

# **A Study on Inflation Accounting in India**

## Contents for Tables:-

S.R.No.	Contents	Page No.
1	Abstract	3-3
2	Introduction	4-4
3	History of Inflation Accounting	5-5
4	What is Inflation Accounting	6-8
5	What is the need for Inflation Accounting	9-9
6	How Inflation Accounting Works	9-11
7	Types of Inflation Accounting	12-12
8	What if You Don't Use Inflation Accounting	13-14
9	Inflation Accounting Methods <ul style="list-style-type: none"><li>• Current Purchasing Power (CPP)</li><li>• Current Cost Accounting (CCA)</li></ul>	14-24
10	Inflation Adjusted Accounting can Help Make Better Business Decision	25-25
11	Advantage/Merits of Inflation Accounting	25-26
12	Disadvantage/Demerits of Inflation Accounting Inflation Accounting Practices in India's Corporate	27-27
13	Ashok Levland Limited	28-34
14	Bharat Heavy Electricals Limited	34-43

## **Abstract**

The objective of financial reporting is to provide information about an entity which is useful to a wide range of users in making economic decisions. This study empirically investigates the utility of inflation accounting data to investors, by examining the ability of this data to explain the share prices of UK listed companies. Previous research supports a relation between historical cost accounting data and share prices from a conceptual and empirical perspective. Prior evidence from studies on the utility of inflation accounting data to investors is mixed. However, many of these suffer from methodological problems which cast doubts on their ability to evaluate the utility of inflation accounting data. This study overcomes some of the problems encountered in earlier studies and incorporates additional research design features. In evaluating inflation accounting data, this study explores whether or not company policy towards the disclosure of inflation accounting data in the premandatory period is associated with the explanatory power of this data. The investigation was undertaken for 2 periods to discover whether or not a learning lag exists in relation to the inflation accounting data. To achieve the objectives of this study, a recently developed cross sectional valuation model was used. The model incorporates measures from both the balance sheet and income statement, which allows the value relevance of key financial report disclosures to be assessed. The analysis reveals evidence supporting the utility of inflation accounting data to investors. The results show that a company's policy towards disclosing inflation accounting data in the premandatory period is associated with the explanatory power of this

data. The significance of the inflation accounting data appears to be greater for the companies disclosing inflation accounting data in the premandatory period (Supportive Companies), than for companies which commenced disclosure in the first mandatory period (Reluctant Companies). There is also, evidence showing a differential response to the inflation accounting data for the Supportive and Reluctant Companies. The analysis fails to find any evidence of a learning effect in respect of the inflation accounting data.

## **INTRODUCTION**

Since we started understanding things around us, we all used to listen from our Grandparents about the things and articles especially Gold & Ghee being cheaper in their times. That time we used to think that why the things were cheaper in our Grandparents' time and why had they started becoming costlier. So this question would keep us puzzled. But now as we have grown in our knowledge and understanding, we have come to know about the phenomenon of Inflation which in layman's language is known as the state of rising pricing or the falling value of money was the greatest reason behind this.

Now emerges the question that what exactly is the Inflation? Inflation is a global phenomenon in present day times. There is hardly any country in the capitalist world today which is not afflicted by the spectre of inflation. Different economists have defined inflation in different words like Prof. Crowther has defined inflation "as a state in which the value of money is falling, i.e., prices are rising." In the words of Prof. Paul Einzig, "Inflation is that state of disequilibrium in which an expansion of purchasing power tends to cause or is the effect of an increase of the price level." Both the definition have

emphasized on the rising prices of the goods. The basic factors behind the inflation are either the rising demand or the shortening of supply due to any reason.

## **HISTORY OF INFLATION ACCOUNTING .**

In the last few years, inflation accounting has been adopted as a supplementary financial statement in the United States and the United Kingdom. This comes after more than 50 years of debate about methods of adjusting financial accounts for inflation. Accountants in the United Kingdom and the United States have discussed the effect of inflation on financial statements since the early 1900s, beginning with index number theory and purchasing power. Irving Fisher's 1911 book *The Purchasing Power of Money* was used as a source by Henry W. Sweeney in his 1936 book *Stabilized Accounting*, which was about Constant Purchasing Power Accounting. This model by Sweeney was used by The American Institute of Certified Public Accountants for their 1963 research study (ARS6) *Reporting the Financial Effects of Price-Level Changes*, and later used by the Accounting Principles Board (USA), the Financial Standards Board (USA), and the Accounting Standards Steering Committee (UK). Sweeney advocated using a price index that covers everything in the gross national product. In March 1979, the Financial Accounting Standards Board (FASB) wrote *Constant Dollar Accounting*, which advocated using the Consumer Price Index for All Urban Consumers (CPI-U) to adjust accounts because it is calculated every month. During the Great Depression, some corporations restated their financial statements to reflect inflation. At times during the past 50 years standard-setting organizations have encouraged companies to supplement cost-based

financial statements with price-level adjusted statements. During a period of high inflation in the 1970s, the FASB was reviewing a draft proposal for price-level adjusted statements when the Securities and Exchange Commission (SEC) issued ASR 190, which required approximately 1,000 of the largest US corporations to provide supplemental information based on replacement cost. The FASB withdrew the draft proposal.

## **What Is Inflation Accounting?**

Inflation accounting is a special technique used to factor in the impact that soaring or plummeting costs of goods in some regions of the world have on the reported figures of international companies. Financial statements are adjusted according to price indexes, rather than relying solely on a cost accounting basis, to paint a clearer picture of a firm's financial position in inflationary environments. This method is also sometimes referred to as price level accounting.

Inflation accounting is used during times of increasing or plummeting prices in certain areas of the world, usually with respect to multinational corporations and their financial reporting. Most often, it is seen in countries with high inflation. As a result, some accounting standards boards and countries permit or require the companies to restate their financial statements.

Typically, inflation takes place when the money in circulation exceeds the commodities and services production. When this happens, the purchasing power of money diminishes, and prices rise.

International companies apply a unique accounting method in such scenarios, in which the effects of soaring or plummeting costs of goods in certain areas of the world are factored in.

With inflation accounting, accountants consider price indexes rather than only accounting costs to adjust financial statements that paint a more accurate picture of a company's financial position in inflationary environments.

In other words, inflation accounting considers price changes in light of inflationary price increases. Hence, it has become a standard accounting practice in most countries in recent decades.

