

# Support and Against Historical Cost Accounting: Is it Value Relevance for Decision Making?

Evi Rahmawati

*Email : Evirahmawati@gmail.com*

Universitas Muhammadiyah Yogyakarta

## **ABSTRACT**

*This paper reviews the issues on the support and criticism of historical cost accounting (HCA) and the incremental information content on current cost disclosures. Based on literature review this study find that historical cost is still relevant to use in decision making. Empirical studies show evidence both; supporting historical cost accounting and criticisms against the conventional historical cost based financial statements. Issues on historical cost are raised because of economic condition, inflation, the change in high tech environment, price movements, and regulators statements. Studies shows that historical cost accounting. over the decade: still have power explanatory for investors, which indicates that its benefits outweigh its cost. However, Barth et al. (1996) provide strong evidence on incremental information of current cost disclosures for certain assets and liabilities. This paper concludes that even there are weaknesses (against) HCA, still there are more benefits that we can gain through HCA.*

**Key words:** *Historical Cost Accounting, Current Cost, Value Relevance*

## **ABSTRAK**

Tulisan ini membahas tentang masalah pada dukungan dan kritik dari sejarah akuntansi biaya (HCA) dan isi informasi tambahan tentang pengungkapan biaya saat. Berdasarkan tinjauan literatur penelitian ini menemukan bahwa biaya historis masih relevan untuk digunakan dalam pengambilan keputusan. Studi empiris menunjukkan bukti baik; mendukung akuntansi biaya historis dan kritik terhadap laporan keuangan berdasarkan biaya historis konvensional. Isu biaya historis dibangkitkan karena kondisi ekonomi, inflasi, perubahan lingkungan teknologi tinggi, pergerakan harga, dan regulator pernyataan. Studi menunjukkan bahwa akuntansi biaya historis. lebih dari satu dekade yang: masih memiliki daya penjabar bagi investor, yang menunjukkan bahwa manfaatnya lebih besar daripada biaya. Namun, Barth et al. (1996) memberikan bukti yang kuat atas informasi tambahan dari pengungkapan biaya saat aktiva

dan kewajiban tertentu. Makalah ini menyimpulkan bahwa bahkan ada kelemahan (melawan) HCA, masih ada lebih manfaat yang bisa kita peroleh melalui HCA.

**Kata kunci:** Akuntansi Biaya Perolehan, Biaya sekarang, Nilai Relevansi

## INTRODUCTION

The objective of financial reporting are to provide accountability and decision usefulness of the financial statements, which is done by accrual and cash basis method. There are several accounting models for financial reporting, Historical Cost Accounting (HCA), Current Cost Accounting (CCA) and Exit-Price model. For over decade accountants have been using the HCA which has been systematically codified as the fundamentals basis for measuring, recording and reporting the economic and related activities of the firm (Godfrey et al., 2000). Consistent with that, *Generally Accepted Accounting Principles (GAAP)* financial statement are prepared according to HCA basis. HCA basis requires most assets and liabilities should be measured and reported at their acquisition price (historical price). The consideration of the range of technical issues to record and report the entity financial performance has been arising. It has been debatable that HCA has lost its usefulness for user decision making and also lost its value relevance due to the changes in the economy, particularly the high tech environment.

This paper reviews the criticism and issues arise within the HCA model financial statements and the incremental information of current cost disclosures. According to Collins et al. (1997), combined value relevance of earnings and book value has not decreased over the past years, in fact it has increased slightly. However, with the high tech environment and changing price movements, HCA model financial statements can lost its relevancy. *Statements of Financial Accounting Standards (SFAS)* 33 was issued to overcome the misleading information because of the economic condition. However research shows (Beaver et al., 1980; Boatsman and Gheyara, 1980 and Ro, 1980) that there is no significant responses to the market, this indicates that there is no additional information in the data require in the statement. However, in 1991 FASB (*Financial Accounting Standards Board*) issued SFAS 107, Barth et al. (1996) find that loans fair values provide significant explanatory power incremental to nonperforming loans and interest-sensitive assets and liabilities and vice versa under this statement. Further research (Collins et al., 1997) was done to examine whether HCA is still relevant and has powerful explanatory for investors decision making.

