THE ACCOUNTING REVIEW
Vol. LIV, No. 2
April 1979

The Demand for and Supply of Accounting Theories: The Market for Excuses

Ross L. Watts and Jerold L. Zimmerman

ABSTRACT: This paper addresses the questions of why accounting theories are predominantly normative and why no single theory is generally accepted. Accounting theories are analyzed as economic goods, produced in response to the demand for theories. The nature of the demand is examined, first in an unregulated, then in a regulated economy.

Government regulation creates incentives for individuals to lobby on proposed accounting procedures, and accounting theories are useful justifications in the political lobbying. Further, government intervention produces a demand for a variety of theories, because each group affected by an accounting change demands a theory that supports its position. The diversity of positions prevents general agreement on a theory of accounting, and accounting theories are normative because they are used as excuses for political action (*i.e.*, the political process creates a demand for theories which prescribe, rather than describe, the world).

The implications of the authors' theory for the changes in the accounting literature as a result of major changes in the institutional environment are compared with observed phenomena.

I. Introduction

The literature we commonly call financial accounting theory is predominantly prescriptive.[1] Most writers are concerned with what the contents of published financial statements should be; that is, how firms should account. Yet, it is generally concluded that financial accounting theory has had little substantive, direct impact on accounting practice or policy

[1] For example, see Canning [1929], Paton [1922], Edwards and Bell [1961], Sprouse and Moonitz [1962], Gordon [1964], Chambers [1966], and American Accounting Association [1966]. We would prefer to reserve the term "theory" for principles advanced to explain a set of phenomena, in particular for sets of hypotheses which have been confirmed. However, such a definition of theory would exclude much of the prescriptive literature and generate a semantic debate. To avoid that consequence, in this paper (unless qualified) we use the word "theory" as a generic term for the existing accounting literature.

This research was supported by the Center for Research in Government Policy and Business, Graduate School of Management, University of Rochester. The authors wish to acknowledge the suggestions of Ray Ball, George Benston, Richard Brief, Nicholas Dopuch, Nicholas Gonedes, David Henderson, Robert Holthausen, Michael Jensen, Melvin Krasney, Richard Leftwich, Janice Maquire, William Meckling, Philip Meyers, Katherine Schipper, William Schwert, Clifford Smith, and Jerold Warner. We also acknowledge the suggestions received on an earlier version of this paper presented at the Stanford Summer Research Colloquium, August 2, 1977, and the comments of the anonymous reviewers.

Ross L. Watts is Associate Professor and Jerold L. Zimmerman is Assistant Professor, both at the University of Rochester.

Manuscript received October, 1977.
Revisions received January and April, 1978.
Accepted May, 1978.

Copyright © 2001 All Rights Reserved

formulation despite half a century of research. Often the lack of impact is attributed to basic methodological weaknesses in the research. Or, the prescriptions offered are based on explicit or implicit objectives which frequently differ among writers.[2] Not only are the researchers unable to agree on the objectives of financial statements, but they also disagree over the methods of deriving the prescriptions from the objectives.[3]

One characteristic common to the prescriptions and proposed accounting methodologies, however, is their failure to satisfy all practicing accountants and to be accepted generally by accounting standard-setting bodies. A committee of the American Accounting Association recently concluded that "a single universally accepted basic accounting theory does not exist at this time."[4]

The preceding observations lead us to pose the following question: What is the role of accounting theory in determining accounting practice? Our objective in this paper is to begin building a theory of the determinants of accounting theory. This theory is intended to be a positive theory, that is, a theory capable of explaining the factors determining the extant accounting literature, predicting how research will change as the underlying factors change, and explaining the role of theories in the determination of accounting standards.[5] It is *not* normative or prescriptive.[6]

Other writers have examined the relationship between accounting theory and practice. For example, Zeff [1974, p. 177] examines the historical relationship and concludes:

> A study of the U.S. experience clearly shows that the academic literature has had remarkably little impact on the writings of practitioners and upon the accounting policies of the American Institute and the SEC. *Too often, accounting theory is invoked more as a tactic to buttress one's preconceived notions, rather than as a genuine arbiter of contending views* (emphasis added).

Horngren [1973, p. 61] goes further and suggests an explanation for accounting theory's limited impact on the setting of accounting standards:[7]

> My hypothesis is that the setting of accounting standards is as much a product of political action as of flawless logic or empirical findings.

Our tentative theory is consistent with both Zeff's and Horngren's observations. It predicts that accounting theory will be used to "buttress preconceived notions" and further, it explains why. Our contribution to Zeff's and Horngren's ideas is to give them more structure so that we can make additional predictions about accounting theory. The source of that structure is economics. We view accounting theory as an economic good and

[2] For example, Chambers [1966, Chapters 9–11] apparently adopts economic efficiency as an objective while the American Institute of Certified Public Accountants (AICPA) Study Group on the Objectives of Financial Statements [1973, p. 17] decided that "financial statements should meet the needs of those with the least ability to obtain information. . . ."

[3] Some writers (*e.g.*, Chambers [1966]) make assumptions about the world without regard to *formal* empirical evidence and derive their prescriptions using those assumptions. Others (*e.g.*, Gonedes and Dopuch [1974]) argue that prescriptions to achieve any given objective must be based on hypotheses which have been subjected to formal statistical tests and confirmed.

[4] American Accounting Association, [1977, p. 1]. This report also reviews the major accounting theories.

[5] The Committee on Concepts and Standards for External Reports, American Accounting Association [1977] examines many of these same questions, and the interested reader should refer to this committee report for an alternative explanation of these phenomena, specifically Chapter 4.

[6] The terms "normative" and "prescriptive" are used interchangeably. See Mautz and Gray [1970] for an example of prescriptions to "improve" accounting research and hence its impact on practice.

[7] See Sterling [1974, pp. 180–181] for Horngren's response to Zeff's initial remark.

Copyright © 2001 All Rights Reserved

examine the nature of the demand for and the supply of that good.

Understanding why accounting theories are as they are requires a theory of the political process. We model that process as competition among individuals for the use of the coercive power of government to achieve wealth transfers. Because accounting procedures[8] are one means of effecting such transfers, individuals competing in the political process demand theories which prescribe the accounting procedures conducive to their desired wealth transfers. Further, because individual interests differ, a variety of accounting prescriptions, hence a variety of accounting theories, is demanded on any one issue. We argue that it is this diversity of interests which prevents general agreement on accounting theory.

While individuals want a theory which prescribes procedures conducive to their own interest, they do *not* want a normative theory which has their self-interest as its stated objective. The reason is that information is costly to obtain. Some voters will not obtain information on political issues personally. Those voters are not likely to support political actions which have as their stated objective the self-interest of others. The most useful theories for persuading uninformed voters are theories with stated objectives appealing to those voters, *e.g.*, the "public interest." As a result, individuals demand normative accounting theories which make prescriptions based on the "public interest." In other words, the demand is for rationales or excuses. Because it arises from the political process, the demand for normative, "public interest"-oriented accounting theories depends on the extent of the government's role in the economy.

Section II analyzes the demand for financial accounting and accounting theory first in an unregulated economy, in which the only role of government is to enforce contracts, and then in a regulated economy. In Section III, we examine the nature of the supply of accounting theories. Because of the diverse demands for prescriptions, we expect to observe a variety of normative theories. Further, we expect theories to change over time as government intervention changes. In Section IV we examine the effect of government intervention on extant accounting theory during the last century. Section V summarizes the issues and presents our conclusions.

II. The Demand for Accounting Theories

This section analyzes the demand for accounting theories in an unregulated economy (Part A) and the additional demands generated by government intervention (Part B).

A. The Demand for Accounting Theories in an Unregulated Economy

1 Accounting in an Unregulated Economy. Audited corporate financial statements were voluntarily produced prior to government mandate.[9] Watts [1977] concludes that the original promoters of corporations or, subsequently, corporate managers have incentives to contract to supply audited financial statements. Agreements to supply financial statements were included in articles of incorporation (or by-laws) and in private lending contracts between corporations

[8] Accounting "procedures," 'techniques," and "practices" are defined as any computational algorithm used or suggested in the preparation of financial accounting statements. "Accounting standards" are those "procedures" sanctioned or recommended by an "authoritative" body such as the APB, FASB, SEC, ICC, *etc.*

[9] Benston [1969a] reports that as of 1926 all firms listed on the New York Stock Exchange published a balance sheet, 55 percent disclosed sales, 45 percent disclosed cost of goods sold, 71 percent disclosed depreciation, 100 percent disclosed net income, and 82 percent were audited by a CPA.

Copyright © 2001 All Rights Reserved

and creditors.[10] These contracts increase the welfare of the promoter or manager (who is raising the new capital) because they reduce the *agency costs*[11] which he bears.

Agency costs arise because the manager's (the agent's) interests do not necessarily coincide with the interests of shareholders or bondholders (the principals). For example, the manager (if he owns shares) has incentives to convert assets of the corporation into dividends, thus leaving the bondholders with the "shell" of the corporation. Similarly, the manager has incentives to transfer wealth to himself at the expense of both the shareholders and bondholders (*e.g.*, via perquisites).

Bondholders and shareholders anticipate the manager's behavior and appropriately discount the price of the bonds or shares at the time of issue. Hence, the promoter (or manager) of a new corporation receives less for the shares and bonds he sells than he would if he could guarantee that he would continue to act as he did when he owned the firm (*i.e.*, when there were no outside shareholders or bondholders). This difference in the market value of the securities is part of the cost of an agency relationship, it is part of agency costs, and is borne by the promoter (or manager).[12] Jensen and Meckling [1976, p. 308] call it the "residual loss."

Because he bears the residual loss, the manager has incentives to make expenditures to guarantee that he will not take certain actions which harm the principal's interest or that he will compensate the principal if he does. These are "bonding" and "monitoring" expenditures and are additional elements of agency costs. Examples of such expenditures include contracting to restrict dividend payments and expenditures to monitor such dividend covenants.

The final element of agency costs is the utility of the increase in perquisites, wealth transfers, *etc.*, the manager receives because of his actions as an agent. An equilibrium occurs when the net costs of an agency relationship, the agency costs, are minimized by trading-off the decreases in the promoter's (or manager's) utility due to the residual loss, the monitoring and bonding expenditures, and the increased utility due to increased perquisites. The promoter or manager will write contracts for monitoring and bonding as long as the marginal benefits of these contracts (*e.g.*, reduction of the residual loss) are greater than the marginal costs (*e.g.*, the costs of contracting and the utility of any perquisites foregone). Moreover, since he bears the agency costs, the manager or promoter will trv to write the contracts and perform the bonding or monitoring at minimum cost. In fact, the Jensen and Meckling analysis suggests that the equilibrium set of contractual devices is the one which minimizes the agency costs associated with the separation of management and control and with the conflict of interests associated with the different classes of investors.

Promoters and managers voluntarily

[10] In the period 1862–1900, many U.K. companies voluntarily adopted the optional articles included in Table A of the 1862 U.K. Companies Act. See Edey [1968], Edey and Panitpakdi [1956] and Watts [1977]. Examples of private contracts can be found today in any note or bond indenture agreement.

[11] Jensen and Meckling [1976, p. 308] define an agency relationship as "a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent." There are at least two agency relationships which cause corporate promoters and managers to bear agency costs. The first is the relationship between shareholders (the principals) and the manager (the agent) and the second is the relationship between the bondholders (the principals) and the manager (the agent).

