Social Responsibility of Accounting*

Yoshiaki JINNAI

"The system of accounts and the system of operational divisions in an business enterprise constitute the two aspects referring to the same thing. This means that behind the accounts there exist people. The relationship between accounts is the relationship between people, and the system of accounts is a reflection of the social relationship within the business enterprise" (Iwata, 1953, p. 15).

Abstract

Historical and theoretical inquiries into the function of accounting have provided fruitful insights into social responsibility of accounting, which is, and should be, based on accounts kept through everyday accounting activities. However, at the current stage of capitalist accounting, keeping accounts is often regarded as merely a preparatory process for creating financial statements at the end of an accounting period. Thus, discussions on the social responsibility of accounting tend to concentrate on the accounting information provided solely by these financial statements. As a criticism of this tendency, this study addresses the responsibility of accounting by properly identifying and locating the original and essential function of accounting: the function of controlling and recapitulating economic processes by keeping accounts. The concepts of accountability and multi-measurement accounting models are also discussed with a view to expand the responsibility of accounting.

Keywords

Responsibility of accounting, accountability, labor process, accounting control, multi-measurement financial statements, ASOBAT, Takayama model

Introduction

At the contemporary stage of capitalist economy development, the problematic characteristics of accounting information provided through financial statements to shareholders and investors (Ishikawa, 2000; Tsumori, 2002) have been critically discussed in the light of the responsibility or irresponsibility (Tinker, 1984) of accounting. In general, historical and theoretical inquiries into the function of accounting would provide fruitful insights into social responsibility of accounting, which is, and should be, based on accounts kept through everyday accounting activities (Jinnai, 1984a; 1990). However, at the current stage of capitalist accounting, keeping accounts is often regarded as merely a preparatory process for creating financial statements at the end of an accounting period. Thus, discussions on the social responsibility of accounting tend to concentrate on the accounting information provided solely by these financial statements. As a criticism of this tendency, this study addresses the responsibility of accounting by identifying and locating the original and essential function of accounting: controlling and recapitulating economic processes by keeping accounts.

This paper is organized in the following way. First, we consider several definitions of accounting in the light of the relationship between the function and responsibility of accounting. Therefore, the definitions of accounting given by ASOBAT (1966), T. Miyosawa, and K. Marx are examined. Second, the thoughts of I. Iwata, a pioneer of accounting theory in Japan, and K. Inamori, the founder of Kyocera Corporation, are introduced and examined in terms of the function of accounting control. Among the seven accounting principles established by Inamori, the principles of "one-to-one correspondence," "double-check," and "transparency" are of particular significance for establishing the responsibility of accounting. Third, the concept of accountability is examined and the three modes of accountability are identified. Fourth, we introduce a multi-measurement model of financial statements that was originally elaborated by T. Takayama, and discuss how this model would fulfill the present-day requirements for corporate financial information by bridging the conflict between the "revenue-expense approach" and the "asset-liability approach" to corporate annual net income.

Defining Accounting

In accounting theory, numerous definitions of accounting have been presented to date.

Among these, the definition expressed in *A Statement of Basic Accounting Theory* [ASOBAT] (American Accounting Association, 1966) seems to have been most widely accepted by mainstream scholars of accounting. According to ASOBAT:

> The committee defines accounting as the process of identifying, measuring, and communicating economic information to permit informed judgments and decisions by users of the information (p. 1).

It continues to state that:

> This definition of accounting is broader than that expressed in other statements of accounting theory. There is no limitation that accounting information is necessarily based only on transaction data, and it will be shown that information based on various types of non-transaction data meet the standards for accounting information (p. 1).

This definition of accounting is vulnerable to criticism in that ASOBAT seems to consider accounting simply from the viewpoint of decision makers such as investors and corporate managers, and not from that of workers or laborers involved in the direct processes of production or operation in an economic entity. However, note that ASOBAT does not use the term "financial" in the definition. To conceptualize accounting at a universal level of economy or production processes, it is important to consider the responsibility of accounting both historically and ahistorically (Baba, 1980, Chapter 4).

