

Discussion of the Role of Accounting in Financial Disclosure

SHYAM SUNDER

Graduate School of Business, University of Chicago

Professor Birnberg deals with several important issues in his paper and I shall confine my comments to three of these. The first is the question of what, if any, is the usefulness of the distinction between retrospective and prospective accounting. Second, I shall discuss the effect of the use of master-servant, superior-subordinate, or principal-agent framework on the analysis of accounting issues. I think it is more useful to analyse accounting problems by emphasizing the mutuality and simultaneity of these relationships and by de-emphasizing the asymmetry. One result of an increasing recognition of this nature of the accounting problems is that the accounting systems can be seen as the result of equilibrium among diverse sets of interests. I shall discuss this movement in accounting by relating to the notions such as information inductance and the economic consequences of accounting.

RETROSPECTIVE AND PROSPECTIVE ACCOUNTING

Distinction has been drawn in the accounting literature between retrospective and prospective accounting. Retrospective accounting, which is approximated by the present system of accounting in the U.S., is oriented to the past in the sense that it involves recording the events of the past exclusively, and is not concerned with the future. Prospective accounting, on the other hand, is oriented to the events of the future and records judgements about such events. Thus, it relies on the estimates of the future rather than on the concrete events of the past. Accounting for leases, receivables etc. at the present time is largely prospective in this sense. Accounting based on replacement and exit values also is considered to belong to the class of prospective accounting.

Retrospective accounting is necessarily based on our expectations of the future and is therefore not entirely determined by the past. The reason for this dependence on the expectations is that all events, past, present and future, are so complex that they cannot be recorded in their entirety, and the accountant must pick and choose the aspects of the past events that he records and the aspects that he ignores in the accounting system. Since accounting is a pragmatic, goal-oriented activity, the criteria used for selecting the data that are recorded are essentially based on the prospective future need and usefulness of that data. The designer of the accounting system must estimate the future needs of data and evaluate the future consequences of alternative accounting systems that he is able to anticipate and then decide what is to be recorded. Thus, the future affects the retrospective accounting by determining what items are to be measured and recorded and how they are classified. Since there is no natural scheme of classifying accounting data, the classification scheme is determined by the accountants' estimate of the future usefulness of various schemes and their relative costs.

It has been stated that the primary purpose of retrospective accounting is to serve as an instrument of accountability in order to enable the principal to obtain an accounting of how the resources entrusted to the manager have been utilized; and that, therefore, such accounting is oriented purely to the past and is not affected by the anticipations of the future events. Even when we adopt this perspective of accounting, it is not clear that it is free from anticipations of the future periods, since taking account of the steward itself is a purposive activity and is justified only on the basis of its usefulness for the purpose of controlling the activity of the steward in the future periods.

If accounting cannot be purely retrospective, the case for purely prospective accounting is even weaker. Just as our measurements, recording, and classification of events of the past are dependent on our anticipations of the future, estimates of the future events are determined by our past experience. Systematic forecasts are extrapolations of the past.

The thrust of my argument is that our perception and record of the past and the future are mutually dependent on each other, and the separation of the two into neat categories of retrospective and prospective accounts is, in reality, far more difficult than it is usually assumed to be. We can call certain forms of accounting past (historical) or future (current) oriented, but it is important that our understanding of the nature of their relationship to the past and the future is not determined by mere use of such labels. What is called historical cost accounting can also be seen as a system of forecasts where the forecasts are based on a simple rule: Future prices will be the same as the prices in the past. Similarly, the exit value accounting, an example of prospective accounting, can be seen as historical in the sense that the past experience in exchange of assets is assumed to be repeated in the future. If the nature of future exchanges were to be entirely different from the past, there would be no systematic basis for recording the exit values.

The fact that events of the past and forecasts of the future are inextricably linked to each other implies that classification of accounting systems between past and future oriented is not very useful. It might be more fruitful to analyse who should do which part of the work of handling data. The task of handling data consists of (1) identification of the pieces of past data to be collected and classified, (2) collection, classification, and recording of data, (3) generation of forecasts of the future on the basis of the past experience, and (4) comparison of previously made forecasts with the actual realizations and deciding what, if any, changes should be made in the data collection, classification, and forecasting methods. These tasks encompass a broad range of activities of managers. Usually, one or more of these functions is assigned to a specialized manager who is called accountant. The problem of selecting an accounting system can thus be transformed into a problem of organizational design, i.e. one of determining which of the managerial functions are to be entrusted to the accountant. The arguments

for moving from historical cost accounting towards current value accounting imply broadening the job description of the accountant at the expense of narrowing the job description of some other managers, either inside or outside the firm. Where the line between the specializations of various types of managers in a large organization should be drawn is a complex question, and little has been written in the accounting literature on this matter. I think it will come as a surprise to many that the problem of valuation can be seen as a problem of business organization.

