



ACCOUNTING CHOICE AND ITS IMPACT ON REPORTED EARNINGS - A NOTE

Management

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ABSTRACT

The current note is prepared to educate readers on the impact of accounting choice, defined as the combined effect of firm's accounting policy, accounting method and accounting estimate on firm's reported financial position and financial performance. A set of transaction is taken and various accounting options ranging from selection of accounting policy (inventory valuation and depreciation method) to accounting estimates (creation of provisions, estimating economic life of assets) are considered for calculating earnings (profit or loss). With various combinations of accounting policy, accounting method and accounting estimates thirty two different accounting choices emerged out, for the same set of transaction earnings are calculated. It is observed that few combinations resulted into loss while some resulted into profit, highlighting the impact of accounting choice on reported earnings.

KEYWORDS:

Accounting policy, accounting standards, financial reporting

I. INTRODUCTION

An accounting choice is any decision whose primary purpose is to influence the output of the accounting system in a particular way (T.D. Fields *et.al.*) It is combined effect of firm's accounting policy, accounting method and accounting estimate on firm's reported financial position and financial performance. Financial position is represented in terms of firm's asset and liability in its balance sheet whereas profit or loss in income statement represent firm's financial performance. For the note, accounting policy, accounting method and accounting estimate have been explained under.

i. Accounting Policy – Indian Accounting Standard (Ind AS) 8 on *Accounting Policies, Changes in Accounting Estimates and Errors* defines accounting policies as the specific principles, bases, conventions, rules and practices applied by an entity in preparing and presenting financial statements. Indian GAAP provides flexibility to firms in choosing its accounting policy. There are few areas (like valuation of inventory, method of depreciation etc.) where GAAP presents multiple accounting treatments (may be read as accounting policy), in such cases it is left entirely at the discretion of a firm to choose its accounting policy. For instance accounting standard-2 (here after AS-2) on valuation of inventory allows firms to choose its own cost formula out of the two permitted, namely First-in-first-out (here after FIFO) and weighted average (here after WA). This selection, which is left entirely at the discretion of firm impacts reported value of closing inventory and cost of goods sold. Let us understand this with an example, suppose a trading firm on Day-1 purchase five hundred kilograms of material at a price of Rs. 100 per kilogram and on Day-2 purchases another four hundred kilograms of material at a price of Rs. 110 per kilogram. During the period if total sale is six hundred kilograms, then three hundred kilograms of material is available in the form of closing inventory. As materials were purchased at two different prices, the selection of cost formula (FIFO or WA) will impact reported value of material sold, technically known as cost of goods sold (here after COGS) and reported value of closing inventory. FIFO will assign value of Rs. 61,000 and Rs. 33,000 to COGS and closing inventory respectively. As per WA, value of COGS and closing inventory is Rs. 62,667 and Rs. 31,333 respectively. It is observed with similar transactions and different cost formula used, the value of COGS and closing inventory is different. The impact will be significant in a set-up involving multiple products and the huge material quantity.

Similarly, in case of depreciation accounting Indian GAAP provides flexibility to firms in deciding its depreciation policy. The two most widely used depreciation methods are straight line method (here after SLM) and written down value method (here after WDV). Like inventory valuation policy, depreciation policy is completely at the discretion of firm, the choice of depreciation method (SLM or WDV) have an impact on the reported values of assets and depreciation expense. For example, for an asset with an economic life of five years and acquisition cost of Rs. 5,00,000 book value after one year of acquisition will be Rs. 4,00,000 following SLM and Rs. 3,75,000 following WDV. Also, the depreciation amount will vary with the

choice of depreciation policy, with SLM it is Rs. 1,00,000 and with WDV it is Rs. 1,25,000.

ii. Accounting Method – Accounting framework for several accounting items provides choice of accounting treatment to the firm. For example, accounting treatment for research and development (here after R&D) cost as per accounting standard-26 (here after AS-26) on intangible assets, states that cost incurred in research phase should be treated as an expense and development phase cost may be capitalized. But, it is left entirely up to firm to decide at which stage of R&D research phase will end and development phase will begin. This practically leaves R&D cost's accounting treatment at the discretion of the firm.

iii. Accounting Estimates – For the preparation of financial statements firms are required to make various estimates, which may vary from firm to firm. Few areas where accounting estimates are required are provision for doubtful debts, revised economic life of assets etc. With almost similar transactions but different estimates by firms, the reported values in the financial statements may vary.

