

## Research Paper



www.eprawisdom.com

## A STUDY OF RELATIONSHIP BETWEEN INFLATION ACCOUNTING AND COMPANY'S PERFORMANCE MEASUREMENT

<b>Dr. B.Nagaraju<sup>1</sup></b>	<sup>1</sup> Associate Professor and Chairman of Commerce Department, University of Mysore, Mysuru, Karnataka, India.
<b>Zakiyeh Ghavinezhad Lotf Abadi<sup>2</sup></b>	<sup>2</sup> Research Scholar Department of Study in Commerce, University of Mysore, Mysuru, Karnataka, India.
<b>Behnaz Neshati<sup>3</sup></b>	<sup>3</sup> Research Scholar Department of Study in Management, University of Mysore, Mysuru, Karnataka, India.

### ABSTRACT

**T**his study is examine to learn the force of inflation and the company's performance measurement. And to learn the methods of preparing financial assertions according to inflation accounting. The population is total steel companies in India from the years "2006- 2007 to 2010-2011." There are 20 stainless steel companies in India. The sample size is CRUISE and 7 more metal companies (Tata steel, Jindal steel, Bhushan steel, Jsw steel, Viza, Ispat and Vizag) in India. Pertaining to selecting the businesses, the investigator has used Simple Randomly Sample (SRS) method. Researcher has used the primary and secondary resources of data for the research. Statistical tools which has used in this study is Statistical Package for the Social Sciences (SPSS).

**KEYWORDS:** accounting, inflation accounting, performance measurement.

### INTRODUCTION

Inflation Accounting is money related detailing method which records the results of swelling on the monetary articulations that an organization gets ready and distributes toward the finish of the budgetary year. It depends on the presumption that the money is steady. Be that as it may, in specific nations this supposition is not substantial particularly for specific nations which are encountering hyperinflation and the conformities are done by the adjustments in the acquiring force of the masses. Expansion bookkeeping was polished in the US by the American Institute of Certified Public Accountants for more than 50 years. Amid the time of Great Depression many organizations remade their budgetary reports recording the expansion in them. Amid those 50 years many organizations were urged to record the value level balanced proclamations set up of cost-

based money related explanations. The FSAB or the Financial Accounting Standards Board raised a proposition of distributing the value level conformity proclamations which was pulled back by them later because of specific issues. Bookkeeping is an information system and its conceivable plan is to report such information to the customers which may be valuable to them in their corresponded decisions. Development is described as an uneven and decently pointed and unanticipated addition in the measure of money regarding the measure of exchange business which constantly realizes a decline in the general securing influence.

The prevailing part basic and consistent issue about conveyed financial proclamations in generally years has been that they just don't see the monetary it



of life. In different nations, key budgetary exchanges are set up on the specific cost prelude of bookkeeping without respect either to changes in our general level of expenses to increment particularly costs of focal points made, yet to the criticalness that property, plant and hardware and theories might be revalued. Under certain cost bookkeeping (HCA) the sums are recorded by business at the cost at which they are grabbed and there will be no updates made on their qualities paying little regard to the probability that the market estimations of such resources change Under chronicled cost bookkeeping (HCA) the totals are recorded by business at the cost at which they are gotten and there will be no congruity in their qualities paying little regard to the probability that the market estimations of such resources change.

### History of inflation accounting:

History of Inflation Accounting is a significant long one. The adjustments in the value list are recorded in the money related proclamations by the procedure of expansion bookkeeping. Bookkeeping is a procedure of monitoring a business association's budgetary exchanges. It has advanced through a drawn out stretch of time. Numerous financial experts have contributed towards the development of the bookkeeping procedure. Same has occurred with bookkeeping of swelling. The historical backdrop of bookkeeping goes back to the main portion of the twentieth century. The bookkeepers of USA and UK have devoted quite a bit of their time in building up the procedure of expansion bookkeeping. It got to be distinctly critical since the time the economies of different nations started to face expansion as a genuine obstacle to their monetary structure. From that point on the impacts of swelling on money related articulations started to be recorded. This procedure has confronted a few changes and has advanced from that point forward.

### REVIEW OF LITERATURE

The connection with the review of researches, research-papers pertaining of Inflation- Accounting. The review was made from the books on Inflation-Accounting, Journals and Theses on the topic. Review of Literature is helpful in determining the objectives of the study.

