Inflation-Adjusted Accounting Information and the Reliability of Financial Reporting:

Empirical Evidence from Egypt

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Abstract:

This study intends to investigate the comparative quality of historical cost accounting (HCA) and inflation-adjusted accounting (IAA) information. By measuring the reliability of accounting information, the results of the study show that both HCA and IAA information are significant in predicting future accounting information. However, historical cost based regression have higher predictive ability (reliability) for future cash flow than inflation-adjusted based regression.

ملخص:

تهدف هذه الدراسة إلى إجراء مقارنة بين موثوقية التقارير المالية التاريخية والتقارير المالية المعدلة بأثر التضخم في جمهورية مصر العربية، وذلك طبقا لمفهوم الموثوقية المعرف في الإطار المفاهيمي لمعايير المحاسبة الدولية، وذلك لإختبار ما إذا كانت التقارير المالية المعدلة بأثر التضخم تحسن أو تزيد من جودة التقارير المالية. وقد توصلت النتائج إلى أن كل من المعلومات المحاسبية التاريخية والمعدلة بأثر التضخم ذات دلالة احصائية إلا أن المعلومات المحاسبية التاريخية ذات قدرة تنبؤية (موثوقية) أعلى من المعلومات المحاسبية المعدلة بأثر التضخم.

Introduction:

The primary objective of financial reporting is to provide high-quality financial reporting information concerning economic entities, primarily financial in nature, useful for economic decision-making providinghigh-quality financial reporting information is important as it positively influence capital providers and other stakeholders in making investment, credit, and similar resource allocation decision enhancing overall market efficiency (IASB, 2008).

The accounting financial reporting regime is nominal, which assumes no changes to the purchasing power of money over time.

However, the traditional accounting methods as they evolved over the years have proved to be reasonably satisfactory during period of relatively stable prices. In the absence of price stability, however, accounting reports can become extremely unsatisfactory and misleading (Bello,2011).

One of the most significant economic problems that have received broad attention of experts, economists and researchers over many years is price level changes or inflation. Inflation is an ongoing phenomenon that has affected many economies for many years.

Accounting is affected by the phenomenon of inflation, which affects the accuracy of information disclosed in the financial statements. Inflation is one of the factors that affect the accounting system in a country. Inflation, the systematic decrease of purchasing power and destroyer of wealth, is a fundamental fact of economic activity over time and creates serious financial reporting and financial management problems (Schneider et al., 1999).

Although the effects of inflation on financial reporting received considerable attention during the late 1970s when inflation was relatively

high, inflationary effects have been mostly ignored in the more modest inflationary environment since that time (Konchitchki, 2011).

Financial statements without adequate adjustment to inflation do not reflect appropriately the financial position and performance of business enterprises. Furthermore, unadjusted financial statements can be meaningless or even misleading under Inflationary conditions. Several countries have implemented different adjustment procedures resulting in lack of uniformity. A uniform solution to the problem of assessing financial performance of enterprises in an inflationary environment has been long overdue (Goldschmidt and Jacob, 1991).

Problem Statement:

High quality accounting information is one of the important keys for a large number of users, as it influences the quality of their decisions. Providing high quality and useful accounting information is a prerequisite for the efficiency of the enterprise. The usefulness of the accounting information is connected with the extent to which this information corresponds to the particular needs at any given time and how the information contributes to the solution of a particular problem. Usefulness is determined by the quality of accounting information. By useful information which means the kind of information that is necessary and needed by its users; is provided on time and is used for performing a particular activity and for the implementation of direct or indirect link/feedback between the preparers and the users of accounting information. Measuring and assessing the quality and usefulness of accounting information are of particular importance, as these activities will not only enhance the quality of economic decision-making for the

users, but also the overall market efficiency of the business as well (Tsoncheva, 2015).

The International Accounting Standards Board (IASB) issued the standards as well as the conceptual framework, essentially aiming in producing higher quality financial statements. The critical question that arises is whether this goal has been achieved; that is, whether the historical financial statements following the IASB adoption are in fact, of higher quality as opposed to inflation adjusted financial statements?

In periods of rising prices, financial accounting information has been criticized because it reflects a number of dated monetary units while the value of the monetary unit is changing.

Accounting for price-level changes also referred to as inflation accounting is a financial reporting procedure, which records the consequences of inflation on the financial statements that a company prepares and publishes at the end of the financial year, which is based on the assumption of a stable currency. The 1970s and 1980s were exciting period for accountants who welcomed change. The extremely high rates of inflation that were a feature of the period posed a considerable challenge to the traditional historically based-financial accounting model. Within a period of less than twenty years, the professional accounting bodies turned from conservative advocates of the historical cost status quo to radical reformers (Modugu & Ohonba, 2013).

In recognizing the defects of financial reports in inflation situations, a lot of debates, observations, reservations and opinions were preceded in economies such as the U.S and the U.K. However, in developing economies, like Egypt, where inflation is more persistent and is likely to remain so in the near future, little effort has been done.

This study intends to investigate the comparative quality of historical cost accounting (HCA) and inflation adjusted accounting (IAA) information. By examining, the reliability of HCA and IAA information in Egypt, as defined by the International Financial Reporting Standards (IFRS) conceptual framework.

Aim and Objectives:

The general aim of this study is to investigate whether inflation-adjusted accounting information enhances financial reporting quality.

The aim will be achieved by addressing the following objectives:

- Discuss inflation accounting and reasons to account for inflation.
- Introducing a review of previous inflation accounting literatures that provide evidence regarding the usefulness of the disclosure of inflation-adjusted financial statements.
- To provide a comparison for the quality of IAA and HCA information in Egyptian light of the IAS Conceptual Framework. Specifically, the faithful representation (reliability)

Methodology:

The following section provides an overview of the relevant aspects of the research methodology for the current study.

Research Design:

This is an empirical research, which is conducted in Egypt using the methodology of Barth et.al (2001) in order to investigate the comparative quality of HCA and IAA information's defined by the IFRS conceptual framework in terms of its reliability. This study is also based on a review of the previous accounting literature on inflation accounting.

Targeted Population Selection:

The population in this study constituteda total number of (177) firms listed on the Egyptian Stock Exchange (ESE) within 2014 to 2018. During the study period, the Egyptian economy has witnessed substantial economic, political and structural changes. These changes have affected the inflation rates in Egypt.

Sampling Method:

For the purpose of the study sample of 45 firms that are listed in ESE were selected over the period 2014 to 2018, a period during which inflation rate was relatively increasing. It was necessary for the companies to be listed in ESE to allow for continuous availability of data for the entire period of the study. Firms were selected based on the availability of data. Financial institutions were excluded from the sample due to different reporting requirements. Six companies were excluded due to missing data. The final sample was 39 companies. These sample companies belong to different sectors, which include Chemical, Food, energy, Pharmaceutical, construction, healthcare and Steel.

