

RATIONALITY AND MARKETABILITY OF HISTORICAL COST ACCOUNTING

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1. Introduction

Recently, discussion regarding accounting has often been focused on the measurement of assets and liabilities. This comes in the backdrop of an increase of the stock of the wealth in the economy with relation to the size of income flow and the increasing influences the fluctuations of the stock have on the economy as it matures. As a result, disclosure of the current price information has become increasingly necessary and useful, and the *raison d'être* of historical cost accounting has been called into question. This paper examines the significance and role of historical cost accounting from the viewpoint of a stratified functional structure of accounting.

2. Classification and Characteristics of Valuations

Accounting can be considered to be a procedure for converting fact-related systems to numeral-related systems (Takeda, 1998, p.2). As a consequence, valuation standards for recognizing facts and converting these facts to numerical values are indispensable in accounting. Valuation alternatives can be classified into three categories: historical cost, current price¹⁾, and future value as shown below.

The three valuation alternatives differ not only temporally--i. e. past,

Fig. 1 Classification and Characteristics of Valuation Alternatives

<u>Valuation Alternatives</u>	<u>Point of Time</u>	<u>Transaction Experience</u>	<u>Characteristics</u>
Historical Cost	Past	The Entity's Experience	Hardness
Current Price	Present	The Market's Experience	Fragility
Future Value	Future	The Entity's Experience Expected	Softness

Source: Yuji Ijiri, *Historical Cost and Its Rationality*, The Canadian Certified General Accountant's Research Foundation, 1981

present, and future--but also in transaction experience. On this subject, Ijiri interprets historical cost as the entity's experience, current price as the market's experience, and future value as the entity's expected experience. From the viewpoint of its involvement and participation in a market transaction, an enterprise is a concerned party in the case of historical cost, an observer or a bystander in the case of current price case, and a predeterminer with regard to future value.

Historical cost is said to have a "hardness" characteristic. It is the price which was actually formed by an entity when it participated in the transaction in the past, and is based on an invariable, real, and historical fact (Littleton, 1953, p. 173). Accordingly, when figuratively compared to an actual physical substance, historical cost has the "hardness" of steel resistant to pressure or disturbance from any direction.

Historical cost, in other words, is the original price or original value which was formed from the relation between an enterprise and another transaction party in the market, comparable to an original species of plant or animal. In this sense, if historical price is preserved and recorded as a species, even when it has been processed or manipulated to produce various variants, it can return to the starting point or point of origin. In this sense,

as accounting valuation becomes more diversified and complicated, the significance of recording historical cost increases even more.

The second valuation category, current price, is the price formed on the basis of an agreement between a seller and a buyer in the market, so, in one sense, it is real and objective. However, current price is also a price formed and maintained in a situation in which the concerned entity itself has given up participation in the transaction and remains as an observer or bystander. In this sense, current price is virtual for the concerned entity. Consequently, current price can be said to have a "semi-real or semi-virtual" existence. In other words, it is both "real and virtual" and "not real and not virtual".

If we consider current price to be a price formed by a situation in which a concerned entity has not become a party directly involved in the transaction, and which has given up participation in the transaction, should this entity participate in a transaction whose quantity exceeds price flexibility, the price, namely current price, would then fluctuate. Even though current price looks "hard", it has a definite "fragility" in that, if a new participant appears in a market transaction, the price, which was already formed, cannot be maintained and it collapses. In this respect, current price is, if likened to a physical substance, similar to glass or brick, which has "hardness" but also "fragility", and can be broken if subjected to pressure or jarring from an unexpected direction.

Future value, the third valuation alternative, is generally defined as either the price by which an entity expects to buy or sell in the market in the future, or the discounted present value of future cash flow. In any case, future value is clearly virtual; it is a price primarily obtained by making various kinds of forecasts and suppositions, and not a price actu-

ally formed in the market.

In this respect, future value is very subjective in that the price is susceptible to forecast or supposition. On the other side of the coin, it can also be said that future value is equipped with "softness" which can be freely changed by varying forecasts or suppositions. In this sense, future value has the elusive "softness" of half-melted soft ice cream if the forecast or supposition is obscure, or the moderate "softness" of clay or gypsum used for making a model if the forecast or supposition has firm basis.

