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Accounting for Changing Prices: Will a Lasting Solution be Found?

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ABSTRACT This paper attempts a concise evaluation of developments that have taken place in one of accounting's most elusive subject to-date. This desk study paper is based primarily on efforts made by two of the most influential western countries in the development of accounting - the United Kingdom and the United States of America. Even though developed western countries have, for the time being, lost interest in this subject, and understandably so, developing countries can hardly afford to follow suit. Given the extensive experimentation with inflation accounting models by developed western countries in the 1980s, it would take very high rates of inflation for these countries to develop an appetite for this topic again. Accounting for changing prices remains a very important topic in developing countries as they are the ones often ravaged by high rates of inflation. The bottom line is that if developments in accounting and changing prices are to take place in the foreseeable future, these will have to come from developing countries. Historically, these countries have almost always relied on developed western countries for the development of accounting. Can accounting for changing prices be an exception?

INTRODUCTION

A quick review of literature on inflation accounting reveals the obvious lack of a precise and commonly used definition of this accounting term. Authors have often defined accounting and then inflation but fell short of defining inflation accounting even when their books or papers may be entitled "Inflation Accounting". Authors have either taken the meaning of inflation accounting as a given or have deliberately avoided attempting a definition for one reason or another. Discussion of inflation accounting has tended to centre around the phrase "accounting for changing prices". The Merriam-Webster Online Dictionary and Thesaurus (2010) defines inflation as – "a continuing rise in the general price level usually attributed to an increase in the volume of money and credit relative to available goods and services". The Business Dictionary.com (2010), has referred to inflation accounting as the act of: "adjusting financial statements to show a firm's real financial position in inflationary times. It aims to indicate how rising prices and lower purchasing power of the currency affect a firm's cost of refinancing its productive assets, and of its ability to maintain an adequate level of profit on the capital employed. One method is to adjust every figure in the balance sheet on the basis of a price index (such as consumer price index) which reflects the current purchasing power of the currency. Another method suggests to revalue tangible assets at their replacement cost." BNET Business Dictionary has defined Inflation Accounting as "the adjustment of a company's accounts to reflect the effect of inflation and provide a more realistic view of the company's position."

Inflation accounting can therefore be described as a process or means of measuring and communicating the effects of inflation on the economic value of an enterprise. Changing prices, however, are a result of changes either in the general price level, changes in prices of specific items, or both. Accountants and economists are concerned with changes in both general price levels and prices of specific items. Inflation as defined above excludes changes in prices of specific items. In strict terms, inflation accounting would therefore not cover both types of changes in prices. This is probably one reason why accountants have not paid much attention to the definition of inflation accounting, and instead choose to talk about changing prices. Since changes in both general price levels (inflation) and prices of specific items may have

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considerable impact on the economic value of an enterprise, this paper explores both types of changes in prices rather than restrict itself to what has been described as inflation accounting.

Inflation accounting is a topic which has been widely discussed and debated by academic accountants, practicing accountants, accounting boards and governments for close to a century. Dissatisfaction with the Historical Cost Accounting (HCA) model dates as far back as the mid to late nineteenth century. Today, a century later, the whole world clings to HCA at times with limited use of indexing in countries experiencing hyper-inflation, and occasionally, supplementary information reflecting current costs is supplied in financial statements. In 1918 Middleditch asked the question: "Should accounts reflect the changing value of the dollar?" (Scapens 1977). Calls for accounting to reflect the effects of changing prices were triggered mainly by inflationary conditions which existed during and after the two world wars. Countries most affected by rising prices during the two world wars were Germany, France, Britain and to a lesser extent, the United States of America (DeLong 1997; Kosares 2008; Tassava 2008). It is, therefore, not surprising that much of the work on accounting and changing prices came from these countries. A historical analysis of accounting for changing prices shows that interest in this subject tended to rise and fall along with the rise and fall in inflation in these countries (Riordan et al. 2009). For instance, interest in inflation accounting became an important topic in the 1970s in countries such as the United States when inflation became a major concern (Farrell et al. 2000). When the US contained inflation in the 1980s, considerable efforts that had been made in dealing with inflation accounting were brought to nought when Financial Accounting Standards Board (FASB) abandoned SFAS 33 – Financial Reporting and Changing Prices (Farrell et al. 2000).