### **Support for Historical Cost Accounting**

Historical cost accounting is relevant in making economic decisions. As managers make decisions concerning future commitments, they need data on past transactions. They must be able to review their past efforts and the measure of these efforts is historical cost. Ijiri (1975) presents 3 reasons to support this:

- (1) It affects the evaluation and selection of decision rules. In order to determine which decision rules to use. Managers need information about the quality of their past decisions.
- (2) It provides input to the satisfying notion. Some decisions makers do not seek to optimize but to satisfy.
- 3) It is used because it is imposed on the decision maker by their environment

Under HCA a record of actual transaction is made. A supporting record of the figures on the financial statements is therefore provided. Records of past transactions are necessary for accountability. Ijiri (1975) claims that as long as accountability is important historical cost must be utilized.

Mautz (1973) emphasizes that the users can be inform about the changes in market value by providing the parenthetical disclosure. Therefore recognize the change as an element of current income is no longer needed. Mautz stated that HCA is based on recognition of the effect of actual activities not just possible.

HCA does not differ materially from current cost, supplementary data on current prices (changing price) are a practical and sufficient way of dealing which such information without having to shift from historical cost to a current cost basis. Ragland and Moulton (1993) examine on which assets and liabilities give rise to stock value by using a firm's stock value as a benchmark and giving statement prepares discretion. Most practitioners of accounting agree that historical cost carrying amounts provide useful and meaningful information to users and prepares of general purpose financial statements. At the same time, most practitioners of accounting would agree that users and prepares of financial statements need other information to make decisions. Specifically they need information about the current values of an enterprise and its various operations. Ragland and Moulton (1993) argue that current values are so important to decision makers that they continually develop and use estimates where no measurement is provided by the historical cost model.

Criticism against conventional HCA financial statements argue that the historical cost model does not reflect economic value and is not designed to reflect economic value. It does not recognize all the effects on value of inflation or changes in technology, business and industry. It does not reflect reasonable expectations about prospective decisions, events and transactions. Ragland and Moulton argue that since both historical and current value information is useful, it is unacceptable to choose between them.

It is equally unacceptable to mix historical cost and current value information in a single set of financial statements; the end result is a loss of both kinds of information. Ragland and Moulton suggest that a conceptual framework are needed that can preserve the advantages of the historical cost model while reporting relevant current values. Historical cost accounting would be applied to all transactions during each accounting period, and the account balances and net income resulting from those transactions would retain the values reported today

Ball and Brown (1968) belief that is inadequate to evaluate the usefulness of income numbers by comparing accounting practices to normative models. Therefore they done an empirical study to the extent to which the contents and timing of the annual accounting earnings announcement is reflected in security prices. By using the foundation of Efficient Market Hypothesis and the Market Model Ball and Brown examined three empirical data. The first empirical data is accounting income number from 261 firms. The second is annual report announcement dates, which is the date of publications of the preliminary income report in the Wall Street Journal. Then the last data is the share price information that is monthly closing prices on the NYSE (New York Stock Exchange). The results of Ball and Brown (1968) study is highly significant for accounting theory, considering that this is the first research study to obtain evidence of the decision-usefulness of historical cost-based accounting earnings. There are three major finding from Ball and Brown, first the market reacted in the same direction with the shift of actual income when it differs from expected income positively or negatively. Second the market has been anticipated about most of the information in the annual income number before the annual reports is released. The last finding form this research study is the share prices continue to move after the announcement date (Post earning Announcement Drift).

Another study, Hand (2000) finds that the pricing of Internet stocks was dominated by economic fundamentals (accounting based measure), and not by web traffic or supply and demand factors. The implications of this study results for the pricing of Internet stocks are that they are not somehow intrinsically different to all types of stocks: economic fundamentals, such as accounting book values and earnings, are still the most critical factor in their valuation

### **Criticism against Historical Cost Accounting**

There has been increasing concern to the adequacy of the HCA system in the current business environment. The Australian Accounting research Foundation (AARF) has released the Monograph 10, they claim that HCA failed to provide objective information and proposes alternatives that consider the changing value of assets and liabilities.

*Historical cost is insufficient for the evaluation of business decisions*

Edwards and Bell argue that managements need HCA information in order to evaluate their past performance; hence they can make a right decision for their future. Similarly with those findings Edward and Bell argue that historical cost accounting has insufficient for the evaluation of business decisions; they claim that a proper evaluation of past decision must entail a division of total profit in given period while the price of asset and liabilities are changed.

