

# Inventory and Ratio Analysis

CS Gowtham, S.Praveen Kumar, J.Hameed Hussain

**Abstract:** Inventories are rough materials, work-in-process items and completely finished product that are seen as the section of business' points of interest that are arranged or will be readied accessible to be obtained. Itemizing a sensible stock model is one of the genuine stresses for an industry. The most timely intelligent stock organization explores return to the second decade of the earlier century, anyway the eagerness for this legitimate area is up 'til now mind boggling. There is distinctive stock control technique, for instance, Economic solicitation sum, reorder point, security blend, etc. [1],[ 3],[5]

Stock is the most ludicrous assets of a collecting association. Stock decisions honestly impact the estimation of cost of product sold and in this way expect a fundamental employment in choosing the declared pay of an association. As needs be, a serious examination of stock valuation and related records can give a reason to looking over the budgetary position of a firm. [2],[ 4],[6] Fixed assets generally called generous assets or property, plant and equipment, is a term used in speaking to assets and property that can just with critical exertion be changed over into cash. This can be differentiated and current assets, for instance, cash or budgetary adjusts, which are depicted commercial liquid assets. Guideline speaking, simply significant assets are implied as fixed. Also, a fixed/non-current asset can moreover be described as a bit of leeway not really offered to an organization's clients/end-customers. Fixes assets are planned for use for quite a while. The estimation of these favorable circumstances decreases with their use or with time or various reasons.. [7],[ 9],[11]

**Keywords :** Assets, cost, analysis

## I. INTRODUCTION

Inventories are unrefined materials, work-in-process items and completely finished product that are seen as the bit of business' points of interest that are arranged or will be readied accessible to be bought. Itemizing a proper stock model is one of the critical stresses for an industry. The most reliable sensible stock organization investigates return to the second decade of the earlier century, anyway the excitement for this consistent zone is so far mind boggling. Again, considering the constancy of any system is a critical segment in the assessment works out. Estimations of specific segments are hard to portray or for all intents and purposes shocking. In such cases, feathery models of stock organization expect a noteworthy position. This paper analyzes potential parameters of existing models of stock

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control. An undertaking is made to give a cutting edge review of existing composition, concentrating on delineations of the characteristics and sorts of stock control models that have been made. [14],[ 16], [18]

The stock is interface between the age and the appointment technique. The activity of stock organization is to check the openness of material as and when required the measure of the stock and if it's possible to confine the enthusiasm for stock. In the present forceful universe of amassing associations are glancing through better methodologies for improving the business strategy, how to satisfy the customer and by following this how they can stay ahead with their adversaries in the domain of competition. The procedure that can breath life into these things for past decades. This addresses money will be tied up until the stock leaves the association as purchased things, on account of tremendous size of inventories kept up by firms a proportion of advantages are required. It is subsequently totally essential to regulate inventories beneficially and feasibly in order to ignore the trivial theories. A firm who is rejecting the administering of inventories will be in risk at its long run efficiency and may bomb finally. [8],[ 10],[12]

## II. OBJECTIVES OF THE STUDY

### Primary Objective

To investigate the general stock and fixed resources execution of Ford India Pvt Ltd. The reason for review of fixed resources and capital ventures is the target assembling and assessing proof about financial activities and occasions with non-current resources and capital speculations with the point of setting up the level of consistence with these announcements the acknowledged standards of tax collection and bookkeeping and giving test results to intrigued clients. [13], [15],[ 17]

### Secondary Objectives

- To study on the fixed assets management
- To study on the inventory and cost control measures
- To understand about financial auditing and its importance

### A. RESEARCH DESIGN:

The examination configuration alludes to the general methodology that you coordinate the various parts of the investigation in a reasonable and legitimate way, in this manner, guaranteeing you will adequately address the exploration issue; it establishes the diagram for the gathering, estimation, and examination of information. Note that your examination issue decides the kind of plan you

should utilize, not the a different way[19],[21],[23]

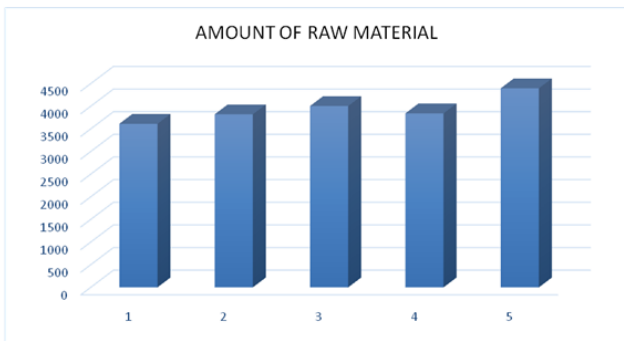
**B. STATISTICAL TOOLS USED:**

**RATIO ANALYSIS**

Proportion Analysis is a type of Financial Statement Analysis that is utilized to acquire a brisk sign of a company's budgetary exhibition in a few key zones. The proportions are classified as Short-term Solvency Ratios, Debt Management Ratios, Asset Management Ratios, Profitability Ratios, and Market Value Ratios. [20],[ 22], [24]