[12] See Jensen and Meckling [1976] for a formal proof that he bears this cost.

Copyright © 2001 All Rights Reserved

included bonding covenants in corporate articles and by-laws in the nineteenth century. Dividend covenants were voluntarily included in company charters as early as 1620.[13]

Watts's [1977] analysis of agency relationships suggests that the function of audited financial statements in an unregulated economy is to reduce agency costs. This theory predicts that accounting practices (*i.e.*, the form, content, frequency, *etc.*, of external reporting) would vary across corporations in an unregulated economy depending on the nature and magnitude of the agency costs. Agency costs, in turn, are, among other things, a function of the amount of corporate debt outstanding and of the relative share of equity owned by the manager.[14] These variables affect the manager's incentive to take actions which conflict with the interests of shareholders and bondholders. Agency costs also vary with the costs of monitoring managers, which, in turn depend on the physical size, dispersion, and complexity of the firm. Further, the practices underlying financial statements will vary across firms because an accounting practice which minimizes agency costs in one industry may not minimize those costs in another.

As an example of the association between agency costs and accounting procedures, consider management compensation schemes in the nineteenth century. Some management compensation schemes in the nineteenth century were included in corporate articles. Those schemes tied management compensation to the firms' "profits" [Matheson, 1893, pp. vii–viii] to reduce the divergence between the interests of the managers and shareholders.[15] At that time "profits" were effectively operating cash flows, since accrual accounting was not used. [Litherland, 1968, pp. 171–172]. However, a cash flow "profit" index is susceptible to shortrun manager manipulation. The manager can reduce repairs and maintenance expenditures and increase cash flows and "profits,"[16] which would increase the manager's compensation.[17] In addition, reduced maintenance increases the ability of the corporation to pay current dividends. Such dividends could reduce the value of the creditors' claims and increase the shareholders' wealth.[18]

To reduce these agency costs of equity and debt, several contractual devices were used to decrease the likelihood that managers and shareholders would run down the value of the capital stock.

i) Dividends were restricted to a fixed proportion of profits, thereby creating a buffer.[19]
ii) Reserve funds of fixed amounts had to be maintained if dividends were to be paid.[20]
iii) Fixed assets were treated as merchandise accounts with changes in value (usually not called depreci-

[13] See Kehl [1941, p. 4].

[14] Agency costs are also a function of the tastes of managers for non-pecuniary income, the extent of managerial competition, the degree to which the capital markets and the legal system are able to reduce agency costs, *etc.* See Jensen and Meckling [1976, pp. 328–330].

[15] The terms "shareholders" and "stockholders" are used interchangeably.

[16] See Matheson [1893, p. 5] for a report that managers did in fact adopt this tactic in the nineteenth century.

[17] See Matheson [1893, p. vii] for a statement that managers did in fact resist depreciation charges because of the effect on their compensation.

[18] See Smith [1976, p. 42]. Also, we find labor managed firms in socialist countries faced with the same agency problem. Labor has less incentive to maintain physical capital than an owner-manager. Jensen and Meckling [1977].

[19] For example, the General Bank of India had a provision in its charter limiting dividends to not more than ⅘ of net (cash) profits [DuBois, 1938, p. 365].

[20] The Phoenix Insurance Company, 1781, required a reserve fund of £52,000 before any dividends could be paid. *Ibid.*

Copyright © 2001 All Rights Reserved

ation) closed to profits prior to dividend distributions.[21]

In the latter procedure, depreciation was treated as a valuation technique which had to be estimated only in profitable years, since dividends were paid only in these years. A typical company charter requiring depreciation is:

> The directors shall, before recommending any dividend, set aside out of the profits of the company, but subject to the sanction of the company in general meeting, such sum as they think proper as a reserve fund for maintenance, repairs, depreciation and renewals.[22]

The court interpreted this article and the term "proper reserve" as a mechanism to account for declines in the capital stock.[23] Thus, the existence of a depreciation covenant (and hence the presence of depreciation in the financial statement) or other restrictions on dividends was a function of the amount of fixed assets and the nature and magnitude of the agency costs of debt.

Capital market participants contract to supply capital. Managers and owners seeking capital have incentives to enter into contracts which limit the agency costs they incur. But these contracts must then be monitored and enforced since managers have incentives to circumvent the contracts. For example, the promoter or manager of a corporation may contract to restrict dividends to, or base management compensation on, profits after a deduction for depreciation because such a covenant enables him to sell bonds and shares at a higher price. However, *after* the contract is written the manager has incentives to minimize that depreciation charge, thereby leading to increased profits (and potentially increased management compensation) and dividends which transfer wealth from bondholders to shareholders (including management). Thus, contracts will reduce agency costs only if they include provisions for monitoring. Since audited financial statements are useful devices to monitor these voluntary agreements between owners and managers, these statements serve a useful role in the capital markets and owner-managers will agree to provide them in advance.

2. The Function of Accounting Theories

The preceding analysis suggests that accounting theories will serve three overlapping functions in an unregulated economy.

i) *Pedagogic demand.* Accounting procedures are devised in order to reduce agency costs of contracts. Since these costs vary across firms, accounting procedures will vary, giving rise to diversity of techniques, formats, *etc.*[24] However, diversity in accounting procedures increases the difficulty of teaching the

[21] See Littleton [1933, pp. 223–227].

[22] *Dent v. London Tramways Company*, 1880, in Brief [1976, p. 193].

[23] "Take the case of a warehouse: supposing a warehouse keeper, having a new warehouse, should find at the end of the year that he had no occasion to expend money in repairs, but thought that, by reason of the usual wear and tear of the warehouse, it was 1,000*l.* worse than it was at the beginning of the year, he would set aside 1,000*l.* for a repair or renewal or depreciation fund, before he estimated any profits; because, although that sum is not required to be paid in that year, it is still the sum of money which is lost, so to say, out of capital, and which must be replaced." *Ibid.*

[24] Prior to the creation of the Securities and Exchange Commission (SEC) in 1934, much variation existed in accounting procedures. See Blough [1937, p. 7]. In an unregulated economy, the market itself regulates the amount of diversity of accounting procedures. There are economies associated with using existing practices and terminology. If the firm adopts previously unknown accounting practices, then the users of the statements (*i.e.*, creditors monitoring shareholders and shareholders monitoring management) will incur costs in learning the new accounting procedures. If creditors and shareholders have alternative uses of their capital (*i.e.*, capital markets are competitive) the costs of the new procedures are ultimately borne by the shareholders and managers. Hence, new procedures (and increased diversity) will be implemented only if their added benefits offset the added costs they impose.

Copyright © 2001 All Rights Reserved

practice of accounting. Consequently, accounting teachers develop pedagogic devices (rules-of-thumb) to assist learning and to structure the variation found in practice. Theorists examine existing systems of accounts and summarize differences and similarities. These descriptions of practice highlight the tendencies of firms with particular attributes to follow certain accounting procedures.

Nineteenth century accounting texts and articles indicate that accounting theorists recognized the diversity of practice and attempted to distill general tendencies from the diversity. For example:

> No fixed rules, or rates of depreciation can be established for general use, because not only do trades and processes of manufacture differ, but numerous secondary circumstances have to be considered in determining the proper course. It may, however, be possible to lay down some general principles which will always apply, or which, at any rate, may with advantage be held in view in deciding particular cases. [Matheson, 1893, p. 1]

Similarly, Dicksee and Tillyard's [1906] treatise describes current accounting practice for goodwill and the relevant court cases. Based on this description, the authors "enunciate general business principles and explain their practical application" [Dicksee and Tillyard, 1906, p. vii].

ii) Information Demand. In an unregulated economy there is a demand for writers to do more than just describe variations in accounting practice. There is a demand for predictions of the effects of accounting procedures on both the manager's and auditor's welfare via exposure to law suits. The auditor contracts with the shareholders (and creditors) to monitor management, and he is legally liable if he fails to report breaches of covenants in the corporation's articles or by-laws.[25] Furthermore, the demand for a given auditor's services is a function of the auditor's efficiency in monitoring management.[26] Hence, the auditor again has an incentive to understand how management's choice of accounting procedures affects agency costs.

Auditors would value information in the form of theories predicting how agency costs vary with accounting procedures. In particular, auditors would like to know how managers' actions and hence agency costs would be affected by alternative accounting procedures.

iii) Justification Demand. Early accounting textbooks warned that managers would use accounting to serve their own interests at the expense of shareholders. The second edition of Matheson [1893] contains examples of such warnings. Matheson provides illustrations of how managers can take advantage of deficiencies in the definition of depreciation, repairs, and maintenance charges to increase "profits" and their own compensation at the expense of shareholders and/or bondholders. For example, on page 5 he writes:

> The temptation to treat as Profit the Surplus of Income over Expenditure, without sufficient allowance for Deterioration, appears to be often irresistible. Thus, in the case of a Tramway undertaking in its first years of working, a dividend may be possible only by writing off little or nothing from the capital value of the cars, the harness, and the horses. This, of course, cannot last without the intro-

[25] See the *Leeds Estate Building Company* case in Edwards [1968b, p. 148].

[26] Share prices are unbiased estimates of the extent to which the auditor monitors management and reduces agency costs (see Fama [1970] and Gonedes and Dopuch [1974] for a review of the evidence on market efficiency). The larger the reduction in agency costs effected by an auditor (net of the auditor's fees), the higher the value of the corporation's shares and bonds and, *ceteris paribus*, the greater the demand for that auditor's services. If the market observes the auditor failing to monitor management, it will adjust downwards the share price of all firms who engage this auditor (to the extent to which the auditor does not reduce agency costs), and this will reduce the demand for his services.

Copyright © 2001 All Rights Reserved

duction of new capital, but in undertakings long established there yet may be epochs of fictitious profits due to various causes. For instance there may be neglect of repairs, which, when the necessity for them becomes evident, will involve a heavy outlay for renewals; or it may arise from actual fraud in postponing expenditure, so as to show large profits, which will raise the value of shares for stock-jobbing purposes. There are railways where the dividend income and the corresponding value of the shares have fluctuated considerably, not according to alterations in the real earnings, but according to alternate neglect and attention in regard to plant.

Accounting texts (and theories) which detail how managers seek to manipulate profits and the consequent effects of those manipulations on shareholders and bondholders not only improve the auditor's ability to monitor such behavior, but also provide the auditor with ready-made arguments to use against such practices in discussions with management. It is clear that Matheson's work fulfilled this role. William Jackson, a member of the Council of the Institute of Chartered Accountants in England and Wales, stated that he used Matheson's book in that fashion:

To those who honestly and from conviction treat the subject on the only sound basis, it may seem superfluous to urge due consideration of the arguments so convincingly set out in these pages; but Auditors, and especially those who have to deal with joint-stock or other concerns where the remuneration of the management is made wholly or partly dependent upon declared Profits, know in what varied forms resistance to an adequate Charge against profits for Depreciation is presented.

The fallacies underlying these objections present themselves again and again with the modifications caused by the lack of apprehension in some, or the ingenuity of others. *Mr. Matheson's work provides the Auditor with true antidotes to these fallacies, and it has been in past times used by the writer with satisfactory effect, where his own less-reasoned arguments have failed to convince.*

He therefore recommends it afresh to the notice and for the support, where necessary, of members of his own profession, and of those who, untrained in the practice of Auditing, are confronted with unfamiliar and specious pretexts for avoiding the unwelcome charge against Profits [Matheson, 1893, pp. vii-viii] (emphasis added).