Data Collection:

The financial statements in Egypt are reported based on HCA system. HCA information is available from the annual published financial statements. There are no Egyptian firms that provide IAA information of any description in their financial statements because there is neither legal nor institutional (in the form of standards) requirement to do so. Thus, IAA information needs to be approximated from HCA information available in the published financial statements. This study implements out

of the numerous inflation-accounting approaches; Constant Purchasing Power Accounting CPP. (A detailed illustration of CPP in p 19:20)

CPP is the most readily available method to mitigate the effects of inflation on accounting practices.CPP is relatively easy to apply. It is also not a departure from the HCA basis.

Price indices are prepared and published every month and computations are simple. In addition, the Consumer Price Index (CPI) is an objective basis, as it is prepared by an unbiased government agency (Central Agency of Public Mobilization and Statistics of Egypt).CPI can be taken for conversion of historical costs financial statements. A detailed description of CPP accounting method will be illustrated.

Data Analysis:

The research hypotheses were statistically tested via multiple regression technique in order to analyze the data. This study contains two regression equations. Ordinary Least Square is used to estimate the regression coefficient. The justification for choosing this technique is that the sample estimates obtained using this technique represent the best (minimum variance), linear, unbiased estimate of the population parameters.

Research Limitations:

- IAA information is an extension to, not a departure from HCA. The reliability of the analysis therefore depends much on the quality of HCA data reported by the various companies.
- Although from last century, a lot of work has been done on inflation accounting, but until now, no standard and uniform method has been developed for inflation accounting.

- **The financial statements of the selected companies do not provide detailed information about time of acquisition of non-monetary assets; therefore, it is assumed that non-monetary assets are acquired at a particular point in time which is 2014 (the beginning period of this study).**

The reminder of this paperis organized in the following sections:
1- **Financial Reporting Quality.**
2- **Meaning of inflation.**
3- **Accounting for inflation.**
4- **Literature review.**
5- **Variables selection, definition and measurement.**
6- **Results and discussion.**
7- **Conclusion.**

1-Financial Reporting Quality:

Studying the literature, Dechow and Schrand (2004) define Financial reporting quality is the extent to which accounting information accurately reflects the company's current operating performance, is useful in predicting future performance, and helps assess firm value.

Financial reporting quality can be seen as the precision with which the financial reports convey information to equity investors about the firms expected cash flows (Biddle et al., 2009).

Shroff (2015) defined financial reporting quality as the extent to which financial statements reflect the underlying economic performance of a company, and reporting credibility as the confidence or faith investors have in the accuracy of the financial statements presented to them.

Financial reports should meet certain qualitative criteria in order to avoid poor quality and accomplish their purpose. IASB (2008) in its conceptual framework concludes that high quality is achieved by adherence to the

objective and the qualitative characteristics of financial reporting information.

Qualitative characteristics are "the attributes that make the financial information useful and are distinguished as fundamental or enhancing depending on the way they affect the usefulness of the information", (IASB 2008).

The Conceptual Frame work of IASB (2010) provides general guidelines for high quality financial reporting. For financial information to be useful, it should possess two fundamental qualitative characteristics:

- Relevance; and

- Reliability /Faithful representation.

If either of those qualities is completely missing, the information will not be useful. Information must be both relevant and faithfully represented if it is to be useful. Neither a faithful representation of an irrelevant phenomenon nor an unfaithful representation of a relevant phenomenon helps users make good decisions (IASB, 2010).

The IASB (2010) also described enhancing qualitative characteristics, which are complementary to the fundamental qualitative characteristics. Enhancing qualitative characteristics distinguish more useful information from less useful information. They enhance the decision-usefulness of financial reporting information that is relevant and faithfully represented. The enhancing qualitative characteristics are:

- Comparability;

- Verifiability;

- Timeliness; and

- Understandability.

Measuring and assessing the quality and usefulness of accounting information are of particular importance, as these activities will not only enhance the quality of economic decision-making for the users, but the overall market efficiency of the business as well.

As a social science, accounting is affected by the environment in which it operates, but at the same time, it is one of the factors impacting on this same environment. One of the most important factors that affect accounting system is inflation.

Accounting is affected by the phenomenon of inflation, which also affects the quality of information disclosed in the financial statements. Next section discusses the meaning of inflation.

2- Meaning of inflation:

Inflation is a rise in the general level of prices of goods and services in an economy over a period. An increase in the general price level makes each unit of currency buys fewer goods and services .Consequently, Inflation is erosion in the purchasing power of money. A chief measure of price inflation is the inflation rate. Inflation rate is the annualized percentage change in a general price index or the rate at which the general level of prices for goods and services is rising (Islam, 2013).

Labonte (2011: p.1) defined inflation as a sustained or continuous rise in the general price level or, alternatively, as a sustained or continuous fall in the value of money.

From above definitions, inflation can be defined either as a rise in prices, decrease in the monetary value or as an expansion in aggregate income (expenditure). Inflation is a state of disequilibrium when there is a sustained rise in price level. It is inflation if the prices of most goods go up. The rate of increase in prices may be slow, moderate or rapid.

3-Accounting for Inflation:

Financial reporting is a function of the economic, legal, political and social environment in which it operates. Changes in this environment create a need for persistent development.

The Financial Accounting Standards Board (FASB) issued pronouncement in September 1979 requiring supplemental disclosure of the effects of inflation on the financial statements of most large publicly held firms beginning with the 1979 annual reports (FASB 1979). Those 1979 annual reports leave little doubt that these changes in financial reporting requirements will have a direct impact on the managerial assessment of specific products, markets, and businesses as well as on marketing decisions relating to pricing, service, promotion, and distribution.

The requirements of the pronouncement apply to public enterprises that prepare their primary financial statements in U.S. dollars and in accordance with U.S. generally accepted accounting principles and that have, at the beginning of the fiscal year for which financial statements are being presented either:

- Inventories and property, plant, and equipment (before deducting accumulated depreciation, depletion, and amortization) amounting in aggregate to more than $125million; or
- Total assets amounting to more than $1 billion (after deducting accumulated depreciation).
- No changes are to be made in the primary financial statements; the information required by the pronouncement is to be presented as supplementary information in published annual reports. For fiscal years ended on or after December 25, 1979, enterprises are required to report:

- **Income from continuing operations adjusted for the effects of general inflation**
- **The purchasing power gain or loss on net monetary items.**
- **Income from continuing operations on a current cost basis**
- **The current cost amounts of inventory and property, plant, and equipment at the end of the fiscal year.**
- **Increases or decreases in current cost amounts of inventory and property, plant, and equipment, net of inflation.**

International Accounting Standards Committee issued in July1989, a new International Accounting Standard (IAS 29)"Financial Reporting in Hyperinflationary Economies"

This standard shall be applied to the financial statements, including the consolidated financial statements, of any entity whose functional currency is the currency of a hyperinflationary economy.