**Table:1**

YEAR	AMOUNT OF RAW MATERIAL
2013	3613
2014	3822
2015	4005
2016	3843
2017	4397



**Fig:1**

**INTERPRETATION:**

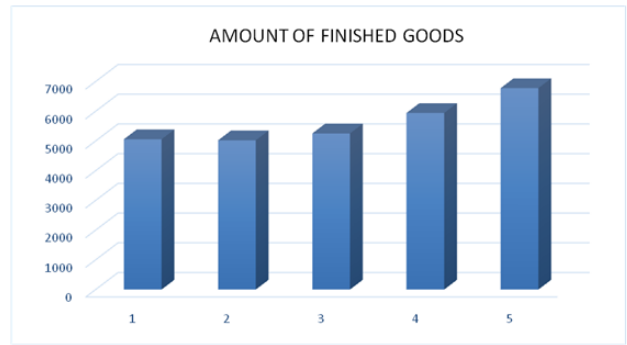
As shown in the table above the raw materials, work-in-process, and supplies declined from 2015 to 2016 but then increased from 2016 to 2017 exceeding 2015 level.

**Finished Goods:**

These are the carrying amount as of the balance sheet date of merchandise or goods held by the company that are readily available for sale. [31],[33],[32]

**Table:2**

YEAR	AMOUNT OF FINISHED GOODS
2013	5058
2014	5022
2015	5254
2016	5943
2017	6779



**Fig:2**

**INTERPRETATION:**

The above table shows that the finished products increased from 2015 to 2016 and from 2016 to 2017. It shows a gradual increase in the amount of finished goods. [25],[27],[29]

**ECONOMIC ORDERING QUANTITY:**

Per year Ford India Pvt Ltd spends around 295,000,000 for aluminium coils, which is a major raw material for automobiles.

**FORMULA:**

$EOQ = \sqrt{2AB/C}$ . Where,

A - Total quantity required

B – Ordering Cost per order

C – Carrying cost per unit

DECEMBER 2013 – 2014:

The company requires the below given amount of raw materials of aluminium coils for the production of around 12,000 cars per month[26],[28],[30]

**Table:3**

PARTICULARS	
Quantity	1,691,000 kg
Ordering cost per order	1,97,000
Purchase price Per unit	157
Carrying cost	12%

**Table:4**

PARTICULARS	
Quantity	1,523,000 kg
Ordering cost per order	2,38,000
Purchase price Per unit	160
Carrying cost	10%

**Table:5**

PARTICULARS	
Quantity	1,680,000 kg
Ordering cost per order	2,72,000
Purchase price Per unit	173
Carrying cost	14%

**Table:6**

YEAR	NET FIXED ASSET	NET WORTH	RATIO %
2016 – 17	228928	29283	7.81
2015 – 16	216932	28751	7.56
2014 – 15	210546	28590	7.36
2013 – 14	204075	27685	7.37

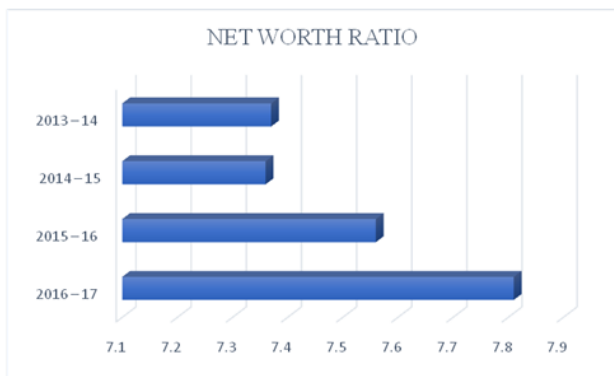


Fig:2

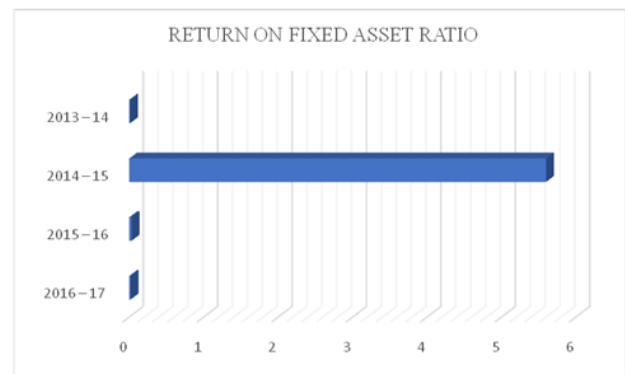


Fig:4

**INTERPRETATION**

The above table shows a continuous increase in Net worth and fixed assets. This shows the satisfactory position of the company.

**INTERPRETATION**

The above table shows increase in profit during the year 2014 – 15 has gone up, this shows the favorable position of the company.