**Naresh Kumar (1982)** in his study "some aspects of Inflation Accounting" attempted to examine theoretically various methods and applied General Purchasing Power Accounting and Current Cost Accounting methods of inflation accounting on HOCL

and Tata chemicals Ltd. in order to measure the magnitude of distortions caused by Price Level changes on:

- a) Growth in sales, income and capital employed
- b) Payment of dividend and taxes

**J. S. Arora (1988)** in his research study "Inflation Accounting in India-corporate practices and perceptions of Chartered Accountants" did an exploratory work and attempted to analyze the view of local Chartered Accountants regarding price level accounting.

**Subash Chander and J. S. Arora (1992)** in their research paper "Inflation Accounting in India: perceptions of Chartered Accountants attempted to analyze the views of Chartered Accountants regarding the effects of inflation on various aspects of accounting and auditing. A survey of the empirical studies conducted in the field of accounting for changes in India reveals that no comprehensive study has been undertaken to examine the corporate practices and regards accounting for price changes in private and public sector. Besides this, no attempt has been made to know the perceptions of the Chartered Accountants and corporate executives regarding this vital issue. Since the Chartered Accountants are both preparers as well as auditors of financial statements hence it is necessary that their views should be analyzed.

**H. Saduman, Okumus (2002)** "The effects of Inflation on measures of profitability in Turkish Banking", this aims to demonstrate the distorting effects of inflation on the financial statements of Turkish banks, and the corresponding effects on measures of profitability performance. To this end, Current Purchasing Power Accounting with a variant of the Brazilian method (CPPBM) is employed. It is observed that after inflation adjustment(via CPPBM) the level of profitability in Turkish banking over the period 1989-1995 is lower (overall) with respect to profitability measures calculated using historical cost based financial statements. In addition to this, a significant change in ranking by bank group, according to profitability performance is noted. This clearly reflects the importance of considering the potential distorting effects of inflation on the financial statements of Turkish banks. **Bhasin (1986)** [46] in his study attempted to measure and record by applying suitable methods, the effects of price level changes on the historical cost accountants of Bharat Heavy Electronics Limited. The need for attention to be paid to this subject was also felt by businessmen, accountants, managers and the

Government of India. The work is a case study of Bharat Heavy Electronics Ltd. (BHEL), the only company which has been reporting effects of price level changes since 1975-76 regularly. The study is essentially an exploratory one. It covers a period of nine years from 1975-76 to 1983-84. The officially published annual reports of BEHL formed the main source of information and other accounting data. Besides, a questionnaire was also prepared to collect information in respect of such accounting practices as depreciation method, inventory valuation method inflation accounting practices and other information generally not available in the annual reports. The Wholesale Price Indices are taken from the Bulletin of such indices published by the office of the Economic Advisors, Government of India, New Delhi.

**Gupta (1983)** in his work titled "inflation accounting" provided the self-contained explanation of inflation accounting. He described that depending on the objective to be served, there are primarily three ways to deal explicitly with changing prices viz; Current Purchasing Power method (CPP) Current Cost Accounting and Specific and General Price Level Accounting (SPLA) (GPLA) which combines CPPA and CCA. Each alternative method involves a choice of the measurement unit and the method of valuation. The choice of the measurement unit may be historical cost or current cost.

### **OBJECTIVE OF THE STUDY**

1. To learn the force of inflation and the company's performance measurement.
2. To learn the methods of preparing financial assertions according to inflation accounting.

### **HYPOTHESES PREPARATION**

A speculation is a proposed justification for a phenomenon. Planned for a theory to be a logical speculation, the logical strategy requires that one may test it. Researchers by and large construct mechanical speculations in light of past findings that can't palatably be clarified with the accessible logical hypotheses however the words "hypothesis" and "theory" are often used synonymously a logical speculation is entirely unexpected from a logical hypothesis. A logical speculation is a proposed clarification of a wonder which still should be thoroughly tried. In examination, a logical hypothesis has experienced concentrated testing and is for the most part acknowledged to be the exact portrayal behind a perception. A working hypothesis is a provisionally accepted hypothesis suggested for further research.

H1= Disclosure of financial claims as per inflation accounting helps the users of financial statements for making effective decisions for protection of operating capability of the organization.

### **RESEARCH METHODOLOGY**

The investigator uses the following technique:

#### **Population**

The population is total steel companies in India from the years "2006- 2007 to 2010-2011." There are 20 stainless steel companies in India.

#### **Selection of sample**

The sample size is CRUISE and 7 more metal companies (Tata steel, Jindal steel, Bhushan steel, Jsw steel, Viza, Ispat and Vizag) in India. Pertaining to selecting the businesses, the investigator has used Simple Randomly Sample (SRS) method; away of 20 steel companies in India, 8 companies and mainly SAIL have been selected by arbitrary, from Bombay Stock market. All the said companies have prepared the twelve-monthly reports according to historical basis.

