



Analysis of Fixed Assets Management in the Manufacturing Industry, India

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ABSTRACT:

Every company owns a fixed asset that is used in its business operations. This article aims to investigate the problem, which stems from non-current fixed assets affecting profitability and asset management efficiency. The research seeks to identify the impact of estimates and valuation in accounting fixed assets through several objectives. Fixed assets management is the process of recording and tracking long-term assets over their entire lifecycle, from acquisition to disposal. Companies must maintain accurate records to ensure compliance with accounting standards and reporting requirements.

Keywords: Fixed Asset Management, Content Analysis, Measurement, Accuracy, Risk Assessment, Money Management, Comparative Analysis.

1. Introduction

Fixed assets management is an accounting process that tracks fixed assets for financial accounting, preventive maintenance, and theft deterrence. Fixed assets are also referred to as PPE (property, plant, and equipment); these are purchased for continued and long-term use in earning profit in a business. This group includes as an asset land, buildings, machinery, furniture, tools, and specific wasting resources, e.g., timberland and minerals. They are written off against profits over their anticipated life by charging depreciation expenses (with the exception of land assets). The main problem of the study is to determine and maintain the fixed assets. Fixed Asset Management is then identified as a core activity for manufacturing companies. It discusses fixed assets for various manufacturing companies and provides an overview of tools to support fixed assets activities. Fixed assets are not purchased for sale, so they are not a part of the inventory at any stage. These are used in the business as service assets and act as a medium of the process of business for aiding production and generating earnings during their estimated life.

There are two types of fixed assets:

- **Tangible Fixed Assets:** Tangible Fixed Assets are an essential component of a company's overall asset base. These assets are physical in nature and have a long-term presence in the operations of an organisation. Examples of Tangible Fixed Assets include property (such as land and buildings), plant and machinery, equipment, and vehicles.
- **Intangible Fixed Assets:** Intangible Fixed Assets are assets that do not have a physical form but are valuable to a company for their potential to generate future revenue or provide competitive advantage. Examples of Intangible Fixed Assets include patents, copyrights, trademarks, software, brand names, customer lists, and goodwill.

2. Objectives of the Study

- To determine the effectiveness of fixed assets management that is utilized in the manufacturing business.
- To assess the amount of capital expenditure made by the company during the period of study.
- They evaluate the fixed assets turnover during the period of study.
- They know the returns from fixed assets investments.
- To evaluate if fixed assets are liquidated and to calculate the proportion of contribution towards owner's fund and long-term obligations.

3. Scope of the Study

The study covered the fixed assets of Bonfiglioli. They are drawn from the annual reports of the company. The subject matter is limited to fixed assets, their analysis, and their performance but no other accounting, corporate, marketing, and financial areas.

4. Data Analysis and Interpretation

This study relied on combining the deductive approach with the quantitative analysis approach, where the deductive approach was used to root the subject through books, periodicals and scientific communications, and electronic articles published online.

Analytical Tools

- Trend analysis
- Book value
- Net profit margin
- Gross profit margin
- Correlation
- Ratio analysis

Fixed Assets and Ratio Analysis

The relationship of the fixed assets of a company with its other measure of business efficiency can be analyzed with the help of ratio analysis. The following ratios are used for the present study.

- Fixed assets to net worth ratio.
- Fixed assets as a percentage of current liabilities
- Total assets turnover ratio
- Fixed assets turnover ratio
- Return on total fixed assets.
- Fixed assets to net worth ratio.
- Net worth

TREND ANALYSIS ON INVESTMENT ON FIXED ASSETS

Trend percentage = Current year ÷ Base year x 100

Table- 1

YEAR	FIXEDASSETS (In lakhs)	TREND PERCENTAGE
2014-15	5549	100
2015-16	4947	89.15
2016-17	4744	83.26
2017-18	7069	132.18

Inference: It is clear from Table 1 that investments in fixed assets are in increasing trend during the period under study from 2014-15 to 2017-18 except in the year 2016-17. Fixed assets of the company also showed a continuously increasing trend during this period from 100 to 132.18 percentage.