## **Example of Inflation Accounting**

### **Example #1**

A manufacturing company ABC purchased machinery for ₹10,000 in 2001. In 2009, ABC Company reinstated its financial records using inflation accounting. In 2001, the general price index was 400; in 2009, it was 600. Find the current cost of the machine purchased in 2001.

Therefore,

The current price index is 600

The base price index is 400

The historical cost is ₹10,000

Current costs =  $600/400 \times 10,000 = ₹15,000$ .

In the balance sheet, the closing balance of the land would be ₹15,000, which is the current cost.

### **Example #2**

The XYZ company, involved in construction, purchased the land for ₹5,000 in 1999. In 2000, the XYZ company reinstated its financial records using inflation accounting. Based on a 200 general price index in 1999 and a 300 general price index in 2000, calculate the current cost of a land parcel purchased in 1999.

As a result,

There is a current price index of 300.

The base price index is 200.

The historical cost is ₹5,000.

$300/200 \times 5000 = ₹7,500$  is the current cost.

The current price would be ₹7,500, and the closing balance of the land would be recorded as ₹7,500 on the balance sheet.

## **What is the Need for Inflation Accounting?**

Inflation Accounting is necessary for the following reasons:

- Using the usual accounting system, you can accurately represent the company's position.
- It is possible to differentiate between firms or companies using inflation accounting since inflation affects various firms/companies.
- You can compare companies/firms based on their performance.
- This way, the company's financial position is clear and profits are balanced.
- In addition, it helps calculate depreciation, which provides accurate information and improves decision-making.

## **How Inflation Accounting Works**

When a company operates in a country where there is a significant amount of price inflation or deflation, historical information on financial statements is no longer relevant. To counter this issue, in certain cases, companies are permitted to use inflation-adjusted figures, restating numbers to reflect current economic values.

International Accounting Standard (IAS) 29 adopted by the International Financial Reporting Standards (IFRS) is the guide for entities whose functional currency is the currency of a hyperinflationary economy. IFRS defines hyperinflation as prices, interest, and wages linked to a price index rising 100% or more cumulatively over three years.

Companies that fall under this category may be required to update their statements periodically in order to make them relevant to current economic and financial conditions, supplementing cost-based financial statements with regular price-level adjusted statements.

Inflation or deflation can cause a significant impact on an organization's historical information and financial reports. Due to the relative change in value from inflation/deflation, the financial data ceases to be relevant and, as a result, provides very little use or value to the individuals using them.

Inflationary accounting uses index prices to create a more realistic picture of how companies and their financial positions are doing in inflationary settings. It provides more information than basic cost accounting can supply. It allows the business income and expenses to be representative and comparable with other companies and historical information.

Depending on the location, accounting standards boards (IFRS, GAAP, etc.) allow or require adjustments of financial statements in specific situations. Depending on the company and the particular standards that apply to them, they may be required to restate their financial statements periodically in order to provide reliable and valuable information about the company.

Companies used standards set by the International Financial Reporting Standards (IFRS) Foundation as guides to report their financial statements when operating in hyper-inflated economies. According to the IFRS, hyperinflation occurs when prices, interest and wages rise by around 100% or more over three years.

The IAS 29 'Financial Reporting in Hyperinflationary Economies' standard requires figures in financial statements to be restated by applying a general price index. For example, if a country becomes hyperinflationary on 1 February 2022, companies preparing quarterly statements must apply IAS 29 standards for the quarter ended 31 March 2022.

EY added that inflation accounting must be used in inflationary conditions because:

- Historical cost figures become less meaningful than what they were in a low inflation environment
- Holdings gains on non-monetary assets reported as operating profits do not represent real economic gains
- Current and previous financial periods become incomparable
- "Real" capital can be reduced because reported profits do not account higher replacement costs of resources used

The IAS 29 standard does not establish an absolute inflation rate at which an economy is considered to be hyperinflationary, "instead, it considers a variety of non-exhaustive characteristics of the economic environment of a country that are seen as strong indicators of the existence of hyperinflation," said EY.

Companies operating in Argentina, Venezuela, Sudan, Iran, Zimbabwe and Lebanon should use IAS 29 standards when accounting their financial statements, according to the IFRS.

## **Types of Inflation Accounting**

There are several types of inflation accounting methods that have been developed to address the impact of inflation on financial statements. These methods include

- **Current Cost Accounting:** This method adjusts the value of assets and liabilities for changes in the general price level so that the financial statements are presented in terms of current purchasing power.
- **Constant Dollar Accounting:** This method presents financial statements in terms of the purchasing power of a base year so that the effects of inflation are eliminated.
- **General Price Level Accounting:** This method adjusts both the value of assets and liabilities, as well as the income statement, for changes in the general price level.
- **Hyperinflation Accounting:** This method is used in situations where the rate of inflation is extremely high, and the monetary unit is not stable. It involves expressing financial statements in terms of a stable unit of measure, such as the U.S. dollar.
- **Corporate Inflation Accounting:** This method adjusts the value of a company's assets and liabilities for changes in the company's specific price level, rather than the general price level.

## **What If You Don't Use Inflation Accounting?**

The financial statements are prepared on a historical cost basis, assuming that the unit of account (e.g., the dollar) has a static value. The value of money, on the other hand, alters over time.

Also, prices are not constant for economic, political, or social reasons, and inflation or deflation may account for price changes. Because financial statements must be accurate, inflation accounting is required.

In an omnipresent inflationary scenario, historical costing-based financial statements have several drawbacks.

### **The following are the most crucial setbacks:**

Conventionally, historical costs are used for recording fixed assets on the balance sheet, resulting in an unrealistically low current value.

Because depreciation is computed on the historical cost of fixed assets, depreciation provisions are also insufficient for covering replacement costs. The firm may therefore face significant difficulties because of an inadequate provision of funds.

When prices are rising, there is a critical overstatement of earnings because the cost of goods sold is based on historical costs, and no account is taken of money's diminishing purchasing power.

Lastly, an overstatement of profits can result in heavy financial strain for the company, resulting in unnecessary dividends, heavy taxation, and so on.

In a nutshell, when the general price level rises rapidly, the reported profits of a company with a large percentage of its assets stated at historical cost are overstated. If profits are overstated, costs and expenses are equally understated. This may result in illusory reporting of profits.