In institutional accounting, the three valuation alternatives described above seem to be used flexibly in accordance with proper role and function at the time in a process similar to building construction which requires steel frames for supporting structure, glass and brick for windows and decorations, and a model for when a new structure of building is to be built. Actually, even in the existing accounting system based on "historical cost and realization," it is well known that evaluation by current price is applied to part of securities or inventories, and evaluation based on future value is applied to the reserve for pension plan.

Therefore, it is reasonable to understand that these three valuation alternatives of historical cost, current price, and future value are not in exclusive, but rather in a complementary relationship. The problem is choosing which valuation alternative to adopt as a basis.

3. Record-Calculation Functions and Valuation Preference

Littleton (1979, p. 13) groups the antecedents of bookkeeping into three categories: a material (something which needs to be reworked), a language (a medium for expressing the material), and a methodology (a plan for systematically rendering the material into the language). His examples of

a material are private property, capital, commerce, and credit. Bookkeeping originated as a means for recording and calculating debts and credit relations with other parties to reduce the possibility of future trouble in using personal accounts. With the passage of time, impersonal accounts for merchandise or buildings, etc. as well as nominal accounts for salaries and paid commissions, etc. were also introduced, and thus an integrated record system for both real and nominal accounts was developed. These accounts are basic elements illustrating the record-calculation function of bookkeeping, in which various facts relating to transactions are recorded for reproduction. In this framework, the price which was actually formed among concerned parties in the market, namely the historical cost, is chosen as the valuation for recording facts (Tsuneo Nakano, 1992, p. 3).

Around the end of the 19th century, about 400 years after the publication of the first book of bookkeeping, "Summa de Arithmetica Geometria Proportionalita" by Luca Pacioli, the development of partnerships and corporate forms of business organization resulted in "subdivision of ownership" and "severance of ownership", and encouraged the rapid evolution of bookkeeping into accounting. The role of accounting no longer remained merely in recording, but had diversified itself into such areas as clarification of accountability, determination of equity of fund suppliers, measurement of income, and supplying management with useful information (Littleton, 1966, pp. 9-11).

The origins of accountability, which is the responsibility to report and interpret the performance of an organization, manifest themselves in the master-slave bookkeeping in the ancient Rome and agency bookkeeping in Italy. However, proprietorship is needed for double entry bookkeeping. This proprietorship came about through the introduction of subdivision of

ownership and severance of ownership, producing a need to determine income from invested capital (Tsuneo Nakano, p. 4). Income determination involves the calculation of the surplus as profit after maintaining the value of the capital invested by the proprietors, and it can be also interpreted, from the viewpoint of trustees, as determining the minimum responsibility for maintaining assets on the basis of the original value formed by the market transaction, in other words, the historical cost.

In general, proprietors will not approve the discharge of the responsibilities of trusteeship without objective evidence. Accordingly, fiduciaries such as boards of directors must disclose information, which can be verified by objective evidence. In this respect, historical cost information provides just such evidence. (Hirose, 1998, p. 96.) According to Takeda (1998, pp. 139-140), one must acknowledge a "supposition of parallel progress" on the basis of the rule of acquired historical cost, whereby the relation of "historical cost = service potentials" established on the day of acquisition must be maintained even with the passage of time.