BOOK VALUE:

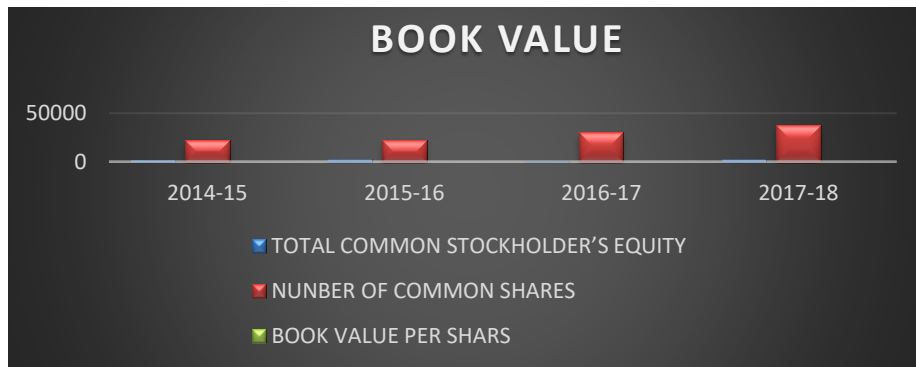
Book value per share = $\frac{\text{Total common stockholder's equity}}{\text{number of common shares}}$

Table - 2

YEAR	EQUITY (lakhs)	Number of equity shares (lakhs)	Book Value Per Share
2014-15	1661	22562	0.07
2015-16	1953	22256	0.09

2016-17	1364	30254	0.04
2017-18	1993	37674	0.05

Graph 1



Inference: From the above table, it is inferred that stockholders' equity from 2014-2018 is an increasing trend. The highest percent of book value is recorded as 0.09 in the year 2015-16. That shows the position of the company is satisfactory and reliable.

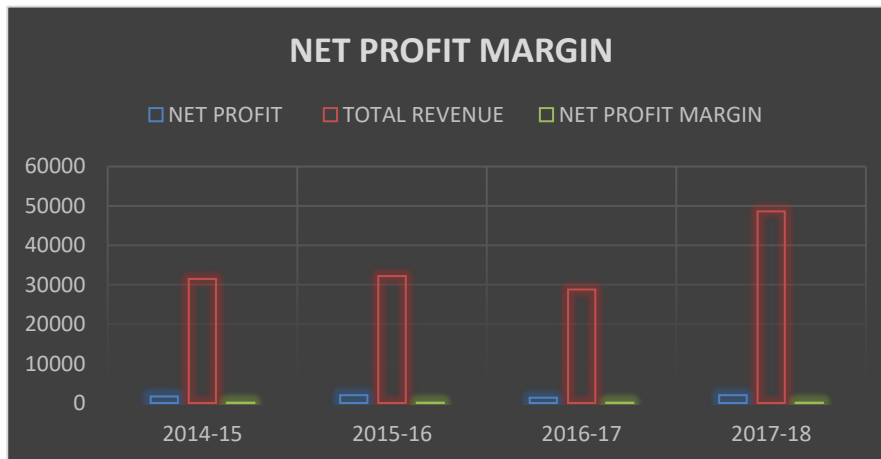
NET PROFIT MARGIN:

Net Profit margin = Net Profit/Total revenue x 100

Table -3

Year	Net profit (lakhs)	Total revenue (lakhs)	Net profit margin
2014-15	1661	31441	5.28
2015-16	1953	32216	6.06
2016-17	1364	28816	4.73
2017-18	1993	48619	4.09

Graph 2



Inference: It can be seen from Table 3 that net profit had a fluctuating trend during the period under study from 2014-15 to 2017-18. In the year 2015-16, the highest net profit margin is recorded. The fluctuations were the highest, which should be kept in control for long-run survival.

GROSS PROFIT MARGIN:

Gross profit margin = $\frac{\text{Revenue} - \text{Cost of goods sold}}{\text{Revenue}}$

Table - 4

YEAR	REVENUE (lakhs)	COST OF GOODS SOLD (lakhs)	GROSS PROFIT MARGIN
2014-15	31441	17819	0.43
2015-16	32216	18118	0.44
2016-17	28816	15649	0.46
2017-18	48619	27449	0.44

Inference: It can be seen from Table 4 that net profit had a fluctuating trend during the period under study from 2014-15 to 2017-18. In the year 2016-17, the highest gross profit margin, 0.46, is recorded. The fluctuations were the highest, which should be kept in control for long-run survival.

FIXED ASSETS TO NET WORTH RATIO: This ratio establishes the relationship between fixed assets and shareholder funds. The shareholder funds include equity share capital, preference share capital, reserves, and surplus, including accumulated profits. However, fictitious assets like accumulated deferred expenses, etc., should be deducted from the total of these items to shareholder funds. The shareholder funds so calculated are known as the net worth of the business.