To curb such issues, the Accounting Principles Board of the American Institute of Certified Public Accountants (AICPA) suggested in June 1969 that companies' annual statements should include supplementary information about the financial impact of changes in general price levels.

The catch is that an enterprise's financial statements can be made more realistic by adjusting them to reflect the firm's performance and position truthfully and equitably over a given period.

## **Inflation Accounting Methods**

There are two main methods used as inflationary accounting methods. The first is current purchasing power (CCP), and the second, being current cost accounting (CCA).

The **current purchasing power method** involves adjusting the financial statements and associated numbers to the current price. For non-monetary items, this is done by taking the historical figures and applying a specific conversion rate based on a price index.

The conversion rate is found by dividing the index price at the end of the period by the index price at the beginning of the period. Monetary items are subject to a net gain or loss during adjustment.

The **current cost accounting method** takes the fair market value (FMV) instead of the historical cost. With this method, all monetary and non-monetary assets must be adjusted to their current values.

The two most popular inflation accounting methods that are used worldwide are:

- Current Purchasing Power (CPP)
- Current Cost Accounting (CCA)

### **Current Purchasing Power (CPP)**

CPP, aka general price-level accounting, is a mixed method in which financial statements (i.e., P&L and Balance Sheet) are prepared on a historical basis and converted as per the current purchasing power of the currency based on a price index in the end.

In the US, the CPP method is endorsed by the Accounting Policy Board and the Financial Accounting Standards Board (FASB).

In contrast to the current cost accounting (CCA) method, CPP does not determine the current values of various assets; instead, only the financial statements are stated in terms of uniform value.

The CPP method treats monetary and non-monetary items differently. Non-monetary items (such as fixed assets, plants, stocks, and buildings) are translated at historical rates, while monetary items are translated at the current rate.

For example, a building was purchased for \$100,000 in 2020, and the general price index at that point in time was 200. Then in 2022, considering the general price index at 400, the current value of the building will be:

$$(\$100,000/200) \times 400 = \$200,000$$

Current Purchasing Power Method (C.P.P.) is also known as General Price-Level Accounting. CPP methods, financial statements prepared under historical cost accounting are re-stated by using an approved price index. This is a mixed-method in which financial statements are prepared on a historical basis these statements, in the end, are converted on the current purchasing power of the currency. This is a mixed-method in which financial statements are prepared on a historical basis these statements, in the end, are converted on the current purchasing power of the currency.

### **Steps of Current Purchasing Power (CPP) Method**

The following steps should be followed to prepare financial statements under the CPP method of accounting for price level changes.

#### **(1) Calculation of Conversion Factor**

CPP method involves the restatement of historical figures at current purchasing power. For this purpose, historical figures must be multiplied by conversion factors. The formula for the calculation of the conversion factor is:

- Conversion factor = Price Index at the date of Conversion/Price Index at the date of item aros
- Conversion factor at the beginning = Price Index at the end/Price Index at the beginning

- Conversion factor at an average =  $\text{Price Index at the end} / \text{Average Price Index}$
- Conversion factor at the end =  $\text{Price Index at the end} / \text{Price Index at the en}$
- Average Price Index =  $\text{Price Index at beginning} + \text{Price Index at the end} / 2$
- CPP Value = Historical value X Conversion factor

## **(2) Distinction between Monetary and Non-monetary Accounts**

CPP method classifies all assets and liabilities into two groups' i.e. monetary items and non-monetary items.

**Monetary Items:** Monetary items are assets and liabilities, the amounts of which are receivable or payable only at a current monetary value. Monetary assets include cash, bank, bills receivables, debtors, prepaid expenses, account receivables, investment in bond or debentures, accrued income, etc. Monetary liabilities include creditors, accounts payable, bills payable, outstanding expenses, notes payable, dividend payable, tax payable, bonds or debentures, loan, advance income, preference share capital, etc.

**Non-monetary Items:** Those items which cannot be stated in fixed monetary value are called non-monetary items. Such items denote assets and liabilities that do not represent specific monetary claims. Non-monetary accounts include land, building, machinery, vehicles, furniture, inventory, equity share capital, irredeemable preference share capital, accumulated depreciation, etc.

### **(3) Gain or Loss on Monetary items**

Monetary items are receivable or payable in a fixed amounts irrespective of changes in the purchasing power of money. The change in purchasing power of money has an effect on monetary assets and monetary liabilities, Therefore, the holding of such items results in gain or loss in terms of real purchasing power. Such gain or loss is termed as general price level gain or loss.

### **(4) Valuation of Cost of Sales and Inventories**

Cost of sales and inventory value vary according to cost flow assumptions i.e. first-in-first-out (FIFO) or last-in-first-out (LIFO). Under FIFO, the cost of sales comprises the entire opening stock and current purchases less closing stock. And closing is entirely from the current purchase. Under the LIFO method, the cost of sales comprises the current purchase only.

### **(5) Restated Balance Sheet**

The historical balance sheet is prepared as per the historical income statement, so it can not represent the revised or changed value of assets and liabilities. Under the price level change, the historical balance sheet should be revised to reflect the true picture of the financial position of any organization. Inside the historical balance sheet, both monetary and non-monetary items are listed.

## **Current Cost Accounting (CCA)**

The CCA approach focuses on preparing financial statements (balance sheet and profit and loss statement) on the current values of individual items rather than on original or historical costs.

Moreover, all adjustments are made in assets and expenses; and liabilities remain silent in this method.

The CCA method is the replacement of the CPP inflation accounting method. This method overcomes the CPP model's limitation of considering a single index value for all the assets and liabilities, whereas, in reality, the change in prices isn't the same.

For example, the change in the price of land will not be similar to the change in the price of buildings or debtors.

This is why the CCA method was created by the Inflation Accounting Committee of the UK government in 1975, and since then, it has been extensively researched and discussed. With the issuance of SSAP 16 (Statement of Standard Accounting Practice), it has finally been settled.

For example, if a machine is purchased on 10 Feb 2020 for \$10,000 and can be purchased on 1 Feb 2022 for \$30,000, its gross current replacement cost will be \$30,000.

The Current Cost Accounting is an alternative to the Current Purchasing Power Method. The CCA method matches current revenues with the current

cost of the resources which are consumed in earning them. Changes in the general price level are measured by Index Numbers. Specific price change occurs if price of a particular asset changes without any general price change. Under this method, asset are valued at current cost which is the cost at which asset can be replaced as on a date. While the Current Purchasing Power (CPP) method is known as the General Price Level approach, the Current Cost Accounting (CCA) method is known as Specific Price Level approach or Replacement Cost Accounting

The current cost accounting (CCA) technique is adopted in place of the current purchasing power (CPP) of replacement cost accounting technique for price level changes.