In a hyperinflationary economy, reporting of operating results and financial position in the local currency without restatement is not useful. Money loses purchasing power at such a rate that comparison of amounts from transactions and other events that have occurred at different times, even within the same accounting period, is misleading.

This standard does not establish an absolute rate at which hyperinflation is deemed to arise. It is a matter of judgment when restatement of financial statements in accordance with this standard becomes necessary. Hyperinflation is indicated by characteristics of the economic environment of a country, which include, but are not limited to, the following:

(a) The general population prefers to keep its wealth in non-monetary assets or in a relatively stable foreign currency. Amounts of local currency held are immediately invested to maintain purchasing power;

(b) The general population regards monetary amounts not in terms of the local currency but in terms of a relatively stable foreign currency. Prices may be quoted in that currency;

(c) Sales and purchases on credit take place at prices that compensate for the expected loss of purchasing power during the credit period, even if the period is short;

(d) Interest rates, wages and prices are linked to a price index; and

(e) The cumulative inflation rate over three years is approaching, or exceeds, 100%.

The restatement of financial statements in accordance with this Standard requires the application of certain procedures which include:

- **Statement of financial position amounts not already expressed in terms of the measuring unit current at the end of the reporting period are restated by applying a general price index.**

- **Monetary items are not restated because they are already expressed in terms of the monetary unit current at the end of the reporting period. Monetary items are money held and items to be received or paid in money.**

- **Assets and liabilities linked by agreement to changes in prices, such as index linked bonds and loans, are adjusted in accordance with the agreement in order to ascertain the amount outstanding at the end of the reporting period. These items are carried at this adjusted amount in the restated statement of financial position.**

- **All other assets and liabilities are non-monetary. Some non-monetary items are carried at amounts current at the end of the reporting period, such as net realisable value and market value, so they are not restated. All other non-monetary assets and liabilities are restated.**

- **Most non-monetary items are carried at cost or cost less depreciation; hence they are expressed at amounts current at their date of acquisition. The restated cost, or cost less depreciation, of each item is determined by applying to its historical cost and accumulated depreciation the change in a general price index from the date of acquisition to the end of the reporting period. For**

example, property, plant and equipment, inventories of raw materials and merchandise, goodwill, patents, trademarks and similar assets are restated from the dates of their purchase. Inventories of partly-finished and finished goods are restated from the dates on which the costs of purchase and of conversion were incurred.

- Detailed records of the acquisition dates of items of property, plant and equipment may not be available or capable of estimation. In these rare circumstances, it may be necessary, in the first period of application of this Standard, to use an independent professional assessment of the value of the items as the basis for their restatement.

- In a period of inflation, an entity holding an excess of monetary assets over monetary liabilities loses purchasing power and an entity with an excess of monetary liabilities over monetary assets gains purchasing power to the extent the assets and liabilities are not linked to a price level. This gain or loss on the net monetary position may be derived as the difference resulting from the restatement of non-monetary assets, owners' equity and items in the statement of comprehensive income items and the adjustment of index linked assets and liabilities. The gain or loss may be estimated by applying the change in a general price index to the weighted average for the period of the difference between monetary assets and monetary liabilities.

- The gain or loss on the net monetary position is included in profit or loss.

This Standard becomes operative for financial statements covering periods beginning on or after 1 January 1990.

Accounting for price-level changes also referred to as inflation accounting is a financial reporting procedure which records the consequences of inflation on the financial statements that a company prepares and publishes at the end of the financial year, which is based on the assumption of a stable currency (Moduguet.al,2012) .

In other words, inflation accounting is a kind of accounting procedure and method, which is under inflation condition, according to the general price index or current cost data, adjusts traditional historical cost accounting in order to reflect and offset the influence of price rise on traditional accounting statement, or completely change some traditional accounting principles, and reflects corporate financial situation and business achievement more realistically(Che &Li,2011).

Inflation accounting attempts to develop accounting methods which can neutralize the distortional effects of inflation (Hakki,1992).

3/1 The implementation of inflation accounting is a necessary requirement for economic development due to the following reasons (Singh, 2016; Che & Li, 2011; Archambault & Archambault, 1999) :

- To reflect the true and fair view of the operations of the concern.
- To keep the capital intact so as to facilitate replacement of assets. The implementation of inflation accounting is to properly compensate the cost of production factors and maintain reproduction capacity.
- To facilitate the interested parties to the business for making rational decisions.
- To get tax benefits by providing depreciation on replacement cost.
- To report for gains and losses on holding monetary assets and monetary liabilities.
- It is a need to promote inflation accounting for improving the stability of accounting units.
- The implementation of inflation accounting is to correctly calculate corporate profit and loss.

- **The implementation of inflation accounting is to ensure the comparability of accounting information between enterprises and across times.**

- **The implementation of inflation accounting is to improve corporate decision-making ability on investment.**

- **The implementation of inflation accounting is to meet the international practice. The globalization of financial markets has created a large number of investors who trade in foreign securities and companies that issue securities on foreign exchanges. Differences in accounting standards among countries make it difficult to efficiently issue or analyze foreign securities. A need for international harmonization of accounting standards has developed as a result.**

    There is no agreement among accounting professionals upon a single accounting method to neutralize the effects of inflation, in other words, there is no standard or uniform method to be adopted for adjusting the financial statements for price level change.

This research discusses CPP as it is the most readily available method to mitigate the effects of inflation on accounting practices (Hakki, 1992)

3/1/1Constant Purchasing Power Accounting (CPP):

    Historical cost statements are based on accounts measured in mon5etary units, which have different levels of purchasing power.CPP accounting converts these into monetary amounts with the same purchasing power. Purchasing power of money is determined at a certain point in time through the use of price indexes. The overall objective of the method is to determine the real changes in the well-being of the business and to exclude all effects resulting from the fluctuations in the value of money, which do not represent real changes in financial position of a business (Lee 2009)[1].

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[1] **From (Acheampong, 2015)**

The method uses purchasing power unit rather than money, andit is not strictly a change from the historical cost based accounting. It is merelyan attempt to remove the distortions in the financial statements, which arises due to changing price levels. It makes accounting income normally reflects the effects of inflation, using an appropriate index of general price level changes, on depreciation, cost of sales and net monetary items is reported after the general purchasing power of the shareholders equity in the enterprise has been maintained. The overall objective of the method is to determine the real changes in the value of money which do not represent real changes in the financial position of a business (Zaid,2013).

CPP seeks to adjust the financial statements by removing the effects of changes in the general purchasing power of money on traditional accounts (Singh, 2016).

CPP retains the historical cost basis of accounting by adjusting only for the effects of general inflation (measured by a general purchasing power index). The inflation adjustment can be applied only to the non-monetary items in the accounts, those whose amount is not fixed in nominal monetary units. Such items include real assets and shareholders' equity interests. Thus, a gain on borrowing and loss on holding money will be reported as a result of inflation, and the depreciation charge and cost of stocks sold, will be re-stated by using a general index..

