

A Study on Fixed Assets Management in Stovekraft Pvt. Ltd. Bidadi

*Dr. S.Oviya, #Dr. V.Chandrakala

*,#Faculty, PG.Dept. Of Commerce (MCOM), BMS College for Women, Bangalore-4

*oviyasadha@yahoo.co.in , #chandrakalavc@gmail.com

ABSTRACT - Asset management is crucial to the accounting process in any business. It can be difficult to find the time and the tools to devote the needed attention to assets that they deserve. Fixed Assets are the assets held with the intention of being used on continuous basis for the purpose of producing or providing goods or services and are not held for resale in the normal course of business. E.g.: Land and Buildings, Plant and Machinery, Motor Vehicles, Furniture and Fixtures.

This study indicates that the stovekraft company is by and large aware of heavy build-up of assets and capital locked thereby, fixed assets come to rescue at the time of crisis. This study has helped in understanding the various aspects of fixed assets management like how the asset is being acquired by the company, why it is needed, how the company operates by the use of these fixed assets etc., still there are some old assets that need to be disposed off or need replacement but otherwise, stovekraft company has been able to manage all its assets efficiently and effectively.

Key words: Fixed asset management, additional purchase of asset, asset disposals, asset maintenance and asset replacement decision.

I. INTRODUCTION

Asset management is crucial to the accounting process in any business. It can be difficult to find the time and the tools to devote the needed attention to assets that they deserve. The truth is that a company's assets can yield substantial tax savings in depreciation deductions. Without thorough management of assets, the accuracy of financial reports will be threatened and there will be a negative impact on your bottom line. Establishing the highest standards of depreciation accuracy and best practices in fixed asset management will pay off in the form of savings and efficiency.

One of the largest capital investments many companies have is their investment in their property, plant and equipment account and so on.

Fixed Assets are the assets held with the intention of being used on continuous basis for the purpose of producing or providing goods or services and are not held for resale in the normal course of business. E.g.: Land and Buildings, Plant and Machinery, Motor Vehicles, Furniture

Financial transactions are recorded in the books, keeping in view the going concern aspect of the business unit. In going concern aspect it is assumed that the business unit has reasonable expectation of continuing the business for a profit for an indefinite period of time. This assumption provides much of the justification for recording fixed assets at original cost and depreciating them in a systematic

manner without reference to their current realizable value. It is useless to record the fixed assets in the balance sheet at their estimated realizable values if there is no immediate expectation of selling them. So, they are shown at their book value (i.e., Cost - Depreciation) and not at current realizable value.

The market value of the fixed assets may change with the passage of time, but for accounting purpose it continues to be shown in the books in historical cost. The cost concept of accounting states that depreciation calculated on the basis of historical cost of old assets is usually lower than the amount calculated at current value/ replacement value. These results in more profits, which if distributed in full will lead to reduction in capital

II. REVIEW OF LITERATURE

ZoranNesic, NebojsaDenic, JasminaVesicVasovic (2015)

In this paper, an approach to software development is presented, with the direct aim of improving the quality of the business operations of an enterprise. Software refers to the management of the fixed asset of an enterprise and it demonstrated a practical functionality and a significant impact on the quality of the entire business doing of the enterprise under consideration. The paper presents the most important steps of the presented software and their methodological aspects.

PeninahJepkogeiTanui (2016)

Business whether large, small, formal or informal contributes largely to the country’s economy through increasing trading, provision of employment and livelihood opportunities. Kenya through major support of entrepreneurship has tried to ensure that the businesses become the source of development. Thus, there is need that these businesses are going concerns so as to fulfill this dream. However, many businesses in Kenya are being faced with the challenge of identifying and valuing their assets. The study thus endeavored to determine asset management

Pradip Kumar Das (2017)

Fixed assets are the assets of permanent nature used in the operation of a business. These assets are earning assets and provide the basis for the firm's earning power and value. Here attention must be given to the management of fixed assets as they represent sizable outlay and involve the long-term financial commitment.. An analysis on the financing pattern and utilization of fixed assets is, therefore, vital for the management of a business enterprise. The study reveals the sufficiency of owner’s funds to finance fixed assets requirements and that the company had also enough long-term funds to finance the entire fixed assets as well as part of current assets.

STATEMENT OF THE PROBLEM

Fixed asset management is an accounting process that seeks to track fixed assets for the purposes of financial accounting, preventive maintenance and theft deterrence. Organizations face a significant challenge to track the location, quantity, condition, and maintenance and depreciation status of their fixed assets.