The crux of the CCA technique is the preparation of financial statements (balance sheet and profit and loss account) on the current values of individual items and not on the historical or original cost.

### **Current Cost Accounting: Explanation**

In 1975, the UK government's Inflation Accounting Committee (IAC) designed the CCA technique.

Since then, it has been extensively studied and debated, and now it has been finalized by the issue of SSAP 16 (**Statement of Standard Accounting Practice**).

The CCA system considers price changes that are relevant to a specific firm or industry rather than the whole economy.

It seeks to arrive at a profit figure that can be distributed safely in the form of a **dividend** without impairing the firm's operational capability.

The CCA method is based on the concept that a **business enterprise** is an ongoing operation in which the continuous replacement of **assets** is needed.

In CCA, dollars (or another currency) are used, and assets are valued at their **acquisition cost**.

Hence, no adjustment is made for inflation. Financial statements are drawn up on the assumption that the purchasing power of money is stable over time.

However, since the purchasing power of money differs over different periods of time, these statements do not ultimately measure what they seek to measure.

However, CCA is the oldest and the most popular method of **inflation accounting**.

## **Features of the Current Cost Accounting Method**

The salient features of the CCA method are:

- Fixed assets are shown not at their depreciated original cost but at their net replacement value
- **Stocks** are shown at their net replacement value
- **Depreciation** is calculated at the current value of assets

- **Gains/losses** due to the changes in the price level are shown in a separate statement
- Inventory consumed is valued at the price at the date of consumption

Under the CCA method, assets and **expenses** are shown in financial statements at the current cost to replace those specific resources.

Thus, **profit** is measured by comparing **revenues** with the current replacement cost of the assets consumed in the earning process.

### **How Current Cost Can Alleviate the Need for the Cost Flow Method**

The CCA method is suitable when managers within an organization are committed to the industry, and also when they are interested in replacing the present plant with a new one at the end of its useful life.

CCA is generally preferred over the **current purchasing power (CPP) technique** of price level **accounting**. This is because it is a complete system of inflation accounting.

Financial statements prepared under the CCA method provide more realistic information and make a distinction between profits earned from business operations and gains arising from changes in price levels.

As depreciation under CCA is provided on the basis of current cost, the method prevents the overstatement of profits and keeps **capital** intact.

## How Current Cost Can Alleviate the Need for the Cost Flow Method

CCA systems can alleviate the need for a cost flow method and, in this way, solve the problem of having either a realistic income statement or a realistic balance sheet, but not both.

In general, current cost is the cost of currently acquiring an item. Under such a system, the cost of goods sold is recorded at the current cost of the item at the time of its sale.

Thus, the gross margin figure, which is the difference between sales and the current cost of goods sold, represents income available to the firm to cover operating expenses after maintaining its ability to purchase new inventory.

On the balance sheet, the ending inventory is recorded at the current cost as of the end of the accounting period.

The difference between the current cost of the ending inventory and its historical cost is considered an unrealized holding gain.

Thus, figures on the income statement and balance sheet represent realistic amounts.

CCA is not a generally accepted accounting principle for primary financial statements.

However, due to the perceived importance of these data for current and future investors and creditors, the **FASB** requires that certain companies disclose selected current cost data on a supplemental basis.

Regarding inventories, FASB Statement No. 33 requires firms with inventories and property, plant, and equipment of more than \$125 million, or total assets exceeding \$1 billion, to disclose income from continuing operations on a current cost basis.

Also, the current costs of inventory and property, plant, and equipment at the end of the year must also be disclosed.

## **Inflation Adjusted Accounting Can Help Make Better Business Decisions**

The primary goal of inflation accounting is to adjust historical cost figures for substantial changes in the economy's overall level. It'll help senior-level management in decision making the following way:

**Capital Allocation:** Capital is allocated through the pricing mechanism in capital markets, which relies on financial information. Therefore, inaccurate or incomplete financial information will result in poor pricing and allocation decisions. Using an inflation accounting system would benefit the various parties involved in the business.

**Empower Management:** In the long run, management will be better prepared to deal with the problems caused by inflation, and productivity will improve as a result.

**Accurate Depreciation:** When the true value of assets is reflected, depreciation is calculated on their face value rather than their historical cost.

**Helps Assessment:** When balance sheets of two years are presented and adjusted to inflation accounting, making the crucial comparison becomes simple and convenient. Because these values are current and not based on historical cost, it feels a bit like the time value of money.

**Accurate Dividend Payment:** This method is preferable to the cost method in keeping a check on dividends and taxes since dividends and taxes are not calculated based on cost.

### **Advantages/Merits of Inflation Accounting**

The main merits of inflation accounting are:

- **Realistic view.** Inflation accounting enables the company to present a realistic view of its profitability as current revenues are matched to **current costs**.
- **Basis of depreciation.** The correct amount of **depreciation** is when it is charged on the current values (inflated values), and thus the replacement of **assets** will be more reasonable.
- **Check on payment of dividends out of capital.** Inflation accounting enables companies to maintain **capital** by checking payment of

dividends and taxes out of capital (due to inflated profit calculated based on **historical cost** accounting).

- **True and fair balance sheet.** The company's financial position, as shown by the balance sheet, will be true and fair if it keeps a meaningful balance of various effects of inflation accounting in mind.
- **Reasonable comparison of profitability.** When **financial statements** consider inflation accounting, the profitability of two plants purchased on two dates can be known concretely. This is because they are calculated based on current value and not on historical cost.
- **Check on misleading deeds.** In inflation accounting, higher wage and salary demand is less likely to arise, more and more prospective entrepreneurs will not come to open their units, and unwanted competition will be checked.
- **Wrong matching concepts.** Assets purchased in the past are depreciated at the original **cost** or historical cost concept, while all other **revenues** and **expenses** are shown on current prices against matching accounting concept.
- **Safety of owner's equity.** Inflation accounting records fixed asset values according to their current values. Hence, the owner's capital valuation will show its correct value.