The definition of accounting using the term "process" is not monopolized by ASOBAT. For example, Miyosawa regards accounting as a labor process, i.e. a human activity (Jinnai, 2011). Miyosawa (2005) thinks that the substance of accounting is a labor process or human activity, and accounting as such is in motion and develops to form a social process, and it therefore appears as that which historically changes and develops. According to Miyosawa, the characteristics of accounting can be fully understood when accounting is grasped in its totality that subsumes both financial accounting and management accounting. Furthermore, the complete system of contemporary accounting can be fully analyzed when all the contemporary phenomena of accounting including external auditing by CPAs can be subsumed and located adequately (pp. 13-14).

By following Marx's theory of labor process, Miyosawa suggests that accounting exerts "accounting power" or "accounting capabilities" throughout its process, and that it would be possible to theorize the social relationships that surround accounting by using the concept of "accounting relation" which is analogous to Marx's concept of "production relation," which corresponds to "production power" (Miyosawa, 2005, p. 59).

Marx's profound insights into accounting can be found in numerous passages in the three volumes of Capital (Marx, 1976, 1978, 1981). A clear interpretation of accounting is given in Volume 2 (Marx, 1978). He writes that:

> Book-keeping …, as the supervision (*Kontrolle*) and the ideal recapitulation of the process, becomes ever more necessary in its purely individual character; it is thus more necessary in capitalist production than in the fragmented production of handicraftsmen and peasants, more necessary in communal production than in capitalist. The costs of book-keeping are however reduced with the concentration of production and in proportion to its increasing transformation into social book-keeping" (Marx, 1978, p. 212).

This interpretation of accounting by Marx may be regarded as the most radical and universal in that the function of accounting stated above has existed, and will exist, in any mode of accounting that has appeared, and will appear, in the development of economy (Tanaka, 1976; Jinnai, 1982).

Function of Accounting Control

Accounting Thoughts of I. Iwata

Iwao Iwata (1905-1955) was Professor of Accounting at Hitotsubashi University, and was one of the pioneers of accounting and auditing in Japan. He contributed greatly to the construction of both financial accounting and auditing theories, as well as to the establishment of the Japanese systems of certified public accountants and auditing standards. Iwata was exceptional in paying suficient attention to the function of accounting control. With regard to the fundamental function of accounting, he writes the following:

> Accounting control simply is the function to preserve properties by recording the changes in the properties and clarifying the result of the cash receipts and disbursements. This is the most original and essential function of accounting, and is

> common to any sort of accounting system. However, it is not fully recognized that this original function of accounting is still important in the highly developed form of contemporary corporate accounting. The function of accounting control has been overlooked in modern business accounting by being dazzled by its function of income measurement (Iwata, 1951, p. 18).

Iwata believes that accounts are kept in the ledger not solely for the preparation of financial statements at the end of an accounting period, but also and more importantly for confirming the existence of accountability.

Iwata describes the relationship between accountability and accounts as follows:

> What is shown in each account of assets, for example, through the recording of the increments and decrements in the assets is to which division and/or person within the business enterprise the accountability for the assets is attributed. … Accounts are kept to confirm and attribute this kind accountability, and then to preserve the properties (Iwata, 1953, pp. 13-14).

Iwata criticizes the general tendency in traditional accounting theory to consider accounts from the viewpoint of "things" and explain the meaning of accounts from the side of "things" (Iwata, 1953, p. 368). For Iwata, account records can be regarded not merely as representations of things and their changing status, but also as representations of the relationships between people and things, as well as among groups of people in an enterprise. Hence, Iwata insists that:

> The relationship between accounts is the relationship between people, and the system of accounts is a reflection of the social relationship within a business enterprise (Iwata, 1953, p. 15).

Accounting Thoughts of K. Inamori

Kazuo Inamori [1)] (1932-) is the founder of Kyocera Corporation and has elaborated his own philosophy, principles, and methods of accounting, which have been adopted by Kyocera and other related companies. His accounting thought is also radical in that it is derived from a deep insight into the essential relationship between the control function of accounting and business operation or production process, to use Marx's terminology.