YEAR	NET FIXED ASSET	CAPITAL EMPLOYED	RATIO %
2016 – 17	228928	147670	1.55
2015 – 16	216932	142589	1.52
2014 – 15	210932	142510	1.48
2013 – 14	204075	142085	1.44

YEAR	FIXED ASSETS	PERCENTAGE
2012 – 2013	211,017	100
2013 – 2014	217,931	103.2765133
2014 – 2015	224,925	106.5909382
2015 – 2016	237,951	112.7639005
2016 – 2017	242,724	115.0258036

Table:8

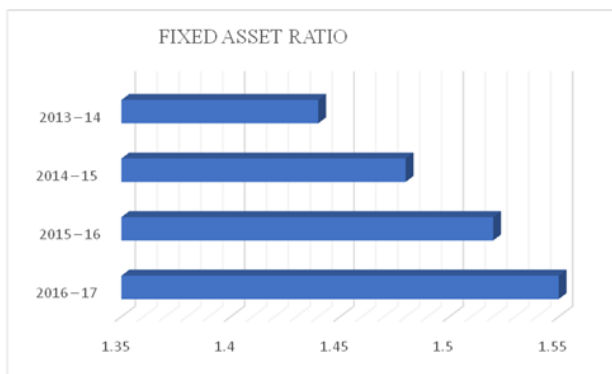
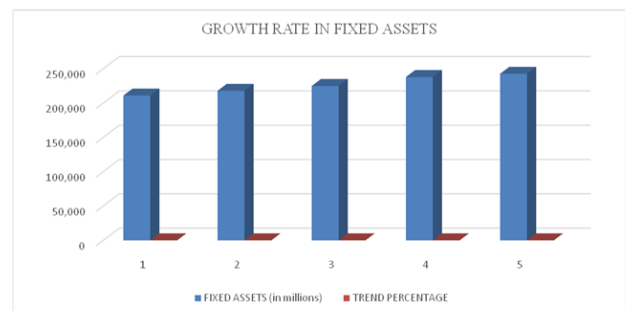


Fig:3



**INTERPRETATION:**

The above table shows growth in fixed assets satisfactory position of fixed assets in the total capital employed in the company. The highest percent 1.55 recorded in the year 2016 – 17. That shows the position of the company is satisfactory

Table:7

YEAR	PROFIT AFTER TAX	TOTAL ASSETS	RATIO %
2016 – 17	4607	237951	0.019
2015 – 16	7371	224925	0.032
2014 – 15	1230	217931	5.6
2013 – 14	2451	211017	0.011

**III. RESULTS**

There is an expanding development in the benefits of the organization for as long as five years.

- Fixed assets the officials empowers the association to screen all points of interest. It can tell where the advantages are discovered, how they are used, and when changes were made to them. The data from the advantage the administrators game plan can ensure that preferred position recovery will provoke better returns.
- From the EOQ, the full scale yearly cost of the association during the years 2013 – 14 and 2015 – 16 where essentially same however, the year 2014 – 15 showed a trip.
- During the five years finished incredible is in extending point

- Return on fixed asset is fluctuating during the past five years, in 2014-15 it was 5.6%, anyway there was a massive ruin to 0.032% in the year 2015-16 and again it has been reduces to 0.019% in 2016-17.
- Net worth extent during the 5 years was in growing example anyway in 2014-15 it has to some degree lessens to 7.36%.
- During the five years fixed asset extent is in the extending design, in 2016-17 it was 1.55%.
- The stock audits and affirmations are done physically at the respected stages.
- Scrap is being watched regularly and the system is done in each 31 days.

#### IV. DISCUSSION

Keeping up ground breaking asset information by observing their region use overseer, backing and insurance could manufacture their gainfulness even more viably.

- Group fixed asset must be under \$100000, of which life should be more noticeable than 1 year.
- Low cost fixes asset may be obtained mass.
- Special instruments for venders are truly guaranteed by Ford that are at shipper's region are not checked in this way periodical affirmation should be conceivable that will benefit in holding assets.
- Retention of advantage affirmation are held under records at any rate for quite a while. Consistently the records are invigorated by the particular record's time range of convenience.
- The EOQ decided is suggesting that the association should get its stock requirements by putting orders a significant part of the opportunity to its suppliers.
- The return on fixed asset of the association is underneath the standard extent in all the five years, subsequently it should be improved at any rate to the standard.

#### V. CONCLUSION

The store division plays out the going with abilities to keep repaired assets especially kept. At the point when a preferred position is acquired and recorded, it is pursued. All the fixed assets are forever marked with a fixed asset name that contains a successive number. The number should contrast with a log book or the fixed asset module (the assistant record) of the accounting system.

Each fixed asset's physical territory is accounted for and any moves inside or outside the workplace are recorded. Any arrangements, new acquisitions, or salvages are in like manner be recorded to ensure fixed asset stock is to date.

Stock organization must be practiced for keeping exact records of product that are set up for creation. The association assembles the cycle check information and system it proficiently to take care of records. To know the veritable inventories that are available for age. Stock organization is critical for holding cost down, while meeting rule. Free market action is a delicate equality and this stock organization might want to ensure that the leveling is undisturbed.

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