Current Purchasing Power and Its Utilisation on The Companies (With Special Reference to Indian Steel Companies)

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ABSTRACT This paper investigates the use of inflation accounting by current purchasing power method and its effects on financial statements of steel companies in India. Therefore the annual reports of 8 steel companies listed in Bombay Stock exchange, India has been collected. All the companies prepare the annual reports in historical cost method; therefore conversion to Current Purchasing Power (CPP) has been done. Then the ratios were calculated on both historical cost and CPP of financial statements to form two sets of ratios. An analysis of paired sample t test has been conducted on some financial ratios of these companies to see the differences between two methods. At the end the results show that a significant difference between adjusted cost based financial ratios and historical cost based financial ratios occurs only for return on equity (ROE) and return on asset (ROA) and there is no significant change in operating profit ratio (OPR), current ratio (CR) and quick ratio (QR).

INTRODUCTION:

Financial statements are usually reported in the traditional accounting framework commonly referred to as historical cost accounting, in which money is based as a unit of measures. In times of inflation the purchasing power of money is falling and thereby, this unit of measures does not have a constant value. As such, in accounts based on historical cost income, expenditure, assets and liabilities have a mixture of value depending on the date at which each item was originally brought into the accounts. During a period of rising prices, financial statements based on historical cost do not adequately portray financial position.

There are three potentially serious problems:

- An erosion of the equity base may not be clearly recognized;
- The assets of the business will tend to be understated; and
- Any gains and losses from holding monetary items will not be recognized.

The distorting effects of inflation on the conventional financial statements can be severe. Even relatively low inflation rates can have significant cumulative effect overtime. To combat the problem, various methods of accounting for inflation have been proposed and there has been much debate as to which should be adopted.

At the heart of the debate lies the problem of equity maintenance and, in particular, how equity maintenance should be defined. By resolving this problem, other problems, such as the way in which profit is measured and how assets should be reported, can then be resolve financial transactions occurring at different dates will be expressed in terms of their purchasing power at a single, common date – the end of the accounting period. This is done by adjusting for the change in the price index between the date of the transaction and the end of the accounting period. Profit available for distribution will be derived by expressing both the revenue received and the cost of the goods sold for the period in terms of their current (end-of-accounting-period) purchasing power. The cost of assets acquired will also be expressed in terms of their current purchasing power.

The sales revenue is already expressed in terms of current purchasing power as the sale of inventories took place on the last day of the accounting period. The cost of sales figure is adjusted as the inventories were acquired at an earlier date. Where there are lots of sales and purchases that accrue evenly over the period, an average index for the period is used.

Cash has not been adjusted as it is a monetary item that stays fixed irrespective of changes in the purchasing power of the monetary items. (There is no loss on holding cash during the period as it was received at the end of the month.)

The CPP approach is often commended for its reliability. The historic cost of items is normally used as the basis for making adjustments and the adjustments are made using an objective index. Inflation is usually estimated using the Inflation rate. Inflation rate is usually calculated as the percentage change in a Price Index year on year. Usually Consumer Price Index is considered the ideal price index for calculating inflation rate. But in India Wholesale Price Index or WPI released by the Reserve Bank of India is considered for calculating the Inflation rate of the Indian National Rupee.

RESEARCH METHODOLOGY:

The researcher has selected 8 steel companies in India for the purpose of study by simple random system, So 5 year's annual reports (balance sheet and profit and loss account) of these companies for the periods of

2005-06 to 2010-11 have been taken from published data in Bombay Stock Exchange, for the purpose of data collection. All the companies prepares financial statements according to historical cost accounting, therefore researcher have converted the figures of financial statements into Current purchasing Power (CPP) basis, and used WPI (Wholesale Price Index), and then according to related formulas conversions have been done. CPP method seeks to use general purchasing power price of money rather than specific price indices to convert the historical figures into relevant figures of purchasing power for the end of the period in review. In simple term, the conversion of historical figures into CPP figures is as follows:

Multiplying the historical cost figures by the price index at the end of the period, and divide by the index which existed at the date of original transaction

The conversion process is discussed below in following 3 sections:

a) Balance sheet at the beginning of the year b) Profit and loss account for the year and
c) Balance sheet at the end of the year And net gain or loss on monetary assets also should be calculated.