4. Function of Interests Coordination and Choice of Income Calculation System

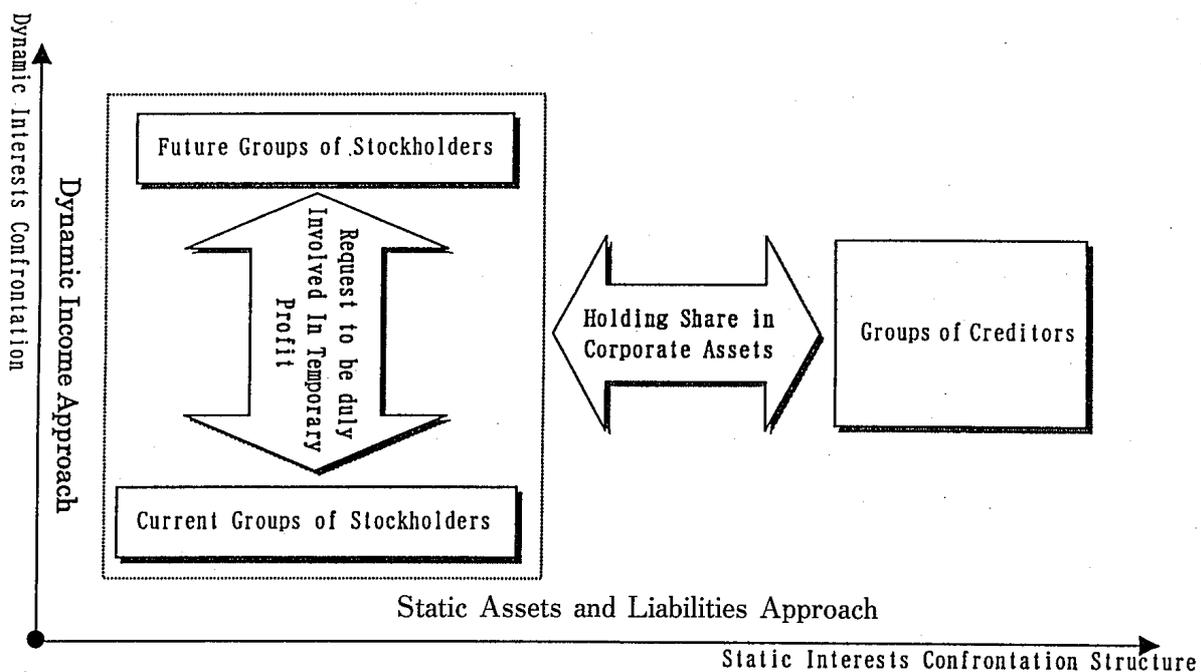
The development of financial capitalism brought with it an increased diversification of financial methods, which led to a pattern of confrontation of the interests of shareholders and those of creditors. In addition to accountability, accounting, though the selection of income measurement methods, had to play a role in coordinating the interests of different parties by committing to distribution.

As is widely known, in the static theory of accounting, the interests of shareholders and creditors are interpreted as a static confrontation struc-

ture related to the equities in corporate assets at specific point of time. An asset-liability approach, in which income is defined as the increment of net worth, was adopted as the method to coordinate the confronting interests of various groups. In this approach, real value (current price) of existing assets confirmed by inventory is objective, and as long as dividends are paid to stockholders group on the basis of these objective and definite income, the maintenance of the net assets or the protection of creditors is considered to be assured. (Yamashita, 1968, pp. 16-17.) Thus, current price is preferred as the evaluation method.

Yamashita (1967, p. 6) notes that, as the security market developed rapidly and stock holdings were used as a means to gain profits by trading rather than to control a company, the number of floating stockholders in search of higher profits increased. As a result, stockholders belonging to floating stockholder groups required income from the period they happened to be

Fig. 2 Stratified Structure of the Confrontation of Interests



stockholders. This phenomenon resulted in new relationships between current stockholders and future stockholders. This situation is illustrated in Fig. 2.

Historically, the confrontation of interests concerning equity appeared first as a static position between stockholders and creditors at a specific time; and then as a dynamic confrontation in interests among stockholder groups as stockholders came to float.

In other words, it can be said that the former is "static confrontation relating to holdings of corporate equities," while the latter is "a dynamic confrontation relating to participation in income distribution." Therefore, we should determine fairly income belonging to each accounting period in order to coordinate interests among shareholders, and an income determination approach based on "the historical cost and realization concept" is the preferred method for making such a determination.

Under an income determination approach based on "an historical cost and realization concept," both costs and income are real values determined on the basis of actual transaction in the market, and the figures are both equipped with "hardness" resistant to various kinds of pressures and equipped with financial substantiation.

In addition, under the "historical cost and realization concept," assets are evaluated by historical cost, and unrealized profits are excluded from income determination. As a result, creditors' interests are more effectively protected than they are with the static profit calculation.

