Proceedings of 5th International Conference of Economic, Business and Government Challenges 2022. Vol. 1 No. 1 August 2022: 232-239

RELEVANCE ANALYSIS OF INFLATION ACCOUNTING IN ASSESSING COMPANY FINANCIAL STATEMENTS

Gempita Asmaul Husna[1*], Khusnul Fatikha[2], Gideon Setyo Budiwitjaksono[3]
Faculty of Economics and Business, UPN Veteran Jawa Timur, Indonesia
gempitah@gmail.com[1*]

Abstract. Indonesia is a country that adheres to an open economy which brings Indonesia to the problem of inflation from year to year, while the accounting process in Indonesia generally adopts historical costs. This concept works with a stable monetary unit, it does not recognize changes such as the effects of inflation. All transactions that occur are recorded based on historical values or values obtained during transactions and bring the dilemma of relevance to the company's financial statements. For investors and stock traders, additional reports such as General Price Level Accounting are needed to determine their resilience in the face of unpredictable competition and monetary. This concept states that the true value of the Rupiah (IDR) is determined by the goods or services commonly known as purchasing power. During inflation or deflation, the quantity of goods/services can be obtained by changing the nominal value of money constantly, which means that the purchasing power of the rupiah changes. With this additional report, the purpose of the accounting report can be fulfilled, as a competent reference for making the right decisions.
Keywords: *Accounting, inflation, financial statements*

I. Introduction

Inflation is an economic condition caused by an increase in the prices of goods and services in general and continuously. Based on the Consumer Price Index (CPI) in the calculation of annual inflation at the Central Statistics Agency, the percentage of inflation in Indonesia in 2013 was 8.38%. This percentage experienced a large increase from 2012 which was 4.30%. Although not in double digits, inflation of 5% can be said to be high. This shows that there is an increase in the prices of goods and services caused by the purchasing power of consumers and changes in prices in the industrial sector. Therefore, this study uses 2013 as the year of observation because the inflation rate increased dramatically by 95%. The Central Statistics Agency (BPS) noted that in July 2013 the highest inflation was caused by the foodstuffs group, namely 5.46% and the processed food, beverages, cigarettes and tobacco group by 1.55%, while for the non-food and drinks below 1%.

At this time the capital market is the prima donna of investors to invest their capital. But to invest capital in stocks is not as easy as turning the palm of the hand. Investors must know the profitability of the company whose shares will be purchased. How the resilience of a company in the face of competition and monetary is difficult to predict. Information about a company that sells its shares in the capital market can be found through its financial statements. Financial statements are important information for users of financial statements in order to assess the company's overall financial performance. Financial statement information is considered to have information quality value if it meets two elements, namely reliability and relevance for users of financial statements. Uniquely, Indonesian accounting records adhere to a conventional accounting system where financial statements are presented based on historical values (Historical Cost) which assumes that prices (monetary units) are stable. Conventional accounting does not recognize changes in the general price level or changes in the specific price level. As a consequence, if there is a change in purchasing power such as in the period of inflation, the financial statements if we return to the explanation in the previous paragraph are economically irrelevant. To overcome this inflation accounting becomes a reliable guide in analyzing the financial statements of a company.

II. Literature Review

Inflation Accounting

Inflation accounting is an accounting process to produce information that has taken into account the level of price changes. The presentation of financial information related to price changes due to inflation conditions, there are several concepts that can be applied, namely:

1. Current Cost Accounting. This concept retains the unit of measurement but deviates from the historical cost model.
2. General Price Level Accounting Concepts (General Price Level). This concept changes the unit of measurement but maintains the reporting model on the basis of historical cost.

The Indonesian Accounting Principles (PAI) as a whole do not regulate the application of the inflation accounting concept for financial reporting. PAI applies the concept of value as an alternative valuation for certain items, for example for securities (short-term investments) and inventory items. However, the application of the applicable value is always associated with the condition that if there is a decrease in the price of the asset in question until it is lower than its acquisition price, it is not caused by an increase in the price of the asset.

Meanwhile, in presenting the value of fixed assets, PAI does not apply the concept of value that applies in relation to price increases, but in relation to the application of the basis of conservatism in financial reporting. This is contrary to the general situation which indicates an increase in price and not a decrease in price.

Several studies on the application of the concept of constant prices to adjust the value of financial statement items due to inflation as in the research conducted by Prof. Hadibroto in (Inflation Accounting) concludes that the application of this concept is good for financial reporting. So it is necessary to review the importance of the inflation accounting concept applied in the presentation of financial statements for the reliability of the information in the financial statements.