B. The Demand for Accounting Theories in a Regulated Economy

This section extends the previous analysis of the demand for theories to include the effects of government. We assume that private citizens, bureaucrats, and politicians have incentives to employ the powers of the state to make themselves better off and to coalesce for that purpose. One way by which coalitions of individuals are made better off is by legislation that redistributes (i.e., confiscates) wealth.

1. Accounting and the Political Process

Farm subsidies, tariffs, welfare, social security, even regulatory commissions[27] are examples of special interest legislation which transfer wealth. The business sector is both the source (via taxes, antitrust, affirmative action, *etc.*) and the recipient of many of these wealth transfers (via tax credits, tariffs, subsidies, *etc.*).

Financial accounting statements perform a central role in these wealth transfers and are affected both directly and indirectly by the political process. The Securities and Exchange Commission (SEC) regulates the contents of financial statements directly (upward asset revaluations are not allowed, statements of changes in financial position must be prepared, *etc.*). The Federal Revenue Acts also affect the contents of financial statements directly (*e.g.*, LIFO). In addi-

[27] See Stigler [1971], Posner [1974], and Peltzman [1976].

Copyright © 2001 All Rights Reserved

tion, regulatory commissions (*e.g.*, state public utility boards, various banking and insurance commissions, the Interstate Commerce Commission, the Federal Trade Commission) often affect the contents of financial statements.

Besides these more direct effects, there are indirect effects. Government commissions often use the contents of financial statements in the regulatory process (rate setting, antitrust, *etc.*). Further, Congress often bases legislative actions on these statements.[28] This, in turn, provides management with incentives to select accounting procedures which either reduce the costs they bear or increase the benefits they receive as a result of the actions of government regulators and legislators.[29]

Since public utilities have incentives to propose accounting procedures for rate making purposes which increase the market value of the firm, their arguments are assisted if accounting standard-setting bodies such as the Financial Accounting Standards Board (FASB) mandate the same accounting procedures for financial reporting.[30] Consequently, managers of utilities and other regulated industries (*e.g.*, insurance, bank and transportation) lobby on accounting standards not only with their regulatory commissions but also with the Accounting Principles Board (APB) and the FASB.

Moonitz [1974 a and b] and Horngren [1973 and 1977] document instances of regulated firms seeking or opposing accounting procedures which affect the value of the firm via direct and indirect wealth transfers. Examples of other firms lobbying on accounting standards exist. Most of the major U.S. oil companies made submissions regarding the FASB's Discussion Memorandum on General Price Level Adjustments [Watts and Zimmerman, 1978].

2. The Effect of Government Intervention on the Demand for Accounting Theories

The rules and regulations which result from government regulation of business increase the pedagogic and information demands for accounting theories. Even beginning accounting textbooks report the income tax requirements of LIFO, depreciation, *etc.* Practitioners demand detailed texts explaining SEC requirements (*e.g.*, Rappaport [1972]), tax codes, and other government regulations.

The justification demand for theories also expands with regulation. The political process in the U.S. is characterized as an advocacy proceeding. Proponents and opponents of special interest legislation (or petitioners before regulatory and administrative committees) must give arguments for the positions they advocate. If these positions include changes in accounting procedures, accounting theories which serve as justifications (*i.e.*, excuses) are useful. These advocacy positions (including theories) will tend to be based on contentions that the political action is in the public interest,[31]

[28] The reported profits of U.S. oil companies during the Arab oil embargo were used to justify bills to break up these large firms.

[29] See Watts and Zimmerman [1978] for a test of this proposition. Also, see Prakash and Rappaport [1977] for further discussion of these feedback effects. See a bill introduced into the Senate by Senator Bayh (U.S. Congress, Senate, Subcommittee on Anti-trust and Monopoly [1975, pp. 5–13] and [1976, p. 1893]). Note that it is absolute size and profits which are used as a justification. On this point, see the "Curse of Bigness," *Barron's* [June 30, 1969, pp. 1 and 8]. Also see Alchian and Kessel [1962, p. 162].

[30] The Interstate Commerce Commission based its decision to allow tax deferral accounting on APB Opinion No. 11. See Interstate Commerce Commission, *Accounting for Federal Income Taxes*, 318 I.C.C. 803.

[31] Other writers have also recognized the tendency for advocates to use public interest arguments. For example, Pichler [1974, pp. 64–65] concludes that the accounting profession has increased its economic power via control over entry "through legislation justified as protecting the public interest" (p. 64). "In most cases, *public rather than professional interest was cited as the primary reason for* [the legislation]" (p. 65) (emphasis added).

Copyright © 2001 All Rights Reserved

that everyone is made better off, that most are made better off and no one is harmed, or that the action is "fair," since those contentions are likely to generate less opposition than arguments based on self-interest. Often, those public interest arguments rely upon the notion that the unregulated market solution is inefficient. The typical argument is that there is a market failure which can only be remedied by government intervention.

Politicians and bureaucrats charged with the responsibility for promoting the general welfare demand public interest testimony not only to inform them of the trade-offs but also for use in justifying their actions to the press and their constituencies. Consequently, when politicians support (or oppose) legislation, they tend to adopt the public interest arguments advanced by the special interests who promote (oppose) the legislation.

i) Examples of Public Interest or Market Failure Justifications. The reported objective of the Securities Exchange Act of 1934 and of required disclosure is stated by Mundheim [1964, p. 647]:

> The theory of the Securities Act is that if investors are provided with sufficient information to permit them to make a reasoned decision concerning the investment merits of securities offered to them, investor interests can be adequately protected without unduly restricting the ability of business ventures to raise capital.

This objective stresses economic efficiency. The statement suggests that required disclosure can increase investors' welfare at virtually zero cost (*i.e.*, that there is a market failure).

Examples of "public interest" justifications of accounting procedures are observed in rate-setting hearings for public utilities. For example, Public Systems, an organization that represents municipalities and rural electrification agencies, applied for a hearing on the Federal Power Commission's (FPC) Order 530 which allowed the use of income tax allocation in setting rates.[32] Order 530 increases the cash flow of electric utilities "at the expense of customers using electricity" and hence harms the interests of Public Systems. But, Public Systems did not argue that it is in its self-interest to oppose Order 530. Instead it argued that "normalization [income tax allocation] represents an *inefficient* means of subsidizing the public utility industry" [U.S. Congress, Senate, 1976, p. 683] (emphasis added).

Bureaucrats also use public interest arguments to justify their actions.[33] For example, the former SEC Chief Accountant, John Burton, a bureaucrat, justified the disclosure regulations imposed during his term in office by arguing:

> In a broad sense we hope [that disclosure regulations] will contribute to a more efficient capital market. . . . The way in which we hope that will be achieved is first by giving investors more confidence that they are getting the whole story and second by encouraging the development of better tools of analysis and more responsibility on the part of the professional analyst to understand what's going on. We think that by giving them better data we can encourage them in the direction of doing a better job, thus leading, we hope, to more effective [sic] capital markets [Burton, 1975, p. 21].

Government regulation creates a demand for normative accounting theories employing public interest arguments, that is, for theories purporting to demonstrate that certain accounting procedures *should* be used because they lead to better decisions by investors, more efficient capital markets, *etc.* Further, the demand

[32] U.S. Congress, Senate [1976, p. 59]. "Metcalf Staff Report."

[33] McGraw [1975, p. 162]. Also, see U.S. Securities and Exchange Commission [1945, pp. 1–10].

Copyright © 2001 All Rights Reserved

is not for *one* theory, but rather for diverse prescriptions. On any political issue such as utility rate determination, there will be at least two sides. In the FPC Order 530 example, Coopers & Lybrand, who opposed Public Systems, wanted a theory which prescribed income tax allocation, while Public Systems wanted a theory which did not. When we consider that accounting methods are relevant to taxes, antitrust cases, union negotiations, disclosure regulations, *etc.*, as well as utility rate-setting, we expect a demand for a multitude of prescriptions.

With increased government intervention in business, the demand for theories which justify particular accounting procedures (proposed in the self-interest of various parties) has come to eclipse the demand for theories which fulfill the pedagogic and information roles. We present evidence to support this proposition in Section V.

ii) Rationality or "Theory Illusion." Until recently, it had been popular in the economics literature to assume that politicians, elected officials, bureaucrats, *etc.*, acted in the "public interest" (the public interest assumption).[34] In order to determine which actions are in the public interest, politicians require theories which predict the consequences of alternative actions. "Rational," "public interest"-oriented politicians/bureaucrats would tend to use the theories which best predict (*i.e.*, the "best" theories)[35] and hence those theories would predominate. Leading articles in the accounting literature are implicitly based on the public interest premise (AAA [1966, p. 5], AICPA [1973, p. 17], Gonedes and Dopuch [1974, pp. 48–49 and pp. 114–118], Beaver and Demski [1974, p. 185]) that the "best" theories prevail.

In recent years, however, economists have questioned whether the public interest assumption is consistent with observed phenomena.[36] They have proposed an alternative assumption—that individuals involved in the political process act in their own interest (the self-interest assumption). This assumption yields implications which are more consistent with observed phenomena than those based on the public interest assumption.[37]

The costs and benefits to voters of becoming informed, of lobbying, of forming coalitions, and of monitoring their representatives' actions are of central importance in a self-interest model of the political process. Downs [1957] suggests that the expected effect of one individual's vote on the outcome of an election is trivial, and, hence, the individual voter has very little incentive to incur the costs of becoming informed on political issues. On the other hand, individual voters do have incentives to act as groups in the political process. Economies of scale in political action encourage group participation. When several voters have similar interests on particular issues (*e.g.*, members of a trade union), those voters can share the "fixed" costs of becoming informed and moreover can increase the likelihood of affecting the outcome of an election by voting as a bloc.[38]

[34] For a summary of this literature see Posner [1974] and McCraw [1975].

[35] By "best" theory, we mean the theory most consistent with observed phenomena. Such theories allow public officials to predict the outcomes of their actions, thereby helping them select actions which increase social welfare.

[36] See Posner [1974].

[37] For analyses of the political process based on this assumption see Downs [1957], Jensen [1976], Meckling [1976a and b], Mueller [1976], Niskanen [1971], Peltzman [1976], Stigler [1971], and Leffler and Zimmerman [1977].

[38] Stigler [1971] attempts to explain the regulation of an industry on the basis of variation of coalition costs, free-rider costs, *etc.*, with such variables as group size, homogeneity of interests, *etc.*

Copyright © 2001 All Rights Reserved

The costs of political action also depend on the existing political institutions (*e.g.*, whether political decisions are made by referendum or a vote of elected representatives) [Leffler and Zimmerman, 1977]. If we call the sum of the costs of political action the "transactions costs" of political decisions, the crucial question is "what is the magnitude of these transactions costs?" If the transactions costs of political decisions are high, self-interest motivated government servants will not always act in the public interest; if they are zero, they will.[39] Hence, if the transactions costs of the political process are high, government officials will not use the "best" theory available; if they are zero, they will.