Eighteen years ago Davidson & Trueblood (1961) urged accountants to participate in managerial decision making by expanding their activities beyond data collection and classification and to get rid of their preoccupation with the fiduciary and stewardship responsibility. In the context of organizational structure, Davidson & Trueblood's proposal could be interpreted either as a call for despecialization of accountants to reduce the difference between their work and the work of other managers or as a proposal to expand the accountant's territory at someone else's expense. What is not done by accountants now is done by someone else, and for accountants to start doing something they are not already doing will necessarily affect what other managers are doing now. Under either interpretation, the proposal implied change in the organizational structure of firms. Davidson & Trueblood did not discuss what effects such reorganization might have on the efficiency of the entire structure. To find out, we need to know how much specialization we should have in the organizations, who should have how much territory, and where should the boundaries between managerial specializations be drawn.

Since the most important problem of organizational design is one of designing a system of performance measurement and rewards that can be used to motivate managers to act in the desirable fashion and to control the reorganization, the division of responsibilities assigned to individual members of the management tends to be such that the output and input of each manager can be measured with a reasonable degree of independence. Of course, it is impossible to attain complete independence since, if it were so, there would be little reason for these individuals to work within the framework of a single firm, and they could work instead as independent contractors. The criterion of measurability of the efficiency of each manager is combined with the feasibility of

finding individuals who have the skills to cope with all the tasks that fall within their job description.

The traditional system of accounting is based on a division of labor between the accountants and the other managers such that the efficiency of the accountant in the organization can be measured relatively independently. If the accountant were to take on the additional tasks of, say, forecasting sales volume, on the basis of which production and sales managers carried out their planning, it would make it more difficult to measure his efficiency as compared to an accountant who simply reported the data on past sales to the sales managers and the production managers and left the sales forecast for them to make on the basis of this data and whatever other information they might have. The forecast errors would then be the responsibility of the line managers, and the accountant's performance evaluation would not be affected by them. Much of the attention on the importance of the hardness of accounting data has been centered on external accounting, even though a similar need for hardness of accounting data exists in the area of internal accounting. Factors that drive financial accounting towards separation of functions along lines that permit measurement of the performance of the various parties in the firm are also present in the case of managerial accounting. While the separation of lines of responsibility between the accountants and other managers within a firm is nowhere as complete as it is in the case of external accounting, similar principles of organization apply, and it is not surprising that the controller's office is usually made responsible for collecting relatively hard data, while the collection of softer data and forecasts are often left to the managers who actually use such data. Such an arrangement is perhaps chosen because it is organizationally efficient.¹

I would therefore suggest that the question of whether accounting should be primarily prospective or retrospective can be reformulated in the terms of organization theory. It is clear that in any organization and in any social system, all of the tasks listed below must be accomplished, and the

problem is to find an assignment of these tasks to various parties in such a way that the organization will function efficiently. Historical data must be recorded in order to facilitate recall and learning and to locate responsibility for specific acts. Items of historical data to be gathered must be identified, and a scheme of classifying them must be devised, forecasts must be made and evaluated in the light of the results realized. Those who argue for retaining the existing historical cost accounting framework want the accountant to be responsible for only the first two of these tasks. Those who want current value accounting want to go a little further, and perhaps Davidson & Trueblood had in mind an all-encompassing function for the accountant, where the accountant was to be made responsible for everything that had to do with data. The dispute is not so much about what is more or less useful but about who will do what. Even if the accountant did not provide forecasts of sales and earnings, etc., other parties would do that work. We need to know if the results of transferring this responsibility to the accountant will be more efficient. Let us not separate accounting into retrospective and prospective functions, because they all must be carried out. They are not substitutes for each other. It is largely a terminological problem of which function in the management is going to be called the accountant. Does it make a difference?

