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# PREFERENCE OF DEPRECIATION METHOD(S) BY COMPANIES REVALUING THEIR ASSETS: A SCENE OF INDIAN INDUSTRY

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#### **Abstract**

Revaluation of fixed assets is one of the practices which give some relief to industry in the time of rising inflation. In India since no companies are using inflation adjusted accounts, not more, but some companies are concerned about the rising prices and they go for periodic revaluation of their fixed assets. The paper in hand has tried to study the preference of depreciation method(s) by the companies which have revalued their accounts in past. The impact of sector, group, region and industry is also studied.

Key words: Depreciation methods, Revaluation of fixed assets, SLM, WDV method, sector, group, region, and industry.

#### Introduction

Revaluation of the fixed assets is not a common practice in Indian corporate sector as the data from the present study reveal that only 26(7.42 percent) out of 350 sample companies have revalued their fixed assets. For all companies the basis of revaluation has been the opinion of technical experts like Valuers, Engineers etc. Further to calculate the impact on the choice of depreciation method the data collected from annual reports of companies have been divided into following:

- Ownership Pattern
- Region
- Group
- Industry

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#### **Review of Literature**

As **Sidney Davidson and others** (1956) in book fundamentals of accounting comment on depreciation," on no subject in accounting has there been so much written and so much as confusion as on the subject." The subject of depreciation is controversial and it also creates confusion. The experts are agreeable on this point but they seem to be critical against the work done in this area by other, as most of the articles available in the literature of depreciation accounting are mostly the critical review of the work done by the others.

**U.S. National Association of Accountants** (1958) published a research report under the heading "Current Practice in Accounting for Depreciation". For this research fifty-five companies provided the information regarding their depreciation practices. Out of the fifty-five companies forty-nine opted for either sum of the year's digits method or declining balance method for tax as well as accounting purposes, five companies used these methods specifically for tax purpose and straight line or output unit method for accounting purposes. The remaining company opted straight-line method for tax purpose and declining method for accounting purpose. The study further revealed that two thirds of the companies used historical cost base for depreciation purpose whereas one third of the companies restated depreciation charges in terms of current price level.

**Tahidur** (2017) in a study Revaluation of Fixed Assets Before IPO: A Study on Textile Industry in Bangladesh found that Revaluation of fixed assets before IPO was a common practice in the textile industry of Bangladesh. On an average, the sample companies under textile industry category increased the value of their fixed assets by 42 percent with a minimum of 4 percent and a maximum of 130 percent. Among the years under study, 2014 and 2015 observed the highest number of newly listed textile companies in Bangladesh, the combined percentage of which was about 55 percent. The reporting of asset values based on fair values would assist investors and others making unbiased predictions about firms' future performance. He further suggested that in the overall process of fixed asset revaluation utmost fairness and transparency should be ensured to get the actual benefit.

# **Objectives of Study**

Following associated objectives of study are considered:

- To study the preference of depreciation method(s) by companies which are revaluating their assets
- To study the impact of sector, region, group and industry on the preference of depreciation methods by revaluating companies.

#### **Hypotheses of Study**

Following hypotheses have been made to statistically test the study:

Ho-1: There is no association between choice of depreciation method(s) and Sector to which companies revaluing their fixed assets belong.

Ho-2: There is no association between choice of depreciation method and region to which companies revaluing their fixed assets, belong.

Ho-3: There is no association between choice of depreciation method(s) and group to which companies revaluing their fixed assets, belong.

Ho-4: There is no association between choice of depreciation method(s) and industry to which companies revaluing their fixed assets, belong.

# Sample size and Data

350 companies from Indian corporate sector have been selected and secondary data from their annual reports have been compiled and analyzed for the purpose.

# Study

#### **Sector wise Preference**

Under this section a trial has been made to find association between the sector and method and rates of depreciation being used by the companies revaluing the fixed assets. The corporate sector has been classified into public sector companies and private sector companies for the study. Private sector companies are further divided into foreign subsidiaries and Indian domestic companies. Table 1 imparts an important information that none of the sample entities from public sector i.e. government companies has revalued its fixed assets. All of the companies, which have revalued their fixed assets, are from private sector. 15 percent of foreign subsidiaries in India have revalued their fixed assets during the study period. Remaining 85 percent are Indian private sector companies. Following hypotheses are tested in this regard:

#### Preference of Method(s)

As per preference of method 59 percent of sample Indian companies and 50 percent of foreign subsidiaries are found practicing SLM of depreciation. As far as the choice of combined use of SLM and WDV method of depreciation is concerned 32 percent of domestic Indian companies in private sector and 25 of the foreign subsidiaries in India have been applying both methods. Only 9 percent of domestic Indian companies in private sector and 25

percent of foreign subsidiaries, which have revalued their assets, are using WDV method of depreciation.