Even though recently a study by Khodadadi et al. (2014) has suggested that inflation does not materially impact the financial content of financial reports, it is generally agreed and overwhelming so, that inflation does distort the content of financial reports and thus compromises their utility. Numerous studies have pointed this out (Man 2007; Riordan et al. 2009; Cenap 2011; Yaniv 2011; Agundu et al. 2013**)** with some demonstrating the effect of inflation in financial reporting.

Historically the world has relied mainly on industrialized western countries for the development of accounting. In broad terms, accounting systems in the western world, and by extension, to many of the developing countries, can be classified under two main spheres of influence: Anglo-American and Franco-German. Failure to develop an accounting model which satisfactorily addresses changing prices on the part of countries such as Britain, the United States of America, France, Germany and the Netherlands, has meant that the whole world remains without an inflation accounting model. Accounting for changing prices remains a very important topic in developing countries as they are the ones often ravaged by high rates of inflation. These countries can, therefore, hardly afford to remain complacent about this topic. The following paragraphs trace the historical developments on inflation accounting in some of the countries mentioned above, particularly UK and USA.

INFLATION ACCOUNTING MODELS

Even though calls for accounting to reflect the effect of changing prices date back as far as the early 1900's, today no acceptable accounting model has been developed which completely reflects the effects of changing prices on the performance and economic value of an enterprise. From the beginning of the second quarter of the twentieth century, a considerable amount of research has been undertaken and a number of committees set up to study and make recommendations on accounting for changing prices in Britain and the United States of America. These have resulted in a lot of controversy on this subject. Those who are closely associated the problems surrounding changing prices with the general price level advocated the General Price Level Accounting (GPLA) model. In Britain this model was commonly known as the Constant/Current Purchasing Power (CPP) accounting model. The GPLA is a model which relies heavily on general price indices such as the Consumer Price Index. The use of indices enables the presentation of financial statements in constant monetary units. This, it is argued, takes care of inflation and greatly enhances the comparability of financial statements prepared in inflationary years to those prepared in years without or with negligible inflation. The major shortcomings of this model are: (1) that it ignores the effects of changes in prices of specific items which did not come about as a result of the changes in the general purchasing power of money. Take, for example, the fall in computer prices even in years characterized by high inflation; (2) that it is difficult to compute an index that includes (covers) all the commodities and services in an economy. In developing countries the index problem is much more pronounced because reliable indices are still largely hard to come by.

The shortcomings of the GPLA model have obviously meant that there will be those against its adoption. A section of accountants suggested the adoption of the Current Cost Accounting (CCA) model. The term Replacement Cost Accounting (RCA), has been used in accounting literature in much the same way as CCA. In this paper, reference will only be made to CCA, which in all essence includes replacement costs. The CCA model is designed to take care of changes in prices of specific items. Its advocates argue that since this model addresses price changes (whatever the cause of the price change) item by item, a model such as GPLA is irrelevant and therefore should not be adopted. The CCA model is not without limitations. There are at least three methods of measuring current costs such as replacement costs, net realisable costs, and present value costs. To complicate things further, there are a number of possible current cost variations under each of these three methods (Whittington 1983). Each method may be relevant and applicable in certain circumstances and not in others.

Both GPLA and CCA bear the additional shortcoming of rendering verification of transactional evidence rather cumbersome. This is particularly pronounced in the case of the CCA where changes of prices of specific items would in most cases be at varying rates. There is no indicated solution to this shortcoming at the present time.

The limitations of each of these two models of accounting (GPLA and CCA) has left the accounting profession divided between those supporting either model and those who have found both GPLA and RCA unsuitable and therefore prefer the traditional HCA.

