

## **“Gauging the Performance of Financial Messiah Using Inflation Accounting- The Case of Selected Public and Private Sector Banks of India”**

**Akinchan Buddhodev Sinha**

*Assistant Director The Institute of Company Secretaries of India Email: akinchanbsinha@gmail.com  
Contact No: 91-9819386690*

### **Abstract**

*Banks are backbone of an economy. A robust banking system implies rapid and sustainable economic growth. By meeting the financing requirements of various sectors, they ensure a holistic development of the economy. However, it is essential to ascertain whether the banks which can be termed as ‘Financial Messiah’ are registering a prodigious performance or struggling. Generally, by observing the trends of key financials like, Reported Net Profit After Tax, Earnings Before Interest and Tax, Earnings Before Interest Tax Depreciation and Amortization etc. one decide the financial serendipity of an organization. The approach is perfect but in order to ascertain whether the growth in profits, sales, earnings before interest and tax etc. are real or nominal some scientific approach is needed. In this regard, inflation accounting can be of immense assistance, as it provides a vivid picture of sales, net gain or loss, resultant monetary gain or loss on holding liabilities, resultant monetary gain or loss on holding monetary assets etc.*

*For the purpose of the research study, three public and private sector banks will be considered. In order to anonymity, pseudo names for the selected banks will be used. Current Purchasing Power Method (CPP Method) will be applied. Further, for determining the profit under CPP method, Income method will be used.*

*The findings and conclusion of the research study focuses upon as to whether the financials displayed by the selected banks are merely cajoling or they speak something about the performance of the banks.*

**Keywords:** *Significance of Banking Sector; Performance of Indian Banking Sector; Inflation Accounting Approach*

**JEL Classification Code:** *G2 (Financial Institutions and Services)*

### **I. Introduction**

The banking sector have always occupied a prominent position in the economy of any nation. Its importance as the “lifeblood” of economic activity, in collecting deposits and providing credits to states and people, households and businesses is undisputable. In all economic systems, banks have the leading role in planning and implementing financial policy. The difference lies with prioritizing goals and their way of achievement. Banks plays a crucial role in the financial life of a business. Although no wealth is created by Bank, but their essential activities facilitates the process of production, exchange and distribution of wealth. In this way they become the effective partners in the process of economic development and growth. In the words of Stephenson & Britain “Banks are the custodians and distribution of liquid capital, which is the life-blood of our commercial and industrial activities and upon the prudence of their administration depend the economic well-being of the nation”.

The significance of banking system in various economies of the globe, especially, the emerging economies is evident from the first annual meeting of Deputy Governors from the emerging markets that took place at the BIS in February 1995. It had as its focal point the challenge to central banks (and supervisors) as countries embraced more liberal banking system in the context of broader capital account convertibility. Several critical issues like, unease about short-term capital flows, exchange rate pegs and requisite measures to enhance the resilience of the banking systems to external jerks. As we tend to do research for getting solutions after witnessing a setback, similarly the aforesaid developments originated from the Mexican crisis of December 1994.

Discussing about Indian banking scenario, India’s banking sector is sufficiently capitalised and well-regulated. The financial and economic conditions in the country are far superior to any other country in the world. Credit, market and liquidity risk studies suggest that Indian banks are generally resilient and have withstood the global downturn well.

## **II. Performance Of Indian Banking Sector**

The financial sector in the Indian economy has had a checkered history. The story of the post-independent (i.e., post-1947) Indian financial sector can perhaps be portrayed in terms of three distinct phases—the first phase spanning over the 1950s and 1960s exhibited some elements of instability associated with *laissez faire* but underdeveloped banking; the second phase covering the 1970s and 1980s began the process of financial development across the country under government auspices but which was accompanied by a degree of financial repression; and the third phase since the 1990s has been characterized by gradual and calibrated financial deepening and liberalization.

The Reserve Bank of India (RBI) was founded in 1935 under the Reserve Bank of India Act “...to regulate the issue of Bank Notes and keeping the reserves with a view to securing monetary stability in India and generally to operate the credit and currency system of the country to its advantage.” Apart from being the central bank and monetary policy authority, the RBI is the regulator of all banking activity, including non-banking financial companies, manager of statutory reserves, debt manager of the government, and banker to the government.