Sterling (1967), he argue that the conservatism was the fundamental principle of valuation but due to arguments that for the historical cost realization convention are manifestly specious when removed from the context of conservatism, they come up with second hypothesis that the cost rule is, in fact, nothing more than manifestation of conservatism. Sterling concluded that conservatism yields are not just giving zero information but also giving misinformation. Hence they claim that historical cost yield misinformation. They agree that the present value were more realistic and more likely what people mean by wealth.

***Current cost accounts (CCA) are more useful for investor decision making***

Duncan and Moores (1998) examine the usefulness of CCA information for investor decision making. With the New Zealand Society of Accountants CCA-1 Standard (Information Reflecting the Effects of Changing Prices) became a mandatory reporting requirement as from April 1982, majority of listed companies were not complying with its requirements. The reason given by the company directors for non-compliance, a significant proportion were categorized implying either the non-relevance or the subjectivity and complexity of such CCA information. These negative statements by company directors about the relevance and reliability of CCA information imply that such information is not useful to investors.

In contrast to the directors comments, the objective of the CCA-1 Standard states that it is intended to provide more useful information. CCA accounts are expected to better facilitate an assessment of the financial viability of the business' and return on investment by managers, shareholders, investors, and others in their decision making than historical cost. Duncan and Moores (1998) study results show that CCA are more useful for investor decision making because they are both more relevant and perceived to be more reliable than conventional historical cost accounts. With the limitations from this study, the experiment CCA information was found to provide more relevant information. This is because the treatment groups receiving such information made different and better decisions than those receiving HCA information. Furthermore, current cost accounts were found to result in different and better favorability rankings and slightly more accurate rate of return predictions. Complementing these findings, the CCA financial statements

were perceived to be just as, and possibly more, reliable than the HCA statements. Finally reliability was shown to be positively associated with relevance.

### ***Market value accounting***

Shim and Larkin (1998) argue that the market value accounting better presents the economic reality of transactions and therefore, tends to provide more useful and relevant information than does historical cost financial reporting. They argue that as business environments are changing rapidly and become increasingly volatile, the financial statements of firms should portray the underlying economic reality of the firms rather than the summary of past transactions. Based on their survey literature, the other important weakness of GAAP financial reporting is the lack of predictability of the going concern and the lack of emphasis on future cash flows of the firm. Market value financial reporting may be less reliable due to the subjectivity of certain measurements, but it could provide much more relevant and meaningful information to the users despite the subjectivity involved in measurement.

### ***Gradual movement in regulation away from historical cost***

Recently, the accounting regulation has been move gradually form HCA. New accounting standard are increasingly requiring assets valuation at market price. For example the *Australian Accounting Standard (AAS) 25 "Financial Reporting by Superannuation Plans"*. It recommends that assets of both a defined contribution plan and a defined benefits plan shall be measured at "net market values" as at reporting date. Also regulation on "Presentation and Disclosure or Financial Instruments" all recommend that liabilities be measured at their present values. using discounting techniques. Furthermore, Australian Accounting Boards have maintained that measuring assets at their net market values and measuring liabilities at their present value provides more relevant information to users about the firm's resources" than does the HCA. Consistency with those statements, regarding with Statement Accounting Concept (SAC) 2 "Objective of General Purposes Financial Reporting" and SAC 3 "Qualitative Characteristics of Financial information", the boards are also concerned with whether:

- (1) General purposes financial report will provide information that is considered useful to user for making and evaluating decisions about the allocation of scarce resources.
- (2) Those reports would be presented in a manner which is assists in discharging the accountability of management and governing bodies.
- (3) The information in those reports is relevant, reliable, comparable and understandable.

Moreover in SAC 4 "The appropriate measurement basis for an assets will depend upon the model of accounting being applied" its implicitly stated that the preferred model of accounting was not necessary historical cost. While up to now the SAC 5 identify the values appropriate for the elements of financial statements (whether FICA, CCA or other), the measurement unit which is appropriate (nominal or constant purchasing power dollars) and the concept of capital which is appropriate (Financial or physical capital).