The general formula for restatement is:

$$\text{Nominal monetary amount} \times \frac{\text{Price index converting to}}{\text{Price index converting from}} = \text{Constant monetary amount}$$

3/1/2 Features of CPPMethod:

Following are certain main features of CPP method: (Singh,2016) :

- Companies will continue to keep and present their records in historical monetary unit.

- **The conversion will be based on general price index of the purchasing power of the money.**

- **The directors will have to provide a supplementary statement and a basis on which it has been prepared and comments on the significance of the figures.**

- **It should be emphasized that the system does not seek to reflect current values but merely to make adjustments for the change in the monetary unit itself.**

- **Classify items into monetary items and non-monetary ones.**

- **Monetary items are not restated because they are already expressed in terms of the monetary unit current at the end of the reporting period. Monetary items are money held and items to be received or paid in money.**

- **Re-state "non-monetary" items in the balance sheet (i.e. those items not fixed in nominal terms) by indexing historical cost from the date of acquisition or (if relevant) subsequent revaluation, up to balance sheet date.**

- **Re-state the profit and loss account by making four adjustments:**
  - *Depreciation adjustment:* **This will be proportionate to the restatement of fixed assets. It reflects depreciation in current prices rather than historical prices at date of acquisition or revaluation.**
  - *Cost of sales adjustment:* **This eliminates stock appreciation due to the fact that stocks are charged to profit at historical cost rather than their current cost at time of use. It can be based on simple indexation of opening stocks.**
  - *Monetary items* **are assets, liabilities, and equities whose balances are fixed in terms of the numbers of monetary units regardless of changes in the general price level. Monetary assets include cash, items such as accounts and notes receivable, and marketable debt securities, such as bonds, that are expected to be held to maturity and redeemed at a**

fixed number of monetary units. Regardless of changes in the general price level, these balances are fixed and provide for the recovery of neither more nor less than the stated number of monetary units. Monetary liabilities include such items as accounts and notes payable and long-term debt. Regardless of changes in the price level, these balances are fixed and call for the payment of neither more nor less than the stated amounts. The difference between a company's monetary assets and its monetary liabilities is referred to as its net monetary position. With the number of monetary unit relating to monetary items remaining fixed and reflecting current monetary unit regardless of the change in the price level, purchasing power gains and losses arise as prices change. In any given period, the gain or loss from holding monetary assets is offset by the loss or gain from maintaining monetary liabilities. The net gain or loss for a period, therefore, depends on whether a company's position in net monetary items is positive (monetary assets exceed monetary liabilities) or negative (monetary liabilities exceed monetary assets). Gains and losses are associated with a company's net monetary position as follows:

Company's position	Rising Prices (Inflation)	Declining Prices (deflation)
Positive Net Monetary Position	Loss	Gain
Negative Net Monetary Position	Gain	Loss

3/1/3 Advantages of CPP:

- CPP is the most readily available method for coping with the effects of inflation on accounting practices. Price indexes are prepared and published every month and computations are simple. In addition, the Consumer Price Index (CPI) is an objective basis, since it is prepared by an unbiased government agency. Moreover, it is argued that adjustment based on the CPI makes the most sense for the

stockholders, who are also consumers. Stockholders can more easily relate these adjusted figures to their personal expectations and needs. As a result, they can make more informed decisions by understanding the real return on their investments (Hakki, 1992).

- **The CPP method is relatively easy to apply and is not too drastic a departure from the HCA basis.IAA information is an extension to, not a departure from HCA information.**

- **It is a measure of shareholders' capital and that capital's maintenance in terms of purchasing power units. Profit is the residual value after maintaining the money value of capital funds, taking account of changing price levels. Thus, it is a measure readily understood by the shareholder/user of the accounts. It can prevent payment of a dividend out of real capital as measured(Elliot and Elliott,2011).**

- **It translates the historical currency representing the purchasing power in different periods into current currency, which strengthens the comparability of financial statements between different enterprises and different periods of the same enterprise (Che & Li,2011).**

Disadvantages of CPP:

- **A major difficulty in the preparation of CPP supplementary accounts is the classification of items into monetary and non-monetary.**

- **It is HCA based but adjusted to reflect general price movements. Thus, it possesses the characteristics of HCA, good and bad, but with its values updated in the light of an arithmetic measure of general price changes. The major defect of becoming out of date is mitigated to a degree, but the impact of inflation on the entity's income and capital may be at variance with the rate of inflation affecting the economy in general(Elliot and Elliott,2011).**

4-Literature review:

(1)	(Wadi ,2006)
Title	The effect of inflation on accounting disclosure in Palestinian economic bodies. "Analytical empirical study"
Objective	That study aimed to choose an appropriate method for highlighting the influences of inflation on financial statements prepared by the Palestinian economic bodies through modifying the accounting figures included in these financial statements in accordance with the special rate of prices.
Methodology	Modified replacement cost model – was tested. The data based on HCA value was compared with data based on modified replacement cost to find out the influences resulting from the outcomes of financial statements when taking the effects of inflation into consideration. The proposed model was tested in a Palestinian company.
Results	That study showed that: 1- Substantial differences between the results of accounting measurements according to the proposed model and the results of HCA value basis. 2- Using the HCA basis will lead to misleading and contrary to fact outcomes, which will negatively affect the reliability and appropriateness of financial statements outcomes. 3- The study recommended that the proposed model should be used as additional statements besides statements prepared on HCA to meet the needs of of financial statements' users.
(2)	(Kirkulak & Balsari, 2009)
Title	Value Relevance of Inflation-adjusted Equity and Income
Objective	That study investigated the role of incremental information content of IAA data in explaining the market value of equity and stock returns on the Istanbul Stock Exchange (ISE).
Methodology	The Turkish accounting reporting system provides both historical cost and inflation-adjusted financial statements only for the year 2003. This provided a unique opportunity to compare the value relevance of IAA data versus HCA data. A sample of 133 firms was included. Analysis was

	based on the valuation model developed by Ohlson (**1995**), which derives the value of a firm by using a function of the firm′s earnings and the book value pershare.
Results	The results showed that: 1- HCA data overstate the relative financial strengths of firms. The historical cost-based financial ratios for net sales, inventory, and accounts receivables are higher than those of inflation-adjusted. The differences are statistically significant. However, the results documented higher book value per share and Fixed-assets-to-total assets ratio for the IAA data. 2- The findings also show that inflation adjustment affects financial ratios significantly, which may create different risk assessments for the selected firms. 3- The two sets of data(HCA and IAA) are not to be used as substitutes, but, rather, they are complementary. 4- The major findings of that research are tha IAA information enhances reporting quality, and the improvements help valuations.
(3)	**(Bello, 2011)**
Title	**The Joint Information Content of General Purchasing Power and Current Cost Accounting.**
Objective	**That study aimed to investigate the value relevance of joint reporting of alternative IAA model with HCA model.**
Methodology	**Data for the study were sourced from annual financial statement of four Nigerian cement companies. The financial statements in Nigeria are reported based on HCA. HCA data is available from the annual financial reports. General purchasing power conversion was made based on the IAS [29], Goldsmith framework, and Ohlson's clean surplus accounting theory.**
Results	**The findings of that study revealed that:** **The joint information content of General Purchasing Power accounting and HCA provides better signals to which in turn positively increase the value of financial**