## Disadvantages/Demerits of Inflation Accounting

The following are the main demerits of inflation accounting:

- **Depreciation.** Depreciation reduces the value of fixed assets due to use and the passage of time. It should be charged on original and not on current values.
- **Replacement of fixed assets.** Critics of inflation accounting state that depreciation is charged for the replacement of fixed assets.

The same assets are not available for replacement due to change in models, inventions, or fashion, and the same machine is not needed.

Thus, replacement of assets does not contribute much.

- **Deflation situation.** During deflation, prices always fall. Adjusting to the price level change means charging lower depreciation and overstating profits, which is also negative from many perspectives.
- **Theoretical concept.** The concept of inflation accounting is more theoretical compared to other accounting concepts. This is because it is only window dressing the accounting concept, as per the suitability of individuals.
- **Complicated system.** Inflation accounting is not the easiest approach. It requires extensive calculations and unwanted adjustments, which inexperienced accountants and bookkeepers cannot use effectively.

- **Expensive technique.** The technique is very expensive. Ordinary businesses can rarely afford to use it.
- **Subjectivity in the valuation process.** Inflation accounting cannot be applied to ascertain the real value of assets. Adjustment to current values is not straightforward.

## **Inflation Accounting Practices in India's Corporate sector.**

### **Section -1**

This section will deal with the History, financial results and operation of inflation accounting in the corporate sector. The companies selected are those that have responded to our questionnaire.

### **Ashok Leyland Limited**

Ashok Leyland Ltd. was established on 29 September 1948 as a public limited company with its registered office 19-Rajaji Salai, Chennai. The authorised share capital of the company is Rs. 1500 Million 150000000-equity share of Rs 10 each. The subscribed capital of the company is Rs. 1189.27 Million consisting 118929420 equity shares of Rs. 10 each. At present the company has seven manufacturing branches providing employment near about 14056 employees. Ashok Leyland products enjoy a market preference and a reputation for their reliability, superior performance and durability.

From 7.5T GVW to 125T GTW for goods transport, 19 seater to 80 seater for passenger transport, and a host of special application vehicles for defence, fire fighting and other application, Ashok Leyland vehicles constitute the largest range of commercial vehicles in India. Besides, engines from 30 KVA

to 125 KVA for industrial, marine and genset applications are also made by Ashok Leyland. Ashok Leyland is determined to extend its technological leadership into the next century through new products that employ appropriate modern technology and answer in full customers' ever-changing needs

The installed capacity and production of the company as at March 31, 2000 are as follows:-

#### Capacity and Production

Class of Goods	Unit of Measurement	Capacity per annum		Actual Production
		Licensed Capacities	Installed Capacities	
		Not Applicable	Two Shifts	
Commercial Vehicles	Nos.		50000	38044*
Engines	Nos.		10000	6045
Ferrous Casting	Tonnes		16500	13422

\* Excludes three vehicles (1998-99: five vehicles) manufactured out of raw material / components supplied by the company.

Source: Annual Report 1999-2000 p.27.

As regards inflation accounting approaches in Ashok Leyland Ltd. is concerned, the basis of conversion of historical costs into current purchasing power is the wholesale price index. In order to appraise the shareholders the effects of inflation on company's

activities we have shown on this and on the following pages the results for 1974 and the financial position as at 30<sup>th</sup> September 1974 duly adjusted for inflation as per research study made by Dr. R.N. Nigam because at present the company has discontinued to use inflation accounting approach as per questionnaire received from the company duly filled in. In order to justify the

inflation accounting approach in preparing the financial statements of the company we have taken the extract from the annual report of the company for the year ended 30<sup>th</sup> September 1974.

These reveal that the published profit before tax of Rs. 810 lakhs is reduced to Rs. 446 lakhs when the impact of inflation is eliminated. Also, but for the inflationary gain in net monetary items amounting to Rs.290 lakhs, the year's after tax results would have

shown a loss of Rs. 100 lakhs, as the tax provision of Rs. 566 lakhs is based on historical

profits rather than inflation adjusted profits.

**Result for the year ended 30<sup>th</sup> September 1974**

	Historical Cost Basis (as published accounts)		Estimated Current Purchasing Power Basis (at 30-9-1974)	
	<u>Rs.</u> (In Lakhs)	<u>%</u>	<u>Rs.</u> (In Lakhs)	<u>%</u>
Sales (inclusive of Excise Duty)	7,110	100.0	8,180	100.0
Less: Commission & Rebate	<u>27</u>	<u>0.4</u>	<u>32</u>	<u>0.4</u>
	<u>7,083</u>	<u>99.6</u>	<u>8,148</u>	<u>99.6</u>
Costs:				
Material	4,707	66.2	5,815	71.1
Excise Duty	<u>646</u>	<u>9.1</u>	<u>737</u>	<u>9.0</u>
Net Added Value	1,730	24.3	1,596	19.5
Expenses	944	13.2	1,154	14.1
Interest on Loans	35	0.5	41	0.5
Other Income	( 55)	( 0.7)	( 61)	( 0.8)
Provision on longer required	<u>( 4)</u>	<u>( 0.1)</u>	<u>( 4)</u>	<u>-----</u>
Profit before Tax	810	11.4	466	5.7
Net gain in monetary Items	<u>-----</u>	<u>-----</u>	<u>( 290)</u>	<u>( 3.5)</u>
	810	11.4	756	9.2
Tax:				
Current year	555	7.8	555	6.8
Previous years	<u>11</u>	<u>0.2</u>	<u>11</u>	<u>0.1</u>
Profit after Tax	<u>244</u>	<u>3.4</u>	<u>190</u>	<u>2.3</u>

**BALANCE SHEET AS AT 30<sup>th</sup> SEPTEMBER 1974**

Capital & Loan Funds:

Share holders' Funds *	1,546	81	2,350	87
Loan funds	<u>353</u>	<u>19</u>	<u>353</u>	<u>13</u>
	<u>1,899</u>	<u>100</u>	<u>2,703</u>	<u>100</u>

Application of Capital &

Loan Funds:

Fixed Assets	871	46	1,636	61
Investment	52	3	55	2
Net Current Assets	<u>971</u>	<u>51</u>	<u>1,012</u>	<u>37</u>
	<u>1,899</u>	<u>100</u>	<u>2,703</u>	<u>100</u>

\*Includes Proposed Dividend

**Note:**

1. Basis: The adjustments for inflation are based on movements in wholesale price index (source: Indian Labour Journal published by the Government of India) which stood at 313.1 at the beginning of the year and at 410.5 at the end of the year (Base: April 1952 March 1953 =100). The increase of 97.4 points implies a rate of inflation of 31% during the accounting year. 3

2. Stock: Stocks at the beginning and end of the year have been stated in rupees of the purchasing power at the year-end (30<sup>th</sup> September 1974) thus taking the inflationary element (Rs. 419 lakhs) out of the profit on the sale of stocks.