Accounting of fixed assets must ensure control over the efficient use of industrial sites (lands), equipment’s, machinery, vehicles and other instruments of labor. Note that the awareness of availability of labor and constant monitoring of their effective use are important in the management of production activities of each enterprise, for these reasons fixed assets management study is undertaken.

OBJECTIVES OF THE STUDY

- To study on different types of fixed assets used by stovekraft private limited company.
- To study on repairs and maintenance cost on fixed assets.
- To study on relationship between fixed assets turnover and return on asset.

HYPOTHESIS

- **H₀**: There is no relationship between Fixed assets turnover and Return on assets.

- **H₁**: There is a relationship between Fixed assets turnover and Return on assets.

RESEARCH METHODOLOGY

The methodology for this study is to assess fixed asset management process in the Stovekraft private limited company. It is a descriptive study using qualitative data that describes how fixed assets are managed and controlled. Fixed asset management is a very meaningful activity in any organization; it oversees the proper control of fixed assets including inventory, use and all transactions regarding fixed assets. Accurate information is imperative to any organization. The data sought covers all aspects of any fixed asset management process.

III. DATA ANALYSIS AND INTERPRETATION

This chapter includes various ratios, percentiles and net values of different types of fixed assets which is to be analyze the firms profitability, solvency, etc., and trend analysis of financial statements is to be analyze the changes in profits turnover, assets, liabilities and comparing them with one another using base year data. The trend analysis is to be calculated by using financial elements of balance sheets and profit and loss account of Stovekraft private limited company.

The analysis and interpretation of fixed assets of Stovekraft private limited company is done by using the bar graphs, charts on the basis of five years information.

1. Building to Net Fixed Assets

Building to net fixed assets ratio = Building / Net fixed assets*100

Table no.1 showing Building to net fixed assets

| YEAR | BUILDING | NET FIXED ASSETS | RATIO |
|-----------|-----------|------------------|-------|
| 2012-2013 | 183505623 | 509826068 | 35.99 |
| 2013-2014 | 183568568 | 783587871 | 23.43 |
| 2014-2015 | 264703112 | 985783144 | 26.85 |
| 2015-2016 | 424681989 | 1173257323 | 36.19 |
| 2016-2017 | 441668007 | 1145085148 | 38.57 |

Source: Secondary source

Analysis and Interpretation:

The above table states that the ratio of building was decreasing year by year from 2012-13 to 2014-15 i.e., from 35.99% to 26.85%. In the year 2015-16 and 2016-17 it was increased from 35.99% to 36.19% and 38.57%.

This facts depicts that the company is growing because of number of employees are increased, assets are also increasing etc., therefore to provide sufficient space and facilities, company has to purchase additional building either on own or on rental basis.

2. Plant and Machinery to Net Fixed Assets

Plant and Machinery to net fixed assets ratio = Plant and Machinery / Net Fixed Assets*100

Table no. 2 showing Plant and Machinery to net fixed assets

| YEAR | PLANT AND MACHINERY | NET FIXED ASSETS | RATIO |
|-----------|---------------------|------------------|-------|
| 2012-2013 | 308593289 | 509826068 | 60.53 |
| 2013-2014 | 651860389 | 783587871 | 83.19 |
| 2014-2015 | 715852382 | 985783144 | 72.62 |
| 2015-2016 | 793140916 | 1173257323 | 67.60 |
| 2016-2017 | 816621654 | 1145085148 | 71.32 |

Source: Secondary source

Analysis and Interpretation:

From the above table indicates the ratio of Plant and Machinery to Net fixed assets of the company. By comparing ratios to base year 2012-13 i.e., 60.53%, in the year 2013-14 and 2014-15 it was increased to 83.19% and 72.62%. During 2015-16 and 2016-17 the ratio was increased from 60.53% to 67.60% and 71.32%.

The increasing ratio indicates that there is an additional purchase of plant and machinery is conducted by the company because of high production capacity and good in up gradation of technology.

3. Furniture and Fixtures to net fixed assets

Furniture and Fixtures to net fixed assets ratio = Furniture and Fixtures / Net fixed assets*100

Table no.3 showing Furniture and Fixtures to Net fixed assets

| YEAR | FURNITURE AND FIXTURES | NET FIXED ASSETS | RATIO |
|-----------|------------------------|------------------|-------|
| 2012-2013 | 9089667 | 509826068 | 1.78 |
| 2013-2014 | 9797627 | 783587871 | 1.25 |
| 2014-2015 | 9839875 | 985783144 | 0.99 |
| 2015-2016 | 24459816 | 1173257323 | 2.08 |
| 2016-2017 | 26906393 | 1145085148 | 2.35 |

Source: Secondary source

Analysis and Interpretation:

The above table shows that the ratio of furniture and fixtures to net fixed assets was increasing as well as decreasing year by year by comparing to the base year 2012-13 i.e., 1.78%. In the year 2013-14 and 2014-15 ratio was decreased to 1.25% and 0.99%. During 2015-16 and 2016-17 the ratio was increased from 1.78% to 2.08% and 2.35%.

