

DEPRECIATION RATES: A STUDY OF PRACTICE OF INDIAN CORPORATE SECTOR

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Abstract

Depreciation is as old as the business system. Rates of providing depreciation are very important decision to be taken by the companies. In India Companies Act directs the companies to follow Schedule XIV for depreciation rates. Schedule XIV provides the minimum rates which the companies must follow. The present paper highlights the different depreciation rates being followed by corporate sector in India viz. as prescribed under Companies Act or otherwise.

Key Words: Depreciation, Sch. XIV, Companies Act, Companies characteristics

Introduction

Depreciation accounting is as old as the business system. It is probably the most discussed and disputed topic in accounting. Number of authors has defined depreciation as follows:

Meigs describes, "Depreciation means the allocation of the cost of an asset to the periods in which services are received from the asset."

According to **Pickles**, " Depreciation is the permanent and continuing diminution in the quality, quantity or value of asset. "

As per the words of **Prasad and Dakshinamurthy**, " Depreciation is the provision made in the books of an enterprise to allow for the loss in the value of fixed assets through wear and tear and obsolescence. While wear and tear are the results of use, obsolescence occurs when there is a premature loss of value owing to technological progress, inventions, introduction of new methods or designs or changes in customer preferences. This loss in value is accounted for by making the provision for depreciation."

Encyclopedia Britannica defines depreciation as, "An accounting charge for decline in the value of an asset spread over its economic life. Depreciation covers wear and tear from use and physical deterioration from age and exposure to elements. It also includes obsolescence i.e. loss of usefulness arising from availability of new and more efficient types of goods serving the same purpose. It does not cover losses from sudden and unexpected destruction of usefulness of the property as a result of fire, accidents, thefts, war damage or adverse court decisions or from declining price levels."

According to **Wikipedia**, the free encyclopedia, "In accounting, depreciation is an expense that is created by the gradual erosion of the value of a fixed asset. It is also supposed to create a reserve for the replacement of the asset. Rates of depreciation vary with the class of the asset and the life expectancy of the asset. For example a building would be depreciated over a longer period of time than a computer. "

Dunn (2005) in an article "Depreciation - Methods of Accounting" looked at three methods of depreciation viz. Straight line method, Written down value method and sum of years' digits methods along with the factors of providing depreciation in the light of FRS 15 in detail with examples.

A Dictionary of Business and Management (2006) explains **depreciation rate** as the percentage rate used in the straight line method and diminishing balance method of depreciation in order to determine the amount of depreciation that should be written off a fixed asset charged against income or the profit and loss account.

Objectives of the Study

The major objective of the study is to find out the different depreciation rates being followed by corporate sector in India viz. as prescribed under Companies Act or otherwise. However the other specific objectives are as follows:

- To study whether the company's characteristics like paid up capital, sector, and region have impact on the preference of depreciation rates.

Methodology

From all of the listed companies in India a sample of 350 has been taken for the study. Secondary data have been gathered from the available published annual reports of the above said companies. Tabular analysis, percentages, and chi square test have been applied for analysing the same. The following abbreviations have been used at different places including tables:

- *SCH XIV* refers to Schedule XIV of Companies Act,
- *HALL* implies higher rates of depreciation (than Sch XIV rates) in all assets.
- *I TAX* rates mean rates of depreciation as prescribed by Income Tax Act,
- *HSA* represents higher rates of depreciation (than Sch XIV rates) in some assets,

Hypotheses of the Study

The hypotheses to be tested have been framed to find out empirically association between choice of depreciation rates on one side and company's characteristics such as paid up capital, sector, and region on the other. Accordingly following hypotheses have been formulated:

- There is no association between choice of depreciation rates and company's characteristics such as paid up capital, sector, and region.

Limitation of the Study

Following are the main limitation of the study:

- The study has been restricted to only 350 public limited listed companies in India.

General Discussion

As discussed earlier that data relating to 350 companies have been gathered, compiled and analyzed. From the information gathered the Table 1 has been constructed which shows that in case of choice of rates of providing depreciation, 68 per cent of the total sample companies are using Sch XIV rates as the base rates for providing depreciation followed by the combination of Sch XIV rates and HSA policy which has been preferred by about 26 per cent of the sample companies. The application of Income Tax rates for charging depreciation has not been welcomed by Indian corporate sector as no company out of 350 sample companies is found using these rates. A very small portion has been following other policies like about 1 percent and about 5 percent in case of combined use of SCH XIV and I Tax and HALL respectively. Indicating thereby that these policies are not the common practice amongst the companies in India

Paid up Capital wise Preference

The paid up capital of the company generally denotes the size of the company. It has been conceptually assumed that with the growth in the paid up capital of the company the company gets sophistication in its policies, strategies, tools and techniques to be used by the company. So the companies having different paid up capitals shall follow different rates of depreciation. From the information gathered following null hypotheses are tested statistically:

Ho-1: There is no association between choice of depreciation rates and the paid up value of the company.