For data analyzing has used 5 ratios such as; OPR (operating profit ratio, ROA (return on assets), ROE (return on equity) and, CR (current ratio) and QR (quick ratio). For analyzing the

variables, the independent T-test has been used, to see the difference between each variable in historical accounting and in inflation accounting.

RESULT:

The following table is showing mean and Std. Deviation of six variables NPR, GPR, OPR, ROE, ROI, and ROWC as per historical cost accounting and inflation accounting:

Table: The mean and standard deviation of inflation and historical NPR in two ways Group Statistics. (H=Historical, I= Inflation)

Group Statistics					
		N	Mean	Std. Devi.	Std. E. Mean

OPR	H	40	20.5387	12.03954	1.90362
	I	40	15.6790	10.98890	1.73750
ROI	H	40	12.7269	16.85148	2.66445
	I	40	5.6370	10.97549	1.73538
ROE	H	40	14.2068	14.59251	2.30728
	I	40	6.6762	13.97364	2.20943
CR	H	40	180.3340	105.27713	16.64578
	I	40	181.7313	105.47906	16.67770
QR	H	40	124.2770	101.30746	16.01812
	I	40	124.2770	101.30746	16.01812

Table 2
Independent t- test for variables between the two methods of historical cost and CPP

Independent Samples Test									
	Levine's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Eros.	95% Confidence Interval of the Difference	
								Lower	Upper
OPR	1.043	.310	1.886	78	0.36	4.85975	2.57734	- 27133	9.99083
ROI	4.975	.029	2.230	78	.029	7.08988	3.17976	.75947	13.42028
ROE	.414	.522	2.357	78	.021	7.53050	3.19454	1.17066	13.89034
CR	.000	.982	-.059	78	.953	-1.39725	23.56327	-48.30812	45.51362
QR	.000	1.000	.000	78	1.000	.00000	22.653.4	-45.09873	45.09873

CONCLUSION:

The p- values obtained by t test, shows that amounts of ROI and ROE are smaller than 0.05, therefore we can say there are significant difference between these two ratios as per historical cost accounting and current purchasing power method. Other p- values are all less than 0.05, so there is no significant for difference between two methods

The analysis of result shows that All the profitability ratios (OPR, ROI, ROE) declined in CPP compare to historical accounting, but the result were double in ROE and ROA as the numerator were understated and denominator were overstated after adjustment. Since the fixed assets are valued at historical cost (in all steel companies), the assets are stated at a much lower figure than their current replacement costs. This makes a company vulnerable to takeover bids and leads to lower valuations for the shareholders. According to descriptive statistics calculations, the current ratio has increased.

The result in current ratios is a sign that inventory investments among companies' assets can reach to low amounts. Liquidity ratio is current asset divided by current liabilities. Current items are largely monetary.

The nonmonetary item among current items is inventories, that this amount is low in this work. Change in liquidity ratios will fluctuate depending on their magnitude and the amount of QR was same in both methods as the denominator and numerator figures all are monetary and no need to convert monetary item as they are already in CPP.

REFERENCE [1] Atrill P., Eddie McLaney, "Financial Accounting for Decision Makers", 6th edition, P.375 | [2] Clifford F. T. and Thomas S., (1987), "What Did Inflation Accounting Tell Us?" Journal of Accounting, Auditing and Finance 2(4), 375-391 | [3] Gupta, Ramesh (1983), "Inflation Accounting" Tata McGraw Hill publishing company limited, New Delhi. | [4] ICAEW. (1974) "Insidious Effect of Inflation on Company Performance", Management Accounting. | [5] Joe Ben Hoyle and CJ. Skender (2009) Financial accounting by publication date; December. | [6] J.S. Arora (1988), Inflation Accounting in India Corporate Practices and Perceptions of Chartered Accountants. | [7] Jubash Chandar & J.S.Arora (1992) Inflation Accounting in India, Perceptions of Chartered Accountants" | [8] Jeffrey. j. Archambault (1999) "A cross-national test of determinants of inflation accounting. | [9] Karapinar A. and Zeif F., (2005), "The effect of Inflation accounting on Financial Statement | Analysis", pp. 26, 49-72. | [10] Miller, E. (1980), Inflation Accounting, New York: Van Nostrand Reinhold. |