MUTUALITY OF RELATIONSHIPS

Analysis of accounting problems in terms of master-servant, superior-subordinate, and principal-agent relationships tends to emphasize the asymmetry of the relationships between various accounting agents and to de-emphasize the symmetry of rights, responsibility, and constraints on the behavior of various agents. Principal-agent terminology distracts attention from the reciprocal nature of the relationships under examination and the ordinary English meaning of these words tends to make the relationships look far more one-sided than they are. In what sense is the master the master, or in what sense is the superior superior to

¹ The importance of dividing organizations into relatively independent units has been emphasized in the literature of organization theory. For example, Thompson (1967) suggests the following propositions:

Proposition 6.1: Under norms or rationality, organizations facing heterogeneous task environments seek to identify homogenous segments and establish structural units to deal with each.

Proposition 6.4: Under conditions of complexity, when the major components of an organization are reciprocally interdependent, these components will be segmented and arranged in self-sufficient clusters, each cluster having its own domain.

the subordinate? What aspects of the relationship make the boss the boss? The use of these terms leaves a definite impression that one party is dependent on the other, while the other is not so dependent. This is not borne out by the facts.

When a principal entrusts an agent with valuable resources, he is not giving away something for nothing, nor is the agent getting something for nothing. The agent, in exchange, is giving up his time, the use of his talents, and taking responsibility that, if not fulfilled, may damage his reputation and thus his future wellbeing. When the agent gives an accounting of the resources to the principal at the end of his stewardship period, a similar exchange takes place between the two parties. The principal receives the resources back, possibly with some interest added to his principal, and the agent receives his reward and a release from the obligations he took upon himself. Once such accounting has been given, the agent is no longer liable to have his reputation hurt by the future events. The period of contract between the two parties can be seen either as the interval between the two exchanges or as an interval over which exchanges take place continuously or continually. In any case, the essence of the relationship between the principal and the agent is the balanced exchange of resources.

It would be difficult to show that, in general, the principal has greater power over the agent than the agent has over the principal. The power of each agent could probably be measured by the range of alternative choices available to each and the degree of compulsion under which each acts to enter the transactions mentioned above. In a typical business corporation in the United States today, it would be difficult to assert that the shareholders of the firm, who are usually referred to as principals, have greater power over the professional managers who run the firm in the sense of having a broad range of options available. The shareholders can choose from a large variety of investments, stocks and bonds of corporations among them. They can go to the managerial labor market and choose managers to run their firms. Similarly, the professionals can choose from a variety of careers and from a large variety of business or nonbusiness organizations with which they can contract to sell their services. A newly graduated MBA, for example, can usually pick one of the several job opportunities available to him, the number of job opportunities available to him being limited largely by the search costs,

interviewing time, etc., rather than by the total number of potential employers he can find.

The so-called principal enters the transaction of entrusting his resources to an agent only because he, after evaluating various alternatives available to him, has reached the conclusion that this alternative is better. Similarly, the agent, after considering various opportunities available to him to employ his skills, experience, and reputation, must have concluded that it is better to enter into a contract with the principal than to pursue any of the other options available to him. Thus the relationship of principal and agent depends entirely on mutual convenience.

In a transaction between two independently acting parties, each side gives and each side receives something that it regards as satisfactory in exchange for the sacrifice made. This is the basis of all exchanges. Thus, a contractual arrangement enhances the utility of both parties to the contract. Whether there are two or three or more parties involved in any given contract, it is clear that each party brings some resources to the contract and receives certain rights in exchange, and, therefore, their relationship is symmetrical in this respect. The party that contributes capital has no more reason to be called the principal than does the party that contributes the labor, managerial skills, or other resources necessary to carry out the production activity of the firm.

Of course, in most contracts different contracting parties bring in different resources and receive their compensation in different forms. The rights of certain parties may be relatively risk-free, while the rights of other parties may include a substantial amount of risk; rights of some parties may be contingent on a variety of events. But these contingencies themselves are a part of the contract negotiated between the parties and do not by themselves render one party more or less powerful than another.

Contracts among independent parties are not always carried out. Whenever any party to a contract reaches a conclusion that he will gain more from the violation of a contract than he will lose in the form of rights, compensation, penalties, or reputation, we can expect that such a violation will indeed occur. So no contract can be absolute, and it is only as binding as the strength of penalties and other undesirable consequences that may be imposed on the violators.