In this section 350 sample entities from Indian corporate sector have been divided into seven segments viz. 1-2 Crores, 2-5 Crores, 5-10 Crores, 10-25 Crores, 25-50 Crores, 50-100 Crores and above 100 Crores (Refer Table 4.2). The division of segments on the basis of paid up capital has been opted from " Reserve Bank of India Bulletin Sept. 1998".

Table 2 depicts that companies in 1-2 Crores and 50-100 Crores categories of paid up capital are not using HALL and combination of Sch XIV and Income Tax rates at all. Sch XIV and Income Tax rates are being used by companies in 2-5 Crores (4 percent), 5-10 Crores (1.96 percent) and 10-25 Crores (1.03 percent) categories. On the other hand HALL policy has been in practice in companies having paid up capital of 2-5 Crores (4 percent), 5-10 Crores (7.84 percent), 10-25 Crores (9.28 percent), 25-

50 Crores (4.68 percent) and above 100 Crores (1.43 percent) respectively Interesting fact emerging out of the data gathered shows that Sch XIV is the first preference of corporate sector in India as the majority of the companies are using Sch XIV rates for charging depreciation paid up capital wise. The following percentages of practice of Sch XIV rates would prove the above fact 1-2 Crores (71.43 percent), 2-5 Crores (84 percent), 5-10 Crores (74.51 percent), 10-25 Crores (67.01 percent), 25-50 Crores (65.63 percent), 50-100 Crores (72.22 percent) and above 100 Crores (60 percent). The second choice of corporate sector regarding the use of depreciation rate is the combination of Sch XIV rates and HSA as the table reveals the percentages of preference as in 1-2 Crores (28.57 percent), 2-5 Crores (8 percent), 5-10 Crores (15.69 percent), 10-25 Crores (22.68 percent), 25-50 Crores (29.69 percent), 50-100 Crores (27.78 percent) and above 100 Crores (38.57 percent). On the basis of the chi-square tests results as the value computed are lower than the critical values with 18 degree of freedom and at 0.05 level of significance, the null hypothesis that there is no association between choice of depreciation rates and the paid up value of the company, can be accepted.

Sector wise Preference

An effort here has been made to find if there is any effect of sector on the preference of depreciation rates. For the purpose of this study, 350 companies from Indian corporate sector have been divided into two sectors viz. Private Sector and Public Sector Under public sector only government companies have been considered whereas the private sector is further subdivided into foreign subsidiaries and Indian domestic companies. For statistical testing following hypotheses are formulated and tested:

Ho-2: There is no association between choice of depreciation rates and the sector to which the companies belong

The Table 3 reveals that 82.76 percent of the public sector companies are discovered using SchXIV rates as rates for providing depreciation as compared to those in private sector where the percentage was about 67 percent. Regarding the use of HALL and the combination of Sch XIV and Income Tax it has been observed that no company in the public sector is following the above combination, whereas private sector companies are following the above practice with a very small percentage of about 6 percent and 1 percent respectively. The combination of Sch XIV rates and HSA policy has been practiced by about 27 percent of Private sector companies where as the same is being used by about 17 percent of public sector companies. Since the calculated value of chi-square is less than the critical value at 5 percent of significance level so the hypothesis, that there is no association between choice of depreciation rates and the sector to which the companies belong, is accepted.

Region wise Preference

The existence of any relationship between different regions of India and practice of depreciation accounting rates is studied over here. For simplification and purposeful conclusions, the corporate sector in India has been divided into Four geographical regions viz. North, South, East and West. (Table 4). The following hypotheses have been designed and tested statistically:

Ho-3: There is no association between choice of depreciation rates and the region to which the companies belong

Now we can study the region wise preference of rates of depreciation by corporate sector in India. By referring Table we can observe that 63-73 percent of the concerns in different regions are following Sch XIV rates as rates for providing depreciation. Eastern companies with 76.32 percent of companies opting for Sch XIV rates are at top followed by northern companies with 76.25 percent. However in case of southern and western region companies the percentage of following Sch XIV rates has been 63.01 percent and 64.78 percent respectively. As far as the sch XIV and HSA is concerned 28.77 percent of companies from southern region has opted this practice followed by western, northern and eastern companies with percentage of 27.67 percent, 22.5 percent and 18.42 percent respectively. Sch XIV & IT rates are being used by only 1 company from south and 2 companies from west. HALL policy is being followed at very negligible percentage ranging between 1-7 percent in different regions. The chi-square results show that there is no association between the choice of depreciation rates and the region to which the companies belong.