Inamori regards accounting as "the core of management" in his major works on management and accounting (Inamori, 1998, 2006). He writes that [2]:

> In the process of learning management, I came to think that accounting represents "the core of modern management". I realized that to recognize the true condition of business activities exactly was essential for the long-term development of the corporation (p. 3).

He continues to state that:

> To undertake management in earnest, all management figures must show the true operating conditions of the company without any manipulation. All items and numbers in the income statement and the balance sheet must be perfect, reflecting an absolutely accurate view of the company for everyone to see. I thought of this data as the instrument panel of an airplane. The financial figures are the readings that management must rely on to pilot the corporation toward the desired destination (p. 3).

Inamori's success in business has depended to a considerable extent on his efforts to let accounting be as functional as possible. He writes that:

> With these ideas in mind, I asked my accounting department to prepare financial documents that would help me steer the company. As a result, both Kyocera and DDI have been able to achieve steady business growth without any adverse effects from the bubble economy (p. 4).

Inamori (1989, pp. 16-18) admits that he was unskilled in accounting when he started his own business. This forced him to ask questions and learn the most basic principles of accounting, and he came to rely on his management philosophy of "do the right thing as a human being" to establish the company's own set of accounting principles [3] composed of the following.

1 Principle of cash-basis management

2 Principle of one-to-one correspondence
3 Principle of muscular management
4 Principle of perfectionism
5 Principle of double-check
6 Principle of profitability improvement
7 Principle of transparent management

Each of these principles is not solely a formal accounting discipline, but also a substantial economic discipline by which an enterprise is regulated. For example, "cash-basis management" describes a simple management style based on the substance of things that focuses on cash flows or on managing business on the basis of cash flows (pp. 43-45). The principle of "one-to-one correspondence" requires that an accounting system maintains an exact correspondence between a single change in an asset such as cash or commodity and the correct voucher that represents the change. This principle should be applied rigorously throughout the accounting procedure to regulate the activities of both the enterprise and the people working in it. Inamori insists that through the application of this principle, the enterprise can achieve "transparent management" that is free from any unfairness, either internal or external (pp. 65-66). "Muscular management" is expected to create a lean and muscular or a financially sound company (p. 79). "Perfectionism" refers to the basic posture of management that aims at perfection in every business detail without any ambiguity or compromise whatsoever (p. 101). "Double-check" indicates a mechanism in which every accounting activity or any other business activity is checked by two or more persons to sustain the soundness of personnel and organizations (pp. 108-110). "Profitability improvement" is important for increasing sales, as well as raising the added value of the company's products and services. In Inamori's philosophy, this discipline is a prerequisite that enables the management to raise employees' standards of living and contribute to the advancement of society through corporate activity. Inamori describes the root of the seventh discipline "transparent management" as follows:

> Since I founded Kyocera, the strong bonds formed between human minds have always been the basis for my business; in other words, I have managed the company based on a mutual trust with employees. It was necessary for a small company like Kyocera to have a strong bond between management and employees in order for it to survive in a highly competitive world. I realized then the impor-

> tance of openly disclosing the true condition of our company to employees in order to build a strong trust between us. Such was the thinking that led me to build our style of transparent management, sharing the company's true financial condition with all employees (p. 147).

Among the seven accounting principles cited above, "one-to-one correspondence," "double-check," and "transparent management" are specifically related to the responsibility of accounting. Noted that all of these principles were originally established not for disclosing economic information to external users of financial statements such as creditors and share-holders but for internal purposes of preventing frauds and mistakes in business operations and building trust among management and laborers to achieve higher levels of profitability, efficiency, and soundness of the enterprise. Inamori's idea may be highly valued because modern accounting scholars with notable exceptions such as Iwata and Baba, have paid little attention to such a function of accounting control.

Responsibility and the Concept of Accounting

Inamori's principles of accounting seem to be closely related to two forms of accountability: "original" accountability and "*societas*" accountability, which are explained below.