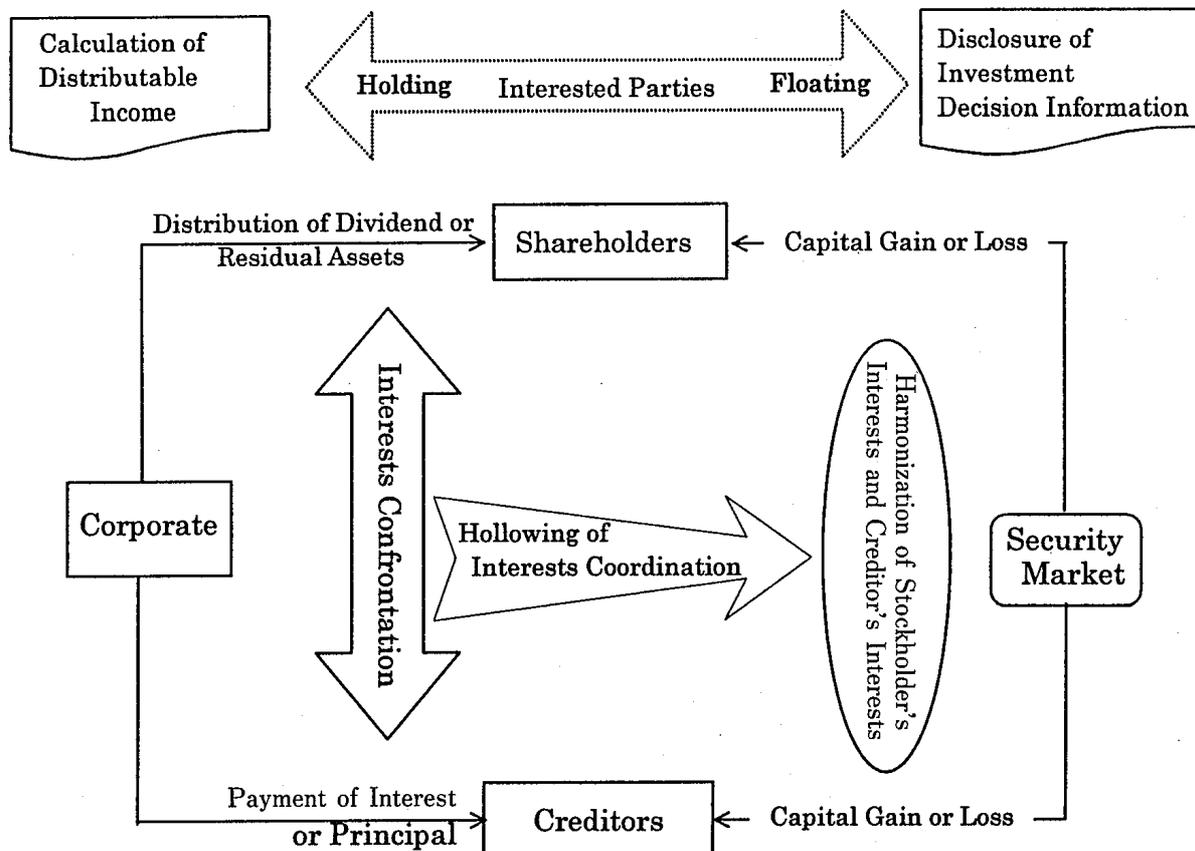
5. Hollowing of the Coordination of Interests and Harmonization of Interests

As the security market became more established, and as chances to

obtain capital gain from the trading there were institutionally organized, the behavior of stockholders and creditors as well as the interests of the both groups began to change remarkably. This is shown in Fig. 3.

With the development of the security market, many stockholders tend to show more interest in earning capital gains by stock trading rather than in receiving residual assets dividends. In addition, the methods of financing by enterprises and the behavior of creditors also change. In the past, credit was generally issued by financial institutions such as banks, and normally only in large amounts. But, as credits and liabilities were changed to securities by the issuing of bonds and other financial instruments, credit could be handled in smaller and more diversified amounts, and even

Fig. 3 Harmonization of Stockholder's Interests and Creditor's Interests



the public could become creditors for a corporate company.

Under these conditions, stockholders and some creditors could secure equities and earn income through market transactions without the direct dealing of funds with a corporate entity, in spite of the fact that no changes actually occur because the normal relations of an enterprise with stockholders and creditors are ultimately maintained through the distribution of dividends or residual equities, or through the payment of interest and principal of liabilities. As a result, the interest coordination function related to the equity or income of stockholders and some creditors transfers from enterprises to the market, if in an intermediate or transitional way. This phenomenon is called the "hollowing of interest coordination".