Inflation

There are many definitions of inflation in the scope of economics. In the early period, the definition of inflation that was often used after the second world war according to AP Lehner was a condition where there was excess demand for goods in the economy as a whole (Anton H Gunawan, 1991). According to Boediono (1995) inflation is defined as the tendency of prices to increase in general and lasts continuously. Meanwhile, according to FW Paish provides an explanation of inflation as a condition where national income increases much faster when compared to the increase in the increase in goods and services produced in an economy (Anton H Gunawan, 1991). From some of the definitions above, it should be underlined that the definition of inflation includes the following aspects:

1. Tendency, which is a tendency for prices to increase, meaning that at a certain time it is possible for prices to decline but overall have an increasing tendency.
2. Sustained, price increases that occur do not only last for a certain time, but continuously over a long period of time.
3. General level of price, the price in the context of inflation is intended as the price of goods in general, not in the sense of one or two types of goods.

The inflation theory used is "Inflation Targeting". Inflation Targeting is monetary policy by making inflation the final target. In implementing Inflation Targeting, Bank Indonesia sets the desired inflation target and implements a monetary policy strategy to achieve the inflation target that has been set. In this regard, Bank Indonesia applies forward-looking monetary policy based on interest rate control because empirically monetary transmission through interest rates is quite effective in influencing aggregate demand and inflation.

Monetary Policy that has been implemented by Bank Indonesia as the monetary authority through inflation targeting policy. Other considerations used by Bank Indonesia using inflation targeting are (Amril Arief, 2005):

1. Related to the exchange rate system used, namely the free exchange rate system.
2. Inflation targeting inflation for the public.
3. Inflation targeting increases monetary policy transparency Improved
4. accountability resulting in better public understanding which has an impact on increasing the credibility of the Central Bank.

By applying the inflation target to reflect the direction of the market system, it means that the orientation of the central bank in managing the economy has shifted towards the smaller role of the central bank. As a consequence, the goal of economic development is not merely high economic growth, but rather sustainable economic growth. The implementation of monetary policy using inflation targeting is expected to create stronger macroeconomic fundamentals.

Historical Cost

Based on the Financial Accounting Standards (SAK), the presentation of financial information stated in the financial statements is prepared using the *historical cost accounting concept.* Financial statements are the final result of an ongoing accounting process with the assumption that economic conditions are always stable. Meanwhile, in reality, these assumptions are starting to become less realistic because the level of economic stability is starting to become difficult to realize. The use of *historical cost* in the preparation of financial statements describes the reporting of financial information based on cost, namely assets, liabilities, capital and all operating results are reported based on the value at the time of the transaction. (Rofelawati, 2009).

Accounting based on *historical cost* wants to maintain two characteristics of information, namely objectivity and*verifiability*. In fact, the users of financial statements are very concerned with relevance. Relevance is more concerned with the present and the future. Therefore, information based on *historical costs* is considered less relevant for decision-making purposes, especially in economic conditions in which the prices of goods tend to always increase. (Suwardjono, 1989).

According to Sugiarto, 1990, the main strength of *historical cost* is that the resulting financial statements reflect the acquisition cost which generally comes from objective financial transactions. Therefore, the information contained therein is considered:

1. Can be trusted;
2. Reflecting the objective;
3. Unbiased;
4. Inexpensive;
5. Easy to audit independently.

In inflationary economic conditions, there are two problems faced in applying *historical-cost accounting* (Richard & Myrtle 1995), namely:

1. problem *Valuation*.
   The value of individual assets or specific assets will change when compared to other assets even though the purchasing power of money does not change. This is because new products are produced using different technologies or new products are produced with higher capabilities. It can also be due to changes in economic conditions, people's perceptions of the benefits of certain goods will change, thus affecting the value of these goods.
2. The*measurement unit problem*.
   Due to inflation, the purchasing power of money changes so that the monetary unit as a measure of value is no longer homogeneous when it comes to time. This change in the value of the unit of measurement occurs because of changes in the general price level in the economy. That is, if the value or benefit of an item does not change, the number of monetary units that can be used to obtain the item will vary from time to time because the purchasing power of money changes. Thus the difference in the price of an item at two different times does not necessarily indicate a difference in the value or benefit of the goods.
   If the effect of price changes as above is not considered, then in a situation where the price level tends to rise there are two things that can happen, namely the calculation of profits tends to be*overstated*or in actual profit figures there is a*holding*and if this is ignored. then the concept of retaining assets may be violated. The first is related to the issue of the unit of measurement which is the basis for general*price-level accounting.* The second is related to the concept of economic profit to maintain assets but the asset measurement is emphasized on the present value of the company's physical assets.