3. Fixed Assets and Depreciation: The value of fixed assets have been stated in term of the rupees of the purchasing power at the year end by converting the historical values with reference to changes in the indices mentioned in Para 1 above between the dates of acquisition and 30<sup>th</sup> September 1974. The total increase in the net written down value measured in rupees of the purchasing

power at the year-end amounted to Rs. 760 lakhs. Accordingly, the depreciation charge is based on cost of fixed assets measured in rupees of the purchasing power at the year-end. The additional charge involved is Rs. 101 lakhs.

4. Sales, Purchases and other costs: These have also been stated in terms of the rupees of the purchasing power at the year-end. This adjustment increases profit by Rs. 176 lakhs as sales exceed the costs included in this heading.

5. Monetary Item: Net monetary items comprise of total borrowings, creditors and other current liabilities less debtors and other current assets. During the period of inflation holders of cash and other monetary assets lose purchasing power. A rupee at the end of the year will purchase less than it would have at the beginning of the year. Conversely, the holders of liabilities fixed in money terms will gain purchasing power during the period of inflation. Although we will have to pay the same amount expressed in money terms (rupees), in purchasing power terms the debt will have been reduced. In our case the net gain on this account is Rs. 290 lakhs.

6. Shareholders' Fund: The effect of the increase in fixed assets, investments and stock is to produce similar increase in the shareholders fund as at 30<sup>th</sup> September 1974. The financial statements which give a true and fair view of the state of affairs of the Company and of the results of operations have been prepared in conformity, in all material respects, with the generally accepted accounting principles in India and supported by reasonable and prudent judgments and estimates. Also, the company is in a position to carry on its business in the foreseeable future and accordingly it is considered

appropriate to prepare the financial statements on the basis of a going concern. Table -1 shows the performance made by Ashok Leyland Limited in its Annual Report 1999-2000.

**Table -I**  
**Showing the Financial Performance**  
**(for the year ended 31<sup>st</sup> March 2000)**

	(Rs. Millions)									
	99-00	98-99	97-98	96-97	95-96	94-95	93-94	92-93	91-92	90-91
Sales Volume										
Vehicles (nos.)	37859	29741	31547	43352	37399	30410	2426	20571	23422	24698
Engines (nos.)	6004	7185	7611	8331	6537	5258	5666	4069	6337	4517
Spare Parts and others	2145	2145	2520	2030	1962	1596	1411	1115	1027	935
Sales Value	25987	20451	20143	24825	20097	15133	11813	9544	10307	9229
Profit Before Tax	933	233	207	1570	1336	706	353	46	269	414
Profit After Tax	785	204	184	1249	1131	706	353	46	244	263
Assets										
Fixed Assets	9458	9547	9026	8399	7142	5904	5021	3268	2723	2005
Investments	1204	625	485	583	781	681	523	277	1607	54
Net Current Assets	10329	10491	13914	13679	11284	9000	4463	5686	3435	2426
	20991	20663	23425	22661	19207	15585	10007	9231	7765	4485
Financed by										
Shareholders Funds-Capital	1189	1189	1189	1189	1189	1189	780	694	315	315
-Reserves	10145	9852	9763	9704	9152	8485	3902	3400	1913	1774
Loan Funds	9657	9622	12473	11768	8866	5911	5325	5137	5537	2396
	20991	20663	23425	22661	19207	15585	10007	9231	7765	4485
Earnings per share (Paise)	660	171	154	1050	951	837	491	79	776	835
Dividend (%)	35	10	10	50	40	35	27	12	27	27
Employees (Nos.)	14056	14254	14635	15274	14545	13616	12596	12307	12338	12329

Source: Ashok Leyland Ltd. Annual Report 1999-2000,p.2.

From the above table it is evident that profit before tax in 1999-2000 is Rs. 933 million as against Rs. 233 million in 1998-99. Profit after tax Rs. 785 million in 1999- 2000 as against Rs.204 million in 1998-99. The total sales

during 1999-2000 increased by 34 per cent over the previous years. This shows a growth of 27.3 per cent during the same period improved market coverage, better product performance, customer-oriented schemes etc., helped the company to achieve satisfactory results. Thus improvement in sales volume resulted in better profit compared to the previous year the total share capital of the company is Rs. 1189 million in 1999-2000 which contributed over the years. The reserves during the year 1999-2000 increase from 9852 to 10145 an increase of Rs.293 million. The dividend recommended by directors is 35 per cent (Rs.3.50 per equity shares of Rs. 10) free of tax for the year ended 31" March 2000 while it was 10 per cent in the previous year.

### **Bharat Heavy Electricals Limited.**

In order to meet the needs of power generation, India entered in the field of manufacturing heavy electrical equipment. The first plant was set up at Bhopal by the Heavy Electricals Limited (HEL) during the Second Five Year Plan (1956-61). The range of heavy electrical equipment included turbines and generators for generation of power, transformers and switchgears for transmission of power, and industrial and traction motors and controls, rectifiers, etc., for utilization of power. However, due to rapid industrial development specifically during the sixties, the HEL was unable to cope

with the increasing demand for a higher range of heavy electrical equipment. To augment the manufacturing capacity for this heavy electricals equipment and other items not manufactured at Bhopal, a new company, the Bharat Heavy Electricals Ltd. (BHEL) was incorporated on November 13, 1964. In order to pool the technical expertise and available recourses of the two

companies and to ensure no duplication of product lines, BHEL and HEL were merged to form a single company known as the Bharat Heavy Electricals Ltd (BHEL) on January 1, 1974. After Bhopal unit, three more units came into being viz.,

1. High Pressure Boiler Plant - Tiruchirapalli (May, 1965).
2. Heavy Power Equipment Plant - Hyderabad (December, 1965).
3. Heavy Electricals Equipment - Hardwar (January, 1967).

The Soviet Union collaborated in the establishment of the above No.1 and 2 units and Czechoslovakian assisted in setting up No.3 units. Today, Bharat Heavy Electricals Limited has become the largest manufacturers of power plant equipment and electrical engineering organization in the country with unique spectrum of products and services. . It ranks amongst the top 12 manufacturers of power plant equipments in the world. Its aim and objectives are as under.