	reports. It was recommended that policy makers and standard setters should consider price level adjustments even in lower inflationary situations.
(4)	**(Konchitchki,2011)**
Title	**Inflation and Nominal Financial Reporting: Implications for Performance and Stock Prices.**
Objective	**The objective of that study was to test:** **1- Whether unrecognized gains and losses from inflation help predict future cash flows, and** **2- Whether investors incorporate this information into their investment decisions (how investors process IAA information).**
Methodology	**An algorithm that extracts IAA from firms' nominal financial statements was developed. More specifically, the algorithm adjusts nominal financial statements for inflation, firm-by-firm, using the distinction between monetary and nonmonetary amounts. The sample included U.S. firms (645,97 firm year observations) with fiscal year-ends over the period 1984 to 2008, a period during which inflation was relatively low (average three percent). The framework developed in Barth et al. (2001) was extended to include inflation gains. Specifically, for horizons of one to four years.**
Results	**The main findings of that study were:** **1- Unrecognized inflation gains are informative for predicting future cash flows.** **2- inflation-based trading strategies are associated with significant abnormal returns, meaning that stock prices do not fully reflect the implications of inflation gains for future cash flows.** **3- Stock prices act as if investors do not fully distinguish monetary and nonmonetary assets, which is necessary to determine the effects of inflation.** **4- Unrecognized inflation effects have significant economic implications, even during a period in which inflation is relatively low.**
(5)	**(Ilter, 2012)**
Title	**Exploring the effects of inflation on financial statements**

Objective	The objective of that research was to show the inflation effect on the financial statements and its economic impacts on the companies in an inflationary environment.
Methodology	A model company had been developed with some events and assumptions that the company went through gradual increases in inflation rates have been tried on the model.
Results	The result showed that: 1- Inflation can have hazardous effects on financial statements. It is an uncontrollable external factor for management. 2- Inflation, even at lower rates affects negatively the financial statements. 3- Model shows what ratios are affected by inflation adjustments. 4- As inflation accelerates, the effects of inflation become more apparent on financial statements.
(6)	**(Fodio,Salaudeen,2012)**
Title	Comparative analysis of the value relevance of historical cost accounting and inflation-adjusted accounting information.
Objective	That study investigated the comparative value relevance of HCA and IAA information in Nigeria. That study examined the mean differences between historical cost financial ratios and inflation-adjusted financial ratios in order to reveal the distortion caused by HCA information during inflationary period. Four financial ratios-returns on assets, return on equity, return on market value of equity, and return (plus depreciation) on market value of equity, were computed for both HCA and IAA data. It also examined the information content of HCA and IAA information in order to determine the incremental content of each.
Methodology	Historical cost financial statements of a sample of companies obtained from the Nigerian Stock Exchange were restated. Regression analysis has been used to measure the joint effect of the earning numbers on security prices.
Results	The results showed that: 1- Historical cost financial ratios are generally higher than inflation adjusted ratios, except for return on market value of equity. 2- HCA information has the potency of distorting,

	though not significantly, the accounting information provided to decision makers. 3- HCA is more value relevant than IAA information. However, the value superiority was not found to be statistically significant. 4- Consequently, it was recommended that policy makers in Nigeria should encourage firms to provide IAA information as complimentary to, rather than replace, HCA information provided in annual financial statements.
(7)	**(Zaid,2013)**
Title	**The Value Relevance of Inflation Accounting Disclosure of Quoted Petroleum Firms in Nigeria.**
Objective	**That study examined the individual value relevance of HCA model, IAA model, and joint value relevance of IAA disclosure on the quoted petroleum firms in Nigeria.**
Methodology	**The sample of the study constituted six Petroleum firms on the Nigerian Stock Exchange covering a period of seven years (2005 to2011). That study used modified Olhson model (1995). Price valuation model for analysis. Correlational Research design were employed. Data were sourced from Nigerian stock exchange fact book and available annual financial reports of the firms. Price indexes provided were used to adjust HCA information into the IAA values.**
Results	**The Results of the study showed that :** 1- **IAA information is slightly more explanatory than the HCA information, and marginal information provided by the IAA information does not mean anything to the financial information users.** 2- **While on the overall, the inflation adjusted cost model shows a little more relevance if the joint reporting is adopted.** 3- **That study concluded that, the IAA information has an explanatory power as HCA, and joint reporting could provide financial information users with broad opportunity to focus on other variables for their decision-making.**
(8)	**(Patjoshi ,2013)**
Title	**Comparative analysis of reported and inflated financial ratio.**

Objective	That study investigated the impact of inflation on Indian companies' financial performance and financial position by evaluating and comparing reported and inflation-adjusted financial ratios.
Methodology	Financial statements of 42 Indian manufacturing companies had been restated in current purchasing power for a period of 5 years (2004-05 to 2008-09). The ratios were calculated on both historical and inflation adjusted financial statements to form two sets of ratios. The CPP method and financial ratio analysis had been employed to study the impact of inflation on different financial ratios.
Results	Results showed that with the impact of inflation there is significant difference in liquidity, profitability and activity ratios except quick ratio.
(9)	**(khodadadi1, V. et al., 2014)**
Title	Investigating the Effect of Inflation Disclosure on Improving the Information Content of the Financial Reporting.
Objective	The objective of that study was to investigate the effect of inflation disclosure on improving the information content of the accounting financial reports .
Methodology	120 accepted companies' data in the Tehran stock exchange was analyzed using the data panel method with fix effects during 2002 to 2012.
Results	The results of that research showed that: 1- There is no significant difference between the information content of modified accounting earnings and the inflation effects compared with the reported accounting earnings in prediction of operating cash flow. 2- There is not either a significant difference between the modified accounting earnings information content and the inflation effects compared with the reported accounting earnings in prediction of stock return. 3- There is not a significant difference between the modified accounting earnings information content and the inflation effects compared with the reported accounting earnings in prediction of abnormal return.