The Indian economy’s liberalisation in the early 1990s has resulted in the conception of various private sector banks. This has sparked a boom in the country’s banking sector in the past two decades<sup>4</sup>. The revenue of Indian banks grew four-fold from US\$ 11.8 billion to US\$ 46.9 billion, whereas the profit after tax rose nearly nine-fold from US\$ 1.4 billion to US\$ 12 billion over 2001-10<sup>5</sup>. This growth was driven primarily by two factors. First, the influx of Foreign Direct Investment (FDI) of up to 74 per cent with certain restrictions. Second, the conservative policies of the Reserve Bank of India (RBI), which have shielded Indian banks from recession and global economic turmoil.

In the current scenario, i.e. during FY06–17, deposits grew at a CAGR of 12.03 per cent and reached 1.54 trillion by FY17. Strong growth in savings amid rising disposable income levels are the major factors influencing deposit growth. Access to banking system has also improved over the years due to persistent government efforts to promote banking-technology and promote expansion in unbanked and non-metropolitan regions. At the same time India’s banking sector has remained stable despite global upheavals, thereby retaining public confidence over the years.

## **III. Inflation Accounting- An Overview**

Inflation Accounting is a technique of accounting which helps to understand the financial position of a company or country when the country is experiencing a high inflation. High inflation causes a wrong projection and hence this technique is used.

Using this technique, a company's financial position can be evaluated even during a period of hyperinflation. The true profits should be shown in P&L along with the correct assets and liabilities in the balance sheet. Since inflation affects the costs of business, the overall picture is different and hence this technique has to be adopted.

### **Methods:**

1. Current Purchasing Power (CPP) Method- The financial statements are converted into figures at current purchasing price. However the values of only the non-monetary items are converted.  
Conversion Factor = Price index at the time of conversion / Price index at the date of transaction
2. Current Cost Accounting (CCA) Method- Each and every item under the financial statements is restated at its current value.
3. Hybrid Method- Mix of both CPP method and CCA method

### **Advantage:**

By converting figures of financial statements at current prices the statements become more relevant to the current economic and financial conditions.

### **Disadvantage:**

The price level is general price level and not for the individual items. Also the depreciation charged might not be adequate for replacing all types of assets.

### **Inflation Accounting Approach**

In order to gauge the performance of Indian banks in terms of key financials, i.e. Monetary Liabilities and Monetary Assets, selected public and private sector banks have been considered for the research study. The public and private sector banks considered for the research study are- State Bank of India, Punjab National Bank and Canara Bank and HDFC Bank, ICICI Bank and Yes Bank respectively. The periods considered for the study are- 2014-15, 2015-16 and 2016-17.

The United States, the United Kingdom and certain other countries adopted forms of inflation accounting because increasing rates of inflation during 1970's had become a serious problem (Whittington, 1983, Bloom and Debessay, 1984). In 1974, the Institute of Chartered Accountants in England and Wales, issued the provisional statement of Standard Accounting Practice No:7 “Accounting for Changes in the purchasing power of Money” . This is popularly known as CPP method of accounting. The practice required companies to include current purchasing power statements in to their annual accounts.

In 1975, a government-appointed committee consisted of accountants, businessmen and economists published a report called the Sandilands Report. The report rejected current purchasing power system and suggested current value accounting. In 1977, the outgrowth of the Sandilands Committee report, ED 18 was issued. The Accounting Standards Council issued ED 24 requiring that current cost adjusted statements be reported as supplements to historic cost accounts so that ED 18 was not received with universal enthusiasm by profession (Brayshaw and Miro, 1985).

SSAP 16 Current Cost Accounting came into effect in 1980. This standard was completely withdrawn in 1988 due to criticism over cost and lack of use. In 1979, Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standard No 33 as amending ASR 190. This standard required supplementary disclosures on both current cost and constant cost dollar estimates in footnotes to the financial statements. By 1986, SFAS 33 was no longer mandatory in the United States after a cost-benefit analysis of applying the standard and a decline in the rate of inflation (Radebaugh and Gary, 2002).