General Price Level Accounting (GPLA)

General Price Level accounting known as General price level accounting states that the real value of Rupiah (abbreviated as Rp) is determined by the goods or services that can be obtained, which is commonly called purchasing power. In times of inflation or deflation, the amount of goods/services that can be obtained changes with a constant nominal value of money, which means that the purchasing power of the Rupiah changes. General price level accounting will restate the components of the financial statements into Rupiah at the same level of purchasing power, but in no way change the accounting principles used in accounting based on historical values.

Adjustments to financial quantities for inflation to reflect general price values or general price levels

and the use of these adjusted values in accounting. Changes in the general price level can be calculated or measured by a price index. The price index commonly used is the consumer price index, which is an index that presents periodic changes in the costs of selected groups of goods purchased by consumers which is used as a measure of inflation.

Preparation based on historical values adjusted to be based on general price levels can be done by converting historical values with conversion factors into general price levels, with the following formula:

$$\text{Conversion faktor} = \frac{\text{Index now}}{\text{Base year index}}$$

In preparation based on general price levels, it is necessary to pay attention to items that will be affected by a decrease in the purchasing power of Rupiah, namely:

1. Monetary assets, such as cash on hand, marketable securities, and accounts receivable and others which are dormant accounts will experience a significant decrease in purchasing power because these accounts can no longer be appraised
2. Real estate does not experience the effect of a decrease in purchasing power, but from an accounting point of view, it is an item that is affected by a decrease in the purchase price. However, this is not a serious problem because these accounts can be assessed.
3. Assets in foreign currency are not affected by the decline in the purchasing power of the Rupiah because they can be valued at the latest exchange rate.

Controversy regarding the relevance of the GPLA has been and is still ongoing today. A number of supporting arguments have been developed (Richard & Myrtle 1995):

1. Financial statements that are not adjusted for general price levels or in other words are presented based on historical values do not reflect changes in the purchasing power or ability of various assets and claims in the company. Meanwhile, the report that is presented based on the general price level presents data that reflects the purchasing power of assets and claims in certain currencies at the end of the period.
2. Conventional historical-cost accounting does not measure income properly as a result of matching Rupiah in the income statement. Expenses that have occurred in the previous period are contracted with revenues which are generally reflected in certain current Rupiah values. General price-level accounting provides a better concept of matching income and expenses because it uses a constant value of money (common value).
3. General price-level accounting is relatively easy to apply. Just replace "old value" with "current value". General price level accounting reflects the last concept of General Accepted Accounting Principles. As a result, it is considered relatively more objective and can be verified. These characteristics make general price-level accounting more acceptable in many companies than current-value accounting.
4. General price-level accounting provides management with relevant information in its evaluation and use. Thus, profit and loss based on general price levels result from handling monetary items that reflect management's response to inflation. In the end, general price level accounting presents the general effect of inflation on earnings and provides a more realistic rate of return. Relevance is more concerned with the present and the future, therefore information based on historical values is considered less relevant for decision-making purposes, especially in economic conditions that tend to experience inflation.

On the other hand, the rejection of general price-level accounting is based on the following arguments:

1. Most empirical studies indicate that the relevance of general price level information is also weak or in other words unacceptable. Future studies are expected to provide more assurance before any conclusions can be reached regarding the level of relevance of general price level information and the ability to fully interpret it.

2. The general price level changes account only for changes in the general price level and does not change the account to a specific price level. Thus, the profit and loss account for non-monetary assets is not recognized and users of data adjusted for general price levels may believe that changes in values have corresponded to current values.
3. The effect or consequences of inflation will be different in different companies. Capital-intensive firms will be more affected by inflation than firms filled with short-term assets.
4. The costs of implementation are greater than their principal value in general price-level accounting than the benefits.

Several regulations issued by the Financial Accounting Standard Board (FASB) in the USA also still do not provide certainty regarding whether or not to use general price-level accounting, including:

1. Statement no. 33 which requires certain companies to present additional information using general price-level accounting and current cost accounting.
2. Statement no. 89 states that additional information with general price-level accounting and current cost accounting should be provided but is not required.

Statement of Financial Accounting Standards in Indonesia that additional information, among others, regarding disclosure of the effect of price changes is non-binding.