DECISION MAKING STRUCTURES AND LOW RATES OF INFLATION

The long outstanding HCA model has a number of other limitations which accountants have tolerated for many decades. However, accountants seem not to be able to accept the shortcomings of the alternative accounting models that would go a long way in addressing the impact of changing prices in financial reporting. The profession has probably never dealt with a more controversial topic than accounting for changing prices. Debates and experiments tended to go on endlessly, albeit not so much since the decade of the 1980s. With the exception of the Netherlands, no country has ever permitted the complete abandonment of HCA. CCA and/or GPLA financial statements whenever proposed were to be supplementary to HCA ones. The reasons why both CCA and GPLA have not fared well in accounting for changing prices can be linked to the accounting decision making structures in the leading countries, and to the relatively low rates of inflation experienced by these countries over the past few decades.

In Britain and the United States of America, for example, there are several independent accounting regulatory bodies, some with de facto veto powers in accounting decision- making. Each of these accounting regulatory bodies operates on majority rule basis. Though views may differ within an accounting regulatory body, views put forward for national decision making are those of the majority of the body. The United States has the Financial Accounting Standards Board (FASB), the American Institute of Certified Public Accountants (AICPA), the Government Accounting Standards Board (GASB) and the Securities Exchange Commission (SEC), all with a role to play in the development of accounting. In the UK, there is the dominant Institute of Chartered Accountants in England and Wales (ICAEW), Institute of Chartered Accountants of Scotland (ICAS), Association of Certified Chartered Accountants (ACCA), Chartered Institute of Management Accountants (CIMA), and the umbrella body, Consultative Committee of Accountancy Bodies (CCAB) with its Accounting Standards Committee (ASC), among others.

With different bodies supporting different accounting models within a country, the outcome has often been a deadlock as each body battled to push its own ideas forward. Low rates of inflation have meant that no sense of urgency and necessity existed when addressing accounting issues relating to changing prices. The result is that HCA continues to be the only acceptable accounting model despite its limitations.

Much of the recent literature on inflation and accounting or accounting for changing prices discusses techniques that can be applied to data generated using the historical cost accounting model to make accounting information comparable in years of significant inflation (See for example, Hughes et al. 2003; Suhanyiova 2009; Zhenghong et al. 2011).

MOST MARKED EFFORTS TOWARDS ACCOUNTING FOR CHANGING PRICES

There was never a time when the western world came closer to adopting an accounting model for changing prices than the decade of the 1980s. The beginning of this decade witnessed a marked interest in accounting for changing prices in the United States of America to a degree never before experienced in the history of accounting. Though preliminary work was carried out towards the end of 1970's, experimentation with accounting models geared towards changing prices started in earnest, in 1980. The United Kingdom experimented with CCA while the United States of America experimented with CCA and GPLA (CPP in the United Kingdom) accounting models. However, the decade came to an end with both countries abandoning their experiments with these models.

In September 1979, the Financial Accounting Standards Board (FASB), the United States of America's accounting standards authority, issued Statement of Financial Accounting Standards No. 33 – "Financial Reporting and Changing Prices" (FASB 1979). FAS 33 called for mandatory disclosure of supplementary information on both CCA and GPLA basis. This statement applied only to public enterprises that had either (1) inventories and property, plant, and equipment (before deducting accumulated depreciation) amounting to more than $125 million or (2) total assets amounting to more than $1 billion (after deducting accumulated depreciation (FASB 1979). After eight years of experimentation, the FASB abandoned FAS 33 in 1987.