In 1986, SFAS No. 33 was superseded by SFAS No.89 “Financial Reporting and Changing Prices”. This standard which gives opportunity for companies to publish the effect of the general price level on a voluntary basis is still valid.

International Standards Accounting Committee issued IAS 6 “Accounting Responses to Changing Prices” in 1977. In 1981 IAS 15 “Information Reflecting The Effects of Changing” superseded IAS 6. Adoption of IAS 15 was optional not mandatory. This standard was withdrawn due to lack of support in 2005.

The latest standard now is IAS 29, “Financial Reporting in Hyperinflationary Economies” issued in 1989. The standards are mandatory for some companies reporting in the currency of a hyperinflationary economy.

Turkey had experienced hyperinflation until mid 2000s. However, application of inflation accounting became mandatory in 2003, when the inflation ratio started to decline. Prior to that year, in order to alleviate the negative effects of inflation, certain accounting techniques were allowed to be implemented in tax legislation; namely, LIFO, accelerated depreciation, adjustment of fixed assets (see Arsoy and Gücenme, 2009). The techniques were mainly used to lower the profit.

Capital Market Board (CMB) issued Communiqué XI -20 “Principles for Adjustment of Financial Statements in Hyperinflationary Periods” in 2001. The communiqué largely adopted the rules of IAS 29. According to the communiqué companies were required to restate their financial statements of the period of 2003.

The Law numbered 5024 of the Ministry of Finance on inflation adjustment was enacted by the Turkish Parliament in 2003. According to the law, inflation adjustment was to be made after the beginning of 2004. Rules of the Tax Law about inflation accounting were significantly different from IAS 29. According to Tax Law, only balance sheets of companies were required to be adjusted. Items of income statements were not adjusted but the net monetary profit or loss was taken into account.

Those two different regulations , The Law 5024 and Communiqué XI /20, are still valid. However, inflation accounting application ended in the beginning of 2005 for the inflation rate fell below the hyperinflation level.

#### **IV. Literature Review**

D.J. Daily (1984) conducted a research on the effects of inflation in Canada on reported rate of return in manufacturing from 1966 to 1982. The study showed that when the capital was maintained on a current cost basis rather than on a historical cost basis, the level of rates of return was lowered. Most of the earlier studies (Basu and Hanna, 1976; Bossons, 1977; Tarasofsky, Roseman and Waslander, 1981) were in line with the results in Daily research. But, one study of inflation and taxation in Canada suggested that inflation had very little effect on the rate of return (Boadway, Bruce and Mintz, 1984).

A number of studies about rates of return to shareholders' interest in North American manufacturing firms concluded that the rates of return in manufacturing declined in late 1970s (Feldstein and Summers, 1977; Holland and Myers, 1979;

Nordhaus, 1975; Tarasofsky, Roseman and Waslander, 1981; Daly and MacCharles, 1982; Wilcox, 1983). Several of these studies suggest that declines were clearer for manufacturing than for the broader non-financial sector. A similar study conducted in United Kingdom shows similar results (Walton, 1981)

Such studies show that reported profits are overstated and total assets are undervalued during and after periods of inflation with traditional accounting concepts relative to an economic concept designed to maintain the firm as an ongoing entity (D.J.Daily, 1985).

Thies and Sturrock conducted a research over a sample of 50 large manufacturing firm using replacement cost data for the period 1977-1983. The findings showed that rankings of historical cost-based financial ratios did not match well with rankings of replacement cost-based ratios. The data also indicated that historical cost-based financial ratios often grossly misrepresent the relative financial strengths of companies.

In Turkey, the first inflation accounting application was conducted in 2003. The application was terminated after the 2004 financial statements were adjusted. Inflation accounting has been the subject of many studies. (see Uman, 1979; Akdoğan, 1980; Gucenme, 2002; Pekdemir and Selvi, 2004; Örtten and Karapınar, 2004). However, these studies are not empirical in nature, rather they are theoretical and aim to explain the principles of application. The first empirical study on the effects of inflation on financial ratios was conducted by Karapınar and Zaif (2005). In their study, Karapınar and Zaif examined the effects of inflation accounting practice on companies' financial ratios. Their sample covered the 73 non-financial companies listed Istanbul Stock Exchange as of 2003. The ratios were calculated on both historical and adjusted numbers of financial statements to form two sets of ratios. Results showed that there was no significant change in liquidity, financial, profitability and activity ratios except fixed asset turnover ratios.