#### **Data Collection:**

The researcher has used the primary and secondary resources of data for the research below:

#### **Secondary sources:**

- 1) Annual reports of companies
- 2) Information published by government department, Reserve Loan Company of India
- 3) Various libraries situated in India.
- 4) Related books and journals, various articles
- 5) Internet.

For collection of data I possess selected the twelve-monthly the companies that all of them have been prepared as per historical accounting method, and then among them selected ratios for 5 years have been determined. That is one section of the area of the research data. For the purpose of conversion of historical figures to pumping accounting, the researcher has chosen CPP.

The creation of current purchasing power (CPP) method is one of the greatest revolutions in neuro-scientific 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 electric power (CPP) method, any founded and approved general price index can be 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 conditions of units of equal purchasing power. According to CPP, opening balance sheet and closing balance sheet adjusting is needed

and also for profit and reduction account, depreciation adjustment, cost of goods sold adjusting, gain on borrowing and loss on holding money would have been determined. Again I calculated the same ratios for current purchasing power data. This kind of is the other part of the research data. Therefore with these data's I discussed about the research hypothesis.

## STATISTICS IN RESEARCH

Statistical Package for the Social Sciences (SPSS) is an extensive and versatile statistical evaluation and data management solution. SPSS usually takes data from almost any kind of document and use them to create tabulated reports, charts, and plots of distributions and trends, descriptive statistics, and conduct complex statistical studies. SPSS is available from several platforms; windows, Mac pc and the UNIX systems.

### Hypotheses Test:

#### Hypotheses No.1:

There is a significant relationship between inflation accounting and company's performance measurement.

#### Calculated variables:

##### 1. Net Profit Ratio (NPR)

$$NPR = \frac{\text{NET PROFIT}}{\text{NET SALES}} \times 100$$

The Net profit ratio (NPR) has been selected as an indicator of inflation accounting used in steel companies and so as on independent variable. GPR, OPR, ROI, ROE and ROWC, have been selected as dependent variables and indicators of performance measurement.

##### 2. Gross Profit Ratio (GPR)

$$GPR = \frac{\text{GROSS PROFIT}}{\text{NET SALES}} \times 100$$

##### 3. Operating Profit Ratio (OPR)

$$OPR = \frac{\text{OPERATING PROFIT}}{\text{NET SALES}} \times 100$$

##### 4. Return on Working Capital (ROWC)

$$ROWC = \frac{\text{NET PROFIT}}{\text{WORKING CAPITAL}} \times 100$$

##### 5. Return on Equity (ROE)

$$ROE = \frac{\text{NET PROFIT}}{\text{EQUITY SHARES}} \times 100$$

##### 6. Return on Investment (ROI)

$$ROI = \frac{\text{NET PROFIT}}{\text{INVESTMENT}} \times 100$$

### Hypotheses No.1

Disclosure of financial statements as per inflation accounting helps the users for making effective decisions for protection of operating capability of the organization.

Inflation accounting adjusts the figures in the balance sheet on the most basic of a price index, which reflects the current purchasing benefits of the currency.

For the objective of another speculation the specialist is utilizing Karle Pearson Correlation of Ratio. The connection coefficient of the considerable number of factors (NPR, OPR, GPR, ROI, ROE, and ROWC) as each swelling strategy has as of late been taken. As per remain beneath:

Specialist has looked into the relationship between components to the next individual in pumping technique. Accordingly, one of the factors as the autonomous variable is surveyed its association with the rest factors as the reliant variable.

When NPR is as independent adjustable while others as dependent: Connection between NPR with GPR, OPR, ROI, and ROE is Significant at the 0. 01 levels. Connection between NPR and ROWC at the 0. 05 level is significant.

Once OPR is as impartial variable while others as centered: There is significant marriage between OPR with NPR, GPR, ROI, and ROE at 0. 01 levels. Correlation is significant at the 0. 05 levels between OPR with ROWC. - When GPR is as free factor while others as needy: There is a positive relationship between GPR with NPR, OPR, ROI, and ROE at 0. 01 levels and there is no noteworthy relationship between GPR with ROWC.

- When RETURN ON INVESTMENT is as autonomous flexible while others as reliant: The Pearson connection of proportion between ROI with NPR, OPR, GPR, ROI and ROE is noteworthy at 0. 01 and there is no noteworthy marriage between ROI with ROWC.

- When ROE is as autonomous variable while others as reliant: There is a positive relationship between ROE with NPR, OPR, ROI, and ROE at 0. 01 levels and there is no noteworthy relationship between ROE with ROWC.