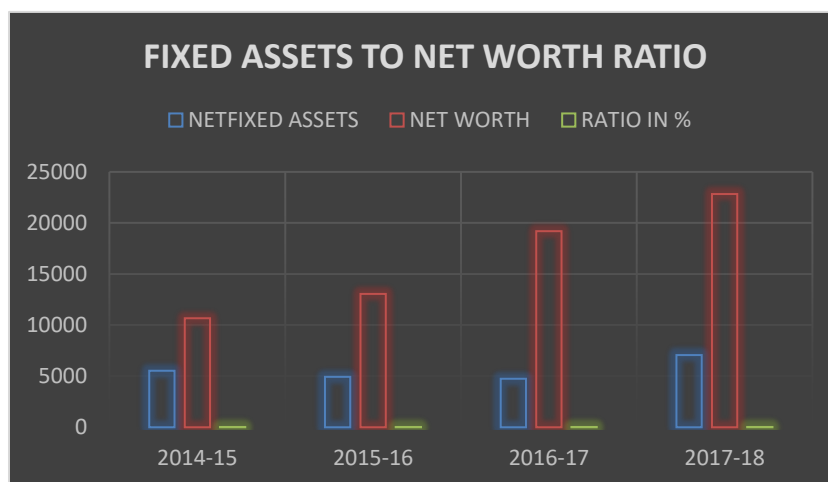
Net worth = share capital + reserves and surplus + retained earnings

Fixed assets to net worth ratio = $\frac{\text{FIXED ASSET}}{\text{NET WORTH}} * 100$

Table- 5

YEAR	NETFIXED ASSETS	NET WORTH	RATIO IN %
2014-15	5549	10686	0.52
2015-16	4947	13063	0.38
2016-17	4744	19211	0.25
2017-18	7069	22827	0.31

Graph 3



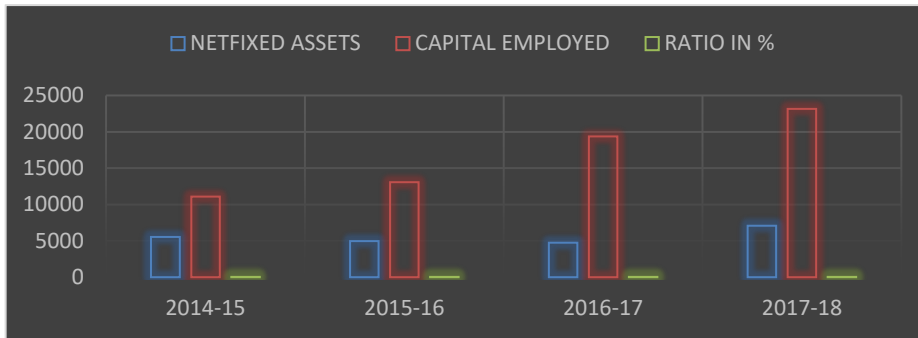
Inference: It can be seen from Table 5 that the net worth of the company is showing a continuously increasing trend during the period under study from 2014-15 to 2017-18. fixed assets fluctuate during the period of study. The fixed assets to net worth ratio marked very low in 2016-2017.

FIXED ASSETS RATIO:
$$\text{Capital employed} = \frac{\text{shareholders fund} + \text{Long-Term borrowings} - \text{Fixed assets (after depreciation)}}{\text{Capital Employed}}$$

TABLE- 6

YEAR	NET FIXED ASSETS	CAPITAL EMPLOYED	RATIO IN %
2014-15	5549	11072	0.50
2015-16	4947	13062	0.38
2016-17	4744	19370	0.24
2017-18	7069	23153	0.31

Graph 4



INTERPRETATION: The above table shows growth in fixed assets satisfactory position of fixed assets in the total capital employed in the company. The highest percentage was 0.50, recorded in the year 2014-15.