Findings

- Sch XIV rates are more preferred than other rates.
- Use of Sch XIV rates on some assets and Higher rates to remaining assets is the next preferred policy in Indian corporate sector.
- Other policies like combination of Sch XIV rates and Income Tax rates, Higher rates than Sch XIV rates to all assets (HALL) are in practice but with a very small percentage of their follower.
- Not even a single sample company has used depreciation rates prescribed by Income Tax Act.
- Sch XIV rates are preferred in all segments of paid up capital wise divisions but these are more preferred in 2-5 Crores and 5-10 Crores categories.
- Combination of Sch XIV rates and HSA policy has been more preferred in above 100 Crores paid up capital wise category.

- The combination of Sch XIV rates and ITax rates is being used in only 2-5 Crores, 5-10 Crores and 10-25 Crores paid up capital wise categories.
- Higher rates on all assets (HALL) has been preferred more by companies under 10-25 Crores category as compared to other categories.
- None of the sample public sector company is found applying HALL policy. These companies from public sector have applied only Sch XIV rates and combination of Sch XIV rates and HSA policy.
- Private sector sample companies have preferred Sch XIV rates at number one followed by combination of Sch XIV rates and HSA policy. Private sector has also used the other policies but with a very small preference rate.
- 83 percent of Government companies and 72 percent of domestic private sector companies are using Sch XIV rates whereas in case of foreign subsidiaries these rates are being used by only 38 percent.
- Sch XIV rates are more preferred in Northern and Eastern regions as compared to other regions

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TABLE 1

Rate wise break up of companies

Number of companies	Sch XIV	Sch XIV & HSA	Sch &IT	HALL
350	239	90	3	18
Percentage	68.29	25.71	0.86	5.14

TABLE 2

Paid up Capital wise Preference of Rates of Depreciation

S.No	Paid up Capital (Crores)	Sch XIV	Sch XIV & HSA	Sch XIV & I TAX	HALL	Total
1	1-2	5(71.43)	2(28.57)	0(0)	0(0)	7
2	2-5	21(84)	2(8)	1(4)	1(4)	25
3	5-10	38(74.51)	8(15.69)	1(1.96)	4(7.84)	51
4	10-25	65(67.01)	22(22.68)	1(1.03)	9(9.28)	97
5	25-50	42(65.63)	19(29.69)	0(0)	3(4.68)	64
6	50-100	26(72.22)	10(27.78)	0(0)	0(0)	36
7	Above 100	42(60)	27(38.57)	0(0)	1(1.43)	70
	Total	239	90	3	18	350

Source: Annual Reports of Companies

Obtained Value of Chi Square = 25.7299 at 0.05 level of significance

Degree of freedom = 18, Critical value = 28.9, Hypothesis Accepted

TABLE 3

Sector Wise Preference of Rates of Depreciation

S.no	SECTOR		Sch XIV	Sch XIV & HSA	Sch XIV& IT	HALL	Total
1	Private sector	Domestic	198(71.74)	64(23.19)	3(1.09)	11(3.98)	276
		Foreign subsidiaries	17(37.78)	21(46.67)	0(0)	7(15.55)	45
		TOTAL	215(66.98)	85(26.48)	3(0.93)	18(5.61)	321
2	Public sector		24(82.76)	5(17.24)	0(0)	0(0)	29
	TOTAL		239	90	3	18	350

Source: Annual Reports of Companies

Obtained Value of Chi Square = 3.7499 at 0.05 level of significance

Degree of freedom = 3, Critical value = 7.81, Hypothesis Accepted

TABLE 4

Region Wise Preference of Rates of Depreciation

S.No	REGION	Sch XIV	Sch XIV & HSA	Sch XIV & IT	HALL	Total
1	NORTH	61(76.25)	18(22.50)	0(0)	1(1.25)	80
2	SOUTH	46(63.01)	21(28.77)	1(1.37)	5(6.85)	73
3	EAST	29(76.32)	7(18.42)	0(0)	2(5.26)	38
4	WEST	103(64.78)	44(27.67)	2(1.26)	10(6.29)	159
	TOTAL	239	90	3	18	350

Source: Annual Reports of Companies

Obtained Value of Chi Square = 8.0058 at 0.05 level of significance

Degree of freedom = 9, Critical value = 16.9, Hypothesis Accepted