As an example of the importance of positive political transactions costs, consider the manager of a utility advocating deferred tax accounting because of its effects on utility rates. The manager will argue that recognizing deferred taxes as current operating costs is in the public interest. The official responsible for allowing or not allowing this practice has a greater incentive to resist the lobbying efforts of the utility manager if other individuals (*e.g.*, consumer advocates) lobby against the procedure. Whether those individuals lobby depends on the costs of consumers being informed about the effects of the accounting procedures on their welfare (which requires human capital), the costs of forming groups to oppose the procedure, *etc.* The manager's public interest theory (which is an "excuse" to cover a self-interest motive and need not be valid) increases the costs of others being informed and will tend to be accepted by the public official *if* the transactions costs are large enough.

We assume that political transactions costs are large enough to cause the acceptance of "invalid" theories, that the competition among excuses does not always lead to acceptance of the "best" theory. The usefulness of that assumption depends on the empirical consistency of its implications. It is an empirical question. The work by Posner [1974], Stigler [1971], and Peltzman [1976] supports the assumption.

The assumption that the transactions costs of the political process are non-zero is analogous to the assumption of non-zero transactions costs in capital markets.[40] In capital market theory it is typically assumed that transactions costs are zero despite the fact they obviously are not, because that assumption yields empirically confirmed hypotheses. Why then, should political transactions costs be sufficiently more important than capital market transactions costs to warrant their inclusion in a political theory?

We suggest that there is an important difference between capital markets and the political process which make transactions costs important in the latter case. There is, in the capital markets, a direct market for control. If the manager of a corporation is not maximizing the market value of the corporation's shares, then an individual can, by buying its shares, acquire control of the corporation in the capital markets and, therefore, obtain the right to make the decisions. That individual can change the corporation's decisions and reap for himself the capital gain from the increase in the value of the corporation's stock. If the Chairman of the Securities and Exchange Commission were not making decisions in the public interest, an individual could not directly buy the right to make those decisions and capture the benefits of the changed decision. Because direct payments to

[39] The social choice literature (see Mueller [1976]) discusses the conditions which guarantee Pareto-efficient decisions by regulators.

[40] See Fama [1976] for a review of capital market theory.

Copyright © 2001 All Rights Reserved

elected officials are illegal and payments in kind are generally more expensive, it is costlier to bribe Congressmen, Senators, *etc.*, than to purchase a controlling interest in a corporation. It is also costly to establish indirect ways of achieving the same result.[41]

Notice that in our model of the political process everyone is rational. No one is being "fooled" by accounting theories; they are not "fooled" by "theory illusion."[42] If people do not investigate the validity of theories, it is because they do not expect such investigation to be worthwhile. If the expected benefits of investigation to an individual are small, he will make only a limited investigation.

Our assumption of high political costs is crucial to our theory. As we shall see in the next section, the assumption enables us to discriminate between the empirical implications of our theory and the implications of an alternative theory. This allows empirical testing. Ultimately, the test of the political cost assumption is whether the implications of the theory based on the assumption are confirmed or not by empirical tests. Thus, the merit of an assumption is judged by the predictions it generates. Those accounting researchers who build theories on the assumption that information is a pure public good (*e.g.*, Gonedes and Dopuch [1974] and Beaver [1976]) often assert that information is a pure public good. Yet, no tests of these theories have been provided. In Section IV we argue that implications of our theory are consistent with the evidence.

III. The Supply of Accounting Theories

Accounting theorists often view themselves as expert critics or defenders of accounting prescriptions (*e.g.*, replacement cost, historical cost, *etc.*). They argue that accounting theory should be used to determine accounting practice and standards.[43] The ideal state of affairs to them is one in which theorists logically and objectively determine the merits of alternative procedures.[44] For example, Hendriksen [1977, p. 1] writes: "... the most important goal of accounting theory should be to provide a coherent set of logical principles that form the general frame of reference for the evaluation and development of sound accounting practices." Theorists tend to bemoan the fact that this ideal state does not exist and that corporate managers, auditors, and politicians do not allow them to determine accounting standards.[45]

Most theorists probably believe that an objective of their research and the reason they supply theories to provide knowledge which will ultimately improve ac-

[41] See Zimmerman [1977] for further discussion of this issue. Essentially, the reason it is costlier to purchase "control" of the political system (via a system of bribes, payoffs, *etc.*) is that the legal system does not enforce these contracts to the same extent that the state enforces the property rights of residual claimants in corporations. Hence, more (costly) monitoring is required to enforce contracts between politicians/bureaucrats and other parties.

[42] Buchanan and Wagner [1977, pp. 128–130] introduce the concept of "fiscal illusion" as a systematic bias in individuals' perceptions of the differential effects of alternative taxing procedures. They hypothesize "that complex and indirect payment structures create a fiscal illusion that will systematically produce higher levels of public outlay than those that would be observed under simple-payment structures." (p. 129) It could be argued that individuals also suffer from "theory illusion" (*i.e.*, that more complex theories obscure political behavior). We do not subscribe to this phenomenon, but offer it as an alternative explanation.

[43] Mautz [1966, p. 6] and Sterling [1973, p. 49].

[44] Ijiri [1971, p. 26] states, "Accounting theorists are scientific observers of accounting practices and their surrouding environment. Their theories are required to have the highest degree of objectivity."

[45] Moonitz [1974b] does not believe that accounting research should be the sole source for setting practice, but that it should have a role, "Almost everyone agrees that research is an essential component of the process of establishing accounting standards" (p. 58). He goes on to suggest that "accountants must curb the power of the management" (p. 68).

Copyright © 2001 All Rights Reserved

counting practice. They would not regard themselves as supplying "excuses." But we suggest that the predominant contemporary demand for accounting theories (the demand for accounting in a regulated economy) is the demand for justifications—"excuses." If that empirical proposition is correct, the question is: How responsive is the supply side (accounting research) to changes in the nature and quantity of the economic good being demanded?

As long as there exists a large number of individuals who are able to supply a wide diversity of theories (*i.e.*, as long as numerous close substitutes exist) at relatively low cost, then supply will be very responsive to demand. Stigler's observation succinctly summarizes this point:

> . . . consumers generally determine what will be produced, and producers make profits by discovering more precisely what consumers want and producing it more cheaply. Some may entertain a tinge of doubt about this proposition, thanks to the energy and skill of Professor Galbraith, but even his large talents hardly raise a faint thought that I live in a house rather than a tent because of the comparative advertising outlays of the two industries. This Cambridge eccentricity aside, then, *it is useful to say that consumers direct production—and therefore, do they not direct the production of the words and ideas of intellectuals, rather than, as in the first view, vice-versa?* [Stigler, 1976, p. 347] (emphasis added).

The consumers ("vested interests") determine the production of accounting research through the incentives they provide for accounting theorists. The greater the prestige and articulation skills of an accounting researcher, the more likely practitioners, regulators and other academics will know his work and the greater the flow of both students and funds to his university. Researchers have non-pecuniary incentives to be well-known, and this reputation is rewarded by a higher salary and a plenitude of research funds.[46] Practitioners, regulators, and those teaching future practitioners are more likely to read or hear of the output of an accounting researcher if it bears on topics of current interest. As a result, the researcher who is motivated by pecuniary and non-pecuniary factors (*e.g.*, "free" trips to conferences) will tend to write on the current controversies in accounting. Therein lies the connection to the demands of vested interests. Controversies arise in accounting when vested interests disagree over accounting standards. For example, the LIFO controversy arose when the Supreme Court outlawed the base stock method of valuing inventory for tax purposes and the American Petroleum Institute recommended LIFO to replace it, thereby reducing the present value of its members' taxes. The Internal Revenue Service resisted because of the effect on revenues. The parties demanded pro and con LIFO theories which were eventually produced [Moonitz, 1974, pp. 33–34].

Accounting researchers often include a set of policy recommendations as part of their research project.[47] Those recommendations, made on the basis of some objective assumed by the researcher, may never have been intended to serve as an "excuse" for the corporate manager, practitioner or politician who prefers the recommended procedure for self-interest reasons. Nevertheless, the research findings will be favorably quoted by those with vested interests.[48] The more read-

[46] Even though we have argued the existence of close substitutes, all researchers will not be earning the same compensation. Higher compensation will accrue to the most prolific, articulate, and creative advocates—to those who are able to establish early property rights in a topic and thus must be cited by later theorists.

[47] See Beaver [1973] for an example of policy prescriptions based on accounting research.

[48] An interesting case in point is the work of Ijiri [1967 and 1975]. Ijiri claims to be a positivist—". . . the

Copyright © 2001 All Rights Reserved

able the research, the more frequently it is quoted, the more the researcher's fame increases. Similarly, criticisms of alternative accounting practices will be quoted by vested interests and will also increase the researcher's reputation.

The link between suppliers of accounting theory and consumers goes further than mere quotation. Partners in accounting firms, bureaucrats in government agencies and corporate managers will seek out accounting researchers who have eloquently and consistently advocated a particular practice which happens to be in the practitioner's, bureaucrat's, or manager's self-interest and will appoint the researcher as a consultant, or expert witness, or commission him to conduct a study of that accounting problem. Consistency in the researcher's work allows the party commissioning the work to predict more accurately the ultimate conclusions. Thus, research and consulting funds will tend to flow to the most eloquent and consistent advocates of accounting practices where there are vested interests who benefit by the adoption or rejection of these accounting practices.

The tendency of vested interests to seek out researchers who support their position produces a survival bias.[49] The bias is introduced by the vested interests. We do not mean to impugn the motives of accounting researchers who advocate particular practices. In fact, the more consistent the positions of the researcher and the greater his integrity, the more support he lends to the vested interest's position.

Given the rewards for supplying theories on controversial issues, we expect to observe competition in the supply of accounting theories related to those issues. The prescriptions for an issue are likely to be as diverse as the positions of vested interests. But despite this diversity, we do not necessarily expect accounting researchers to be inconsistent from issue to issue. Academic evaluation and criticism create incentives for each researcher to be consistent. However, the rationales given for observed accounting standards may well be inconsistent across issues and different sections of the same accounting standard.

Rationales differ (and are inconsistent) across accounting standards because a standard is the result of political action. The outcome depends on the relative costs which the various involved parties are willing to incur to achieve their goals. And these costs will vary with the expected benefits. The rationale given for a standard will be the successful party's rationale; and if it is a compromise, such as APB Opinion 16 on business combinations, mixtures of rationales will be used.[50] The same party is not successful in every issue; indeed many are not even involved in every issue. Further, vested

---

purpose [of this book] is a better understanding of the foundations of accounting as it is and not as someone thinks it ought to be." [1967, p. x] He states that his work "is not intended to be pro-establishment or to promote the maintenance of the status quo. The purpose of such an exercise is to highlight where changes are most needed and where they are feasible." [1975, p. 28] But, then, in the same monograph (pp. 85–90), Ijiri presents a defense of historical costs, saying, "Our defense of historical cost should not, however, be interpreted to mean that historical cost is without any flaw" (p. 85). Ijiri concludes this defense with a statement, "We should in fact try to improve the accounting system based on historical cost not by abandoning it, but by modifying it (*e.g.*, through price level adjustments) and supplementing it with data based on other valuation methods" (p. 90). Despite being a professed positivist, Ijiri is making a strong normative statement. No wonder the AAA [1977, p. 10] committee when summarizing Ijiri [1975] concludes, "[he] defends historical cost against the criticisms of current-cost and current value. . . ." At least part of the "market" views Ijiri as a defender of the status quo.

[49] Just as in any market, those who produce what is demanded have a better chance of survival than those who do not.

[50] See Zeff [1972, pp. 212–216] for an account of this compromise.

