# VALUE ADDED STATEMENT (VAS): A CRITICAL ANALYSIS: A CASE STUDY OF STEEL AUTHORITY OF INDIA LIMITED

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#### **Abstract**

A Value Added Statement (VAS) is a financial statement which shows how much value (wealth) has been created by an enterprises during a certain period through utilization its capacity, capital, manpower and other sources.

The main object of a company is to generate wealth. If a company cannot create it, then it is a burden on the society and there is no reason to keep it running. The wealth created by company is distributed among various factors of the society.

The term value added means an excess of turnover plus income from services over the cost of goods and services obtained from outside the business. This money divided among the various parties who created it. Thus the value added income would include wages, interest, taxes, dividends paid to shareholders and retained income of the company.

The aim of this paper is to analyze value added ratios of Steel Authority of India Ltd. (SAIL). Value added ratios were calculated on the basis of value added statement and analysed. This paper focuses on how the value added ratios were help to the company to measure the efficiency and productivity of an organization.

**Keywords:** VAS, Value Added Ratios, Financial performance.

#### 1. INTRODUCTION:

Value added is a basic, broad and important measure of judging the performance of an enterprise. A business enterprise grows when it produces wealth. An enterprise may exist without earning profit but cannot survive without adding value. The enterprise not earning profit shall become sick but not generating wealth may die its own death during a specified period. VAS is modified version of profit and loss account.

The concept of value added helps to point out the wealth produced by a manufacture over a period of time. Value added is an excess of turnover plus income from services over the cost of goods and services obtained from outside the business. This money allocated to employees, government, providers of capital and residue retained in business.

#### 2. OBJECTIVES OF THE STUDY:

- \* To disclose the value added by an enterprise during a period of time.
- \* To indicate the wealth created by an enterprise for the purpose of evaluating and measuring the performance of the business unit.
- \* To compute value added ratios and analyze them.
- \* To understand the usefulness of value added statement as a supplementary financial statement.

## 3. METHODOLOGY:

The study is based on the information from secondary data sources. The data relating to the study have been collected from annual reports, documents, magazines, books, journals, various newspapers and subject related websites and research documents. With the help of data comprised in the financial statements, value added statement has been prepared. Various techniques of financial statement analysis were applied and conclusions have been drawn after interpreting the analysed data. In support of the findings and conclusions, statistical techniques have also been used. With the help of the conclusions drawn, suitable, significant and useful

suggestions have been made to improve the performance of the industry.

#### 4. REVIEW OF LITERATURE:

Iron and Steel industry is the basic industry in the present world. Without the development of iron and steel industry the economic prosperity of present world is not feasible and therefore it is known as the key industry in the world

SAIL is the flagship of India is public sector iron and steel industry. It was incorporated in New Delhi on 24<sup>th</sup> January, 1973.

This paper has reviewed the following research studies. The concept of value added is not new but interest in it has been increased since the publication of 'The Corporate Report' by the Accounting Standard Steering Committee, London, 1975 and 'The Future of Company Reports', a consultative document of British Government, published by H.M.S.O., London in July, 1977.

Till inception of value added concept, the accountants have relied on the conventional procedures for assessing the success of an organisation i.e. in the amount of profit earned during an accounting period of late they are giving stress on the importance of VAS because they find it more basic and broad measurement to judge the performance of an enterprise than profit.

"This aspect has been realised in the European Counties and in the United Kingdom and they are presenting the value added statement in their annual reports. This practice is yet to be generally adopted in India. Its presentation in annual reports is neither statutory nor obligatory for companies in this country. Nevertheless, some companies have started including VAS in their annual reports. In Australia, it is proposed to make the statement of value added compulsory to be appended to the final accounts of an enterprise."

The study conducted by American Accounting Association Committee on Accounting and Auditing Measurement (1991) examines empirically the relative merits of derived performance indicator numbers from value added reporting, accrual accounting and cash flow accounting. The result show that the derived performance indicator numbers based on net value added had lower variability and higher persistency than corresponding numbers based on the either earnings or cash flows of 673 US firms for the 1981-1990 periods. The finding of the study made a strong case for both mandatory disclosure and increased research on the usefulness of value added reporting in US context.