Akdoğan, Aktas and Unal, in their study in 2009, extended the number of companies in the sample of Karapınar and Zaif. The results covering 146 companies were consistent with the findings of Karapınar and Zaif's study. Their results revealed that a statistically significant change for the whole sample occurs only on Total Assets Turnover. Other ratios did not show any considerable difference.

### V. Research Methodology

**Current Purchasing Power (CPP) Method:** This method will assist in ascertaining the Net Monetary Gain / Loss arising from the Resultant Monetary Gain / Loss on assets and liabilities. In order to comprehend the applicability of CPP method in determining Net Monetary Gain / Loss of the banks, two banks, i.e. State Bank of India (a public sector bank) and ICICI Bank (a private sector bank) have been considered for the research study. The period considered for the study on random basis is 2014-15.

### VI. Limitations Of The Study

- 1) The study is based on the secondary data.
- 2) All public and private sector banks could not be considered for the research study due to various technical constraints.

#### Applicability of Current Purchasing Power Method

##### *State Bank of India*

For the period 2014-2015

#### A) Impact of changes of general price levels on liabilities:

Particulars	Amount (INR Crore)
Monetary liabilities on 01-04-2014	2063
Value of liabilities at current prices [ 2063 x 1024 / 939] (a)	2250
Value of additional liabilities at current prices [235 x 1024 / 982] (b)	245
<b>Total (a+b)</b>	<b>2495</b>
Less: Value as per closing balance sheet, i.e. monetary liability as on 31-03-2015	2298
<b>Resultant gain on monetary liabilities</b>	<b>197</b>

#### B) Impact of changes of general price levels on monetary assets:

Particulars	Amount (INR Crore)
Value of monetary assets on 01-04-2014	167
Value of assets at current prices on 31-03-2015 [167 x 1024 / 939] (a)	182
Value of additional assets at current prices [41 x 1024 / 982] (b)	43
<b>Total (a+b)</b>	<b>225</b>
Value of assets as per closing balance sheet	209
<b>Resultant monetary loss on holding assets</b>	<b>16</b>

**Net monetary gain [ A – B] = 197 -16 = INR 181 Crore.**

**ICICI Bank**

For the period 2014-2015

**A) Impact of changes of general price levels on liabilities:**

Particulars	Amount (INR Crore)
Monetary liabilities on 01-04-2014	487
Value of liabilities at current prices [ 487 x 1024 / 939] (a)	531
Value of additional liabilities at current prices [47 x 1024 / 982] (b)	49
<b>Total (a+b)</b>	<b>580</b>
Less: Value as per closing balance sheet, i.e. monetary liability as on 31-03-2015	534
<b>Resultant gain on monetary liabilities</b>	<b>46</b>

**B) Impact of changes of general price levels on monetary assets:**

Particulars	Amount (INR Crore)
Value of monetary assets on 01-04-2014	48
Value of assets at current prices on 31-03-2015 [48 x 1024 / 939] (a)	52
Value of additional assets at current prices [ -0.62 x 1024 / 982 ] (b)	-0.65
<b>Total (a+b)</b>	<b>51.35</b>
Value of assets as per closing balance sheet	47.63
<b>Resultant monetary loss on holding assets</b>	<b>3.72</b>

**Net monetary gain [ A – B] = 46 – 3.72 = 42.28**

**Note:** 1) The following items have been considered under monetary liabilities and assets:

a) *Monetary Liabilities: Deposits and Borrowings*

b) *Monetary Assets: Cash & Balances with RBI and Balance with Banks, Money at Call*

## VII. Conclusion

Thus, by applying the Current Purchasing Power Method it can be observed that the net monetary gain of holding liabilities and assets is higher in case of public sector bank, i.e. in this case, State Bank of India, as it stood at INR 181 Crore, whereas, it is INR 42.28 Crore in case of private sector bank, i.e. ICICI Bank.