### **Historical Cost Accounting versus Current Cost Accounting in Changing Price**

Historical cost accounting has some defects in relation with the movements of price. Elliott and Elliott (2002) argue that there are some problems arise when the movement of changing price becomes the issue. These problems are there are Significant information concerning equity progress and wealth is not reported. comparability of business entities becomes distorted, the decision making process become intrinsically flawed, financial reports become misleading because the financial data evolve and unrealized profits arise. However, current cost accounting model measures income with adopting the price index system. Movements in price levels are estimate at the retail price index; price changes in a group of goods and services in general (Elliott and Elliott, 2002).

Based on the support and criticism from the research literature above, it is that there are several issue related with historical cost accounting model. First issues are the timeliness of the historical cost model, which is whether historical more relevant to decision makers than objectivity or verifiability. Secondly, based on the market change, historical cost records may change with the passage of and subsequent events. Furthermore, there is also argument on the accounting whether to use cost or value? There's also some questions arises whether cost is a consistent measurement system for calculating income. Finally, we the issues whether historical cost accounting needs supplementary data additional disclosure to make financial report more relevant to decision making.

### **Incremental Information of Current Cost/Replacement Cost Disclosures**

Frequent criticism of HCA based income numbers is that they do take account of changing price levels of inventories/cost of good sold and plant equipment/depreciation. One proposed alternative is to use replacement cost or current cost to compute net income.

FASB required some US firms to report supplement current cost income numbers in their annual reports by issuing SFAS 33. SFAS 33 applies to public enterprises that have 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).

No changes are to be made in the primary financial statements; the information required by the Statement is to be presented as supplementary information in published annual reports. Based on SFAS requirement to report:

- (1) Income from continuing operations adjusted for the effects of general inflation
- (2) The purchasing power gain or loss on net monetary items.

Enterprises are also required to report:

- (1) Income from continuing operations on a current cost basis
- (2) The current cost amounts of inventory and property, plant, and equipment at the end of the fiscal year
- (3) Increases or decreases in current cost amounts of inventory and property, plant, and equipment, net of inflation.

To present the supplementary information required by this Statement, an enterprise needs to measure the effects of changing prices on inventory, property, plant, and equipment, cost of goods sold, and depreciation, depletion, and amortization expense. No adjustments are required to other revenues, expenses, gains, and losses. In computations of current cost income, expenses are to be measured at current cost or lower recoverable amount. Current cost measures relate to the assets owned and used by the enterprise and not to other assets that might be acquired to replace the assets owned. This Statement allows considerable flexibility in choice of sources of information about current costs: An enterprise may use specific price indexes or other evidence of a more direct nature. This Statement also encourages simplifications in computations and other aspects of implementation: In particular "recoverable amounts" need be measured only if they are judged to be significantly and permanently lower than current cost; that situation is unlikely to occur very often. The Board believes that this Statement meets an urgent need for information about the effects of changing prices. If that information is not provided: Resources may be allocated inefficiently; investors' and creditors' understanding of the past performance of an enterprise and their ability to assess future cash flows may be severely limited; and people in government who participate in decisions on economic policy may lack important information about the implications of their decisions. The requirements of the Statement are expected to promote a better understanding by the general public of the problems caused by inflation: Statements by business managers about those problems are unlikely to have sufficient credibility until financial reports provide quantitative information about the effects of inflation.

## **Value Relevance of HCA**

Capital market research was conducted using the SFAS No. 33. Beaver and Landsman (1983) used several research methods to examine the information content of the SFAS No.33. SFAS 33 states that a major purpose of financial reporting is to provide users with information that is helpful in assessing The basic findings were; 1) SFAS 33 earnings provide no explanatory power with respect to differences in annual security return across firms over and above that provided by historical cost based earnings; 2) Historical cost earnings do provide explanatory power over and above that provided by any one of the SFAS 33 variables.

Beaver et al. (1980) examine the association between changes in security prices and various aspects of disclosure requires by ASR 190 (ASR 190 was required for firms to disclosed replacement cost in order to give relevant information for investors). They find that there are no reactions to the stock price; this indicates that replacement cost disclosures provided no information to the market during the fifteen trading days and after the date that the requirements become effective. This finding is consistent with other findings (Gheyara and Boatsman, 1980, and Ro, 1980).

Gheyara and Boatsman (1980) provide evidence regarding whether information, defined in terms of alternations in assessed return distribution can certainly be attributed to the replacement cost disclosure. The replacement cost disclosure mandated by ASR 190 did not introduce information during the 50 days surrounding disclosure. Hence replacement cost data of the type required by Accounting Series Release 190 are not useful in the context of decision making by capital market agents.