Heller and Stoloney (1995) in their study reveal a very low comparability of the published value added statements in Germany which weakness the information contents of these statements. Additionally they are all noting else than restructured income statements and therefore provide very little additional information. Further the research paper conclude that although the academic accounting interest in value added as an economic performance measure is relatively limited this paper show that in France and Germany there has been a varied discussion and practical application of the value added concept. But even in France, where it is incorporated in general accounting plan and used as an important analytical tool by the "Banque de France" it has so far not widely used in corporate accounting, not even in these two countries, in which this figure is generally regarded as attaining the great popularity. The publication practice of the surveyed companies reveals the perception of value added by the management of those companies.

Serge Evraet (1998) opines that the role of earning in external financial reporting is being seriously challenged by the emerging trends and new ways of accounting systems and mainly the role of value added data. He further states "inclusion of such data in the financial reports of US corporations has been suggested by American Association Committee on accounting and auditing (1991) and in the international accounting and research literature (e.g. Zabaidur 1990; Meek and Gray 1998; Deegan and Hallman 1991). It is well accepted in UK, Germany and France". He further states "Value added represents the total wealth of the firm that could be distributed to all capital providers, employees and the government. Earnings represents the return to shareholders while other value added components reflects returns to the other stakeholders – i.e. the government, bond-holders and employees". Though value added statement and accounting has emerged as new trend in redefining the way we look at the any companies contributions to all stake holders not much research has undergone around the world about it is utility and how that could be used by not only the finance personnel and top-level management and how it could be utilized to reposition the company value before the society.

Arangics G, ct.al. (2008) opines that owning to the absence of accounting standards for the preparation of a value added statement, a large variety of methods are used in financial statements and the study reveals the published value added statements of companies listed on the JSE securities exchange during the period 1976-2005 have beer standardized by the graduate school of business of the university of stellen bosch in order to quantify the differences between the standardized value added statement and the published value added statement

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G.A. Willy: The Chartered Accounts in Australia, August 1979 quoted in the "Chartered Accountant" New Delhi 1980, p. 931.

#### 5. CONCEPT OF VALUE ADDED STATEMENT:

The statement which explains how much value (wealth) has been generated by a concern through utilization of its resources and how it is distributed among the different stakeholders in an accounting period is known as value added statement. The resources include capacity, capital, man power and other resources. The employees government, lenders, shareholders or owners comes under stakeholder. A value added statement is much more important than income statement. The income statement reports on its income statement. The income statement reports on its income earned by a large group of stakeholders. Thus it can say that the value added statement shows the value or wealth generated and distributed to all stakeholders rather than just the shareholders.

Value added is defined, as an excess of turnover plus income from services over the cost of goods and services obtained from outside the business. "Value added may be calculated as the difference between the value of the goods or service produced by the team, i.e. sales revenue, less the value of the goods and services purchased from outsiders i.e., the cost of bought – in materials and services". On the other hand it is defined as the wealth which the reporting entity has been able to produce by its own and its employees efforts and comprises salaries and wages, tax, interest, dividend, depreciation and net profit (retained)." Value added is the wealth the company has been able to create by its own and it employees efforts during a period."

These two definitions are complimentary to each other and illustrates the two components of value added statement (namely generation of value added and a application of value added).

There are different opinions about this concept. Firstly the excess of turnover plus the income from services, over the cost of bough – in materials and services is termed as "gross value added". The annual charge of depreciation is subtracted from the gross value added and the residue is known as 'net value added'. The second opinion is that the excess of turnover plus the income from services over the cost of bought in materials and services is termed as 'value added' and the annual charge of depreciation is known as application of value added, available to the owners of the concern. This opinion attracted more attention and has been used in the study.

#### 5.1 MEASUREMENT OF VALUE ADDED:

For the measurement of value added, profit and loss account figures are the base. B.Cox<sup>4</sup> has suggested two methods of preparing the value added statement viz., the subtractive and the additive method. In the first method, value added may be calculated by subtracting 'bought-in-costs' from sales revenue. 'Bought-in-cost' includes the cost of raw materials consumed and the cost of services obtained from outsiders. In the additive method of preparing value added statement profit before tax, employees cost, depreciation and interest are added to arrive at the figure of value added. Both the methods may be presented in equation which are is follows:

Subtractive Method

Value added = Sales revenue – Bought-in-costs

Where in 'sales revenue' includes revenue from sale of goods and services and 'bought-in-costs' includes cost of raw materials and other goods, plus cost of services bought from outside the company.