- When ROWC is as free flexible while others as needy: The relationship is critical at 0. 05 between ROWC with NPR, OPR, and there is no noteworthy relationship between ROWC with GPR, ROI, and ROE.

So, in this hypothesis is acknowledged and we realize

that divulgence of monetary explanations as each expansion bookkeeping helps within clients to take ideal basic leadership.

**Table 1 Correlation coefficient of variables in the inflation method**

		NPR	OPR	GPR	ROI	ROE	ROWC
NPR	Pearson Correlation	1	.945**	.693**	.815**	.890**	.598*
	Sig. (1-tailed)		.000	.000	.000	.000	.002
	N	40	40	40	40	40	40
OPR	Pearson Correlation	.945**	1	.780*	.764**	.807*	.504
	Sig. (1-tailed)	.000		.000	.000	.000	.002
	N	40	40	40	40	40	40
GPR	Pearson Correlation	.693*	.780*	1	.659**	.470*	.149
	Sig. (1-tailed)	.000	.000		.000	.003	.360
	N	40	40	40	40	40	40
ROI	Pearson Correlation	.815**	.764**	.659**	1	.730**	.499
	Sig. (1-tailed)	.000	.000	.000		.000	.201
	N	40	40	40	40	40	40
ROE	Pearson Correlation	.890**	.807**	.470*	.730**	1	.510
	Sig. (1-tailed)	.000	.000	.000	.000		.001
	N	40	40	40	40	40	40
ROWC	Pearson Correlation	.598*	.504	.149	.499	.510	1
	Sig. (1-tailed)	.000	.001	.360	.001	.001	
	N	40	40	40	40	40	40
ROE	Pearson Correlation	.890**	.807**	.470*	.730**	1	.510
	Sig. (1-tailed)	.000	.000	.000	.000		.001
	N	40	40	40	40	40	40
ROWC	Pearson Correlation	.598*	.504	.149	.499	.510	1
	Sig. (1-tailed)	.000	.001	.360	.001	.001	
	N	40	40	40	40	40	40



**Table2: effects of inflation on financial ratios**

Ratio	Formula	Bias of Variables during Inflation	Direction of Bias	Effects of Bias
Current Ratio	Current assets Current liabilities	Historical<PLA historical=PLA	Downward	Pessimistic
Quick or Acid Test Ratio	Quick assets Current liabilities	Historical=PLA Historical=PLA	None	None
Net Profit Ratio	Net profit Net sale	Historical>PLA Historical=PLA	Upward	Optimistic
Operating Profit Ratio	Operating profit Net sale	Historical>PLA Historical=PLA	Upward	Optimistic
Gross Profit Ratio	Gross profit Net sale	Historical<PLA Historical=PLA	Upward	Optimistic
Return on Equity	Net profit Equity Share	Historical>PLA Historical<PLA	Strongly Upward	Optimistic
Return on Investment	Net profit Investment	Historical>PLA Historical<PLA	Strongly Upward	Optimistic
Return on Working Capital	Net Profit Working capital	Historical>PLA Historical<PLA	Upward	Optimistic

## CONCLUSION AND FINDING

- H1 is accepted. Null speculation is rejected

Intended for hypothesis the investigator used correlation coefficient between 6 profitability ratios (NPR, OPR, GPR, ROI, ROE, ROWC) in 6 steps; in each step one of the ratios be as an independent adjustable and others as reliant variables, then calculated the relationship between them. The result imply that there is important association linking the parameters but only between ROWC and other ratios there is no major association. Therefore we can say that the revelation of inflation accounting can help the users to consider maximum decisions about the safety of operating ability of the company. Progression expansion bookkeeping are not from the cost of India, the range of changing costs and its impact on business pay, charge obligation and genuine worth offers an immense degree for further research. Changing costs and conduct of chances of share costs. Offering value level adjusted records and educational prerequisites of the clients.

## REFERENCES

- Arora, J. S. & Subhash chander, "Inflation Accounting in India; Perception of Chartered Accountants", *journal of accounting & Finance*, spring 1992, pp.100-116.
- Bhasin, M.L. "Inflation accounting- Perspective & Prospects", *Indian Management*, September 1986, pp.7-11.
- Gupta, Ramesh, "Inflation Accounting", *Tata McGraw Hill, Publishing Company Limited, New Delhi, 1983.*
- H. Saduman Okumus, "The Effect of Inflation on Measures of profitability in Turkish Banking", *December 2002, Vol. 13.*

## WEBSITES

- [http://inflationdata.com/inflation/Inflation\\_Rate/HistoricalInflation.aspx](http://inflationdata.com/inflation/Inflation_Rate/HistoricalInflation.aspx)