Copyright © 2001 All Rights Reserved

interests (*e.g.*, an insurance company) are less constrained to give consistent rationales across issues. Hence, we observe a party supporting historical cost valuation in some cases and market valuation in others.[51]

If political transactions costs are high so that there is a demand for excuses which are useful weapons in the political arena, if the demand for accounting theory is dominated by that demand for excuses, and if demand determines production, accounting theories will be generated by, not generate, political debates. We will observe the nature of accounting theory changing as political issues change. Accounting theory will change *contemporaneously* with or *lag* political issues. We will *not* observe accounting theory generally *leading* political action.

Contrast the preceding predictions to what we would expect under alternative theories of accounting theory. The only alternative theory which we can even partially specify is that theories in the accounting literature are used to further the "public interest" (*i.e.*, they assist politicians or bureaucrats in producing regulations to further the "public interest"). In order for politicians or bureaucrats to use that literature we would have to observe the theories appearing in the literature before or, at best, at the same time as the relevant regulation. The appearance of the theories in the literature could not *lag* the regulation. Thus, we can discriminate between our theory and the alternative public interest theory if the appearance of theories in the literature tends to lead or lag regulation. If it tends to lead, the public interest hypothesis is supported. If it lags, our theory is supported. On the other hand, if the literature and regulation are contemporaneous we cannot discriminate between the two hypotheses.

It is important to remember that we are attempting to explain accounting theory as it is represented in the accounting literature (see footnote 1). It is conceivable that an accounting theory could be produced and used in the political process to institute a regulation, but not appear until later in the accounting literature. In other words, the "public interest" could, in fact, motivate the theory and the regulation, but the publication of the theory nonetheless, could, lag legislation. In that case, neither the public interest theory nor our theory could explain the accounting literature. In essence, we would be left without a theory of the literature. However, those who would argue such a scenario must then produce another explanation for, or theory of, the accounting literature.

In Section IV we compare the timing of general movements in the accounting literature to the timing of regulation to see if *a priori* the evidence supports our theory or the public interest theory. We do not present any formal tests which discriminate between the two theories, although we believe such tests could be performed (*e.g.*, by using citation tests). However, the serious problem in doing a formal test is that the public interest theory, like other alternative theories, is poorly specified. Hopefully, this paper will cause others to specify the public interest theory better or specify alternative theories of the accounting literature so that testing is facilitated.

One or two papers discussing a topic prior to the time the topic becomes politically active is not sufficient to reject our theory, just as one or two "heads" is not sufficient to reject the hypothesis that a given coin is "fair." It is important to remember that as in all empirical theories we are concerned with

[51] Ernst & Ernst [1976] has proposed that replacement cost be used for depreciable assets while historical costs be continued for other assets.

Copyright © 2001 All Rights Reserved

general trends. Our predictions are for the accounting literature in general. We are not purporting to have a theory that explains the behavior of all accounting researchers or the acceptance, or lack of acceptance, of every published paper. There are many interesting phenomena that this theory, at this stage of development, cannot yet explain. But this does not *ipso facto* destroy the value of the theory.

Our analysis suggests that the accounting literature is not the simple accumulation of knowledge and consequent development of techniques. It is not a literature in which, as Littleton suggests,[52] concepts become better understood and consequently leads to "better" accounting practices. Instead it is a literature in which the concepts are altered to permit accounting practices to adapt to changes in political issues and institutions.

In this section, the existence of close substitute suppliers of theories was shown to make the supply of accounting "excuses" very responsive to the demand. In the next section we argue that the evidence we have gathered is consistent with the proposition that the market for accounting research is the market for "excuses" and suggests that the theory will be confirmed in formal testing.

IV. The Empirical Relationship Between Government Intervention and Accounting Theory

If the demand for "excuses" is important in determining the output of accounting theorists, we expect to observe changes in accounting theory when a new law is passed which impinges on accounting practice. This section examines how accounting practice and theories were affected by several major types of legislation. We have selected three types of legislation which we believe have had a pronounced impact on accounting theory: the laws regulating railroads, the income tax laws, and the securities acts.

In this section we do not purport to present an exhaustive list of legislation which has created a demand for accounting "excuses" or to present a complete analysis of each type of legislation. Our objective is merely to present *prima facie* support for the hypothesis that accounting theory has changed *after* the introduction of government regulation.

When dealing with historical events such as government regulation, the "evidence" presented is always subject to interpretation and the *ex post* selection bias of the researchers. Critics can always charge that "strategic sampling" of references produced the results. In fact, much of the economic theory of regulation suffers from this *ex post* rationalization. However, at this early stage in the development of the theory, an *ex post* case study approach has yielded insights [Posner, 1974] and appears to be the logical and necessary precursor to a general theory of regulation. We are aware of these methodological problems. Even though the evidence we present is somewhat "casual," and not as "rigorous" as we would like, it is, nonetheless, evidence.[53] Furthermore, we have endeavored to choose the references from the standard, classical accounting literature. Undoubtedly, con-

[52] "There is little evidence of fresh ideas regarding depreciation until the middle of the nineteenth century. The appearance of steam railroads at that time directed attention as never before to fixed assets and their associated problems of maintenance, renewal and improvement. Out of the discussion and experience which followed, new ideas about depreciation took form and the ground was prepared for a better comprehension of the real nature of depreciation itself" [Littleton 1933, p. 227].

[53] It is tempting to suggest citation tests of the theory (*i.e.*, the frequency of articles on a subject increases with regulation). Besides the obvious cost of such a test, it suffers from the interpretation bias of the researchers. Also, how should changes in terminology be controlled? We would welcome anyone who can overcome these methodological difficulties to perform the tests.

Copyright © 2001 All Rights Reserved

flicting citations and references exist. Critics can, will, and should raise these conflicting citations, keeping in mind the statistical fallacies of drawing inferences based on sample sizes of one. We do not contend that all issues are settled, but rather encourage others to pursue, correct, and extend our analysis.

A. Railroad Legislation

The growth of railroads is considered by many accountants to have been very important in the development of accounting theory, Hendriksen [1977, p. 40] lists it as one of the main influences on accounting theory in the period from 1800 to 1930. Littleton [1933, pp. 239–241] is more specific; he ascribes the development of depreciation accounting and the concern with depreciation in the literature in the nineteenth century to the growth of railroads.

There is no doubt that the development of railroads both in the U.S. and the U.K. affected the accounting literature on the nature of depreciation, including the question of charging depreciation as an expense [Pollins, 1956; and Boockholdt, 1977]. Holmes [1975, p. 18] writes:

> Depreciation was a knotty problem for these early railroad accountants. They argued over it, scorned it, denied it, anatomized it, and misused their own concepts. But in the end it was from the very ashes of their disagreements that our modern concepts of depreciation rose Phoenix-like fifty years later.

This literature existed at least by 1841 in the U.K. [*The Railway Times*, October 30, 1841, quoted in Pollins, 1956] and by 1850 in the U.S. [Dionysius Lardner's book quoted in Pollins, 1956]. Although the debate did not result in depreciation being treated as an expense in either the U.S. or U.K.,[54] theories of depreciation were enunciated. Consequently, given our theory, we have to answer two questions: (1) why did this depreciation debate arise with the railroads (*i.e.*, was there some government regulation or political action present in the case of the railroads that was not present for earlier corporations); and if so, (2) did that government regulation or political action precede the literature?

(1) *The reason for the debate* was investigated by Littleton [1933]. He asserts that two conditions were necessary to the development of depreciation accounting—corporations with limited liability and long-lived assets. He suggests that limited liability was a necessary condition, because it led to covenants restricting dividends to profits and thereby created the demand for financial statements which report profits (see Section II). Long-lived assets were important because, if they had not existed, there would have been no necessity to calculate depreciation to determine profits.

We think that Littleton's analysis is incomplete. *First*, agency costs of debt and equity exist whether or not a corporation has legally limited liability. Limited liability merely shifts some of the risk [Jensen and Meckling, 1976, pp. 331–332]. Given that the function of dividend covenants is to reduce the agency costs of debt, it is not surprising to observe them existing as early as 1620 for U.K. companies, long before limited liability was generally recognized for companies. We can easily amend Littleton's argument for this defect; for the first condition of limited liability, we substitute the existence of dividend covenants.

Second, dividend covenants and long-lived assets would not necessarily lead to depreciation being treated as an *expense*. The dividend covenants put a lower bound on the equity participation of

[54] The general practice in both countries came to be the writing-off of the value of fixed assets at the time of retirement of the asset.

Copyright © 2001 All Rights Reserved

shareholders. As long as sufficient earnings have been retained in the past to cover the depreciation of fixed assets to the current time, there would be no necessity to deduct depreciation systematically each year. We do not observe depreciation being treated as an expense prior to this century. Instead it was treated as an allocation of profits.

This suggests that Littleton's analysis has not been supported empirically. Observation of his two conditions would not necessarily be accompanied by depreciation being treated as an expense. Littleton's two conditions existed in the seventeenth and eighteenth centuries (dividend covenants can be observed as early as 1620 and were included in company charters as a general practice in the eighteenth century). Limited liability for U.K. companies existed *de facto* at least by the 1730s and was explicitly recognized by 1784.[55] The U.K. trading companies of the seventeenth and eighteenth centuries certainly had long-lived assets—forts and ships. Yet, we do not observe any real concern with depreciation expense until the nineteenth century.

Littleton recognized that his analysis was inconsistent with observed phenomena and that some other variable was necessary to explain the absence of concern about depreciation expense in both accounting theory and practice. He eloquently expresses the inconsistency [Littleton, 1933, p. 240]:

> The simultaneous appearance of these two elements—active, long-lived assets and a special need for the careful calculation of net profit—seems to be essential to the recognition of the importance of depreciation. Before these two are joined depreciation is incidental to the profit calculation; afterward it becomes indispensable. First in the trading companies, later in the railroads, these two elements were united and the foundations for depreciation accounting were laid. But, so far as could be learned, the depreciation of ships and forts did not receive consideration in the trading companies' bookkeeping, while the railroads, as has been seen, did give considerable attention to the problem of wear and tear of roadway and equipment. *Apparently some third element was also needed, which was present in the case of the railroads* but not earlier (emphasis added).

Littleton [1933, p. 240] suggests that the missing variable is knowledge, that it took 200 years for the nature of the corporation to become known. We suggest that a more plausible explanation is that, in the case of railroads, fares and rates were regulated by government on the basis of "profits."

Both in the U.S. and the U.K., some transportation prices were regulated before the existence of railroads. For example, the rates of the Fort Point Ferry (U.S.), incorporated in 1807, were, according to its charter, to be fixed by the court. [Dodd, 1954, p. 258]. However, railroad rates came to be tied to profits. The early U.S. railroad charters often had provisions for the adjustment of their rates based on profits. For example, the charter of the Franklin Railroad Company, incorporated in Massachusetts in 1830, included the following provision:

> if at any time after the expiration of four years from the completion of the Road, the net in-

[55] See DuBois [1938, pp. 94–95] for a report on the incorporation proceedings of the Albion Flour Mill in 1784. In those proceedings, the Attorney General gave an opinion on limited liability which caused DuBois to conclude that, "for England at any rate, the fact of incorporation either by the Crown or by Parliament came to be the criterion for the extent of limited liability" (p. 96). Note, however, that it was theoretically possible for shareholders of insolvent companies to be made subject to calls. (See DuBois, pp. 98–103). DuBois (p. 95) recognized that *de facto* limited liability existed in the 1730s and 1740s: "it should be noted that through the financial tribulations of the Charitable Corporation, the York Buildings Company, and the Royal African Company, which in the thirties and forties were making life miserable for their creditors, there was no suggestion of any attempt to proceed against the personal estates of the members of the corporations."