In an attempt to criticize the general tendency in accounting theory to regard accountability as the synonym of "stewardship" or "fiduciary responsibility" (Bird, 1973; Wixson *et al.*, 1970; Grady, 1962, for example) [4], the author presented an alternative definition of accountability as "the responsibility of communicating accounting information about the economic processes within an economic entity based on accounting records and accounting calculation" (Jinnai, 1984b, pp. 152-153). On the basis of this general definition of accountability, the author has identified three different modes of accountability: "original," "*societas*," and "stewardship" (Jinnai, 1984b, 2000).

Original accountability refers to the separation of accounting labor from productive labor, whereby the function of accounting is independent of the function of production. However, the former function is necessarily compelled to return to the lattrer function by providing it with accounting information about productive processes. This mode of accountability is primitive and universal, and underlies any production mode of in which the accounting function is entrusted to a person or a group of persons as a part of division of labor in an economic entity. In this mode of accountability, the function of accounting has the responsibility of communicating information about the economic processes to the function of production. In other words, the accounting labor is responsible for keeping the productive labor informed. Nishimura states that in the formation and development of division of labor within society, accounting has the element of reporting in addition to recording, calculation, recapitulation, examination, and analysis (Nishimura, 1984, p. 48).

Societas accountability arises in the division of capital ownership in a societas, which means gathering of more than one active or functioning capitalists (partners) to conduct a business enterprise (Otsuka, 1938; Baba, 1965)[5]. In the early stages of the development of commerce and banking businesses in northern Italy, societas was a typical form of capital combination (Otsuka, 1938; Izutani, 1980). *Societas* accountability refers specifically to the responsibility of mutual communication among its members and continuous confirmation of each member's equity.

Stewardship accountability, the established concept of the responsibility of accounting in traditional accounting theory, occurs in the separation of management from ownership. Littleton and Zimmerman (1962) considers the contemporary mode of accountability as the directly developed form of this type of accountability. If one limits the meaning of accountability to the separation of management from ownership, then the extent of his/her consideration of the responsibility of accounting will also be limited to that which arises from homogeneous types of relationships: master-slave, stewardship, fiduciary, and agency relationships (Jinnai, 1984b, 2005). To analyze the accountability embodied in the contemporary capitalist accounting, the concepts of original accountability and *societas* accountability should also be considered.

Accountability and Multi-Measurement Model of Financial Statements

It is often observed that the basis of income measurement in contemporary corporate accounting is in a drastic shift from the "revenue-expense approach" to the "asset-liability approach". With regard to the current thinking underlying the International Financial Reporting Standards (IFRS), Kodabashi writes the following:

> When we read the Framework of IFRS, we find there a definite will that intends to deny traditional accounting and establish a completely new accounting system. In this framework, historical cost principle as the basis of traditional accounting is denied and double-entry bookkeeping is never referred. It seems that both histori-

cal cost and double-entry bookkeeping are regarded as that which check the development of accounting (Kodabashi, 2010, pp. 37-38).

Historical cost accounting conforms to the revenue-expense approach, while current value accounting is consistent with the asset-liability approach. It is also widely received that economic information contained in financial statements on current value basis is more relevant to investors' decision-making process than that on historical cost basis. However, we cannot deny the significance of account records in the ledger about changes in assets and liabilities resulting from actual transactions during an accounting period because each record in an account corresponds uniquely to an event that caused the change. This one-to-one correspondence between an accounting record and an actual economic event is a requisite for maintaining any mode of accountability. Historical cost cannot be, and should not be, substituted by current value.

Instead, we can think of an alternative form of financial statements that follows the concept of both realized profits in traditional accounting and unrealized profits in current value accounting. Such financial statements may better serve the information needs of various types of stakeholders in contemporary capitalism. Tomoko Takayama proposed such a form of financial statements in her paper entitled "The Structure of Calculation in Business Accounting: A Reconsideration of a Dynamic Accounting Theory" (1984). In this paper, Takayama elaborated a "unified structure of accounting calculation," in which historical cost information obtained by the revenue-expense approach and value information obtained by the asset-liability approach are presented separately but in a unified way in a set of financial statements. The following set of financial statements for the hypothetical XYZ Company in commercial business is prepared by the author using Takayama's model.