Ro (1980) examined whether ASR 190 has significant compliance costs or information effect. Based on the study hypothesis that during periods of substantive inflation, historical cost can give misinformation of earnings and financial strength that lead to erosion of firm's capital base, therefore to correct this situation the disclosures in financial report are suggested. The finding from this research are ASR 190 not having significant compliance costs or information effect, then the investor are likely view ASR 190 replace cost as irrelevant to making decisions making, due to numerous measurement problems and the assumption of the asset. Lastly the research shows that the lack of strong evidence for information effects may have been caused by certain methodology limitation in the study. The limitations are possibly because of the different size of paired firms. the bias that arose when selecting of grouping the firms, the amount of the sample size and lastly the incompleteness of value line RC data as a proxy for the market's expectations of ASR 190.

Watts and Zimmerman (1980) concluded that there are few alternative interpretations can be drawn related to the findings from the three studies (Beaver et al., Boatsman and Gheyara, and Ro):

- (1) Replacement cost data contain no information either because the data are irrelevant to the valuation of shares or because the capital market has alternative sources of information about replacement cost. This leads to the conclusion that the social cost exceeded the social benefits. Even if the data are relevant they do not provide information because there is alternative information that already available.
- (2) Replacement cost contains information, but the information is not specific to the disclosing firms and its value is not reflected in the market value of the disclosing firms' share. In other words the information is useful in general.
- (3) The replacement cost data were new and market participants have not yet learned how to evaluate or process it. Based on capital research, there is an impressive amount of evidence that the equity market reacts very quickly to various sources and types of accounting and non-accounting information. However, the learning effect argument suggest that the market did not react to the ASR 190 disclosures because the investors had not yet learned how to imply this the number in the disclosures.

Barth et al. (1996) investigates the value relevance of fair value disclosures under SFAS No.107 (FASB 1991) by examining whether differences between the market and book value of common equity can be explained in a predictable way as a function of differences between fair value estimates disclosed under SFAS No.107 and their related book values. This study provides evidence that fair value estimates disclosed under SFAS No.107 provide significant explanatory power for bank share prices beyond that provided by book values for three of the five major asset and liability categories disclosed. Barth, Beaver and Landsman consistently find incremental explanatory power for loans fair values. Their findings indicate that differences between disclosed fair values and book values of securities, loans and long term debt are value relevant, but those for deposits and off-balance sheet items are not.

Barth et al. find that loans fair values provide significant explanatory power incremental to nonperforming loans and interest-sensitive assets and liabilities and vice versa. These findings indicate that disclosures of loans fair values do not reflect completely loan default and interest rate risk, although their incrementally significant association with bank share prices and interest-sensitive assets and liabilities. Colins et al (1997) investigates changes in the value relevance of earnings and book value for over forty years by using a valuation framework that uses price as a function of both earnings and book value equity. The estimated

yearly cross sectional regression for 40 years and use as the primary metric to measure value relevance. Collins decomposed the combined explanatory power of earnings value and book value into three components, first, the incremental explanatory power of earnings, second, the incremental explanatory power of book value and three the explanatory power common to both earnings and book value. The result shows that that value-relevance has not declined in over 40 years. Moreover they found that the declined of value-relevance earnings have been replaced by an increased value-relevance of book values.

### **CONCLUSION**

The usefulness and criticism against HCA financial statements and the incremental information of current cost disclosure is debatable. Research on the incremental information of SFAS 33 find that there is no additional explanatory power of supplementary data that requires by the statements when historical cost based earnings are already known. However, even after any one of the supplementary data variables is known, knowledge of historical cost accounting based earnings still provides additional explanatory power. Under SFAS 107, Barth et al (1996) finds that fair value disclosure provide significant explanatory power for bank share prices beyond that provided by book values for three of the five major asset and liability categories disclosed. They consistently find incremental explanatory power for loans fair values. This indicates that fair value disclosure of certain asset requires by SFAS 107 has value relevance. Many capital research have examined the advantages and disadvantages of historical cost accounting and the value relevance of its financial statements. Collins et al. (1997) argue that, based on their empirical evidence, the claims that the conventional historical cost accounting model has lost its value relevance are premature.

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