Additive Method

Value added = Profit before tax + Employees Cost + Depreciation + Interest

Where in employees cost includes wages and salaries including other benefits to the employees.

The Accounting Standard Steering Committee in its discussion paper, the corporate Reports, has suggested a format for value added statement. The suggested format is as under:

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Richard Lewis, David Pendrill and David S. Simon: "Advanced Financial Accounting", (London; Pitman Publishing Limited), 1981, p. 451.

<sup>&</sup>lt;sup>3</sup> John Sizer: An Insight into Management Accounting (London: Pitman Publishing Limited), 1979 p. 35.

<sup>&</sup>lt;sup>4</sup> B.Cox Added value and the corporate Reports: Management Accounting April, 1976.

## XYZ Limited STATEMENT OF VALUE ADDED FOR THE YEAR ENDED ON 31st MARCH

| Item                                       | Amount (Rs.) |
|--|--------------|
| Value Added:                               |              |
| Sales Revenue from Goods and Services      | X            |
| Less: Cost of bought-in-goods and services | X            |
| Total Value Added                          | X            |
| Value Applied:                             |              |
| To The Employees                           | X            |
| To The Providers of Capital                | X            |
| To The Government                          | X            |
| To Re-investment                           | X            |
| Total Value Applied                        | X            |

# 5.2 BENEFITS OF VALUE ADDED STATEMENT

- Value added statement exhibits that employees government, shareholders and lenders all have interest in value addition. So it inspires that all should work with team spirit.
- \* Value added statement improves the mentality of employees.
- \* Productive and inspiring schemes can be implemented easily.
- \* In case of sick companies it can be known to what extent they are sick.
- \* Value added index can help in mutual comparison of companies.
- \* Value added statement is helpful in improving industrial relations.
- \* Value added provides a very good measure of the size and importance of a company.
- Value added statement link a company's financial accounts to the national income. A company's value added statement indicates the company's contribution to national income. As value added statement is based on the system of National Accounts given by UNO to calculate GDP and India Signatory to it.

#### 6. ANALYSIS OF VALUE ADDED STATEMENT OF SAIL:

The value added statement of SAIL has been analysed in two parts viz. Generation of Value Added and Application of Value Added.

Table-1 : Steel Authority of India Ltd.
Value Added Statement including Common Size Percentage
(2018-19 to 2022-23)

(Rs. in Crores)

|                           | Particulars                | 2018-19  | 2019-20  | 2020-21  | 2021-22  | 2022-23  |
|---------------------------|----------------------------|----------|----------|----------|----------|----------|
| Generation of Value Added |                            |          |          |          |          |          |
| A.                        | SALES REVENUE              |          |          |          |          |          |
|                           | Revenue form Sale of Goods | 69511    | 67075    | 64589    | 103644   | 109733   |
|                           |                            | (98.38   | (97.82)  | (97.72)  | (98.44)  | (98.22)  |
|                           | Revenue from Services      | 1145     | 1490     | 1509     | 1647     | 1982     |
|                           |                            | (1.62)   | (2.18)   | (2.28)   | (1.56)   | (1.78)   |
|                           |                            | 70656    | 68565    | 66098    | 105291   | 111715   |
|                           |                            | (100.00) | (100.00) | (100.00) | (100.00) | (100.00) |
| B.                        | COST OF MATERIALS AND      | 51948    | 49371    | 41853    | 70433    | 90024    |
|                           | SERVICES PURCHASED         |          |          |          |          |          |
|                           |                            | (73.52)  | (72.00)  | (63.22)  | (66.89)  | (50.58)  |
| C.                        | VALUE ADDED (A-B)          | 18708    | 19194    | 24245    | 34858    | 21691    |