Decrease leads to decrease in employees, assets, production etc., because of purchase of furniture and fixtures was less when compare to base year. The ratio of furniture and fixtures has increased in the year 2015-16 and 2016-17. The

increasing ratio leads to increase in employees, assets; production etc., to safeguard those assets of the company, the company has to purchase additional furniture and fixtures.

4. Computers to net fixed assets

Computers to net fixed assets ratio= computers/net fixed assets*100

Table no.4 showing computers to net fixed assets

| YEAR | COMPUTERS | NET FIXED ASSETS | RATIO |
|-----------|-----------|------------------|-------|
| 2012-2013 | 8561149 | 509826068 | 1.67 |
| 2013-2014 | 11039649 | 783587871 | 1.41 |
| 2014-2015 | 12415583 | 985783144 | 1.26 |
| 2015-2016 | 18873307 | 1173257323 | 1.61 |
| 2016-2017 | 21307519 | 1145085148 | 1.86 |

Source: Secondary source

Analysis and Interpretation:

The above table shows the ratio of computers to net fixed assets of the company, in the year 2012-13 ratio was 1.67% and it was gradually decreased from 1.67% to 1.26% i.e., from 2012-13 to 2014-15. During the year 2015-16 it was little increased from 1.26% to 1.61% and in the year 2016-17 it was increased to 1.86%.

Comparing ratios to base year 2012-13, the purchased computers were increasing as well as decreasing from past five years. Decreasing of ratio indicates that the usages of computers are less because of not much requirements in the market. Whereas Increasing of ratio indicates that the usage of computers are increased because of the requirements in the market as well as up gradation towards latest technology also.

Table no. 5 showing repairs and maintenance cost of Buildings of the company

| YE A R | BUILDING | | | PERCENTA GE |
|-----------|----------|-------------------|------------------|-------------|
| | VALU E | INCREASI NG VALUE | DECREAS IN VALUE | |
| 2012-2013 | 6982287 | 524693 | - | 7.51 |
| 2013-2014 | 7826555 | 844268 | - | 10.79 |
| 2014-2015 | 8026016 | 199461 | - | 2.49 |
| 2015-2016 | 9825945 | 1799929 | - | 18.32 |
| 2016-2017 | 10956630 | 1130685 | - | 10.32 |

Source: Secondary source

Analysis

The above table shows that value of building is tremendously increasing year by year. In the year 2012-13

it was increased by Rs.524693, during 2013-14 it was Rs.84426. In the year 2014-15, 2015-16 and 2016-17 was increased by Rs.199461, Rs.1799929 and Rs.1130685.

By comparing ratio to the base year 2012-13, the repairs and maintenance ratio of building is increasing and decreasing for each year.

Increasing of ratio leads to increase in number of repairs and maintenance cost therefore increasing value of building was also increased and Decreasing of ratio leads to decrease in number of repairs and maintenance cost. So, the increasing value of building was increased at lower value.

Table no. 6 showing repairs and maintenance cost of Plant and machinery of the company

| YE A R | PLANT AND MACHINERY | | | PERCENTA GE |
|-----------|---------------------|-------------------|------------------|-------------|
| | VALU E | INCREASI NG VALUE | DECREAS IN VALUE | |
| 2012-2013 | 11120901 | 203647 | - | 1.83 |
| 2013-2014 | 12210568 | 1089667 | - | 8.92 |
| 2014-2015 | 14387755 | 2177187 | - | 15.13 |
| 2015-2016 | 19552241 | 5164486 | - | 26.41 |
| 2016-2017 | 22860487 | 3308246 | - | 14.47 |

Source: Secondary source

Analysis:

The above table shows that value of Plant and Machinery is tremendously increasing year by year. In the year 2012-13 it was increased by Rs.203647, during 2013-14 it was Rs.1089667. In the year 2014-15, 2015-16 and 2016-17 was increased by Rs.2177187, Rs.5164486 and Rs.3308246.