It is interesting to note that inflating accounting plays a pivotal role in portraying a true picture of the financial position of an enterprise. As by mere comparison of opening and closing figures of monetary liabilities and assets it may be observed that value of liabilities have gone down and assets have moved up but by applying inflation accounting the true picture is emerged and the actual financial position of the enterprise can be determined.

However, it is to be noted that in the above case only one financial year have been considered and if more financial years and other financial yardsticks, like, operating expenses, fixed assets and their depreciation, taxes and dividends paid etc. would have been considered then probably the outcome would have been different than what can be observed in the research study.

## References

- [\[1\]. https://www.google.co.in/search?dcr=0&ei=bkiMWqO8Loar0gSSh5bABw&q=significance+of+banking+sector&og=significance&gs\\_l=psy-ab.1.0.35i39k112j0i67k112j0l6.7728.12196.0.13872.62.23.1.0.0.0.370.3852.0j5j9j2.17.0....0...1.1.64.psy-ab..49.13.3234.6..0i22i30k1j0i131i67k1j0i131k1j0i46i67k1j46i67k1j0i10k1.321.HfSTD04Tff](https://www.google.co.in/search?dcr=0&ei=bkiMWqO8Loar0gSSh5bABw&q=significance+of+banking+sector&og=significance&gs_l=psy-ab.1.0.35i39k112j0i67k112j0l6.7728.12196.0.13872.62.23.1.0.0.0.370.3852.0j5j9j2.17.0....0...1.1.64.psy-ab..49.13.3234.6..0i22i30k1j0i131i67k1j0i131k1j0i46i67k1j46i67k1j0i10k1.321.HfSTD04Tff)
- [\[2\]. https://www.bis.org/publ/bppdf/bispap28a.pdf](https://www.bis.org/publ/bppdf/bispap28a.pdf)
- [\[3\]. https://www.ibef.org/industry/banking-india.aspx](https://www.ibef.org/industry/banking-india.aspx)
- [\[4\]. file:///C:/Users/ab%20sinha/Downloads/wp1707%20\(1\).pdf](file:///C:/Users/ab%20sinha/Downloads/wp1707%20(1).pdf)
- [\[5\]. https://www.ibef.org/download/Banking-Sector-04jan.pdf](https://www.ibef.org/download/Banking-Sector-04jan.pdf)
- [\[6\]. http://www.careratings.com/upload/NewsFiles/SplAnalysis/Indian%20Banking%20Update%20FY17%20and%20Outlook.pdf](http://www.careratings.com/upload/NewsFiles/SplAnalysis/Indian%20Banking%20Update%20FY17%20and%20Outlook.pdf)
- [\[7\]. https://www.ibef.org/industry/banking-presentation](https://www.ibef.org/industry/banking-presentation)
- [\[8\]. https://www.incometaxindia.gov.in/Documents/Cost-Inflation-Index-upto-FY-2016-17.htm](https://www.incometaxindia.gov.in/Documents/Cost-Inflation-Index-upto-FY-2016-17.htm)
- [\[9\]. https://www.mbaskool.com/business-concepts/finance-accounting-economics-terms/14432-inflation-accounting.html](https://www.mbaskool.com/business-concepts/finance-accounting-economics-terms/14432-inflation-accounting.html)
- [\[10\]. http://www.isarder.org/isardercom/2012vol4Issue1/Vol.4\\_Issue.1-03\\_full\\_text.pdf](http://www.isarder.org/isardercom/2012vol4Issue1/Vol.4_Issue.1-03_full_text.pdf)
- [\[11\]. http://www.moneycontrol.com/financials/sbi/consolidated-balance-sheet/SBI](http://www.moneycontrol.com/financials/sbi/consolidated-balance-sheet/SBI)
- [\[12\]. http://www.moneycontrol.com/financials/icici%20bank/consolidated-balance-sheet/ICI02](http://www.moneycontrol.com/financials/icici%20bank/consolidated-balance-sheet/ICI02)