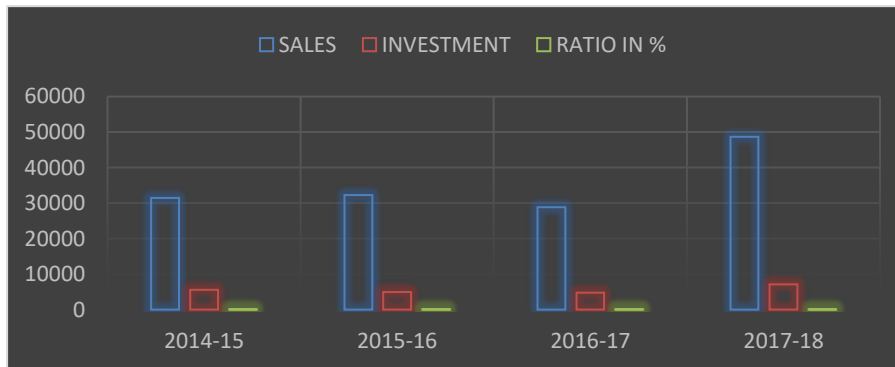
TOTAL INVESTMENT TURN OVER RATIO:

$$\text{Total investment ratio} = \frac{\text{Sales}}{\text{Total investment Y}}$$

Table - 7

YEAR	SALES (lakhs)	INVESTMENT (lakhs)	RATIO IN %
2014-15	31441	5549	5.67
2015-16	32216	4947	6.51
2016-17	28816	4744	6.07
2017-18	48619	7069	6.88

Graph 5



Inference: The above table shows that sales increased Investment varies from 2015- 2018, which signifies the company's position. The highest percentage, 6.88% recorded in the year 2017-18.

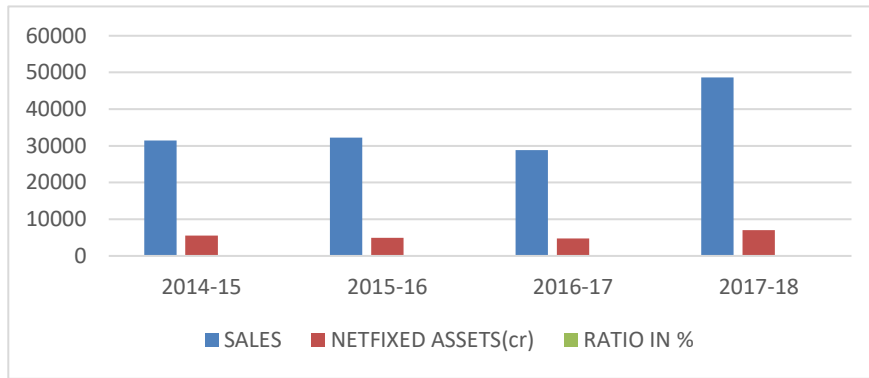
FIXED ASSETS TURNOVER RATIO:

$$\text{Fixed assets turnover ratio} = \frac{\text{sales}}{\text{Total fixed asset Y}}$$

Table - 8

YEAR	SALES (lakhs)	NETFIXED ASSETS (lakhs)	RATIO IN %
2014-15	31441	5549	5.67
2015-16	32216	4947	6.51
2016-17	28816	4744	6.07
2017-18	48619	7069	6.88

Graph 6



Inference: The above table 8 shows increase in fixed assets turnover from 2014-2018. The highest percent, 6.88% recorded in the year 2017-18.

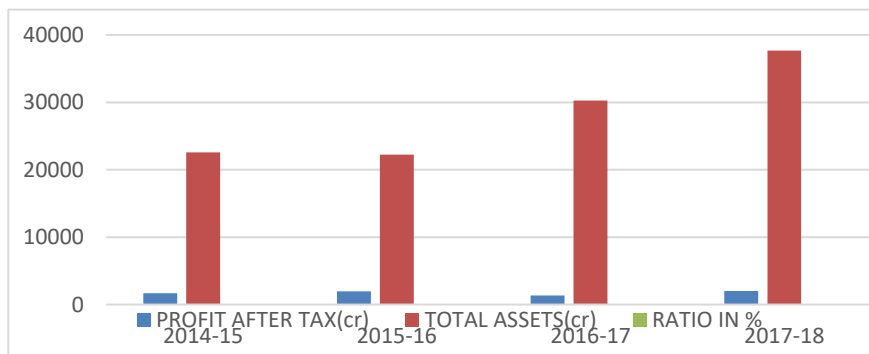
RETURN ON FIXED ASSETS:

$$\text{Return on fixed assets} = \frac{\text{profit after tax}}{\text{Total Assets}}$$

Table- 9

YEAR	PROFIT AFTER TAX (lakhs)	TOTAL ASSETS (lakhs)	RATIO IN %
2014-15	1661	22562	0.07
2015-16	1953	22256	0.09
2016-17	1364	30254	0.04
2017-18	1993	37674	0.05

Graph 9



Inference: The above table 9 shows an increase in profit 2014-2018 profits. There was a huge increase in total assets in the year 2017-2018. The highest percent was 0.09% recorded in the year 2015-16. That shows the position of the company is satisfactory.