Thus, accounting choice of a firm has influence on the reported earnings of the firm. In the present note a hypothetical firm is considered which trades in a single product. The note highlights a situation where the firm has undertaken few transactions in a given accounting year and has to make several accounting decisions. The emphasis of the note is to highlight that how choice of accounting decisions made by a firm will influence its reported earnings. The further note has four sections; subsequent section presents set of transactions undertaken by the firm followed by section on set of accounting choice available. Section-IV provides accounting treatment to various items under all the possible accounting choice combination and the last section provides data analysis and concludes the study.

II. SET OF TRANSACTIONS

I. Inventory Purchase Schedule

Day	Units	Rate (in Rs.)	Value (in Rs.)
1	1000	50	50000
2	2000	45	90000
3	750	52	39000
4	2500	43	107500
5	200	55	11000

As per table-I, inventories were purchased at five different rates, in such a situation there is a need to assume FIFO or WA for the valuation of inventory. As mentioned earlier this inventory valuation choice is up to firm, they may go with FIFO or WA.

I. Constructed and commenced use of fixed assets worth Rs. 5,00,000

on first day of the accounting year

- ii. 3,870 units sold at a price of Rs. 75. Total sales value is Rs. 2,90,250 out of which Rs. 69,600 is credit sales.
- iii. Paid Rs. 50,000 for an advertising campaign.

III. SET OF ACCOUNTING CHOICE

With regard to accounting choice, firm has to make decisions regarding inventory valuation policy (FIFO or WA), depreciation policy (WDV or SLM). Accounting estimates are required for ascertaining economic life of self-constructed asset and creating provisions for doubtful debt and also firm has to decide its accounting treatment for the advertising cost. Thus we can see below following possible accounting options exist for the firm:

- i. Accounting policy(s):
 - a. Inventory Valuation Formula-
 - Option I: FIFO
 - Option II: Weighted average
 - b. Depreciation Policy-
 - Option I: Written down value (applicable rate 15%)
 - Option II: Straight Line Method
- ii. Accounting estimate(s):
 - a. Economic life of fixed assets-
 - Option I: 5 years
 - Option II: 7 years
 - b. Provision for Doubtful Debts-
 - Option I: Create at 3% level
 - Option II: Zero provisions
- iii. Accounting treatment(s) (wherever management discretion is allowed)
 - Treatment of advertisement cost-
 - Option I: Capitalize over 2 year period
 - Option II: Capitalize over 3 years period

With the above mentioned accounting choices we can see following (see table-II) possible accounting combinations exists:

Accounting Choice No.	Inventory Valuation Policy	Provision for Doubtful Debtor	Depreciation Policy	Economic Life of fixed asset in years	Capitalization period for Advertisement in years
1	FIFO	YES	WDV	5	2
2	FIFO	NO	WDV	5	2
3	FIFO	YES	SLM	5	2
4	FIFO	NO	SLM	5	2
5	FIFO	YES	WDV	7	2
6	FIFO	NO	WDV	7	2
7	FIFO	YES	SLM	7	2
8	FIFO	NO	SLM	7	2
9	FIFO	YES	WDV	5	3
10	FIFO	NO	WDV	5	3
11	FIFO	YES	SLM	5	3
12	FIFO	NO	SLM	5	3
13	FIFO	YES	WDV	7	3
14	FIFO	NO	WDV	7	3
15	FIFO	YES	SLM	7	3
16	FIFO	NO	SLM	7	3
17	WA	YES	WDV	5	2
18	WA	NO	WDV	5	2
19	WA	YES	SLM	5	2
20	WA	NO	SLM	5	2
21	WA	YES	WDV	7	2
22	WA	NO	WDV	7	2
23	WA	YES	SLM	7	2
24	WA	NO	SLM	7	2
25	WA	YES	WDV	5	3
26	WA	NO	WDV	5	3
27	WA	YES	SLM	5	3
28	WA	NO	SLM	5	3
29	WA	YES	WDV	7	3
30	WA	NO	WDV	7	3
31	WA	YES	SLM	7	3
32	WA	NO	SLM	7	3