XYZ COMPANY
Balance Sheet
December 31, 2010

ASSETS

Current Assets		
Cash and Receivables		$ 100,000
Marketable Securities	$ 20,000	
Accumulated Valuation Profit	5,000	25,000

Inventories	150,000	
Accumulated Valuation Loss	30,000	120,000
Total Current Assets		$ 245,000
Fixed Assets		
Land	$ 160,000	
Accumulated Valuation Profit	80,000	$ 240,000
Buildings and Equipment	700,000	
Allowance for Depreciation	400,000	
The Balance	300,000	
Valuation Profit	130,000	430,000
Long-term Investment in Securities	200,000	
Accumulated Valuation Profit	90,000	290,000
Total Fixed Assets		$ 950,000
Total Assets		$ 1,195,000

EQUITIES

Current Liabilities		
Notes Payable	$ 300,000	
Translation Loss on		
Foreign Exchange	40,000	
		$ 340,000
Long-Term Liabilities		
Long-Term Debt		100,000
Total Liabilities		$ 440,000
Stockholders' Equity		
Capital Stock		$ 300,000
Additional Paid-in Capital		50,000
Retained Earnings		170,000
Reserve for Unrealized Profit		235,000
Total Stockholders' Equity		$ 755,000
Total Equity		$ 1,195,000

XYZ COMPANY
Income Statement
Year Ended December 31, 2010

Sales (Net)		$ 1,500,000
…………		
(Omitted)		
…………		
Ordinary Income		$ 104,000
Extra-ordinary Profits		
Profit from Sale of Fixed Assets		12,000
Extra-ordinary Losses		
Loss arising from Fire		9,000
Realized Profit		$ 107,000
Valuation Profits		
Valuation Profit on Marketable Securities	2,000	
Valuation Profit on Fixed Assets	5,000	
Valuation Profit on Long-Term Investment in Securities	1,000	8,000
Valuation Losses		
Valuation Loss on Inventories	3,000	
Translation Loss on Foreign Exchange	4,000	7,000
Net Income Including Valuation Profits and Losses		$ 108,000
Unrealized Profits		8,000
Net Income Before Income Taxes		$ 100,000
Income Taxes Applicable		30,000
Net Income		$ 70,000

The income statement in Takayama's model is composed of two divisions. The former division is for calculating net realized profit, followed by the latter division for calculating net income including unrealized valuation profits and losses. In the bottom part of the income statement, the total amount of "unrealized profits" is subtracted from the "net income including valuation profits and losses" to show the "net income before income taxes," which is similar to that calculated in traditional accounting. In this model, each item in the balance sheet is evaluated by its market value, and the market value is presented as the sum of its historical cost and the accumulated valuation profit (or difference of the accumulated valuation loss from its historical cost). In short, historical costs and market values are used in a unified fashion in this multi-measurement model (Jinnai, 2005).

Another example of financial statements in which multiple measures are used in the measurement and communication in accounting is presented by the American Accounting Association (ASOBAT, 1966, pp. 81-95) as a response to the committee's recommendation for reporting multiple measurements to increase the utility of the information communicated. As recommended by ASOBAT, there are two columns in both the balance sheet and the income statement: one for the historical cost of each item and the other for its current cost.

There is a crucial difference between the Takayama model and that of ASOBAT. The former is a kind of accounting for changes in specific prices, while the latter is on the adjusted cost basis. However, note that both of these models have emerged from the pursuit of a multi-value general accounting model in which historical cost accounting is not abolished but subsumed in a unified way. These attempts imply that there could be a general accounting model that would correspond to the present mode of capitalist economy and fulfill the minimum requirements for the expansion of accountability (Ishikawa and Jinnai, 1982; Choi, 1993). From this perspective, it can be said that the present mode of corporate financial accounting in Japan as well as that in the U. S. and other capitalist countries is a particular mode in which current global and political issues of accounting regulation are prominent: they include the compulsory expansion of the disclosure of the current values of financial instruments and the amount of impairment losses in fixed tangible assets.