1. Business Mission

2. Growth

3. Profitability

4. Consumer Focus

5 Employee orientation

6. Technology and

7. Image. Its plants are Scattered all over the country. At present BHEL have the following fourteen manufacturing units (shown in Table - II) and service

centers besides a large number of projects, sites spread all over India where its equipments are as under erection, enabling it

to serve the customers and the country efficiently. The Bharat Heavy Electricals Limited also figures amongst the Ust of largest 500 corporations outside the U.S.A.

**Table – II**

S.No.	Place	States	No. of Plants
1	Bhopal	M.P.	1
2	Hardwar	U.P.	2
3.	Bangalore	Karnataka	2
4.	Jagdishpur	U.P.	1
5.	Ranipet	U.P.	1
6.	Varanasi	U.P.	1
7.	Rudrapur	U.P.	1
8.	Hyderabad	A.P.	1
9.	Jhansi	U.P.	1
10.	Tiruchirapalli	Kerala	1
11.	Goindwal		1
12.	Mumbai	Maharashtra	1
Total			14

Source - Personnel Manual of Bharat Heavy Electricals Limited.

Pretaj^ profit was Rs. 1136887 as against Rs. 750277 in 1983-84. Post tax profit amounted to Rs. 730991 in 1984-85 as against Rs. 375277 in 1983-84.

The company's summarised Balance sheet based on historical cost is shown in Table-III.

**Table-III**  
**Bharat Heavy Electricals Ltd.**  
**Balance Sheet (Based on historical cost) as at 31<sup>st</sup> March 1985.**

	Rs. in thousands			
	<u>Rs.</u>	As at 31-3-1985 <u>Rs.</u>	<u>Rs.</u>	As at 31-3-1984 <u>Rs.</u>
<b>SOURCE OF FUNDS</b>				
<b>Shareholders Funds</b>				
Capital	244,76,00		229,21,00	
Reserve & Surplus	<u>248,62,77</u>	493,38,77	<u>192,60,58</u>	421,81,58
<b>Loan Funds</b>				
Secured loans	11,66,92		75,69,47	
Unsecured loans	399,76,23		456,50,00	
Deferred credits (includes Rs. 926.89 lakhs due within One year; previous year Rs. 906.53 lakhs)	<u>36,73,70</u>	<u>448,16,87</u>	<u>42,10,88</u>	<u>574,30,35</u>
		<u>941,55,64</u>		<u>996,11,93</u>
<b>APPLICATION OF FUNDS</b>				
<b>Fixed Assets</b>				
Gross block	835,27,20		707,48,32	
Less: Depreciation to date	<u>346,50,15</u>		<u>293,23,15</u>	
Net Block	488,77,05		414,25,17	
Capital expenditure in progress	<u>40,29,49</u>	529,06,54	<u>78,51,19</u>	492,76,36
Investments		1,06,23		6,83
<b>Current Assets, Loans &amp; Advances</b>				
Inventories	704,66,35		689,18,90	
Sundry debtors	817,99,76		807,86,18	
Cash and bank balance	194,69,89		123,57,93	
Other current assets	15,62		16,96	
Loans and advances	<u>150,28,63</u>		<u>141,97,80</u>	
	<u>1867,80,25</u>		<u>1762,77,77</u>	
<b>Less: Current liabilities and provisions</b>				
Liabilities	1321,27,56		1160,80,87	
Provision	<u>135,09,82</u>		<u>98,68,16</u>	
	<u>1456,37,38</u>		<u>1259,49,03</u>	
Net current assets		<u>411,42,87</u>		<u>503,28,74</u>
		<u>941,55,64</u>		<u>996,11,93</u>
Contingent liabilities		347,14,98		183,60,70

Source: BHEL's Annual Report for the year 1984-85 p.34.

From table-III, we observe that the company share capital is Rs. 2447600 contributed over the years. Reserve and Surplus during the year 1984-85 increased from Rs. 1926058 to Rs. 2486277 an increase of Rs, 559769. This was made possible by having an after tax profit of Rs. 730991 and after providing Rs. 1502 for prior period adjustment and Rs. 195808 dividend. In this fully owned Government Company the net worth in 1984-85, was Rs. 4933877 and other sources of finance were borrowing and deferred credit amounting to Rs. 4359100. Compared the previous year 1983-84, the debt financing reduced by Rs. 147700 from Rs. 4506800. Under the utilization of resources, the gross block of fixed assets increase from Rs. 7074832 in 1984 to Rs. 8352720 in 1985. The net addition was to the tune of Rs. 1277888 an approximate increase of 15.3 per cent. The balance in accumulated depreciation account shows an increase of Rs. 1532700 over the previous year figure Rs. 2932315. This gives us a net block of Rs. 4887705 as compared to Rs. 4142517 in 1983- 84. There was an additional item capital expenditure in progress of Rs. 402949 in 1984- 85 (Rs 785119 in 1983-84) grouped with fixed assets. Investment in other companies (subsidiaries) was Rs. 10623 as compared to Rs. 683 in 1983-84. The net current assets of the company on 31-3-1985 was Rs. 4114287. The total current assets inclusive loans and advances was Rs. 18678025 of which inventory (a nonmonetary item) was Rs. 7046635, the balance (Rs. 18678025 - Rs 7046635)= Rs. 11631390 of current assets was of monetary nature. The current liabilities all of which are of monetary nature were Rs. 14563738. Thus net current assets of Rs. 4114287 consisted of inventory worth Rs. 7046635 less net monetary liabilities of Rs. 14563738. The figures of the previous year 1983-84 were Rs. 5032874 for net current assets Rs. 6891890 for inventory and Rs. 12594903 for net monetary