Financial Reports

Financial statements are the final result of the accounting process that contains financial information for the purposes of various interested parties (stakeholders and shareholders). Harahap (2007) states that financial statements are a form of corporate responsibility. The existence of prices that tend to change makes historical financial statements irrelevant with the assumption of using a stable value of money (Kodrat, 2006). Silalahi (2010) states that inflation accounting is an accounting process in order to obtain information by calculating the level of price changes. This means that if the company's income decreases, the company tends to convert (Feroz, 1987).

If the company already has proper financial statements, in general, historical values that are applied to the financial statements will be able to face the examination with certainty that the information can be trusted. However, during the inflation period, the currency value has changed which now cannot be equated with the previous value, therefore a principle has emerged that takes into account changes in currency values, such as the general price level accounting principle, which adjusts goods with generally accepted values and uses the same measurement scale. and remains valued on a historical basis as value and Current Cost Accounting as an additional value at the time of inflation.

III. Research methods

In this study, qualitative descriptive methods were used, namely by describing the nature of a situation by collecting, compiling, recording and classifying and analyzing the data obtained and then compared with the theories obtained and discussing the relevant relationships with the problems discussed.

IV. Discussion

Financial statements, as we know them so far, are reports that prioritize reliability rather than relevance. Therefore, one of the principles of preparing financial statements is historical cost (historical cost accounting). That is, the financial statements are prepared based on the historical cost. This concept ignores the inflation that actually occurs in every country. Inflation will affect the value of each number presented in the financial statements which makes the information contained in the financial statements distorted.

As previously discussed, GPLA is an inflation accounting concept that changes the unit of measurement, but still maintains a reporting model on the basis of historical cost. The aim of this approach is to maintain the value of capital at a fixed price with a price index measure.

In the GPLA, the accounts in the historical financial statements are grouped into monetary items and non-monetary items, then treated according to their characteristics. The monetary account is not affected by price changes, so it reflects the general price level prevailing. Ownership of monetary accounts will result in a gain or loss in purchasing power. On the other hand, non-monetary accounts are affected by price changes,

their values do not reflect the general price level in effect, so they must be adjusted to a conversion factor that reflects the general price level in the form of a consumer price index.

Cash and Accounts Receivable do not need to be adjusted to changes in purchasing power, but in the financial statements that are compared, there needs to be a similarity in purchasing power. This adjustment is made in the following manner:

Inventories are converted in the following manner:

$$\frac{\text{Index number in year I}}{\text{Index number in base year 0}} \text{ X cash/accounts receivable}$$

$$\frac{\text{Index number in year 1}}{\text{Acqisition index number}} \text{ X cost of inventory}$$

The cost of inventories depends on the method used (FIFO, LIFO, Average, etc.) and the use of the method must be consistent. Prepayments are presented in the financial statements according to changes in purchasing power at the time of payment. The conversion value is:

Investments are presented in the financial statements according to changes in purchasing power when the investment occurs. The presentation is:

$$\frac{\text{Index number in this year}}{\text{Index number when investment occurs}} \text{ X Investment value}$$

$$\frac{\text{Index number in this year}}{\text{Index number at the time of payment}} \text{ X advance payment}$$

Fixed Assets in the financial statements are presented in accordance with changes in purchasing power when the assets are owned. The conversion value is:

$$\frac{\text{Index number in this year}}{\text{Index number when the aasets is owned}} \text{ X cost of fixed assets}$$

Current Debt does not need to be revalued because it directly follows changes in purchasing power unless it is compared with other financial statements.

Maintenance/subscription contracts (advances on maintenance contracts) are measured at a conversion value of:

$$\frac{\text{Index number in this year}}{\text{Index number during maintanance}}$$

Long-term debt does not need to be revalued because it directly follows changes in purchasing power unless you want to compare it with other financial statements.

Deferred income taxes are reported in the balance sheet at the accumulated amount of tax savings and presented in the financial statements after adjusting for changes in purchasing power of the amount to

be paid, so that Deferred Taxes no longer need to be adjusted for changes in purchasing power. .

Preferred Share Capital can be classified as a monetary element and a non-monetary element depending on the circumstances. Common Stock Capital is measured by the difference between. Total Assets that have been adjusted for changes in purchasing power with Total Debts that have been adjusted for changes in purchasing power plus preferred share capital.

Revenues and expenses can be classified into two groups, namely monetary elements and non-monetary elements. The nature of these accounts is the basis for classifying them. The financial statements that have been prepared using the General Price Level Accounting method are compared with the financial statements prepared using Historical Cost Accounting. Both financial statements were analyzed using the NOD (Number of Dollar) attribute to determine that the financial statements were interpretive and analyzed using the COG (Command Over Good) attribute to determine that the financial statements were relevant.