Copyright © 2001 All Rights Reserved

come shall have amounted to more than ten percent per annum, from the date of the completion aforesaid, upon the actual cost of said Road, the Legislature may take measures to alter and reduce the rates of toll and income, in such manner as to take off the overplus for the next four years, calculating the amount of transportation and income to be the same as the four preceding years; and, at the expiration of every four years thereafter the same proceeding may be had [Dodd, 1954, p. 260].

The charters of three other railroads incorporated in Massachusetts in the same year included a similar provision. [Dodd, 1954, p. 261].

The private acts of Parliament incorporating the early U.K. railroads typically fixed the maximum rates explicitly; but, in one notable exception, the Liverpool and Manchester Railway Act in 1826 limited the company's dividends to ten percent of the capital and required that its rates be reduced by five percent for each one percent of dividend above ten percent [Pollins, 1956, pp. 337–338]. Parliament soon began regulating railroad profits. In 1836, James Morrison sought to have Parliament restrict the profits of all railways. Clauses in Gladstone's 1844 Bill,

authorized the Board of Trade to consider the position and profits of any railway which had a charter for fifteen years and to decide whether to buy it up on prescribed terms or, alternatively, to revise all its charges if it had made a profit of more than ten percent on its capital for three consecutive years [Cooke, 1950, p. 135].

Though these clauses were weakened in the actual Railways Regulation Act of 1844, a principle was established. Cooke [1950, p. 136] explains,

The Act therefore fell short of the designs of Gladstone's committee and it is notable not for any reform it accomplished but rather for the principle embodied in it, that railway companies were one example of a class of company which was formed under special Parliamentary sanction to carry on an undertaking of a special public nature. Since for this purpose it had special powers, it should therefore be subject to special scrutiny and (if necessary) control by the State on behalf of the public.

The question of railroad profits and the public interest was raised in the political process in both the U.S. and the U.K. in the nineteenth century. Hence, it is not surprising that questions of calculating profits and whether depreciation should be charged as an expense were raised. The accounting methods of treating capital additions, depreciation, repairs and renewals, *etc.*, could affect reported profits and hence the rates and market values of railroads. Thus, there was a demand for rationalizations of alternative procedures.

The political issue of railroad profits led several U.S. states (Virginia (1837), New Hampshire and Rhode Island (1841), New York (1855), Massachusetts (1869) and Illinois (1869)) to pass legislation which in some way regulated railroads, usually by "controlling extortionate rates." [Boockholdt, 1977, p. 13; Johnson, 1965, p. 218; and Nash, 1947, p. 2]. According to Nash [1947, p. 3], "Several of the early state laws called for statements of provision for depreciation in annual reports but without definition as to what such provisions should be." Arguments for depreciation are expected to follow such regulations. Finally, in 1887 federal legislation established the Interstate Commerce Commission to prohibit unreasonable rates and price discrimination, control mergers, and prescribe a uniform system of accounts. The Interstate Commerce Commission adopted an accounting policy of charging "repairs or renewals of ties, rails, roadway, locomotives and cars under the classification 'operating

Copyright © 2001 All Rights Reserved

expenses' [which typically results in higher reported expenses than depreciation] but did not mention depreciation" [Littleton, 1933, p. 236].

Although railroads were the prime target of regulation, the rates of other public utilities were also regulated in the nineteenth century. A Gas Commission was established in Massachusetts in 1885 and two years later was expanded to regulate electric companies. Later, it was given control over capitalization and rates [Nash, 1947, p. 3]. Municipalities regulated water company rates (*Spring Valley Water Works v. Schottler* (1883)) [Clay, 1932, p. 33] and such regulation led to legal disputes over whether depreciation should be considered in determining rates (*San Diego Water Co. v. San Diego*) [Riggs, 1922, pp. 155–157]. In addition, states regulated the charges for grain elevators (*Munn v. Illinois* (1877)) [Clay, 1932, p. 30].

It is our hypothesis that rate regulation (primarily of the railroads) created a demand for theories rationalizing depreciation as an expense. Furthermore, we expect that the more popular of these theories would stress that it is in the "public interest" for depreciation to be treated as an expense. Without regulation there was no necessity for depreciation to be a charge, systematically deducted each year in determining net income. However, because rate regulation was justified in terms of restricting the economic profits of monopolists (or eliminating "ruinous" competition), regulation created a demand for justifications arguing for depreciation to be treated as an annual charge to profits. Furthermore, because regulatory legislation was often based on economic arguments, theories of depreciation came to be couched in terms of economic costs.

(2) *The timing of the debate* appears to confirm our hypothesis that political action generated accounting theory, not vice-versa. As we have seen, the early U.S. railroad charters in the 1830s included provisions for regulation of profits. Those charters *precede* the debates observed in the accounting literature. The move by Morrison to have Parliament regulate the profits of U.K. railroads also *precedes* the debates.

B. Income Tax Acts

The influence of the income tax laws on financial reporting *practice* is well known and much lamented by academics.[56] That influence is very obvious in the practice of charging depreciation to net income, rather than treating it as an allocation of profit. Saliers [1939, pp. 17–18] describes the effect of the 1909 Excise Tax Law, the forerunner of the 1913 Income Tax Law:

> "Financial looseness" describes the accounting practices of industries in general at that time. The company bookkeepers, when closing their books, based the amount of the depreciation charge on the amount of profit earned in that year. A lean year caused the property to receive little or no charge for depreciation, while a prosperous year caused a liberal allowance to be made. The authorities had reason for either action at their fingertips, shifting one side to the other as conditions warranted. But after the year 1909 the shift was to the side of larger depreciation charges, for in that year the Corporation Excise Tax Law was enacted. This law levied a 1% tax on net income of corporations in excess of $5,000. This net income was said to be the figure resulting after deducting ordinary and necessary expenses and all losses, including an allowance for depreciation, from gross profit. Depreciation expense was made

[56] Hendriksen [1977, p. 49] states, "The effect on accounting theory of taxation of business incomes in the United States and in other countries has been considerable, but it has been primarily indirect in nature.... While the revenue acts did hasten the adoption of good accounting practices and thus brought about a more critical analysis of accepted accounting procedures and concepts, they have also been a deterrent to experimentation and the acceptance of good theory."

Copyright © 2001 All Rights Reserved

> an allowable deduction and was universally deducted by those corporations affected by the act. The effect of this act on the growth of the use of the depreciation charge cannot be overemphasized. *It was the first instance in which the writing off of depreciation as expense was definitely advantageous. That fact alone insured its general application* (emphasis added).

The influence of tax laws on accounting theory appears to be as dramatic as Saliers' description of the U.S. tax laws' effect on accounting practice, particularly with respect to depreciation. Concern with depreciation as an expense existed only in the *railroad* accounting literature until the 1880s. In that decade we observe a spate of U.K. journal articles and textbooks on the question of depreciation for corporations in *general*. We do not observe the same concern in the U.S. at that time. This raises the question of why the sudden concern with depreciation in the U.K., not just for public utilities, but for all corporations. Further, why did such a concern with depreciation for all corporations not manifest itself in the U.S.?

Brief [1976, p. 737] suggests that the U.K. literature was motivated by a concern with "paying dividends out of capital" and that "accountants sought first of all to clarify theory, and second, to understand their responsibility in these matters. However, they were offered little assistance from judicial and statutory authority which failed to specify rules of accounting behavior." Although the accounting authors of the time may have suggested that was the problem, we think it is a very unsatisfactory answer to the question of what really motivated the literature for two reasons. First, we have already noted that the "profits available for dividends" question had existed for 260 years. Second, there was no uncertainty in the law as to when depreciation should or should not be deducted before determining "profits available for dividends." The legal decisions were consistent: if the corporate articles required a provision for depreciation, it had to be taken; if not it did not. As Litherland [1968, p. 171] states, "the question of depreciation was a matter of internal management with which the law had nothing to do. The Articles of the given company were to govern."

We suggest that the reason a general concern with the depreciation for all corporations (and not just railroads) appeared in the U.K. literature in the 1880s and not before is that, prior to 1878, the U.K. tax laws made no allowance for depreciation. "In 1878 the law was modified to permit the deduction of a reasonable amount for the diminished value of machinery and plant resulting from wear and tear. Depreciation was not mentioned in the law and no amount was permitted for obsolescence" [Saliers, 1939, p. 255]. Now there was an additional reason for arguing over the concept of annual depreciation and its level—taxes [Leake, 1912, p. 180].

The income tax explanation for the late nineteenth century depreciation debate also explains the absence of that debate in the U.S. Brief's hypothesis does not. The first effective U.S. corporate income tax law was the Excise Tax Act of 1909 (which went into effect before it was delared unconstitutional).[57] Thus, in 1880 there was no federal tax motivation driving a debate over depreciation. There was in the U.S. in 1880 the problem of determining "profits available for dividends."

The tax laws affected not only the timing of depreciation discussions, but

[57] An increase in the effective corporate tax rate from less than 1 percent in 1909 to over 7 percent in 1918 further stimulated the concern for depreciation in the U.S. (Source: *Historical Survey of the United States*, U.S. Department of Commerce [1975, p. 1109]).

Copyright © 2001 All Rights Reserved

also the resulting concepts of depreciation and of accounting income. In the legal cases on "dividends out of profits," depreciation was regarded as a valuation procedure (see p. 278). Whether the amount of depreciation taken was sufficient would be decided in the event of a dispute. Administering the tax laws is less costly if the periodic valuation is replaced by an arbitrary proportion of historical cost. This saving was recognized in the early literature [Matheson, 1893, p. 15] and was the likely reason that both U.S. and U.K. income tax allowances for depreciation were based on historical cost. The demand for a rationalization of this procedure and other accruals under the tax law eventually resulted in the concept of income based on matching and the realization concept. Storey [1959, p. 232] reports this effect of the tax law as follows:

> [The realization concept] probably did not exist at all before the First World War, and at least one writer states that the first official statement of the concept was made in 1932 in the correspondence between the Special Committee on Cooperation with Stock Exchanges of the American Institute of Accountants and the Stock List Committee of the New York Stock Exchange. The letter referred to rejects the method of determining income by the inventorying of assets at the beginning and end of each period in favor of the recognition of profit at the time of sale. This concept of profit was gradually taking form during the period after the First World War and had become dominant in the field of accounting determination of net income by the late 1930's. *That it was influenced by the concept of income laid down by the Supreme Court in early income tax litigation is obvious* (emphasis added).

The timing of the depreciation debates in the U.K. also appears to confirm our hypothesis that political action caused the observed change in accounting theory. The tax allowance of the depreciation deduction (1878) *precedes* the 1880s debates.