liabilities. Also, both the balance sheets i.e., 1984-85 and 1983-84, show an addition item of the contingent liabilities of Rs. 3471498 and Rs. 1836070 respectively after the balance sheet total. Bharat Heavy Electricals Limited has started to prepare their financial statements by using current cost accounting (CCA) method. The relevant explanatory note regarding current cost accounting of Bharat Heavy Electricals Limited is being reproduced below (Annual Report of BHEL 1984-85). Current cost accounts (CCA) have been drawn up on the method recommended by SSAP-16. Under condition of continuous inflation, current cost accounting adjustment data is helpful in understanding the impact of inflation on the financial performance, the management's responses to combat and minimize the effect of inflation and its success in its efforts to maintain in real terms net operating assets thus keeping intact its operating capability. Net operating assets comprise of net fixed assets, inventory and monetary working capital and in current cost accounting (CCA) three adjustments are made respectively: - depreciation adjustment, cost of sale adjustment and monetary working capital adjustment. A gearing adjustment is also made reflecting the capital structure of the company. These adjustments are made primarily on the basis of published indices which are illustrated below from the five year summary in addition to the usual current cost accounting for 1984-85. In addition to the usual current cost accounting adjusted account for 1984-85, a five-year current cost summary has been drawn up in table -IV conforming to suggestions made in the Accounting Standard Committee discussion paper issued in April 1982. This presents current cost accounting (CCA) results for the five years from 1980-81. The past years figures have been updated by applying yearly

average values of the indices used for preparation of current cost accounting (CCA).

**Table - IV**

(Rs. in million)

Particular	1980-81	1981-82	1982-83	1983-84	1984-85
Average value of indices	264.2	299.7	326.1	347.8	377.9
Earnings	12,403.5	12,970.4	14,356.8	15,072.6	16,250.8
Value Added	4,203.1	4,444.1	4,957.0	5,528.6	5,561.7
Operating Profit	852.0	778.2	689.2	1,145.6	1,245.9
Profit after tax	251.9	(38.3)	(243.2)	(47.2)	363.2
Net Worth	10,499.3	11,738.3	11,321.7	11,027.7	12,094.4
Capital Employed	17,442.4	19,271.3	17,825.4	15,310.9	16,081.4

Source: Annual Report of BHEL 1985, p.66

The table -V shows the current cost financial statements prepared by BHEL in its 1984-85 annual report.

The details of appropriation of profit for the year are as follows:

	(Rs. in million)	
	1997-98	1996-97
Profit before tax	10,217	8,644
Less: Tax provision		
For the year	3,960	3,863
For the earlier years	<u>-938</u>	<u>3,022</u>
Profit after tax	<u>7,195</u>	<u>4,632</u>
Add: transfer from reserves		
Capital Reserve	0	4
Investment utilization reserve	75	147
Foreign project reserve	<u>116</u>	<u>22</u>
Sub total	<u>7,386</u>	<u>4,805</u>
Less: Appropriation		
Foreign project reserve	106	68
Proposed dividend	612	490
Transfer to General reserve	6,607	4,198
Corporate dividend tax	<u>61</u>	<u>49</u>
	<u>7,386</u>	<u>4,805</u>

Dividend of 25 per cent on the paid up capital of Rs. 2447.60 million has been recommended for 1997-98; an increase of 5 per cent over the rate of dividend for 96-97. Bharat Heavy Electricals Limited has been successful in achieving the overall goals and targets, set out in the Memorandum of Understanding (MOU) signed with Government of India for 1997-98. This performance has qualified the Company for placement in "Excellent" category for the ninth year in succession.

Steady growth in order receipts in most of the product areas has enabled the company achieve a financial turnover of Rs. 64,713 million, which shows an increase of 12.4 per cent over that of last year. New products turnover contributed Rs. 18,670 million i.e. 28.9 per cent of the company's turnover. Export turnover, including deemed exports, was placed at Rs. 17,840 million i.e., 27.6 per cent of overall turnover, recording a growth of 37.9 per cent over 1996-97, Turnover from sale of spares accounted for Rs, 8,730 million, an increase of Rs. 1,820 million over 96-97. Value addition stood at Rs. 28,867

million which was achieved due to better sourcing of materials, resulting in savings in material cost compared to the previous year and value engineering efforts. Profit before tax of Rs. 10,217 million witnessed an increase of 18.2 per cent over that of the previous year; the same in relation to value of production increased from 16.3 per cent in 1996-97 to 17.1 per cent in 1997-98. There was also a significant improvement in the internal resources generation, which registered an increase of 45.9 per cent during the year. There was, however, a small reduction in gross margin as a percentage of value of production, which went down from 20.9 per cent in 1996-97 to 20.2 per cent in 1997-98 mainly due to provision towards wage revision due to employees w.e.f 1-1-1997. During the year 1997-98 due to concerted efforts, interest of Rs. 336.6 million (previous year Rs. 55.7 million) was granted by the Income Tax Department. At the same time interest of Rs. 537.5 million (previous year Rs. 10.9 million) charged earlier was withdrawn and interest of Rs. 50.3 million (previous year Rs. 379.7 million) was charged on account of appellate assessment orders. The net impact of Rs. 814.8 million is shown as interest income of the year. As a result of product working capital and cash management, the total financing cost of Rs. 597 million was much less in comparison with Rs. 1591 million of previous year resulting in a reduction of Rs. 994 million in interest cost. An additional contributory factor was the 0.6 per cent reduction in consumption of raw materials & components and payments to sub-contractors as a percentage of value of production from 49.5 per cent in 1996-97 to 48.8 per cent in 1997-98. Total borrowings have declined from Rs. 8,644 million in 1996-97 to Rs. 3,896 million at the end of 1997-98 resulting in decline in debt; equity ratio from 0.45 in 1996-97 to 0.15 in 1997-98. Equity remained at Rs. 2,447.6 million. Net worth increased by Rs.

6,702 million to Rs. 25,950 million in 1997-98. On the working capital side, there was a small increase of around Rs. 55 million as compared to 1996-97 on account of the following factors: (i) decrease of Rs. 2,713 million in book debts and inventory; (ii) decrease in current liabilities and provision of Rs. 1,645 million and net increase of Rs. 1,123 million in other current assets, loans and advances. Inventory levels declined by 8.7 per cent over the previous year. In terms of number of days of turnover, inventory declined from 119 days in 1996-97 to 97 days in 1997-98. In absolute terms it is noteworthy to mention that raw materials, components, stores and spare decreased by Rs. 1,493 million that is 17 per cent with reference to 1996-97 despite the fact that operations were at an increased level. The level of book debts in number of days' sales declined from 205 days in 1996-97 to 177 days in 1997-98. Cash and Bank balance at the end stood at Rs. 4,153 million as against Rs. 3,160 million at the end of 1996-97. These were utilized in April 1998 towards payment of adhoc advance on account of wage revision and for making short-term investments.