|    |                                   | (26.48)  | (28.00)  | (36.68)  | (33.11)  | (49.42)  |
|----|-----------------------------------|----------|----------|----------|----------|----------|
|    | VALUE ADDED INDICES               | (100.00) | (102.60) | (129.60) | (186.33) | (115.95) |
|    |                                   |          |          |          |          |          |
|    | PLICATION OF VALUE                |          |          |          |          |          |
| AD | DED                               |          |          |          |          |          |
| A. | To the Employees                  | 8830     | 8781     | 10446    | 12846    | 12054    |
|    |                                   | (47.20)  | (45.75)  | (43.09)  | (36.85)  | (55.57)  |
| B. | To the Government                 | 1159     | 1149     | 3029     | 4024     | 734      |
|    |                                   | (6.20)   | (5.99)   | (12.49)  | (11.54)  | (3.38)   |
| C. | To the Providers of Capital       |          |          |          |          |          |
|    | Financial Institutions (Interest) | 3155     | 3487     | 2817     | 1698     | 2037     |
|    |                                   | (16.86)  | (18.17)  | (11.62)  | (4.87)   | (9.39)   |
|    | Shareholders (Dividend)           | 0        | 207      | 1157     | 3614     | 620      |
|    |                                   | (0.00)   | (1.08)   | (4.77)   | (10.37)  | (2.86)   |
|    | Total 'C'                         | 3155     | 3694     | 3974     | 5312     | 2657     |
|    |                                   | (16.86)  | (19.25)  | (16.39)  | (15.24)  | (12.25)  |
| D. | Reinvestment in Business          |          | -        | 7        | 100      |          |
|    | Depreciation                      | 3385     | 3755     | 4102     | 4274     | 4963     |
|    |                                   | (18.09)  | (19.56)  | (16.92)  | (12.26)  | (22.88)  |
|    | Profit Retained                   | 2179     | 1774     | 2694     | 8402     | 1283     |
|    |                                   | (11.65)  | (9.24)   | (11.11)  | (24.10)  | (5.92)   |
|    | Total 'D'                         | 5564     | 5529     | 6796     | 12676    | 6246     |
|    |                                   | (29.74)  | (28.80)  | (28.03)  | (36.36)  | (28.80)  |
|    | Total Disposal of Value Added     | 18708    | 19194    | 24245    | 34858    | 21691    |
|    |                                   | (100.00) | (100.00) | (100.00) | (100.00) | (100.00) |

Source: Annual Report and Accounts of SAIL from (2018-19 to 2022-23)

#### 6.1 THE GENERATION OF VALUE ADDED

The table shows that the generation of value added reveals that in SAIL, the proportion of revenue from sale of goods to sales revenue varied from 97.72 percent in 2020-21 to 98.44 percent in 2021-22. The proportion of revenue from services rendered to total revenue varied from 1.56 percent in 2021-22 to 2.28 percent in 2020-21. The proportion of the cost of material and service purchased varied from 50.58 percent in 2022-23 to 73.52 percent in 2018-19. The proportion of value added to sale revenue varied from 26.48 percent in 2018-19 to 49.42 percent in 2022-23.

In 2018-19 value added to sales revenue was 26.48 percent which increased to 28.00 percent in 2019-20, again it increased to 36.68 percent in 2020-21. It decreased to 33.11 percent in 2021-22 but finally it reached the increased level at 49.42 percent in 2022-23.

The increased trend in the proportion of value added to sales revenue indicated a good performance of the company. The company increases their production capacity and launch a new product in global market.

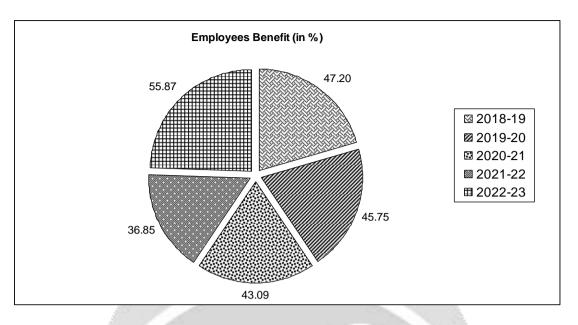
The index number of value added was 100.00 in 2018-19 being the basic year which was increased to 102.60 in 2019-20, which was again increased to 129.60 in 2020-21, 186.33 in 2021-22. Finally it reached the decreased level at 115.95 in 2022-23.

#### 6.2 APPLICATION OF VALUE ADDED

The analysis of a application of value added reveals that the more significant part of value added applied for payment of employees.

