

INFLATION ACCOUNTING (CPP METHOD) AND PROFITABILITY RATIOS IN CASE OF STEEL COMPANIES IN INDIA

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ABSTRACT

The introduction of current purchasing power (CPP) method is one of the greatest revolutions in the field of accounting. It involves the restatement of some or all of the items in the historical financial statement for changes in the general price level. Under current purchasing power (CPP) method, any established and approved general price index is used to convert the values of various items in the balance sheet and profit and loss account. This method helps to present financial statement in terms of units of equal purchasing power. The important aim of this research is to see the relationship between inflation accounting and financial measurement, and assess the impact of inflation on financial statements of Indian Steel companies for the period of 5 fiscal years from 2006-07 to 2010-11. For this purpose the researcher has used CPP method for converting historical figures to inflation accounting, and also the WPI (wholesale price index) that has been published by Reserve Bank of India. For analysis of data the researcher has used profitability ratios; NPR, GPR, OPR, ROI, ROE, ROWC. The result exhibited that there are significant relationship between inflation accounting and financial measurement. And also it showed that all profitability ratios have declined in CPP method compare with historical cost accounting.

Keywords: *Steel Company, CPP, profitability ratios, financial statement.*

Introduction:

Accounting is an information system and its ultimate objective is to report such information to the users which may be helpful to them in their relevant decisions. The user's decision oriented approach to corporate reporting has been widely advocated in literature. All these documents emphasize that corporate financial reports should be designed in such a way so as to present the information which may be used by various users' groups in their respective decisions. The objectives that prescribe statements of earnings and financial position are based on the user's need to predict, compare and evaluate earning power. Under historical cost accounting (HCA) the amounts are recorded by business at the price at which they are acquired and there will be no change in their values even if the market values of such assets change. The most significant and persistent complaint about published financial statements in recent years has been that they do not recognize the economic facts of life. In most countries, primary financial statements are prepared on the historical

cost basis of accounting without regard either to changes in the general level of prices or to increase in specific prices of assets held, except to the extent that property, plant and equipment and investments may be revalued.

Historical cost accounting is all right, if monetary unit is stable and there is no erosion in its value as a result of inflation. Inflation refers to state of continuous rise in prices. It brings downwards changes in the purchasing power of money unit. Thus, financial statements prepared without taking into account the change in purchasing power of the monetary unit lose their significance. Inflation accounting is a system of recording all transaction on their current market price which is calculated by price index." Inflation is a reality throughout the world. Yet its effects go unrecognized in financial statements prepared in accordance with generally accepted accounting principles in most of the countries. Ignoring general price level changes in financial reporting creates distortions in financial statements such as: -Reported profits may exceed the earnings that could be distributed to

shareholders without impairing the company’s ongoing operations.

- The asset values of inventory, equipment and plant do not reflect their economic value to the business.
- Future earning is not easily projected from historical earnings.
- The impact of price changes on monetary assets and liabilities is not clear.
- Future capital needs are different to forecast and may lead to increased leverage, which increases the business’s risk.
- When real economic performance is distorted, these distorted lead to social and political consequences that damage business.

Review of literature:

It was the Accounting Principles Board in the United States conducted the test on the effects of inflation on the profitability of a number of firms operating in the U.S [(Rosenfeld P (1969 p. 45-51)]. It also concerns the evaluation of the effects of inflation upon the performance of economic units. Most empirical research is of the latter kind. Also a research was conducted by Okumus, he evaluated the effect of inflation on measures of profitability in Turkish Banking [H. Saduman Okumus (2002 Vol.13)], In this paper, profitability ratios (ROA, ROE and NIM/AA) based on pre- and post-inflation adjusted financial statements, are compared for the Turkish banking industry over the period 1989-1995. It appears that inflation adjustment, based on the CPP procedure, decreased the level profitability and altered the ranking of profitability ratios by bank groups significantly. This reflects the importance of considering the potentially distorting effects of inflation. Norby (1983 p. 33-39) and Smith and Anderson (1986 p. 107-115) have studied correlations between historical-cost income and imputed constant dollar income of a sample of U.S. firms.

Research Methodology:

The researcher has selected 8 steel companies in India for the purpose of study. So 5 years 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 profitability ratios such as; NPR (net profit ratio), OPR (operating profit ratio), GPR (gross profit ratio), ROA (return on assets), ROE (return on equity) and ROWC (return on working capital). For analyzing the variables, the Karle Pearson correlation of coefficient has been done, to see the relationship between NPR as an indicator of inflation accounting and independence variable and other ratios as indicator of financial measurement and dependent variables.

Result and discussion:

According to the result obtained in the study: The following table is showing mean and Std. Deviation of six variables NPR, GPR, OPR, ROE, ROI, and ROWC under CPP method

Descriptive statistic			N= 8 x5
	Mean	Std. Deviation	N
NPR	7.9253	10.41613	40
GPR	40.1882	21.14473	40
OPR	15.6790	10.98890	40
ROI	5.6370	10.97549	40
ROE	6.6762	13.97364	40
ROWC	30.3960	326.04754	40

Correlation coefficient between NPR and other variables in CPP method

NPR	NPR	GPR	OPR	ROA	ROE	ROWC
Pearson	1	0.96 2	0.62 6	0.832	0.87 1	0.581
Sig (2-tailed)		0.00 2	0.00 0	0.000	0.00 0	0.001
N	40	40	40	40	40	40

Conclusion:

The analysis of result shows that all the p-values are less than 0.01, so the correlation is significant at 0.01 levels, and the hypothesis will approve with % 99 confidences. The NPR has been selected as the indicator of inflation accounting, and other ratios as indicators of financial measurement. Therefore we can say there are significant relationship between inflation accounting (CPP) and financial measurement of steel companies in India.

All the profitability ratios 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.

The variation in performance, when measured on inflation and historical cost basis indicates that inflation, which is a persistent phenomenon in the recent decades, has significant impact on the performance and financial structure of an enterprise.

The aim to tackling the impact of inflation on financial reporting is to provide better information, in particular to help the users to assess prospective cash flow, to measure the performance of the company and to provide more helpful data on the erosion of operating capability and changes in general purchasing power.

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