Conclusion

In its essence, accounting has to contribute to establishing accountable organization within a collectively accountable society. Accounting is expected to reflect the accountability of every organization in society through its fundamental functions: "control" and "ideal recapitulation" of economic (production) processes.

Thus, we may conclude that the social responsibility of accounting is to fulfill the function attributed to it within the total social division of labor. The responsibility of accountants and corporate managers tasked with preparing accounting information for either internal or external use is to perform the precise function of "accounting" so as to make accounting "accountable."

* The draft of this paper was presented at the 2nd International Conference on Governance, Fraud, Ethics and Social Responsibility (IConGFE&SR) that was held in Istanbul, Turkey in June 2010. The author is grateful to Mehmet Ozbirecikli and Kiymet Tunca Caliyurt for their helpful comments on the draft. The author is also indebted to Tomoko Takayama, Professor Emeritus at Tokyo Keizai University, whose work has long served as stimulus and inspiration for radicalizing theories of accounting.

Notes

1) Inamori was born in 1932 in Kagoshima, Japan. After graduating from the Faculty of Engineering (Applied Chemistry) of Kagoshima University in 1955, he began work on developing new ceramics, and established Kyoto Ceramic Co., Ltd. (presently Kyocera Corporation) in 1959. In 2000, Inamori merged DDI, KDD, and IDO, three companies in the telecommunication industry, into KDDI. In 2010, he was appointed CEO of Japan Air Lines (JAL).

2) Inamori (1998) was written in Japanese. The essential part of this work is translated in English by Kyocera Corporation and presented on its website. The English sentences of Inamori in this paper are quoted from the following page of this website:
http://global.kyocera.com/inamori/management/accounting.html

3) Inamori's management philosophy and style in which workers are fully subsumed in management has recently been criticized by Japanese commentators (Saito, 2010, for example). However, Inamori's thinking of the relationship between the functions of accounting and management is still of theoretical value for considering the responsibility of accounting.

4) In the traditional conceptualization of accountability, the following two different elements are included in the concept of accountability.
(1) responsibility of properly managing the assets trusted
(2) responsibility of identifying and measuring asset changes during the management process by using accounting records, and accounting for the result of management activities based on those records
Gray, Owen, and Adams (1996, p. 38) defines accountability as "the duty to provide an account (by no means necessarily a financial account) or reckoning of those actions for which one is held responsible." Paton and Littleton (1940) uses the term "accounting responsibility" (p. 2).

5) *Societas*, a Latin and Italian term, came to be the term "society" in English (Oxford University Press, 1976; Williams, 1976).

References

American Accounting Association (1966) : *A Statement of Basic Accounting Theory*, American Accounting Association.

Baba, K. (1965) : *Theory of Corporate Finance* (in Japanese), Moriyama Shoten.

Baba, K. (1975) : ***Fundamental Problems in Accounting Theory*** (in Japanese), Moriyama Shoten.

Bird, P. (1973) : ***Accountability: Standards in Financial Reporting***, Haymarket Publishing, Ltd.

Choi, J. (1998) : "Theory of Accounting Information System: An Inquiry into 'Economic Events Oriented' Accounting Models" (in Japanese), Doctoral Dissertation, Tokyo Keizai University.

Grady, P. (1962) : "The Quest for Accounting Principles", ***The Journal of Accountancy***, May.

Gray, R., D. Owen and C. Adams (1996) : ***Accounting & Accountability: Changes and Challenges in Corporate Social and Environmental Reporting***, Prentice Hall.

Inamori, K. (1998) : ***Kazuo Inamori's Pragmatic Studies: Management and Accounting*** (in Japanese), Nihon Keizai Shinbunsha.