# Chart-1 Payment of Employees in SAIL

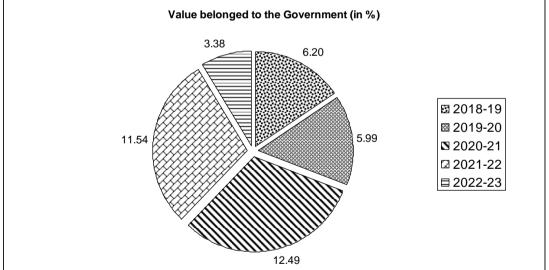
<sup>\*\* :</sup> Figures in paraenthesis show common-size percentages.



The proportion of value belong to employees to total value added market a varied tend during the period of study. The proportion was 36.85 percent in 2021-22 which increased to 55.57 percent in 2022-23. As the percent of the payment to employees to wards value added was 47.20 percent in 2018-19, it decreased to 45.75 percent in 2019-20, 43.09 percent in 2020-21. It further decreased to 36.85 percent in 2021-22. Finally it reached the increased level at 55.57 percent in 2022-23.

Chart-2

Value belongs to the Government of SAIL Value belonged to the Government (in %) 3.38 6.20



The proportion of value belonged to the government (in the form of tax) to total value added fluctuated during the period of study. It varied from 3.38 percent in 2022-23 to 12.49 percent in 2020-21. It was 6.20 percent in 2018-19 which decreased to 5.99% in 2019-20. It increased to 12.49 percent in 2020-21. Again it decreased to 11.54 percent in 2021-22. Finally it reached the decreased level at 3.38 percent in 2022-23.

Payment to Shareholders (in %)

0.00 1.08

4.77

■ 2018-19
□ 2019-20
□ 2020-21
□ 2021-22
□ 2022-23

Chart-3 Payment to Shareholders in SAIL

SAIL did not pay any dividend to shareholders in 2018-19. The proportion of value belonged to shareholders to total value added varied from zero percent in 2018-19 to 10.37 percent in 2021-22. It creased to 1.08 percent in 2019-20, 4.77 percent in 2020-21. Further it increased the highest level at 10.37 percent in 2021-22. Finally it decreased to 2.86 percent in 2022-23.

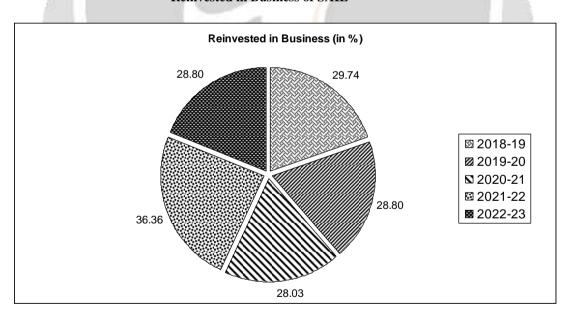


Chart-4
Reinvested in Business of SAIL

The percent of reinvested in business to value added fluctuating trend during the study period. It fluctuated from 28.03 percent in 2020-21 to 36.36 percent in 2021-22. It was 29.74 percent in 2018-19 which decreased upto 2020-21 which was 28.03 percent. It increased the highest level at 36.36 percent in 2021-22 which again decreased to 28.80 percent in 2020-23.

#### 7.CONCLUSION:

Value added is a basic, broad and important measure to judge the performance of an enterprise. In recent years, there has been a considerable increase in the use of value added as an alternative or additional tool to measure business performance. The concept of value added is border than the concept of profit. An enterprise may exist without earning profit but cannot survive without producing value added. The enterprise not earning profit shall become sick but not generating wealth may die its own death during a specified period.

Value added is variously defined, it is defined as an excess of sales revenue over the cost of goods and services obtained from outside the business. Secondly as the wealth generated by a company through its own and its employees efforts.

It is useful for all those who have contributed in the process of generating value, such as employees, providers of capital, government as well as owners.

For prepares value added information would help to understand how the company has generated value added and how it has distributed to different stakeholders. Investors would know the contribution of the company in terms of value addition. Further research in this area is needed to understand value added by public sector undertaking and private sector undertakings. This paper begins with the concept of value added and analysed how it is different from the concept of the profit.

It collected the financial statements of SAIL for five years and restated them into value added statements. Ratio analysis were conducted to understand the usefulness of different value added ratios.

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