### Region wise Preference

Under the region wise preference the impression of region over the revaluation of assets and depreciation methods and depreciation rates has been considered. Accordingly to test the results statistically following hypotheses are made and tested:

#### Preference of Method(s)

Table 2reveals that 57 percent of the companies from north which have revalued their assets are using SLM. 50 percent each in case of eastern and western region companies have opted for SLM. All sample companies, revaluing fixed assets, have used SLM in southern region. Combination of both methods is the next option in companies, which have revalued their fixed assets. As 50 percent, 25 percent and 29 percent of the companies are practicing SLM and WDV simultaneously in western, eastern and northern region respectively.25 percent of eastern companies and 14 percent of northern companies have employed WDV method.

No company, revaluing fixed assets, from south and west has employed WDV. The chi-square test shows that the hypothesis that there is no association between choice of depreciation method and region to which companies revaluing their fixed assets belong can be retained.

# **Group wise Preference**

Here the aim of the researcher has been to find out how many groups are revaluing their assets and their association with preference of depreciation method(s) and rates. For the purpose following tables have been constructed and for more simplification and better presentation the groups which have not gone for revaluation are skipped from the table. Regarding this following hypotheses are formulated and tested with the help of chi-square: Preference of Method(s)

From the Table 3 and graphical presentation below this may be observed that out of 2 sample companies of Bangur group, assets of 1 company are revalued and SLM of depreciation is in use by that company. Birla group has gone for revaluation of fixed assets of one company out of 17 sample companies and that company has been using SLM for providing depreciation. Further assets of 2 out of 4 sample companies of Goenka group have been revalued during the study period. The above said companies are following SLM. The only company of Modi group in sample list has opted for revaluation of its assets and the company has been applying SLM of depreciation. 1 company using SLM out of 2 sample

companies of Reliance group has opted for revaluation of its fixed assets. 3 companies out of 7 companies in Shriram group have revalued their fixed assets. One company in each case has been following SLM, WDV and both methods respectively

Only one company using both methods out of 7 sample companies from Thapar group has opted for revaluation. Further one company from TVS group of which 6 companies are on sample list, has gone for revaluation of its fixed assets. SLM of depreciation has been in operation in that company. Whereas in case of catch all categories i.e. other groups 15 companies out of 231 have revalued their fixed assets during the study period out of which 7 are using SLM, 2 WDV and 6 both methods. Since the obtained value of the chi-square is less than the critical value the hypothesis that there is no association between choice of depreciation method and group to which companies revaluing their fixed assets belong, is accepted.

# **Industry wise Preference**

Here the purpose has been to study the figures of revaluation of fixed assets industry wise on one hand and the relationship of industry with choice of method(s) and rates of depreciation. In this regard following hypotheses are considered:

### **Preference of Method(s)**

The above Table 4 reveals that 1 out of 7 companies from beverages and tobacco industry has opted for the revaluation of its assets. The company has been using WDV method. From the 14 companies in the sample list from cement industry only one company using SLM has gone for revaluation of its fixed assets. Revaluation has not been preferred by chemical industry, as it has been evident from the Table 6.15 that only 2 out of 83 companies have revalued their assets. One company is using SLM and other the combination of SLM and WDV method. Further in case of computer/electronics industry only 2 out of 34 companies have opted for revaluation. SLM and both methods respectively are in operation in case of above said 2 companies. Out of 20 sample diversified companies only 1 using SLM, 1 WDV and 2 both methods, have opted for revaluation of assets. Next engineering companies are also seem to be reluctant towards revaluations as 3 companies following SLM and 2 companies using both methods have revalued their assets from the 71 companies in the sample list. Only one company using both methods from the sample list of 14 other food products companies has revalued its assets during the study period. In case of paper and paper products the position is that out of 5, only one company using both methods has revalued its assets. Further 1 out of 13, 2 out of 34 and 4 out of 26 companies in case of plastic and rubber products, steel and textiles industries respectively have revalued their assets. In all of the above companies SLM

has been found in operation. No sample company from refinery and lubricant industry has opted for revaluation of its assets. In case of miscellaneous industries one company each using SLM and WDV has revalued their assets. The sample list in case of miscellaneous industries has been of 17 companies. The hypothesis that there is no association between choice of depreciation method(s) and industry to which companies revaluing their fixed assets belong can be retained.