This chart disclose about the ratios by comparing to the base year 2012-13 the plant and machinery ratio was increased each year. Increasing of ratio indicates that the repairs and maintenance cost was increased because of lack in the maintenance of plant and machinery like breakdown of asset, some repair occurred during working condition etc., and in the last year repairs and maintenance cost was decreased due to proper maintenance of asset of the company.

Table no. 7 showing repairs and maintenance cost of other assets of the company

| YE A R | OTHER ASSETS | | | PERCENTA GE |
|-----------|--------------|-------------------|-------------------|-------------|
| | VALU E | INCREASI NG VALUE | DECREASI NG VALUE | |
| 2012-2013 | 6732556 | - | 318257 | 4.73 |
| 2013-2014 | 7154394 | 421838 | - | 5.90 |

| | | | | |
|-----------|---------|---------|--------|-------|
| 2014-2015 | 4072166 | - | 255396 | 6.27 |
| 2015-2016 | 3617894 | - | 454272 | 12.56 |
| 2016-2017 | 9120305 | 5502411 | - | 60.33 |

Source: Secondary source

Analysis:

The above table shows that value of other assets from 2012-13 to 2016-17. In the year 2012-13, 2014-15 and 2015-16 was decreased by Rs.318257, Rs.255396 and Rs.454272. In the year 2013-14 and 2016-17 it was increased by Rs.421838 and Rs.5502411.

This line chart stipulates about the ratio for other assets of the company, by comparing ratios to the base year 2012-13, repairs and maintenance ratio was increased each year because of lack in repairs and maintenance of other assets.

Hypothesis testing

The hypothesis testing is a statistical test used to determine whether the hypothesis assumed for the sample of data stands true for the entire population or not. Simply, the hypothesis is an assumption which is tested to determine the relationship between two data sets.

Correlation

Correlation is a bivariate analysis that measures the strength of association between two variables and the direction of the relationship. In terms of the strength of relationship, the value of the correlation coefficient varies between +1 and -1. A value of +/-1 indicates a perfect degree of association between the two variables. As the correlation coefficient value goes towards 0, the relationship between the two variables will be weaker. The direction of the relationship is indicated by the sign of the coefficient; a + sign indicates a positive relationship and a - sign indicates a negative relationship.

Karl Pearson’s coefficient of correlation:

Karl Pearson’s coefficient of correlation is the most widely used correlation statistic to measures the linear relationship between two variables. It indicates the degree of correlation between the two variables. The coefficient of correlation between the two variables X and Y is denoted by rxy(or r).

$$r = \frac{N \sum xy - \sum (x)(y)}{\sqrt{N \sum x^2 - \sum (x^2)} \sqrt{N \sum y^2 - \sum (y^2)}}$$

R = Karl Pearson’s coefficient of correlation

N = number of observations

∑xy = sum of the paired values

∑x = sum of x values

$\sum y$ = sum of y values
 $\sum x^2$ = sum of squared x values
 $\sum y^2$ = sum of squared y values
X = value of independent variable
Y = value of dependent variable

FORMULAS are:

$$FAT = \frac{\text{sales or cost of goods sold}}{\text{fixed assets}}$$

$$ROA = \frac{\text{Net Income After tax}}{\text{Total assets}}$$

HYPOTHESIS

H₀: There is no relationship between Fixed Assets Turnover and Return on Asset.

H₁: There is relationship between Fixed Assets Turnover and Return on Asset.

Table No: 8

Table showing the correlation of fixed assets turnover and Return on asset

(by using Karl Pearson's coefficient of correlation)

| YEARS | FAT | ROA | XY | X ² | Y ² |
|--------------|--------------|-------------|--------------|----------------|----------------|
| 2012-2013 | 2.28 | 1.86 | 4.24 | 5.29 | 3.46 |
| 2013-2014 | 1.54 | 1.35 | 2.08 | 2.37 | 1.82 |
| 2014-2015 | 1.52 | 1.37 | 2.08 | 2.31 | 1.88 |
| 2015-2016 | 2.02 | 1.37 | 2.77 | 4.08 | 1.88 |
| 2016-2017 | 2.79 | 1.89 | 5.27 | 7.78 | 3.57 |
| TOTAL | 10.15 | 7.84 | 16.44 | 21.83 | 12.61 |

Whereas:

FAT: Fixed Assets Turnover.

ROA: Return on Assets.