CORRELATION BETWEEN BOOK VALUE AND NET PROFIT MARGIN

AIM: To check whether there is a significant difference between **Book value** and **Net profit margin** during 2014-18.

NULL HYPOTHESIS: There is no significant difference between Book value and Net profit margin during 2014-18.

ALTERNATIVE HYPOTHESIS: There is a significant difference between Book value and Net profit margin 2014-18.

Table -10

Correlations			
		Book value	Net profit margin
Book value	Pearson Correlation	1	.876
	Sig. (2-tailed)		.124
	N	4	4
Net profit margin	Pearson Correlation	.876	1
	Sig. (2-tailed)	.124	
	N	4	4

Inference: It is interpreted from Table 10 as the Pearson correlation between Book value and Net profit margin at ($p=.876$). Hence the null hypothesis is accepted at a 5% level of significance. It proved no significant difference between Book value and Net profit margin during 2014-18.

CORRELATION BETWEEN BOOK VALUE AND GROSS PROFIT MARGIN

AIM: To check whether there is a significant difference between **Book value** and **Gross profit margin** during 2014-18.

NULL HYPOTHESIS: There is no significant difference between Book value and Gross profit margin during 2014-18.

ALTERNATIVE HYPOTHESIS: There is a significant difference between Book value and Gross profit margin 2014-18.

Table -11

Correlations			
		book value	gross profit margin
Book value	Pearson Correlation	1	-.627
	Sig. (2-tailed)		.373
	N	4	4
Gross profit margin	Pearson Correlation	-.627	1
	Sig. (2-tailed)	.373	
	N	4	4

Inference: It is interpreted from the above Table 11 shows the Pearson correlation between Book value and Gross profit margin at ($p=-0.627$). Hence the alternative hypothesis is accepted at a 5% level of significance. It proved a significant difference between Book value and Gross profit margin during 2014-18.

CORRELATION BETWEEN OPERATING REVENUE AND COST OF GOODS SOLD

AIM: To check whether there is significant difference between **operating revenue** and **cost of goods sold** during 2014-18.

NULL HYPOTHESIS:

TABLE-12

		operation revenue	cost of goods sold
operation revenue	Pearson Correlation	1	.999**
	Sig. (2-tailed)		.001
	N	4	4
cost of goods sold	Pearson Correlation	.999**	1
	Sig. (2-tailed)	.001	
	N	4	4
**Correlation is significant at the 0.01 level (2tailed).			

H₀: There is no significant difference between operating revenue and cost of goods sold 2014-18.

ALTERNATIVE HYPOTHESIS:

H₁: There is significant difference between operating revenue and cost of goods sold 2014-18.

Inference: It is interpreted from the above table the Pearson correlation between operating revenue and cost of goods sold at ($p=.999$). Hence the null hypothesis is accepted at a 5% level of significance. It proved no significant difference between operating revenue and cost of goods sold during 2014-18.

13. CORRELATION BETWEEN OPERATING REVENUE AND COST OF OPERATING EXPENSE

AIM:

To check whether there is significant difference between **operating revenue** and **operating expense** during 2014-18

NULL HYPOTHESIS:

H_0 : There is no significant difference between operating revenue and operating expense 2014-18

ALTERNATIVE HYPOTHESIS:

H_1 : There is significant difference between operating revenue and operating expense 2014-18

Table -13

Correlations		operating revenue	operating expense
operating revenue	Pearson Correlation	1	.996
	Sig. (2-tailed)		.054
	N	4	3
operating expense	Pearson Correlation	.996	1
	Sig. (2-tailed)	.054	
	N	3	3

Inference: It is interpreted from the above table the Pearson correlation between operating revenue and operating expense at ($p=.996$). Hence the null hypothesis is accepted at a 5% level of significance. It proved that operating income and operating costs were insignificant during 2014-18.

14. CORRELATION BETWEEN OPERATING REVENUE AND COST OF NET PROFIT

AIM: To check whether there is significant difference between **operating revenue** and **net profit** during 2014-18.

NULL HYPOTHESIS:

H_0 : There is no significant difference between operating revenue and net profit 2014-18.

ALTERNATIVE HYPOTHESIS:

H_1 : There is significant difference between operating revenue and net profit 2014-18.

