2013-14	2073.78	**1,278.44**
2014-15	2425.90	**1,486.51**
2015-16	1859.77	**807.88**
2016-17	3519.59	**1,422.76**
2017-18	4471.98	**1,932.11**
2018-19	4600.88	**2,960.16**
2019-20	5595.96	**2,763.19**
2020-21	5657.77	**3,092.40**
2021-22	6819.05	**3,690.81**

(Source : Annual reports of Ambuja Cement Ltd)

Analysis: NVA and Profit of Ambuja Cement Ltd also showing the mixed trend during the time of study. In the very first year NVA was 2,462.08 crores and profit was 1,291.82 crores. Then MVA suffered a fall and lend to 2,073.78 crores but NVA got affected by a minor fall and restated at 1,278.44 crores. The same was happened in 2014-15 but this time it was appreciation in numbers and profit grew more than NVA. Then, in 2015-16, company suffered a major downfall and NVA reduced significantly but profit at the same time reduced with more gravitas. In 2016-17 and 2017-18 ,it shows almost same increase in both NVA and Profit. Contrary to that in 2018-19, NVA increased by a minor number whereas profit almost get doubled. In 2019-20, NVA increased by almost 1000 crores but profit of the same year was decreased by almost 200 crores. In 2020-21 and 2021-22, changes in NVA and Profit are variable.
From the data and analysis, it is obvious that there is a positive relationship between NVA and Profit because in almost all instances both changes in the same direction.

The same can be explained more form the graphical representation (Chart No. 2).

Chart No. 2 NVA & Profit of Ambuja Ltd Cement



RESULT:
From the data and analysis, it becomes fact that there is a relationship between Value Addition and Profitability. Still to make sure about results and get a concrete conclusion, Correlation Test is used. Correlation test give result in terms of “r” – correlation coefficient, whose value always bound between (-1) to 1. The more correlation coefficient near to 1 means more strong-positive relationship between variables

and if it is nearer to (-1) then there is strong negative correlation but if it is nearer to 0 then it means there is no observable significant relation exists between variables.

Table No. 4 Correlation Test "r" Value of GVA & Profit

Variable No.	**Variable Name**	**Value of Correlation Coefficient "r"**	**Interpretation of "r" value**
1	GVA	**0.923427**	**Strong Positive Correlation**
2	Profit		

Table No. 5 Correlation Test "r" Value of NVA & Profit

Variable No.	**Variable Name**	**Value of Correlation Coefficient "r"**	**Interpretation of "r" value**
1	NVA	**0.951082**	**Strong Positive Correlation**
2	Profit		

Decision Rules:

- If Value of **"r" = 0 (ZERO)** then **NO Correlation** and Null hypothesis will be accepted.
- If Value of **"r" is between (-1) to 0** then **Negative Correlation** and Null hypothesis will be rejected.
- If Value of **"r" is between 0 to 1** then **Positive Correlation** and Null hypothesis will be rejected.

Table No. 6 Result of Value Added and Profitability

No.	Particulars	Calculated Value of Correlation Coefficient (r)	Correlation Type	Results
1	Gross Value Added (GVA) & Profitability	**0.923427**	**Strong Positive Correlation**	**H_0 is REJECTED**
2	Net Value Added (NVA) & Profitability	**0.951082**	**Strong Positive Correlation**	**H_0 is REJECTED**

Explanation : Here, from the correlation method it is clear that "r" value of Gross Value Added (GVA) and Profitability is **(Positive) 0.923427**. which shows that there is a **Strong-positive Correlation** exist between them. Therefore, researcher failed to accept the null hypothesis.

For Net Value Added (NVA) and Profitability result is also same. As per the correlation method the value of "r" is **(Positive) 0.951082**. which indicates that there is a **Strong-Positive Correlation** exist among them. So, researcher failed to accept the null hypothesis.

FINDINGS :

As per the data these findings are extracted,

(1) There is a observable Positive relationship (Strong Positive Correlation) exist between Gross Value Added (GVA) and Profitability during the study period.

(2) There is a observable Positive relationship (Strong Positive Correlation) exist between Net Value Added (NVA) and Profitability during the study period.

CONCLUSION:

From the data and test results, it can be concluded that there is a positive-relationship exist between Value Addition and Profitability.

REFERENCES:

1. Ali, M., & Abdullah, S. (2021). Macro sustainability accounting: A new way to prepare Value Added Statement. *Journal of Economics and Administrative Science*, *5*(2), 185-197.
2. Bohra, D. K., Nagansur, S., & Anute, N. (2022). Comparative analysis of FMCG products with special reference to HUL and ITC. *OmniScience: A Multi-disciplinary Journal*, 1-10. https://doi.org/10.37591/omniscience.v12i2.3395
3. Chirodiya, A. P. (2022). A comparative study on value added ratios of Ultratech cement Ltd and Ambuja cement Ltd. *Journal of Social Commerce*, *2*(4), 174-182. https://doi.org/10.56209/jommerce.v2i4.42
4. Patel, A. D. (2018). Basic Concept of Value Added Statement. *Research Guru : online journal of multidisciplinary subject*, *15*(2), 382-386.
5. Stainbank, L. (1992). Value added reporting in South Africa. *De Ratione*, *6*(1), 43-58. https://doi.org/10.1080/10108270.1992.11435033
6. Stainbank, L. (2009). The value added statement: Does it add any value? *Meditari Accountancy Research*, *17*(2), 137-149. https://doi.org/10.1108/10222529200900016

Vijayalakshmi, B., & Shrikant, P. (2014). Value Added Statement - An Innovative Dimension of Financial Performance Measurement - A case study of Steel Authority of India Ltd. (SAIL). *Asian Journal of Research in Business Economics and Management*, *4*(4), 138-152.