(10)	(Acheampong,2015)
Title	**Value relevance of inflation-adjusted equity and income.**
Objective	**The main objectives were:** ▪ **To examine the difference between reported HCA data and IAA data.** ▪ **To examine the differences between reported historical cost financial ratios and inflation-adjusted financial ratios.** ▪ **To compare the value relevance of HCA data verses IAA data.**
Methodology	**Data was collected from a sample of selected twenty (20) listed companies on the Ghana Stock Exchange (GSE) for a period of ten (10) years (2004-2013). A valuation model was used to determine the explanatory power of historical cost and inflation accounting variables.** **Financial statements based on HCA were adjusted for changes in inflation using CPI.**
Results	**that study concluded that:** 1- **IAA information content is more value relevant than the HCA information in predicting the book value of the firms.** 2- **Further evidence shows that both IAA and HCA based earnings are value relevant.** 3- **Therefore, it was recommended that the two valuation methods should not be used as substitute but should be used as complementary in the preparation and reporting of financial statements.**
(11)	(Ifeanyi & Chukwuma,2016)
Title	**An empirical analysis of inflationary impacts on profitability and value of selected manufacturing firms in Nigeria.**
Objective	**That study aimed to investigate the nature of the relationship between inflation and the value of firms in the industrial sector in Nigeria. It also examined the relationship between inflation and profitability (represented by return on assets) and economic value added and return on assets.**
Methodology	**That study collected data from the audited financial statements of firms included in the sample .Data was analyzed using multiple regression and analysis of variance.**

Results	The main results of that study include:
	1- A strong negative relationship between inflation and firm value.
	2- An insignificant negative relationship between inflation and return on assets (proxy for profitability).
	3- Inflation, even at low level, seriously understates the true value of the firm.

From the above discussion, Inflation accounting is not a new concept. Previous studies have provided evidence on the magnitude and effect of inflation adjusted accounting numbers. Also they have provided evidence on the importance and effect of inflation adjusted accounting numbers. In Egypt little efforts have been done. The concern over rapid and sustained price increases over some decades has brought in lots of discussions and debates on how to address this problem (e.g., Shaban, 1986; Nemr,1989; Ghonamy,1994). Most of these discussions end in choosing which inflation adjustment method to adopt, recognizing the fact that there is a lack of adequate reporting mechanism to deal with inflation problem.

The current study extends the inflation accounting literature and provides a comparison of the quality of HCA and IAA information in Egypt. The general aim of this study is to investigate whether inflation- adjusted financial statements enhances financial reporting quality.

4-Hypothese Development:

In this research, the quality of financial statements will be examined in light of the IAS Conceptual Framework. Specifically, the fundamental qualitative characteristic- faithful representation (reliability).

Consequently, the current study attempts to test the following

H1: There is no significant difference between the reliability of historical cost-based and inflation-adjusted accounting information.

5-Variables selection, definition measurement:

From the above hypothesis, reliability can be measured as following: The reliability of the HCA financial statements is measured through the linear regression model that has components of current accrual as independent variable and future cash flows as dependent variable (Barthet.al, 2001).

$$OCF_{t+1} = \theta + \gamma_1.OCF_t + \gamma_2.\Delta AR_t + \gamma_3.\Delta INV_t + \gamma_4.\Delta Ap_t + \gamma_5.DEPN_t + \gamma_6 OTHER + \mu_{t+1}$$

.... (1)

Where,

OCF : cash flows from operations

θ : regression intercept (constant)

AR: accounts receivable,

INV : inventory

AP : accounts payable

DEPN : depreciation and amortization

OTHER: other accruals

$\gamma_1 \ldots \gamma_6$: regression coefficient.

μ : error term

t : time

The reliability of the IAA financial statements is measured through the linear regression model that has components of current accrual and inflation gain and loss as independent variables and future cash flows as dependent variable.

For IAA financial statements if inflation-adjusted earnings are higher (lower) than nominal earnings in the current period, the unrecognized inflation gains (losses) should result in increased (decreased) future OCF. Gains can turn into future cash flows in several ways,

depending on firms' activities. Because the underlying economics of firms' activities are the same regardless of how these activities are reported in financial statements, if the nominal financial statements do not fully capture the effects of inflation today, such inflation effects are likely to be realized in future periods, thereby enabling the inflation effects to help predict future performance. For example the inflation effects can turn into OCF because higher unrecognized inflation gains accumulated in nonmonetary assets should result in higher future OCF when the assets are used (in the case of PPE) or sold (in the case of inventory). Further, because inflation is correlated with changes in specific prices, predicting higher future OCF from increases in the general price index is consistent with prior literature that shows increases in specific prices result in higher OCF (Konchitchki, 2011) .

So, the reliability of IAA information can be tested by extending the framework developed in Barth et al. (2001) to include inflation gains.The following equation can be used (Konchitchki, 2011):

$$OCF_{t+1} = \theta + \beta IGL_t + \gamma_1.OCF_t + \gamma_2.\Delta AR_t + \gamma_3.\Delta INV_t + \gamma_4.\Delta Ap_t + \gamma_5.DEPN_t + \gamma_6.OTHER + \mu_{t+1} \quad \text{(2)}$$

Where

IGL_t: **Inflation gains and losses for year t;**

The higher the capacity of the independent variables in explaining the dependent variable is the higher the degree of reliability of the financial statements. The explanatory ability of the independent variables is measured by the coefficient of determination of each model (1) and (2) R^2 separately. The higher the R^2 of the two previous models is, the more reliable the financial statements and, vice versa.

The following paragraph provides the predicted signs of independent variables based on theoretical analysis (Barthet. al ,2001;Konchitchki,2011).

The sign of current operating cash flow (OCF) is positive because assume the operating environment is constant, earnings before extraordinary items and discontinued operations and cash flow in next year are similar with those in current year.

The sign of change in account receivable (ΔAR) is positive because the increase in current period receivables leads to reschedule the collection to next period. The sign of change in inventory (ΔINV) is positive because increase in inventory leads to decrease in the inventory requirement in next period, So that the cash paid to purchase inventory decrease. The sign of change in accounts payable (ΔAP) is negative because increase in current period payables leads to defer the payment to next period. The sign of depreciation (DEPN) is positive because investment in fixed assets generates operating cash flow. The sign of IGL is positive because the unrecognized inflation gains (losses) should result in increased (decreased) future OCF. The unrecognized inflation gains (losses) should result in increased (decreased) future OCF. The sign of other accruals (OTHERS) is indeterminable because it is only a residual value of aggregated accruals minus the four major accrual components, which include (ΔAR+ΔINV-ΔAP-DEPN).The higher the capacity of the independent variables in explaining the dependent variable is the higher the degree of reliability of the financial statements.