Some bonds, namely convertible bonds and warrants, have the latent character of stocks, and as a result, the market price of stocks and bonds is linked, producing a "harmonization of interests" phenomenon where the interests of stockholders and creditors are in harmony rather than in confrontation (Sakurai, 1991, pp. 43-45).

With the "hollowing of interests coordination" and "harmonization of interests," it is inevitable that the core functions of accounting shift from interest coordination to the disclosure of investment decision information.

6. Investment Decision and Current Price Information

Investment decision is particularly future-oriented, and conceptually future value as future forecasted value is accepted as a valuation measure. However, as mentioned above, future value is both virtual and subjective, and depends considerably upon forecasting and supposition. Therefore, although it is permissible for a forecaster to make use of future value at their own risk, its use by a third party in institutional systems is not to be

tolerated. Then, measurement and disclosure based on current price has come to be used in place of future value.

Although its necessity had long been recognized, the institutionalization of current price information disclosure did not occur in the U. S. A. until 1979. The SEC required that the current price of inventories, cost of goods sold, fixed assets such as plants and equipment, and depreciation be disclosed as supplementary information. However, as is well known, this requirement for the presentation of current price information was abolished in 1986, stemming from the fact that the effect of current price disclosure was negligible, and few investors and security analysts were using it.

Later, with the rise in the relative importance of financial instruments in the economy and with the recognition of the usefulness of current price in investment decisions as an index to indicate the discounted future net cash flow, namely market evaluation on future value, the IASC and FASB required financial instruments to be evaluated by fair value.

Although current price is useful for investment decisions that is not sufficient reason in it for adopting current price accounting. This is because, as stated above, accounting has various functions such as recording, accountability, coordination of interests, and information disclosure, and these functions should be considered, not as being mutually exclusive, but rather as forming a interrelated layered structure.

Adopting the current price and realizability concept as an income measurement framework profoundly alters the basic concepts of how profits and losses are generated and what functions accounting performs. In other words, profit can be generated by merely observing or watching the market without participating in trading. However, this is contrary to the idea that corporate activities adapt to markets and it is these actual behaviors that

generate profits.

In this sense, the realization doctrine, which makes the participation in market trade a prerequisite for income recognition, seems to stipulate that profits be generated from actual participation in market, going beyond merely insuring a financial foundation (Saito, 1999, pp. 7-12). There is a great discrepancy between what we might have sold or bought and the actual action of selling or buying, so these two must be strictly distinguished from one another.

Current price, as mentioned before, is a fragile measure with possible fluctuation in price if the concerned enterprise participates in the transaction by offering quantities exceeding price flexibility; in other words, it can be defined as an arbitrary and unstable measure (Ijiri, 1998, p. 188). Accordingly, in an extreme situation in which the interests must be coordinated to the last cent, such a fragile measure should not be used.

However, even in current institutional accounting where the historical cost and realization concept is adopted as the basic framework, evaluation by current price is sometimes carried out by the application of the "cost or market, whichever is lower" basis. In this sense, pure historical cost principle accounting or pure current price principle accounting are theoretically possible, but they do not exist in actual practice, and any working accounting system acceptable for society must inevitably be a mixture of historical cost, current price, and future value.