IV. ACCOUNTING TREATMENT

- i. Inventory valuation policy – As mentioned earlier, the choice is between FIFO and WA. First let us understand the situation regarding valuation of inventory in this case. Here in total 6450 units of inventory were purchased, at different rates, out of which 3870 units were sold, now the issue is how to calculate value of 3870 units sold and 2580 units of closing inventory. Thus a need arises to make an assumption with regard to flow of inventory, FIFO or last-in–first-out (hereafter LIFO). We will only talk about FIFO; since LIFO is not permitted by Indian GAAP (US GAAP permits the use of LIFO). In FIFO with regard to flow of inventory it is assumed that inventory coming in (or purchased) first will be issued (or sold) first. It may be noted that this is merely an accounting assumption and has nothing to do with the actual movement of inventory in the firm. We need to make such assumptions when inventories are purchased at different rates, like the situation in this case. With FIFO value of COGS is Rs. 1,84,160 and value of closing inventory is Rs. 1,13,340, whereas, with WA value of COGS is Rs. 1,78,500 and value of closing inventory is Rs. 1,19,000. It may be noted that COGS is an expense item in the income statement, and the difference between the COGS values as per FIFO and WA is Rs. 5,660 (Rs. 1,84,160 – Rs. 1,78,500). It is observed that the selection of inventory valuation method influences COGS value which in turn influences reported earnings.
- ii. Depreciation policy and economic life of asset– For ascertaining depreciation value we need to consider both depreciation policy and economic life of the asset. In this case with respect to depreciation policy we have to choose between SLM and WDV and two options exist for economic life of assets, 5 years and 7 years. Thus, following possible combination are possible:
 - a. SLM with 5 years of economic life
 - b. SLM with 7 years of economic life
 - c. WDV with 5 years of economic life
 - d. WDV with 7 years of economic life

WDV is based on depreciation rate as prescribed, in this case 15%, thus economic life will not affect the depreciation value if we go with WDV. Thus, with effectively three different combinations, in first year depreciation value will be as follow:

 - a. SLM with 5 years of economic life: Rs. 1,00,000
 - b. SLM with 7 years of economic life: Rs. 71,429
 - c. WDV with 5 (or 7) years of economic life: Rs. 75,000

It may be observed selection of depreciation policy and estimation of economic life has an effect on the depreciation value, which in turn influences reported earnings.
- iii. Provision for doubtful debt – As per conservatism principle of accounting, an accountant should always provide accounting treatment for any anticipated loss or expense. Creating provisions for doubtful debt is one of the applications of conservatism principle. In this case total sales value is Rs. 2,90,250 out of which Rs. 69,600 is credit sales. It is entirely at the discretion of management to decide upon the level at which provision for doubtful debt to be created, if management wish they may not even create such provisions. In this case we have two options, first to create provisions at 3% and second not to create provision for doubtful debt. At 3% level, amount of provision will be Rs. 2,088. Provisions for doubtful debt is an expense item in the income statement, thus creation of such provisions will influence the reported earnings.
- iv. Advertising Expense – In this case we have to decide capitalization period for the advertising expense of Rs. 50,000. The options available are 2 years and 3 years. With 2 years and 3 years capitalization period, advertising expenses will be Rs. 25,000 and Rs. 16,667 respectively in the first year. It may be observed that the selection of capitalization period affects the amount of advertising expense charged to given year, which in turn will influence the reported earnings.