Inamori, K. (2006) : ***Amoeba Management: Each Employee is a Leading Actor*** (in Japanese), Nihon Keizai Shinbunsha.

Ishikawa, J. (2000) : ***Fundamental Problems in Current Value Accounting*** (in Japanese), Chuo Keizaisha.

Ishikawa, J. and Y. Jinnai (1983) : "A Theoretical Framework for Multiattribute Accounting", ***Fukuoka Daigaku Shogaku Ronso***, Vol. 27, No. 3, February.

Iwata, I. (1951) : "What is Internal Control?" (in Japanese), ***Sangyo Keiri***, Vol. 11, No. 10, October.

Iwata, I. (1953) : "'Account', 'Accountability' and 'Accounting Control'" (in Japanese) ***Sangyo Keiri***, Vol. 13, No. 1, January.

Izutani, K. (1980) : ***The Origin and Development of Double-Entry Bookkeeping*** (in Japanese), Moriyama Shoten.

Jinnai, Y. (1984a) : "Notes on the Foundations of the General History of Accounting", ***Fukuoka Daigaku Shogaku Ronso***, Vol. 28, No. 3, February.

Jinnai, Y. (1984b) : "The Foundations of Accountability" (in Japanese), ***Tokyo Keidai Gakkaishi***, No. 139, December.

Jinnai, Y. (2000) : "Rethinking the Concept of Accountability in Social and Environmental Accounting", ***Tokyo Keidai Gakkaishi***, No. 216, February.

Jinnai, Y. (2011) : "Rethinking the Relationship of Accounting to Labour and Capital", ***International Journal of Economics and Accounting***, forthcoming.

Kodabashi, N. (2010) : ***The Thought of IFRS and Comprehensive Income*** (in Japanese), Nihon Jitsugyo Shuppan.

Littleton, A. C. and V. K. Zimmerman (1962) ; ***Accounting Theory: Continuity and Change***, Prentice-Hall, Inc.

Marx, K. (1976) : ***Capital***, Vol. 1, translated by B. Fowkes, Pelican Books.

Marx, K. (1978) : ***Capital***, Vol. 2, translated by D. Fernbach, Pelican Books.

Marx, K. (1981) : ***Capital***, Vol. 3, translated by D. Fernbach, Pelican Books.

Miyosawa, T. (2005) : ***Theory of Accounting Process*** (in Japanese), Chuo Keizaisha.

Nishimura, A. (1984) : "The Nature of Accounting and the Problems in Accounting Research" (in Japanese), in Matsumoto, T. and A. Nishimura, eds., ***Methodologies of Accounting Research*** (in Japanese), Mineruva Shobo, Chapter 3.

Otsuka, H. (1938) : ***The Origin and Development of Joint Stock Company*** (in Japanese), Chuo

Koronsha.

Oxford University Press ed. (1976) : *Oxford English Dictionary*, Second Edition, Oxford University Press.

Paton, W. A. and A. C. Littleton (1940) : *An Introduction to Corporate Accounting Standards*, American Accounting Association.

Saito, T. (2010) : *Kazuo Inamori: An Epidemic Manager* (in Japanese), Kinyobi.

Takayama, T. (1984) : "The Structure of Calculation in Business Accounting: A Reconsideration of a Dynamic Accounting Theory" (in Japanese), *Sangyo Keiri*, Vol. 43, No. 4, January.

Tanaka, A. (1976) : "The Content and Form of Accounting" (in Japanese), *Tokyo Keidai Gakkaishi*, No. 96, July.

Tinker, T. : (1985) *Paper Prophets: A Social Critique of Accounting*, Praeger Publishing Co.

Tsumori, T. (2002) : *The Logic of the Formation of Accounting Standards* (in Japanese), Moriyama Shoten.

Williams, R. (1976) : *Key Words: A Vocabulary of Culture and Society*, William Collins Sons & Co., Ltd.,

Wixson, R., W. G. Kell and N. M. Bedford (1970) : *Accountants' Handbook*, 5th Edition, The Ronald Press Company.

――2010年11月29日受領――