It might appear that the development of the profession could explain the difference in the timing of the concern with depreciation in the U.K. and U.S. The professional bodies did not really develop until the 1870s in the U.K. and until the 1890s in the U.S. [Edwards, 1968a, pp. 197–199]. Hence, we could not observe depreciation debates in either country until those times. However, this alternative hypothesis is unsatisfactory on several counts. *First*, while the first professional society was not formed in the U.K. until 1854, Littleton [1933, p. 265] reports evidence of individuals (primarily lawyers) practicing accounting in the U.K. in the eighteenth century and suggests it is highly likely that accounting was practiced by lawyers in earlier times also. Similarly, there were public accountants in the U.S. at least as early as 1866 [Edwards, 1968a, p. 198]. *Second*, the lack of a *formal* accounting profession did not prevent the appearance of the railroad depreciation literature in both the U.S. and U.K. in the 1840s and 1850s. *Third*, the formation of professional societies, itself, is likely to be due, at least partly, to political action. Accountants have incentives to lobby on government prescription of accounting practices. Given some economies of scale in lobbying, government intervention in accounting would be expected to produce professional bodies.

C. Securities Acts

There appear to be at least two major effects of the U.S. Securities Acts of 1933–34 on the accounting literature: they caused the objective of accounting to shift to what we call the "information objective"; and they stimulated a search for accounting principles. Both *follow* the Securities Acts.

(1) *The Information Objective.* Prior to the Securities Acts accounting theo-

Copyright © 2001 All Rights Reserved

rists tended to describe and base their prescriptions on the multiple objectives of accounting, and they listed the numerous users. Consistent with our analysis of accounting in an unregulated economy, the control, or stewardship role, was frequently stressed. For example, Leake [1912, pp. 1–2] includes as reasons for calculating profit and loss:

1. the stewardship role of management to "uphold the value of the capital investment and to ascertain and distribute the annual profits with due regard to the differential rights" of the various classes of capital;
2. profit sharing schemes between capital and labor;
3. income taxes; and
4. public utility regulation.

Daines [1929, p. 94] describes the "orthodox" or dominant objective of accounting as being "to reflect that income which is legally available for dividends." Sweeney [1936, p. 248] states that "the fundamental purpose of accounting should consist of an attempt to distinguish between capital and income."

In his book based on his doctoral dissertation, Sweeney adds other functions to the stewardship role:

> Business management guides the affairs of business. For its own guidance it depends heavily on reports submitted to it by its employees. Periodically it renders reports of its stewardship to the owners of the business. From time to time it also renders reports to bankers who have lent money to the business, to federal and state governments that tax or regulate business, and to the general financial public.
>
> The whole system of business, therefore, depends upon reports. Reports are made up largely of accounting statements [Sweeney, 1936, p. xi].

Managers were frequently cited as important users of accounting. Paton [1924, p. 1] defines accounting as a

> mechanism and body of principles by means of which the financial data of the particular concern are recorded, classified, and periodically presented and interpreted, with a view, thereby, to the *rational administration of the enterprise* (emphasis added).

After the Securities Acts the providing of information to investors and creditors in order to aid them in making rational investment choices became the dominant objective in the literature. We call this the information objective. One of the earliest documents which illustrates this new emphasis on the investor's decision is the AAA's 1936 "Tentative Statement on Accounting Principles." A number of "unsatisfactory" accounting procedures are discussed, including upward asset revaluations:

> Occasional uncoordinated "appraisals" produce in the average financial statement a hodgepodge of unrelated values of no explicable significance to *the ordinary investor*, if indeed they have any to the managements of the enterprises affected [American Accounting Association, 1936, p. 189] (emphasis added).

Notice the emphasis given to investors. Hendriksen [1977, p. 54] also supports our contention that the objective changed "from presenting financial information to management and creditors to that of providing financial information to investors and stockholders." In a more recent example, *A Statement of Basic Accounting Theory* [American Accounting Association, 1966, p. 4], the information objective is listed first among four objectives of accounting. The objectives are:

1. to provide information for decisions concerning limited resources by "individuals acting in their own behalf, such as the stockholders or creditors of a firm, by agents serving in fiduciary capacities, or by indi-

Copyright © 2001 All Rights Reserved

viduals or groups in business firms, in government, in not-for-profit organizations and elsewhere" [p. 4].
2. to effectively direct and control an organization's human and material resources,
3. to maintain and report on the custodianship of resources,
4. "to facilitate the operations of an organized society for the welfare of all" [p. 5].

Recent writers no longer even list management as a principal user of financial statements. The dichotomy of internal and external accounting has become complete. The recent statement on accounting objectives, the FASB's Conceptual Framework Study [1976], also excludes management:

> Financial statements of business enterprises should provide information, within the limits of financial accounting, that is useful to present and potential investors and creditors in making rational investment and credit decisions [FASB, 1976, p. 10].

The dominance of the information objective arose, we suspect, as a public interest justification consistent with and in support of the *raison d'être* of the Securities Acts. The SEC was justified in terms of, and charged with, maintaining the orderly functioning of the capital markets. In particular the SEC was to protect the public from another stock market crash. That crash was alleged to have been caused in part by inadequate corporate disclosure, although very little evidence exists to support this claim.[58]

Although the SEC delegated the power to determine accounting standards for corporate disclosure to the accounting profession, there is evidence that it still exercised control over that determination. According to Horngren [1973] and Zeff [1972, pp. 150–160] the SEC managed by exception, threatening to intervene, or actually intervening in the standard-setting process whenever the Committee on Accounting Procedure (CAP) or the APB proposed a standard of which it did not approve. Consequently, proponents advocating particular accounting procedures would justify those procedures in terms of the SEC's stated objective—the public interest (which "requires" the information objective).

The hypothesis that the dominance of the information objective was caused by the Securities Acts is supported not only by the tendency of modern writers to cite the public interest as an objective along with the information objective [*e.g.*, the fourth objective of *A Statement of Basic Accounting Theory* listed above], but by the tendency to argue that fulfillment of the information objective is necessary to the "public interest." An example of that latter tendency is provided by the FASB [1976, p. 3]:

> Financial accounting and reporting is an important source of information on which investment, lending, and related decisions are based. Confidence in financial information is vital not only to ensure that individual decisions result in an equitable allocation of capital but to ensure continuing public support of the free enterprise system as a whole.

The close relationship between the information objective and the "public interest" is exemplified by the argument recently raised in the literature that information provided in accounting reports is a public good and that as a consequence, there may be an underproduction of information from society's viewpoint (*i.e.*, there may be a market failure). If there is a market failure, the argument proceeds, the "public interest" may require disclosure laws requiring the

[58] See Benston [1969a and b]. The U.S. Securities and Exchange Commission [1945, pp. 1–3 and Part X] makes this claim, although Sanders [1946, pp. 9–10] disputes much of their argument.

Copyright © 2001 All Rights Reserved

provision of information to investors [Beaver, 1976, p. 66].

(2) *The Search for Accounting Principles.* Before the Securities Acts most of the accounting literature did not stray far from practice, and prescriptions were usually based on rationalizations of practice (*e.g.*, the matching concept). Even Sweeney's price-level accounting proposals of the 1920s were based on practice. According to the author [Sweeney, 1936, p. xii] the work "has its roots in methods that were developed in Germany and France during the late inflation periods in those countries." There was, with the notable exceptions of Paton [1922] and Canning [1929], little effort devoted to establishing a theory of accounting.[59] Indeed, Chambers [1955a, p. 18] claims that except for Paton [1922] the word theory was not attached to any work in the accounting literature until after World War II.

Taggart describes the general situation in 1922 as follows:

> Some of the writers on theory, notably Sprague and Hatfield, not satisfied merely to describe practice, had earnestly addressed themselves to exposition of pure theory; but the textbook writers, for the most part, had quite naturally concerned themselves primarily with practice and with not much more than an occasional nod toward theory, where it seemed to bolster practice. Paton's *Accounting Theory* is concerned only with theory; it touches on practice only for illustration or contrast; and it is quite the opposite of an apologia for practice, [Foreword in the 1962 re-issue of Paton, 1922, p. v.].

Canning [1929, p. 160] himself wrote, "accountants have no complete philosophical system of thought about income; *nor is there evidence that they have ever greatly felt the need for one*"[60] (emphasis added).

A potential explanation for the two famous departures from the orthodox accounting thought of the 1920s [Canning, 1929; and Paton, 1922] is that both were based on doctoral dissertations written in economics departments [Zeff, 1978, p. 16]. Undoubtedly, both authors were influenced heavily by economists as well as accountants. Canning himself writes, "I need not declare my obligation to Professor [Irving] Fisher for the influence of his writings upon my thought—that obligation appears throughout the whole book" [Canning, 1929, p. iv].

If Paton and Canning were harbingers of a change in accounting thought, we would expect to observe a shift in the orthodox accounting view during the 20s, following publication of their books. Alternatively, if Canning's and Paton's views were outliers or aberrations due to their economics training, we would expect to observe them modifying their views towards the orthodox position to ensure their survival as accounting academics.

Zeff [1978] presents evidence that Paton's views, at least, moved more towards the orthodox view during the 1920s and 1930s, than the orthodox view moved towards Paton's. Thus, it is difficult to argue that Paton and Canning were representative of a change in the accounting literature which influenced the passage of the Securities Acts. Instead, we suspect that much of the attention which Paton's and Canning's views received after the Securities Acts was a result of the Acts themselves.

The literature's concern with practice

[59] The Federal Reserve Board published a 1917 bulletin (*Uniform Accounting*) written by Price, Waterhouse & Co. in response to the Federal Trade Commission threatening to establish a federal accountant's register, but the bulletin "consisted of mainly audit procedures" [Carey, 1969, pp. 1:129–135].

[60] Canning's principal intentions were not to reform existing practice or to construct a general theory but rather to make "the work of the professional accountant more fully intelligible to those in other branches of learning" [1929, p. iii].

Copyright © 2001 All Rights Reserved

before the Securities Acts is not surprising (given our theory). Prescriptions based on rationalizations of practice are to be expected in an economy in which corporate reporting is not regulated. Theorists would base their prescriptions for individual firms on the current institutional arrangements determining practice (*i.e.*, in the terms of the agency or stewardship relationships, utility regulation, taxes, *etc.*). Hence, theory would be very concerned with practice. Further, because the advantages are to the individual firms, the theorist would not *require* all firms to follow his prescriptions, but expect his prescriptions to be adopted because of self-interest. The theorist would not try to specify accounting principles which all firms *should* adopt.

As we have noted, the Securities Acts were based on the argument that required disclosure is necessary to the "public interest." The idea was that without required disclosure capital markets would be less efficient. We do not observe this theory being generally advanced in the accounting literature prior to the Securities Acts.[61]

The justification for required disclosure is that the private incentives to adopt accounting prescriptions are insufficient. Hence, current accounting practice cannot serve as a basis for prescriptions. This justification sets accounting theory free from practice. It makes it possible to "build up a theory of accounting without reference to the practice of accounting" [Chambers, 1955a, p. 19]. Further, the justification caused the SEC to demand such theories. Because they were to reform existing accounting practice, the SEC commissioners could not base regulations on practice; they required a theory or a set of accounting principles to justify their rulings.

Zeff [1972, pp. 133–173] documents the AICPA's initial search for accounting principles and the SEC's passing the responsibility for the determination of principles to the profession in SEC Accounting Series Release No. 4 [U.S. SEC, ASR 4].[62] Zeff also documents the search for accounting principles (or standards) by the succession of standard-setting bodies established by the profession. As noted, the SEC exercised control over the standard-setting bodies' search for accounting principles. Thus, we expect these bodies (like the SEC) to search for or demand accounting principles which do *not* describe existing practice.