# **Findings**

- None of the sample company has been found using Inflation accounting for current value adjustments. However a very few sample companies have effected revaluation of assets during study period.
- The most of the concerns have not revalued all of their assets.
- None of the sample entities from public sector i.e. government companies has revalued their fixed assets.
- In each region That SLM has been preferred by majority of companies, revaluing their assets, followed by the combination of SLM and WDV method.
- Group wise preference is same i.e. majority follow SLM after that combination of SLM and WDV and least preferred method for all assets is WDV method as far as group wise study is concerned.
- Industry wise data reveals that 57.69% prefer SLM, 30.78% prefer SLM and WDV combined and only 11.53% use WDV solely to all assets.

TABLE 1
Sector wise Preference of Depreciation Method(s)
By Companies Revaluing Fixed Assets

S.No	SECTOR		SLM	WDV	SLM & WDV	Total
		Domestic Indian companies	13(59.09)	2(9.09)	7(31.82)	22
1	Private Sector	Foreign Subsidiaries	2(50)	1(25)	1(25)	4
		TOTAL	15(57.69)	3(11.54)	8(30.77)	26
2	Public Sector (Govt. Companies)		0	0	0	0
	TOTAL		15	3	8	26
Value of chi-square = 0.8420 at 0.05 Level of significance				Degree of Freedom = 2	Critical Value = 5.99	Hypothesis Accepted

Source: Compiled from Annual Reports

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**TABLE 2**Region wise Preference of Depreciation Method(s) by Companies Revaluing Fixed Assets

S.No	REGION	SLM	WDV	SLM & WDV	Total
1	NORTH	4(57.14)	1(14.29)	2(28.57)	7
2	SOUTH	3(100)	0	0	3
3	EAST	4(50)	2(25)	2(25)	8
4	WEST	4(50)	0	4(50)	8
	TOTAL	15	3	8	26
Value of chi-	Value of chi-square = 5.6488 at 0.05 Level of significance			Critical Value = 12.6	Hypothesis Accepted

Source: Compiled from Annual Reports

TABLE 3
Group wise Preference of Depreciation Method(s) by Companies Revaluing Fixed Assets

S.No	GROUP	SLM	WDV	SLM & WDV	Total	Sample companies
	Bangur	1	0	0	1	2
	Birla	1	0	0	1	17
	Goenka Rpg	2	0	0	2	4
	Modi	1	0	0	1	1
	Reliance	1	0	0	1	2
	Shri Ram	1	1	1	3	7
	Thapar	0	0	1	1	7
	TVS	1	0	0	1	6
	Others	7	2	6	15	304
	Total	15	3	8	26	350
Value of chi-square = 9.7067 at 0.05 Level of significance				Degree of Freedom = 16	Critical Value = 26.3	Hypothesis Accepted

Source: Compiled from Annual Reports

**TABLE 4** Industry wise Preference of Depreciation Method(s) by Companies Revaluing Fixed Assets

S.No	INDUSTRY	SLM	WDV	SLM & WDV	TOTAL	Sample Companies
1	Beverages & Tobacco	0	1	0	1	7
2	Cement	1	0	0	1	14
3	Chemicals	1	0	1	2	83
4	Computers/Electro nics	1	0	1	2	34
5	Diversified	1	1	2	4	20
6	Engineering	3	0	2	5	71
7	Other Food Products	0	0	1	1	14
8	Paper & Paper Products	0	0	1	1	5
9	Plastics & Rubber Products	1	0	0	1	13
10	Refinery & Lubricants	0	0	0	0	12
11	Steel	2	0	0	2	34
12	Textiles	4	0	0	4	26
13	Miscellaneous	1	1	0	2	17
	TOTAL	15	3	8	26	350
	Value of chi-square = 24.7867 at 0.05 Level of significance				Critical value = 33.9	Hypothesis Accepted

Source: Compiled from Annual Reports

### References

Sidney Davidson, James S. Schindler and Roman L Weil. (1956), "Fundamentals of Accounting", The Dryden Press, Illinois, p-409.

Tahidur Rahman, Md. (2017) "Revaluation of Fixed Assets Before IPO: A Study on Textile Industry in Bangladesh", Journal of Finance and Accounting retrieved from <a href="http://article.sciencepublishinggroup.com/pdf/10.11648.j.jfa.20170505.14.pdf">http://article.sciencepublishinggroup.com/pdf/10.11648.j.jfa.20170505.14.pdf</a>

Thomas, Arthur L (1974), "The Allocation Problem: Part Two", Studies in Accounting Research No 9, p-2.

U.S. National Association of Accountants. (1958), "Current Practice in Accounting for . Depreciation", pp. 1-35.

Van, Horne & James C. (1968), "Financial Management and policy", Prentice Hall Inc., EnglewoodCliffs, New Jersey.

Vickery, B.G. (1973), "Principles and Practice of Book Keeping and Accounts", Buller and Tanner Ltd., London.