It had been concluded that even though accounting information on changing prices appear useful, a survey of financial statements users, preparers, and auditors revealed that both the number of users and extent to which the information was used were limited. For the FASB to have concluded, after less than a decade of applying FAS 33, that efforts in this regard were not bearing fruit, appears to have been premature. A new accounting system would invariably take a long time before it can gain full utilization given that HCA system has been used for a very long time and that both GPLA and CCA have never really been easily understood by all users and potential users of financial statements. Worse still, the experimentation period coincided with a period of very low rates of inflation. It has therefore, been too short and untimely to produce reliable results in terms of the usefulness or otherwise of accounting information prepared under GPLA or CCA. The results of the experiment are, therefore, possibly inaccurate and misleading. This view is shared by Farrell et al. (2000), who argue that the "research findings on the usefulness of FAS NO. 33 disclosures have not been conclusive." They argue further that while "in FAS No. 89 (FASB 1986), the FASB declared that FAS No. 33 disclosures did not achieve the cost-benefit relationship that had been anticipated for them, it is noteworthy that FAS No. 89 did not cite a single theoretical argument that would refute the litany of arguments made in the discussion memorandums and exposure drafts leading up to the issuance of FAS No.33 and the statements in the conceptual framework," (Farrell et al. 2000). However, even as the FASB abandoned FAS 33, it encouraged the disclosure of information on changing prices where HCA statements were materially affected.

In Britain the Accounting Standards Committee (ASC) issued Statement of Standard Accounting Practice No. 16 (SSAP 16) – "Current Cost Accounting" in March, 1980. SSAP 16 required supplementary CCA information and it applied to all enterprises except those which did not have any class of share or loan capital listed on the Stock Exchange and satisfied a few other requirements which included an annual turnover of less than £5 000 000 (SSAP 16 1980). In June 1985, SSAP 16 was suspended and finally withdrawn in April, 1988. As in the United States of America, companies were encouraged to supply information on changing prices where HCA statements were materially affected.

Both Britain and the United States of America experienced very low rates of inflation during much of the 1980s, and it was therefore not surprising that interest in accounting for changing prices eventually plummeted. Keeping inflation down was at the top of the agenda of the governments of the two countries during that period. The fact that during the same period (1980s) some countries such the UK experimented with one of the possible models for accounting for changing prices (CCA) while others such as the United Sates experimented with two such models (GPLA and CCA), goes to show the varied thinking amongst accountants on this topic, and this is an indication of just how unlikely it was for accountants to agree on a solution to accounting for changing prices.

THE FLAWS OF HISTORICAL COST ACCOUNTING CONTINUE

The use of the HCA model during periods of changing prices poses a few, yet potentially harmful, economic problems. It is difficult, for instance, to evaluate the performance of an enterprise on the basis of its past performance. Things get worse when comparing two or more enterprises in different lines of business. The ultimate outcome is likely inappropriate allocation of resources throughout the economy. Where national accounting standards allow a high degree of flexibility in the treatment of accounting items, it becomes almost meaningless to attempt a comparison of economic performance of two or more enterprises. The lack of comparability between enterprises may act as a disincentive for potential investors from taking up shares in new as well as existing enterprises. There is also the risk of capital erosion. Changing prices caused by inflation may lead to understatement of costs such as depreciation, and as a result profits would be overstated. An enterprise would likely lose money through tax based on overstated profits. Many developing countries still suffer from lack of reliable financial reporting even without the problems of changing prices. The lack of an accounting model which adequately addresses changing prices worsens an already worrisome situation.

WILL A SOLUTION COME FROM DEVELOPING COUNTRIES

For several decades since the abandonment by the UK, USA and others, of efforts towards the development of an accounting model that effectively takes care of changing prices in financial reporting, it has mainly been some of the developing countries which have and continue to experience persistent high rates of inflation. For instance, in 2009 it was Myanmar, Zimbabwe and Venezuela that IASB considered highly inflationary (hyperinflationary); and the following nine developing countries were on the inflation watch list as of the same period: Democratic Republic of Congo, Ethiopia, Guinea, Iran, Iraq, Sao Tome and Principe, and Seychelles (Deloitte 2010). None of the developed countries were close to hyperinflation. It is thus in the developing countries that the need for an accounting model for changing prices is felt the most. For historical reasons, it is here that there has been very little by way of research on accounting for changing prices.