Calculation:

$$N\sum XY - (\sum X)(\sum Y)$$

$$r = \frac{5(16.44) - (10.15)(7.84)}{\sqrt{[N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}}$$

$$r = \frac{82.2 - 79.576}{\sqrt{[5(21.83) - (10.15)^2][5(12.61) - (7.84)^2]}}$$

$$= \frac{\sqrt{[(109.15 - 103.02)(63.05 - 61.47)]}}{2.624}$$

$$= \frac{\sqrt{(6.13)(1.58)}}{2.624}$$

$$= \frac{\sqrt{9.6854}}{2.624}$$

r = 0.843

Testing of hypothesis:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-(r)^2}}$$

$$t = \frac{0.843\sqrt{5-2}}{\sqrt{1-(0.843)^2}}$$

t = 2.70

Table value : 3.182

t value : 2.70

Conclusion:

T value 2.70 < 3.182, hence the null hypothesis is accepted.

The critical value of t-distribution table is 3.182 @ 5% level of significance and degree of freedom 3 (i.e., n-2 = 5-2 = 3). Since the calculated value of t-test 2.70 is lesser than the critical value (3.182). Therefore, null hypothesis is accepted. Hence, it is concluded that there is no relationship between fixed assets turnover and Return on assets.

IV. SUMARRY OF FINDINGS AND SUGGESTIONS

FINDINGS

- Building ratio was increasing year by year up to 38.57% because of development of the company.
- In order to exploit the global and national market and high production the Plant and Machinery ratio was increased from 60.53% to 83.19%.

- The highest ratio of Furniture and Fixtures was 2.35% and it was decreased to 0.99%. That means employees of the company, production etc., has decreased.
- From the analysis and interpretation, it was found that the ratio of computers was gradually decreasing from 1.67% to 1.26%. That means the company has adopted the computerized system of accounting.
- Repairs and maintenance ratio of Plant and Machinery was increased because of breakdown of assets, lack in maintenance etc.,
- The result of Karl Pearson Coefficient of Correlation states that the calculated value of t-test 2.70 is lesser than the critical value (3.182). Therefore, null hypothesis is accepted. Hence, it is concluded that there is no relationship between Fixed assets turnover and Return on assets.

SUGGESTIONS

- The company must try to adopt developed, innovative working techniques in the upcoming years to compete in the global market.
- Try to focus on the training methods and create a safe working environment for employees while working with the machineries.
- The company must think of modernization and diversification programs, acquiring more number of new furniture and fixtures so company is able to withstand the competition in the market.
- The stovekraft company must utilize its fixed assets in such a way to increase its sales more effectively.
- Company must utilize new technology for fixed assets to increase its production more effectively.
- Proper utilization of plant and machinery and furniture and fixtures helps the company to increase their growth as well as profit.

V. CONCLUSION

This project was a real exercise in undertaking the intricacies and complexities involved in the corporate accounting strategy. It is a matter of satisfaction that researcher was able to complete the project on time. The company has invested a huge amount in the fixed assets which are having a potential of high productivity and efficiency.

This study indicates that the company is by and large aware of heavy build-up of assets and capital locked thereby. Fixed assets come to rescue at the time of crisis. This study has helped in understanding the various aspects of fixed assets management like how the asset is being acquired by the company, why it is needed, how the company operates by the use of these fixed assets etc., still there are some old assets that need to be disposed off or need replacement but otherwise, stovekraft company has been able to manage all its assets efficiently and effectively.

Therefore, the structure of assets in the Stovekraft Company is inconsistent and the results of the present study

suggest that they make a balancing between the components of the structure of assets.

REFERENCE

- [1] Dr. K. Sheshamurthy, R. Venkatesh, (2015), "Management Accounting", Bangalore, Skyward Publishers.
- [2] Dr. S. Anil Kumar, Dr. V. Rajesh Kumar, Dr. B. Mariyappa, (2014), "Advance Financial Accounting", Bangalore, Himalaya Publishing House Pvt. Ltd.,

JOURNALS

- [3] George Emmanuel Latridis, "Incentives for Fixed Asset revaluations; the UK evidence", Emerald Group Publishing Limited, 2012, Issue 1, Volume 13, Page no 5-20.
- [4] ZoranNesic, NebojsaDenic, JasminaVesicVasovic, MiroslavRadojicic, "One approach to the development of software for improving the use of fixed assets", Faculty of engineering and the center for quality, June 2015, Issue 1, Volume 4, Page no 517-522.
- [5] Dr. I. Sathyanarayana, N.B.C Sindhy, A. Naresh, "Evaluation of Fixed Asset Management", International Journal of Scientific Research and Management, 2015, Issue 3, Volume 3, page no 2500-2504.