6-Results and Discussion:

6/1 Descriptive Statistics:

Table (1):Descriptive Statistics (HCA)

Variable	N	Minimum	Maximum	Mean	Std. Deviation
ROA	195	-2.4765E-8	4.0242E-9	7.9417E-11	1.9759E-9
INV	195	-.15	20.86	.2352	1.86041
AR	195	-1.49	20.77	.2089	1.85430
AP	195	-.92	5.27	.0549	.63678
DEPR	195	0.000120	.36	.0167	.02849
OCF	195	-.97	.75	.0393	.15349
OTHERS	195	-30.94	3.08	-.3525	2.76107
Valid N (listwise)	195				

Table (2): Descriptive Statistics (IAA)

Variable	N	Minimum	Maximum	Mean	Std. Deviation
ROA	195	-7.9828E-9	2.1035E-9	-1.7977E-10	8.9627E-10
INV	195	-.16	20.76	.2205	1.81444
AR	195	-1.38	13.42	.1465	1.33927
AP	195	-.40	4.43	.0533	.52388
DEPN	195	0.000177	.62	.0234	.04847
OCF	195	-.78	.45	.0296	.11296
OTHERS	195	-29.64	2.30	-.3333	2.42616
IGL	195	-.23	.23	-.0024	.04898
Valid N (listwise)	195				

Tables (1) and (2) report the results on the descriptive statistics (mean, standard deviation, minimum and maximum values) for both historical cost and inflation-adjusted variables employed in the study, covered a period from 2014 to 2018. All variables are normalized by average total assets for each year.

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Table (3): Mean values and t-statistics for HCA and IAA

Variable	Mean		T-statistic	Sig.	Result of difference
	HCA	IAA			
ROA	7.9417E-11	-1.7977E-10	1.668	.096	sig.at9.6%
INV	.2352	.2205	.079	.937	not sig.
AR	.2089	.1465	.381	.703	not sig
AP	.0549	.0533	.028	.978	not sig
DEPR	.0167	.0234	-1.681	.094	Sig.at9.4%
OCF	.0393	.0296	.712	.477	not sig.
OTHERS	-.3525	-.3333	-.073	.942	not sig.

Table (3) shows the mean values and t-statistic for HCA and IAA information covered a period from 2014 to 2018. All variables are normalized by average total assets for each year. The results indicate the existence of significant differences between inflation-adjusted and historical cost variables. Although, the differences between inflation-adjusted and historical cost variables are not generally statistically significant, on the overall, the historical cost variables are higher than the inflation-adjusted variables except depreciation.

In general the results show that HCA information overstate the financial strengths of firms. This could distort information in the financial statements, which may lead to incorrect decision and stock analysis.

a. **Model (1):**

$$OCF_{t+1} = \theta + \gamma_1.OCF_t + \gamma_2.\Delta AR_t + \gamma_3.\Delta INV_t + \gamma_4.\Delta Ap_t + \gamma_5.DEPN_t + \gamma_6.OTHER$$

$$+ \mu_{t+1} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots(1)$$

Table (4) presents regression results for model (1) under HCA information.

Table (4) regression results for model (1) HCA

Variables	Coefficient	T-Statistic	Sig.	VIF
Constant	3.10E+08	6.275433	0.0000	-
ΔINV	0.065831	1.257755	0.2104	1.0187
ΔA/R	0.103525	5.270304	0.0000	2.1054
Δ A/P	-0.76996	-2.457681	0.0151	1.8960
DEPR	-2.547002	-2.875701	0.0046	1.2458
OCF	0.105875	1.249345	0.0135	1.4530
Others	0.097220	5.060915	0.0000	2.0145
R-squared 0.691794	Adjusted R-squared 0.601386			
F-statistic 7.651972	prob (F-statistic) 0.00000			
Durbin-Watson stat 2.101888	Jarque-Beraprob 0.206741			

In model (1), degree of reliability is tested through the Predictive ability of accruals components and cash flow that is measured where future cash flow are regressed on current cash flow and the components of current accruals.

In table (4) , the historical cost based regression results indicate that the adjusted R^2 of the model is approximately 60% which means that the independent variables (current cash flow and components of current accruals) explain 60% of the systematic variations of the dependent variable (future cash flow) about its mean. It also indicates a significant positive relationship between current cash flow and future cash flow (p < .001). However, not all the accruals components are significant and consistent with the prediction of the sign. Depreciation and amortization, the long-term accruals, is negative which is inconsistent with the prediction of the sign correlated with future cash flow and significant (p =.0046). For the short-term accruals, change in inventory is insignificant (p> 5%). Change in accounts receivable is positive which is consistent with the prediction of the sign and significant (p =.000). Change in accounts

payable is negative which is consistent with the prediction of the sign correlated with future cash flow and significant (p = .0151). Change in other accrual is positive correlated with future cash flow and significant (p = .000).

b. **Model(2):**

$$OCF_{t+1} = \theta + \beta IGL_t + \gamma_1.OCF_t + \gamma_2.\Delta AR_t + \gamma_3.\Delta INV_t + \gamma_4.\Delta Ap_t + \gamma_5.DEPN_t +$$

$$\gamma_6.OTHER + \mu_{t+1} \dotfill (2)$$

Table (5) regression results for model (2) IAA

Variables	Coefficient	T-Statistic	Sig.	VIF
Constant	**5819497**	**2.087738**	**0.0382**	–
ΔINV	**0.575753**	**6.143063**	**0.0000**	**1.81921**
ΔA/R	**-0.132767**	**1.733920**	**0.0846**	**2.02458**
Δ A/P	**0.131206**	**3.391359**	**0.0008**	**2.18960**
IGL	**-0.012221**	**-0.179897**	**0.0857**	**1.65894**
DEPN	**-0.004675**	**-0.150707**	**0.8804**	**2.87561**
OCF	**1.179156**	**2.965961**	**0.0034**	**1.98632**
Others	**0.128999**	**3.395475**	**0.0008**	**2.01548**
R-squared 0.518742 Adjusted R-squared 0.500727				
F-statistic 28.79500 prob (F-statistic) 0.00000				
Durbin-Watson stat 2.109989Jarque-Beraprob 0.23249				

In model (5) degree of reliability is tested through the Predictive ability of accruals components, cash flow and inflation gain or loss that is measured where future cash flow are regressed on current cash flow, the components of current accruals and inflation gain or loss for the current period.

In table (5) the inflation-adjusted based regression results indicate that the adjusted R^2 of the model is approximately 50% which means that the independent variables (current cash flow, components of current accruals and inflation gain or loss) explain 50% of the systematic variations

of the dependent variable (future cash flow) about its mean. The results also indicate a significant positive relationship between current cash flow and future cash flow (p = .0034). However, same as the result of first model not all the accrual components are significant and consistent with the estimated sign of coefficients. Depreciation and amortization, the long-term accruals, is positive which is consistent with the prediction of the sign correlated with future cash flow and significant (p = 0). For the short-term accruals, change in account receivable is consistent with the prediction of the sign; change in account receivable is significant and positively correlated with future cash flow (p = 0). Change in accounts payable is insignificant (p> 5%). Other accruals is significant and positively correlated with future cash flow (p = 0). inflation gain and loss is significant and negatively correlated with future cash flow (p = .0857) .

Comparing the results of table (4) and (5), they indicate that the explanatory power of historical cost and inflation-adjusted are 60% and 50% respectively. This result indicates that historical cost based regression has higher predictive ability for future cash flow than inflation-adjusted based regression. Based on the results above H1 (There is no difference between the reliability of historical cost-based and inflation-adjusted accounting information.) is rejected.