Given this nature of the contractual relationships, it seems odd that they continue to be

described by terms such as master and servant, and principal and agent. Application of principal-agent terminology in the context of shareholders and the managers of a firm appears to be particularly inappropriate.

Accounting is no more a device to control the behavior of the manager by the owner than it is of controlling the behavior of the shareholder by the manager. The mutuality of the relationship can be seen immediately when we analyse the relationship between the accounting and the stock market. The shareholders can be said to control the behavior of managers through accounting in the sense that the managers' bonus, salary, prerequisites, promotions, etc., may be made dependent on their performance reports, and by adjusting the reward function, the shareholders may be able to alter the behavior of managers in a direction desirable to them. On the other hand, the managers, too, have control of their own actions and the accounting system, and they may seek to change it in such ways that the shareholders will be induced to alter their behavior in a way more favorable to managers. Management of income, issuance of information to the stock market at selected times, controlling the timing and detail of information about the new developments in the firm are all devices, many of them related to the accounting system, by which managers seek to control the behavior of the shareholders through the accounting system.

Unfortunately, much of the work in accounting has taken the principal-agent point of view in the literal sense that the accounting system must be analysed and classified and characterized from the point of view of the shareholders only and not from the point of view of the other agents such as managers. As long as the words *principal* and *agent* are used purely as labels to describe the two classes of agents who supply different types of resources and receive their compensation in different forms, the terms *agent* and *principal* are only a convenient way of saying Party One and Party Two. However, if this nomenclature is used to imply that normative judgments about accounting should be based on the point of view of the first party but not on the point of view of the second party, we are led to an incomplete analysis of accounting problems. Perhaps it is better to use nomenclature such as *agent one* and *agent two* to avoid the normative implications of terms such as *master-servant* and *principal-agent*.

ACCOUNTING EQUILIBRIUM

In recent years we have been moving towards a better and more explicit recognition of accounting systems as the equilibrium result of a variety of optimizing decisions made by various economic agents and not merely the optimization process carried out by a single agent or a homogeneous group of agents. Traditionally, the systems of accounting, at least financial accounting, were seen as the instruments of the owner or the shareholder of the firm, and much discussion has been directed to improving the system from that point of view. The above discussion of the symmetry among the agents involved in accounting emphasizes the fact that the system of accounting cannot be changed by one agent without affecting the actions of others. If one agent tries to change the system in a way that he sees as more advantageous to himself, he had better take into account the fact that the other agents, if they see their welfare being affected by change, will also alter their behavior, and after such adjustments have taken place, the first agent who initiated the change may no longer find the final result desirable to him. The induction argument of Prakash & Rappaport (1977) and the more general concern with the economic consequences of accounting (Zeff, 1978) are indications of this heightened awareness that the change in accounting systems is not as easily accomplished as it might appear to be from a narrow perspective of one or two agents.

The determination of the optimal accounting system in the social setting through analytical means where the actions and reactions of various agents have been considered is an extremely difficult task. (As we already know, the determination of the optimal scheme of accounting from the point of view of a single agent is not easy, either.) Attention is now shifting more to the process whereby social institutions adapt accounting methods with the hope that such social adaptation will, over time, yield accounting systems that are desirable in the prevailing environment. Hopes of determining optimal accounting systems through mathematical analysis or empirical research are giving way to a more sober realization that, like other social institutions, accounting, too, is a creature of past events and future expectations, and the determination of an optimal system of accounting is no more realistic than the determination of an optimal distribution

of wealth or an optimal system of government. The accounting reformers will come, will advocate changes, and will sometimes succeed in making some changes; some of them will stick, others will be ignored, and the system of accounting will continue to evolve like other social institutions. Action-reaction consequences of a social change seem too complex to be completely analysed for any realistic problem of accounting.

BIBLIOGRAPHY

- Davidson, J. J. & Trueblood, R., Accounting for Decision Making, *The Accounting Review* (October, 1961), pp. 577-582.
- Prakash, P. & Rappaport, A., Information Inductance and Its Significance for Accounting, *Accounting, Organizations and Society* (1977), pp. 29-38.
- Thompson, J. D., *Organizations in Action* (New York: McGraw-Hill, 1967).
- Zeff, S. A., The Rise of "Economic Consequences", *Journal of Accountancy* (December, 1978), pp. 56-63.