From the results of the analysis, further analysis is carried out. Financial statement elements are said to be relevant > 16 units and interpretive if the difference in the elements that have been prepared based on constant dollars divided by the difference in units is equal to the consumer price index. If the percentage of elements in the financial statements that match the NOD attribute and COG attribute > 50%, then the financial report can be said to be interpretive and relevant.

V. Conclusion

The conclusion that can be drawn is that in times of inflation, GPLA financial statements are more informative than historical cost, but whether or not the material difference caused by GPLA depends on its effect on the company, so that GPLA is not intended to replace historical cost financial statements, but only as a supplement report. to be used as additional information in decision making for parties who need financial statement information so that the objectives of accounting reporting are met. This is based on the statement of Financial Accounting Standards in Indonesia that additional information, among others, regarding the disclosure of the effect of price changes is non-binding.

References

Faiz, IA, & Legowo, H. (2019). Impact of Inflation on Earnings Information on Green Investment.*Journal of Applied Accounting and Taxation*,*4*(1), 117-124.

Hariana, R. ANALYSIS OF FINANCIAL STATEMENTS OF THE PHARMACEUTICAL INDUSTRY BASED ON INFLATION ACCOUNTING WITH THE GENERAL PRICE LEVEL ACCOUNTING (GPLA) METHOD FOR THE 2011-2015 PERIOD.Journal of Scientific Studies in Accounting, Faculty of Economics, UNTAN (KIAFE),6(4).

Hartono, A. (2015). Deviation on the Relevance of Historical Cost and Current Cost Financial Statement Concepts with Islamic Accounting Concepts on Decision Making. Equilibrium: Scientific Journal of Economics, 10(1), 1-13.

INDARMALA, R. (2016).IMPLEMENTATION OF INFLATION ACCOUNTING WITH GENERAL PRICE LEVEL ACCOUNTING METHOD AS ADDITIONAL INFORMATION AT PT MAYORA INDAH Tbk(Doctoral dissertation, University of Muhammadiyah Malang).

Indriyani, NMV, & Wirakusuma, MG (2015). The Relevance of Financial Indicators Using General Price Level Accounting and Current Cost Accounting Methods. E-Journal of Accounting, 11(3), 894-908.

Kodrat, DS (2006). Comparative Study of Financial Statement Preparation with Historical Cost Accounting Methods and General Price Level Accounting during Inflation Periods.Journal of Accounting and Finance,8(2), 78-91.

Kristanto, SB (2007). Relevance Analysis of General Price Level Accounting with Conventional Accounting in Indonesia. Journal of Accounting.

Mursalin, M. (2011). THE USE OF THE CONCEPT OF GENERAL PRICE-LEVEL ACCOUNTING IN ASSESSING THE RELEVANCE OF THE FINANCIAL STATEMENTS OF A COMPANY. Journal of Media Wahana Ekonomika, 8(2), 78-87.

Pratiwi, YE (2018). Concept of Historical Cost Versus General Price Level Accounting Method in Financial Statement Preparation.

Prayogo, SD (1999). Application of Inflation Accounting with General Price Level Accounting Concepts as Additional Information on Conventional Financial Statements of PT. X in Surabaya.

Purwanti, S. (2012). Treatment and Presentation of Inflation Accounting in Financial Statements using the GPLA and CCA Methods (Case Study at PT Catur Putra Sanjaya in Brebes).Journal of Economics and Business.

Rahmawati, N., & Widodo, H. (2008). Inflation Accounting Treatment and Presentation in Financial Statements.Volumes,1, 45-46.

Teresa, S. (2012). Historical Cost and General Price Level Accounting: Relevance Analysis of Financial Indicators. Journal of Accounting, 4(2), 115-134.

Wibisono, A. (2021).ANALYSIS OF APPLICATION OF ACCOUNTING INFLATION TO COMPANY FINANCIAL STATEMENTS AS A SUPPLEMENT REPORT IN DECISION MAKING (Study at PT. Kalbe Farma Tbk Year 2017-2019)(Doctoral dissertation, University of Muhammadiyah Ponorogo).

Winata, L. (1998). Application of Inflation Accounting as a Supplementary Report to Conventional Financial Statements at PT. X in Surabaya.

Yunus, H. (1986). EFFECTIVENESS OF INVESTMENT SUPERVISION IN THE COMPANY.Journal of Indonesian Economy and Business (JIEB),1(1), 87-106.