Table -14

Correlations		operating revenue	net profit
operating revenue	Pearson Correlation	1	.955
	Sig. (2-tailed)		.191
	N	4	3
net profit	Pearson Correlation	.955	1
	Sig. (2-tailed)	.191	
	N	3	3

Inference: It is interpreted from the above table the Pearson correlation between operating revenue and net profit at ($p=.995$). Hence the null hypothesis is accepted at a 5% level of significance. It proved that there was no significance difference between operating revenue and net profit during 2014-18.

5. Findings

- The progress of BONFIGLIOLI shows an increase in net worth considerably over the year. The investment in the net partnership is in an increasing trend. It increased from 2014-18, and it has 100% to 132.18%.
- The stockholders' equity 2014-2018, common shares have increased. The highest percentage is 0.09, as recorded in 2015-16. That shows the position of the company is satisfactory.
- The total revenue has increased. Shows the favourable position of the company. The highest percentage is 6.06, as recorded in 2015-16.
- The COGS has gone up. Shows the favourable position of the company. The highest percentage was 0.46, recorded in the year 2016-17.

- Regarding the continuous increase in net worth and fixed assets. shows the excellent position of the company. The highest percentage was 0.52, recorded in the year 2014-15. That shows the position of the company is satisfactory.
- The satisfactory position of fixed assets in the total capital employed in the company. The highest percentage was 0.50, recorded in the year 2014-15.
- Investment varies from 2015- 2018, which signifies the company's position. The highest percentage was 6.88, recorded in the year 2017-18. That shows the position of the company is satisfactory.
- The highest percentage was 6.88, recorded in the year 2017-18 increases in fixed assets turnover from 2014-2018.
- There was a considerable increase in total assets from 2017-2018, The highest percentage was 0.09, recorded in the year 2015-16. That shows the position of the company is satisfactory.
- Comparing Book value and Net profit margin in Correlation shows no significant difference between Book value and Net profit margin. The obtained value is $p=0.876$.
- Comparing Book value and Gross profit margin in Correlation shows that there is a significant difference between Book value and Gross profit margin. The obtained value is $p=0.627$.
- Comparing operating revenue and cost of goods sold in Correlation shows no significant difference between operating revenue and cost of goods sold. The obtained value is $p=0.999$.
- Comparing operating revenue and operating expense in Correlation shows no significant difference between operating revenue and operating expense. The obtained value is $p=0.996$.
- Comparing operating revenue and net profit margin in Correlation shows no significant difference between operating revenue and net profit. The obtained value is $p=0.995$.

6. Suggestions

- It is suggested to improve the position of the company by effective's utilization of fixed assets.
- The growth rate in fixed assets can be increased by employing more investment.
- The Total investment in sales can be improved.
- Instead of disclosing the combined flows of debtors and loan advances as a decrease/(increase) in trade and other receivables, their separate disclosure will be more meaningful.
- Globalization of economies and the requirement of shares from investors in the capital market, a diverse and demanding audience, the company need clear and in-depth information about the company's financial position in the Annual report.
- The company may investigate increasing various forms of current assets and decreasing current asset liabilities to manage working capital requirements effectively.
- The company must look out for new joint venture assignments.
- The company must raise term and long-term loans to meet the short-term requirement.
- Outsource maintenance and repair for high-tech equipment to reduce operation costs and potential damages to assets.
- Implement a maintenance module to provide proper maintenance to the organization's assets.

7. Conclusion

The manufacturing company's fixed asset management is commendable, as it maintains a well-balanced blend of debt and equity. The financial statement evaluation reveals an efficient utilization of investments, loans, and advances, indicating a sound allocation of resources. Moreover, the company's profitability demonstrates strong performance, evident in the growth of reserves and surplus. The judicious mix of debt and equity suggests that the company has carefully considered its financial structure, optimizing both internal and external funding sources. This strategic approach enables the company to acquire and maintain fixed assets while effectively managing its financial obligations. The efficient utilization of investments, loans, and advances indicates prudent decision-making and an understanding of the company's operational requirements. It signifies that the company has made wise choices in allocating resources towards fixed assets, which contributes to its overall production capacity and efficiency. Furthermore, the increase in reserves and surplus reflects the company's profitability and financial stability. This positive trend suggests that the company's operations generate healthy profits, allowing it to reinvest in the business and strengthen its financial position. Overall, the manufacturing company's fixed asset management

demonstrates satisfactory performance. The effective balance of debt and equity, efficient utilization of investments, loans, and advances, and impressive profitability indicate a well-managed approach. These factors bode well for the company's future growth, stability, and continued success in the industry.

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