7-Conclusion:

Debate about inflation accounting has been ongoing for many years in many countries especially the developing countries. This study tries to shift attention to inflation accounting application by investigating the comparative reliability of HCA and IAA information. By examining the reliability of HCA and IAA information, as defined by the IFRS conceptual framework (Empirical Evidence from Egypt).

In measuring the reliability of accounting information, the results of the study show that both HCA and IAA information are significant in

predicting future operating cash flow. However, historical cost based regression has a slightly higher predictive ability for future cash flow than inflation-adjusted based regression.

The overall findings of the study suggest that HCA and IAA information complement each other rather than replace each other. However, the findings do not discredit the quality of HCA information. The results recommend that IAA information should be used supplementary with HCA information in financial reporting since this will help both the management and investors to take into account the effects of inflation. As mentioned before increasing the level of disclosure should reduce information asymmetry and improve the accounting reporting quality. Disclosure quality should correct any firm miss-valuation. It helps reduce asymmetric information among the stock market participants, as well as between managers and investors.

Totally, the obtained results in this study are in accordance with the results of other research conducted on this issuelikeFodio and Salaudeen, (2012) and (khodadadi1, V. et al. (2014).

The findings have several important implications. The absence of uniform inflation accounting standard made the estimation of inflation adjustment necessary. Although from last century, lot of work has been done on inflation accounting, but until now, no standard and uniform method has been developed. The evidence presented in this paper also underscores the need for further research in this area.

Further research should be conducted regarding the following issues:

- The effect of inflation accounting on key financial ratios.
- The usefulness of inflation-adjusted data in bankruptcy prediction and distribution of dividend decision.
- The ability of inflation-adjusted information to improve financial reporting quality.

References

References translated from Arabic:

Wadi, M. F. A. 2006. The effect of inflation on accounting disclosure in Palestinian economic bodies. A published Master Thesis, Faculty of Commerce, Islamic University- Gaza.

References in English:

Acheampong, O. 2015. Value Relevance of Inflation-Adjusted Equityand Income. Retrieved at March 24 ,2018, from: http://hdl.handle.net/123456789/8613.

Archambault, J. J. and M. E. Archambault. 1999. A cross-national test of determinants of inflation accounting practices. *The International Journal of Accounting* 34 (2) :189−220.

Barth, M. E., D. P. Cram, and K. K. Nelson. (2001). Accruals and the prediction of future cash flows. *The Accounting Review*76 (1): 27–58.

Bello, A. 2011.The Joint Information Content of General Purchasing Power and Current Cost Accounting. Retrieved at August 22,2017, from:https://www.researchgate.net/publication/228270005_ The Joint Information Content of General Purchasing Power and Current Cost Accounting.

Biddle, G., Gilles, H. and Verdi, R. (2009). How does financial reporting quality improve investment efficiency? *Journal of Accounting and Economics*48 (23):112-131.

Chen, F., Hope, O. K., Li, Q. and Wang, X. (2011). "Financial Reporting Quality and Investment Efficiency of Private Firms in Emerging Markets".*The Accounting Review* 86 (4): 1255-1288.

Dechow,P.M. and C.M. Schrand. (2004). Earnings quality. The Research Foundation of CFA Institute3. Retrieved at April 5, 2016, from: https://www.cfapubs.org/doi/pdf/10.2470/rf.v2004.n3.3927.

Elliott,B. Elliott,J. 2011.Financial Accounting and Reporting. Fourteenth Edition. Retrieved at December 15,2016,from:http: //www.pearsoned.co.uk.

FASB,(1979) Statement of Financial Accounting Standards No. 33 *Financial reporting and changing prices, Stanford*.

Fodio, M. I. and Y. M . Salaudeen. (2012). Comparative analysis of the value relevance of historical cost accounting and inflation-adjusted accounting information. *International Journal of Economics and Management Sciences*l (8):25-33.

Goldschmidt, Y and J. Yaron .1991. Inflation adjustments of financial statements application of international accounting standard 29. Working Paper, Retrieved at September 30, 2016, from: http://wwwwds.worldbank.org/servlet/WDSContentServer/WDSP/IB/199 1.

Hakki,S.I.1992. Inflation accounting methods and their effective eness. Master theies. Naval Postgraduate School. Retrieved at March 1,2018, from: http://hdl.handle.net/10945/23927.

IASB, (2008). The conceptual framework for financial reporting. London: International Accounting Standards Board.

IASB, (2010). The conceptual framework for financial reporting. London: International Accounting Standards Board.

Islam,A.2013. Impact of inflation on import: An empirical study. *International Journal of Economics, Finance and Management Sciences*1(6):299-309.

khodadadi1,V. et al. (2014). Investigating the effect of inflation disclosure on improving the information content of the financial reporting. *International Journal of Financial Research* 5 (3): 96-106.

Kirkulak, B. and C. K. Balsari. (2009). Value relevance of inflation-adjusted equity and income. *The International Journal of Accounting*44:363–377,.

Konchitchki, Y. 2011. Inflation and nominal financial reporting: implications for performance and stock prices. *The Accounting Review* 86(3):1045–1085.

Labonte,M.2003. Inflation: causes, costs, and current status. Congressional Research Service. Retrieved at October 9, 2016, from: https://pdfs.semanticscholar.org/.../7bf4dd4a6c9bce7c057225062743.

Lee, T. A. 2009. Financial accounting theory. The Routledge Companion to Accounting History, Retrieved at April 14, 2018, from: https://www.routledge.com/...Routledge-Companion...Financial-Acco.

Modugu, K. P.; C. Okafor; O. Nosa. 2012. Impact of price level changes on financial accounting measurement. *Journal of Management and Corporate Governance.*4:72-82.

Patjoshi, P. (2013).Comparative analysis of reported and inflated financial ratio. *International Journal of Innovation and Development* 2(12):82-88.

Shroff, N.(2015)Real effects of financial reporting quality and credibility: evidence from the regulatory regime. Institute of Technology. Retrieved at April 12, 2017, from: https://pcaobus.org/ News/ .../Financial-Reporting-Quality-Shroff. pdf.

Singh,R.2016. Inflation Accounting Methods: Their Effect on Depreciation. *International Journal in Management and Social Science*4 (6): 315-324 .Retrieved at August 8,2017, from: http://www.ijmr.net.in .

Tsoncheva, G.(2015). Measuring and assessing the quality and usefulness of accounting information. Retrieved at Nov 12, 2017, from: https://ideas.repec.org/a/vrn/journl/y 2014i1p52-64.htm.

Zaid, A. 2013. The Value Relevance of Inflation Accounting Disclosure of Quoted Petroleum Firms in Nigeria. Retrieved at: May 3, 2016, from: https://www.reseasrchgate.net.