V. DATA ANALYSIS

Table-III provides earnings (profit/loss) for all the different accounting choice. It may be observed that for the same set of transaction when we calculate earnings with different accounting choice, the resultant earnings figure is different. Interestingly the variation is so high that out of 32 different cases, 8 resulted into loss whereas 24 cases reported profit. Accounting choice number-3 resulted into maximum loss of Rs. 20,998 whereas highest profit of Rs. 23,654 was reported in accounting choice number-32, the difference between the earnings reported by these two accounting choices is Rs. 44,652. Table-IV provides

descriptive statistics for various accounting items in the case, the range, measured as the difference between maximum and minimum

value of the item, for each of the item clearly signifies the effect of accounting choice on the accounting item.

Table III
INCOME STATEMENT WITH DIFFERENT ACCOUNTING CHOICE

Accounting Choice No.	Revenue (in Rs.)	COGS (in Rs.)	Provision for Doubtful Debtor (in Rs.)	Depreciation Expense (in Rs.)	Advertisement Expense (in Rs.)	Total Cost (in Rs.)	Profit / Loss (in Rs.)
1	290250	184160	2088	75000	25000	286248	4002
2	290250	184160	0	75000	25000	284160	6090
3	290250	184160	2088	100000	25000	311248	(20998)
4	290250	184160	0	100000	25000	309160	(18910)
5	290250	184160	2088	75000	25000	286248	4002
6	290250	184160	0	75000	25000	284160	6090
7	290250	184160	2088	71429	25000	282677	7573
8	290250	184160	0	71429	25000	280589	9661
9	290250	184160	2088	75000	16667	277915	12335
10	290250	184160	0	75000	16667	275827	14423
11	290250	184160	2088	100000	16667	302915	(12665)
12	290250	184160	0	100000	16667	300827	(10577)
13	290250	184160	2088	75000	16667	277915	12335
14	290250	184160	0	75000	16667	275827	14423
15	290250	184160	2088	71429	16667	274344	15906
16	290250	184160	0	71429	16667	272256	17994
17	290250	178500	2088	75000	25000	280588	9662
18	290250	178500	0	75000	25000	278500	11750
19	290250	178500	2088	100000	25000	305588	(15338)
20	290250	178500	0	100000	25000	303500	(13250)
21	290250	178500	2088	75000	25000	280588	9662
22	290250	178500	0	75000	25000	278500	11750
23	290250	178500	2088	71429	25000	277017	13233
24	290250	178500	0	71429	25000	274929	15321
25	290250	178500	2088	75000	16667	272255	17995
26	290250	178500	0	75000	16667	270167	20083
27	290250	178500	2088	100000	16667	297255	(7005)
28	290250	178500	0	100000	16667	295167	(4917)
29	290250	178500	2088	75000	16667	272255	17995
30	290250	178500	0	75000	16667	270167	20083
31	290250	178500	2088	71429	16667	268684	21566
32	290250	178500	0	71429	16667	266596	23654

Table IV
DESCRIPTIVE STATISTICS

Particulars	Revenue (in Rs.)	COGS (in Rs.)	Provision for Doubtful Debtor (in Rs.)	Depreciation Expense (in Rs.)	Advertisement Expense (in Rs.)	Total Cost (in Rs.)	Profit / Loss (in Rs.)
Mean	290250	181330	1044	80357.25	20833.5	283564.75	6685.25
Range	0	5660	2088	28571	8333	44652	44652
Minimum	290250	178500	0	71429	16667	266596	-20998
Maximum	290250	184160	2088	100000	25000	311248	23654

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