There is very little prospect of a solution to the problem of changing prices and financial reporting coming from developing countries. To start with, not all developing countries are experiencing high rates of inflation. Invariably, governments adopt measures applied by the central banks to curb inflation often with a reasonable degree of success. More significantly, individual developing countries do not have sufficient resources to devote towards a search for a solution to this and many other accounting problems. Even when countries act as regional groups such as is the case with the Eastern Central and Southern Africa Federation of Accountants (ECSAFA), amongst others, the shortage of resources remains a stumbling block. Developing countries today look to the International Accounting Standards Board (IASB) for solutions to accounting problems. Even though IASB's best response today is the 'lukewarm,' indices reliant IAS 29 – Financial Reporting in Hyperinflationary Economies, developing countries are not about to start their own efforts in search of a solution to accounting for changing prices. Accounting, therefore, remains without an effective solution to challenges paused by inflation in financial reporting. Users of accounting information will continue to struggle in times of significant and hyper rates of inflation as was witnessed in recent times in Zambia and Zimbabwe, for instance.

IAS 29 is inadequate on its own and does not herald an inflation based accounting model. All that it offers is adjustments of (tinkering with) HCA generated figures, relying on indices. At best, IAS 29 offers a start in the search for an accounting model that fully addresses the effects of changing prices in financial reporting.

Even though some research on accounting and changing prices still goes on in developed countries, it is sporadic and there is not enough interest to bring about positive and conclusive developments on this subject in the foreseeable future. Today much of what is written about inflation and accounting is concerned with the models that were experimented on (GPLA; CCA and other variants) but not about developing a new inflation accounting model. Some of the recent efforts by accounting scholars include the works of Konchitchki (2011), Agundu et al. (2013), and Chambers (2015), among a few others. The challenge remains for both academic and practicing accountants in developing countries to tackle this complex subject that requires a considerable amount of time, effort as well as both human and financial resources to tackle. Perhaps with regional co-operation by accounting bodies and academics in developing countries in order that they pool their limited resources, progress may be made which could eventually lead to IASB lending support to the search for a permanent solution to a challenging accounting problem. The will for this to happen appears, for now, to be non-existent.

CONCLUSION

The world has put up with a financial reporting model – historical cost accounting – which is not able to deal with the problem of changing prices in financial reporting. Even though the world witnessed marked efforts towards a solution to this problem in the 1980s, there is still no suitable accounting model that effectively takes care of the impact of changing prices in financial reporting. Given the extensive experimentation with models for changing prices by such countries as the UK, USA and The Netherlands, amongst a few others, as discussed above, the developed world is not likely to venture into this topic again anytime soon.

It is more the developing countries, as compared to the developed ones, that often experience high rates of inflation and at times hyperinflation. However, the developing countries have almost always looked to the developed countries to take the lead in developing accounting systems and financial reporting standards. This has been mostly because of the shortage of both human and financial resources needed to spearhead the development of accounting in developing countries. There has also been the secondary element of not 're-inventing the wheel.' The fact that not all developing countries often experience high levels of inflation, and also that inflation is not a permanent feature in any economy, has also meant that chances of developing countries working together collectively to tackle this matter have remained remote. It looks more evident, however, that if a solution is to be found with regard to this controversial topic, it will have to be the developing countries working together and enlisting the support of such organisations as the International Accounting Standards Board in the search for a lasting solution to the century-long accounting problem. The prospects for this to happen do not look good in the foreseeable future. However, inflation is a phenomenon that will always exist, subsiding to insignificant levels for the time that economic and monetary policies can contain it, and will rise to worrisome levels from time to time even amongst the best managed of the developed countries.

It is the intention of this paper to stimulate research on accounting and changing prices in the developing countries. A practical approach to this problem, using the inductive approach to developing accounting theory to come up with a framework for financial accounting in changing prices, is necessary if significant progress is to be made. Research on the nature of specific problems facing developing countries as a result of changing prices is highly recommended as a starting point in the process which, hopefully, would eventually lead to a suitable accounting model for changing prices. Lessons learnt by some of the countries in South America that adopted methods and techniques for accounting for changing prices may come in handy.

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