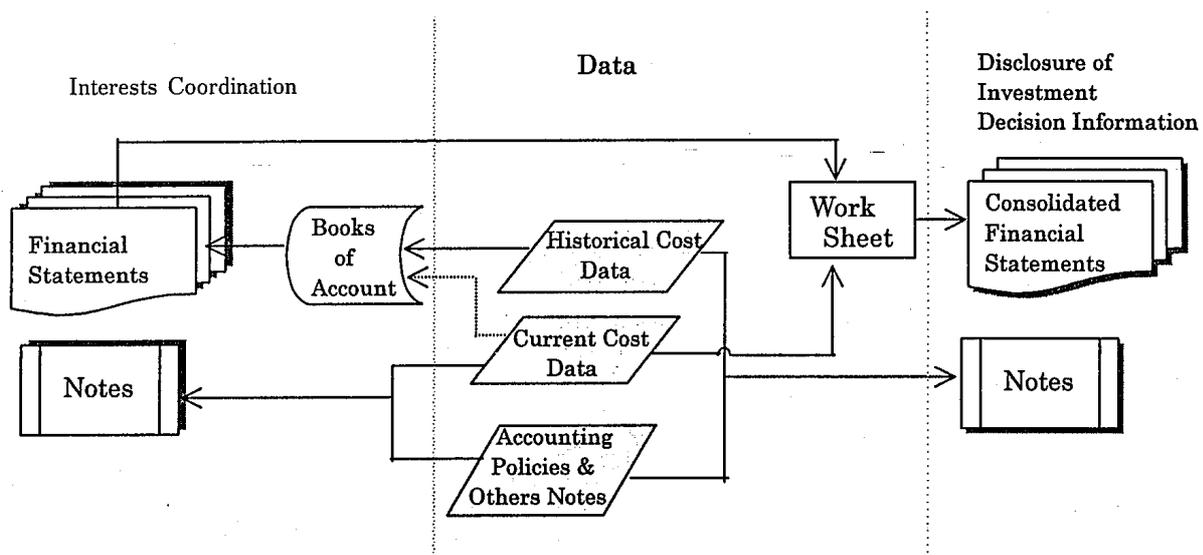
7. Function Differentiation of Financial Statements

If we differentiate between the functions of financial statements for individual companies and consolidated financial statements for groups of companies, the respective features of historical value, current price, and

future value would be activated, and the ultimate usefulness of the two types of financial statements would be enhanced. Fig. 4 indicates the functional differentiation framework for such financial statements.

1. Financial statements for individual companies are supposed to perform the functions of accountability and coordination of interests. Accordingly, financial statements are prepared from books of account, and firmly maintain an income measurement system based on the historical cost and realization concept. Current price is disclosed, as off-balance-sheet information as far as is necessary. In Fig. 4, a dotted line is extended from the current price data to books of accounts, which shows the application of the "cost or market, whichever is lower" rule (Hirose, 1998, p. 32).
2. Consolidated financial statements for a group of companies supposedly perform an information disclosure function. Because consolidated financial statements are prepared based on financial statements, they depend on the historical cost and realization concept. In the case of consolidated

Fig. 4 Function Differentiation of Financial Reports



statements, however, the current price is disclosed as on-balance-sheet information when such disclosure is necessary and useful. With items disclosed as on-balance-sheet information, however, historical costs are disclosed as off-balance-sheet information.

In this way, by differentiating the functions of the types of financial statements, financial statements for individual companies are able to stabilize the coordination of interests by measuring "hard" income via the historical price and realization concept. Interested groups such as stockholders and creditors are able to use necessary current price information, even though it is partial information, in footnotes and in other ways.

On the other hand, in consolidated financial statements, current price information is incorporated in the financial statements themselves, so income and net assets (equities) measurement based on current price is be directly available without adjustment, and the usefulness of consolidated statements is enhanced. Granted, income and net asset measurements incorporated with current price have a fragile quality, but this fragility can be countered by disclosing historical cost as supplementary information in footnotes. This disclosure can aid interested groups like stockholders and creditors in viewing the starting point or basic point of a transaction and in reproducing the information if necessary.

8. Conclusion

As a somewhat farfetched viewpoint, it might be said that the introduction of ASOBAT has led to a tendency for the information supply function of accounting to be highly emphasized and the interest coordination function to be neglected. Of course, it is impossible to deny a stricter require-

ment for the transparency of a company or the importance of disclosing current price information.

However, it is a fundamental function of accounting to record facts which concerned parties carried out, and to coordinate their interests by presenting a basic framework for determining distribution or attribution of equity. Accounting without an interest coordination function is very unstable, like a kite without a tail. For accounting to be true accounting, it is important to continually preserve the distinct starting point or point of origin for stewardship and coordination of interests by using the double bookkeeping mechanism. Function differentiation between financial statements for individual companies and consolidated financial statements for a group of companies will the stratified function of accounting to operate more effectively.

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Note

- 1) Ijiri classified the four bases of valuation, i. e. historical cost, current cost, current value and future value. But, we adopt three classifications, because it is convenient to use the term "current price" to mean either current cost or current value. Current cost is a price formed in the buying-market, while current value is a price formed in the selling-market. Cf., Ijiri, 1981, p. 18.