We expect accounting theorists, who are accustomed to developing rules based on practice, to be perplexed by a demand for accounting principles not based on practice. *After* the SEC's call (in ASR 4) for accounting principles for which there is substantial authoritative support [1938], the accounting literature begins to discuss the nature of principles [Scott, 1941; Wilcox and Hassler, 1941; and Kester, 1942].[63] Further, as theorists come to observe less emphasis being placed on the practicality of their approach, we observe philosophical works becoming far removed from practice such as Chambers [1955a, 1955b, 1966],

[61] The theory does appear in *The Journal of Accountancy* in October, 1930 (see Hoxsey [1930], but the author is not an accounting theorist; instead he is an employee of the New York Stock Exchange. The theory also appears in the writings of Ripley in the popular financial literature in the 1920s (*e.g.*, Ripley [1926]). However, Ripley is also not representative of the financial literature.

[62] ASR 4 stated that "financial statements filed with this Commission . . . [which] are prepared in accordance with accounting principles for which there is *no substantial authoritative support*, . . . will be presumed to be misleading or inaccurate" (emphasis added). ASR 4 created a demand for some procedure or device to provide "substantial authoritative" support.

[63] Storey [1964, p. 3] supports our contention that the Securities Acts were "landmark events" and directly related to the search for accounting principles.

Copyright © 2001 All Rights Reserved

Mattessich [1957] and Edwards and Bell [1961].

It is instructive to compare the search for accounting principles in the U.S. to that in the U.K. where there has not been a government regulatory body with the statutory power to prescribe accounting procedures [Benston, 1976, pp. 14–30; Zeff, 1972, pp. 1–69].[64] Until recently there has been considerably less "progress" in the U.K. in the search for accounting principles [Zeff, 1972, p. 310 and Shackleton, 1977, pp. 17–21] and further, "the English began late" [Zeff, 1972, p. 310]. The evidence suggests that the U.K. search for principles is also a response to government pressure which arose out of various financial crises [Zeff, 1972, pp. 39–40; Benston, 1976, pp. 15–17; and Shackleton, 1977, pp. 17–21].

The difference in the timing of the search for principles in the two countries is reminiscent of the 30-year difference in the timing of the general depreciation debates in the U.K. and the U.S. That 30-year difference also coincides with a difference in the timing of government regulation (*i.e.*, corporate income tax laws allowing depreciation as a deduction). The difference in timing cannot be explained *per se* by the fact that we are comparing two different countries. In the depreciation debates, the U.K. led, while the U.S. led in the search for principles.

The discussion in this section has suggested that much of accounting theory (*e.g.*, the concepts of depreciation, accrual accounting, the application of the concept of economic income, and the idea that the objective of financial statements is generally to provide information to investors rather than to control agency costs), *follows* government intervention. Thus, the evidence is consistent with our hypothesis that much of accounting theory is the product of government intervention and that accounting theory satisfies the demand for excuses. The evidence appears to be inconsistent with what we have called the "public interest" hypothesis. Undoubtedly there are alternative theories which can also explain the timing of the accounting literature. The challenge is to those who would support those alternative theories to specify them and show that they are more consistent with the evidence than ours.

V. Conclusions

In our view, accounting theories have had an important role in determining the content of financial statements—although it might not be the role envisioned by the theorists. Instead of providing "an underlying framework" for the promulgation of "sound" financial reporting practices by standard-setting boards, accounting theory has proven a useful "tactic to buttress one's preconceived notions" [Zeff, 1974, p. 177]. While accounting theories have always served a justification role in addition to information and pedagogic roles, government intervention has expanded the justification role. The predominant function of accounting theories is now to supply excuses which satisfy the demand created by the political process; consequently accounting theories have become increasingly normative.

We are not offering any judgments on the desirability of accounting theories fulfilling an excuse role. What we are arguing, however, is that *given* the existing economic and political institutions and the incentives of voters, politicians, managers, investors, *etc.* to become involved in the process by which accounting standards are determined, the only accounting theory that will provide a set of

[64] See Sanders [1946] for an overview of the different prevailing attitudes in the U.S. and U.K. in the 1940s.

Copyright © 2001 All Rights Reserved

predictions that are consistent with observed phenomena is one based on self-interest. No other theory, *no normative theory currently in the accounting literature*, (e.g., *current value theories*) *can explain or will be used to justify all accounting standards*, because:

1. accounting standards are justified using the theory (excuse) of the vested interest group which is benefitted by the standard;
2. vested interest groups use different theories (excuses) for different issues; and
3. different vested interest groups prevail on different issues.

While a self-interest theory can explain accounting standards, such a theory will not be used to justify accounting standards because self-interest theories are politically unpalatable. As a consequence, *not only is there no generally accepted accounting theory to justify accounting standards, there will never be one.*

REFERENCES

Accounting Principles Board, *Opinion 16: Business Combinations*, American Institute of Certified Public Accountants, 1970).

Alchian, Armen and Reuben Kessel, "Competition, Monopoly and the Pursuit of Money," in *Aspects of Labor Economics*, (Princeton University Press: N.B.E.R., 1962), pp. 157–175.

American Accounting Association, "A Tentative Statement of Accounting Principles Affecting Corporate Reports," THE ACCOUNTING REVIEW, (June 1936), pp. 187–191.

———, Committee on Basic Accounting Theory, *A Statement of Basic Accounting Theory* (American Accounting Association, 1966).

———, Committee on Concepts and Standards for External Reports, *Statement on Accounting Theory and Theory Acceptance* (American Accounting Association, 1977).

American Institute of Certified Public Accountants, *Objectives of Financial Statements*, (Trueblood) Report of the Study Group on the Objectives of Financial Statements (American Institute of Certified Public Accountants, 1973).

Beaver, William H., "What Should Be the FASB's Objectives?", *Journal of Accountancy*, (August, 1973), pp. 49–56.

———, "The Implications of Security Price Research for Disclosure Policy and the Analyst Community," in A. R. Abdel-khalik and T. F. Keller (eds.), *Financial Information Requirements for Security Analysis*, Duke Second Accounting Symposium, Duke University (December 1976), pp. 65–81.

——— and Joel S. Demski, "The Nature of Financial Accounting Objectives: A Summary and Synthesis," *Studies on Financial Accounting Objectives*, supplement to the *Journal of Accounting Research* (1974), pp. 170–187.

Benston, George J., "The Value of the SEC's Accounting Disclosure Requirements," THE ACCOUNTING REVIEW, (July 1969a), pp. 515–532.

———, "The Effectiveness and Effects of the SEC's Accounting Disclosure Requirements," in Henry G. Manne (ed.), *Economic Policy and the Regulation of Corporate Securities*, (American Enterprise Institute, 1969b), pp. 23–79.

———, *Corporate Financial Disclosure in the UK and the USA* (Saxon House, 1976).

Blough, Carman G., "Some Accounting Problems of the Securities and Exchange Commission," *The New York Certified Public Accountant*, (April 1937), pp. 3–14.

Boockholdt, James L., "Influence of Nineteenth and Early Twentieth Century Railroad Accounting on Development of Modern Accounting Theory," unpublished working paper 31, University of Alabama (July 1977).

Brief, Richard P. (ed.), *The Late Nineteenth Century Debate Over Depreciation, Capital and Income* (Arno Press, 1976).

Buchanan, James M. and Richard E. Wagner, *Democracy in Deficit: The Political Legacy of Lord Keynes*, (Academic Press, 1977).

Copyright © 2001 All Rights Reserved

Burton, John C., "An Interview with John C. Burton," *Management Accounting*, (May 1975), pp. 19–23.
Canning, John B., *The Economics of Accountancy* (Ronald Press, 1929).
Carey, John L., *The Rise of the Accounting Profession*, Vols. 1 & 2 (American Institute of Certified Public Accountants, 1969–70).
Chambers, Raymond J., "Blueprint for a Theory of Accounting," *Accounting Research*, (January 1955a), pp. 17–25.
———, "A Scientific Pattern for Accounting Theory," *Australian Accountant* (October 1955b), pp. 428–434.
———, *Accounting, Evaluation and Economic Behavior* (Prentice-Hall, 1966).
Clay, Cassius M., *Regulation of Public Utilities*, (Henry Holt and Company, 1932).
Cooke, C. A., *Corporation, Trust and Company* (Manchester University Press, 1950).
"Curse of Bigness," *Barron's*, (June 30, 1969), pp. 1 and 8.
Daines, H. C., "The Changing Objectives of Accounting," THE ACCOUNTING REVIEW, (June 1929), pp. 94–110.
Dicksee, Lawrence, *Depreciation, Reserves and Reserve Funds* (1903), reprinted by Arno Press, 1976.
Dodd, Edwin M., *American Business Corporations Until 1860* (Harvard University Press, 1954).
Downs, Anthony, *An Economic Theory of Democracy* (Harper and Row, 1957).
DuBois, Armand B., *The English Business Company After the Bubble Act 1720–1800* (The Commonwealth Fund, 1938).
Edey, Harold C., "Company Accounting in the Nineteenth and Twentieth Centuries," reprinted in Michael Chatfield (ed.), *Contemporary Studies in the Evolution of Accounting Thought* (Dickenson Publishing Co. Inc., 1968), pp. 135–143.
——— and Prot Panitpakdi, "British Company Accounting and the Law 1844–1900," in A. C. Littleton and B. S. Yamey (eds.), *Studies in the History of Accounting* (Richard D. Irwin, Inc., 1956), pp. 356–379.
Edwards, Edgar O. and Philip W. Bell, *The Theory and Measurement of Business Income* (University of California Press, 1961).
Edwards, James D., "Some Significant Developments of Public Accounting in the United States," *Business History Review* (June 1956), reprinted in Michael Chatfield (ed.), *Contemporary Studies in the Evolution of Accounting Thought* (Dickenson Publishing Co., 1968a), pp. 196–209.
———, "The Antecedents of American Public Accounting," *Accounting Research* (January 1956), reprinted in Michael Chatfield (ed.), *Contemporary Studies in the Evolution of Accounting Thought* (Dickenson Publishing Co., 1968b), pp. 144–166.
Ernst & Ernst, *Accounting Under Inflationary Conditions*, (Ernst & Ernst, 1976).
Fama, Eugene F., "Efficient Capital Markets: A Review of Theory and Empirical Work," *Journal of Finance* (May 1970), pp. 381–417.
———, *Foundations of Finance* (Basic Books, Inc., 1976).
Financial Accounting Standards Board, *An Analysis of Issues Related to Conceptual Framework for Financial Accounting and Reporting: Elements of Financial Statements and Their Measurement* (FASB, 1976).
Gonedes, Nicholas and Nicholas Dopuch, "Capital Market Equilibrium, Information Production and Selecting Accounting Techniques: Theoretical Framework and Review of Empirical Work," *Studies on Financial Accounting Objectives*, supplement to the *Journal of Accounting Research* (1974), pp. 48–129.
Gordon, Myron J., "Postulates, Principles and Research in Accounting," THE ACCOUNTING REVIEW (April 1964), pp. 251–263.
Hendriksen, Eldon, *Accounting Theory*, 3rd Edition (Richard D. Irwin, Inc., 1977).
Holmes, William, "Accounting and Accountants in Massachusetts," *Massachusetts CPA Review* (May–June 1975), pp. 18–21.
Horngren, Charles T., "The Marketing of Accounting Standards," *Journal of Accountancy*, (October 1973), pp. 61–66.
———, "Setting Accounting Standards in the 1980's," in Norton Bedford (ed.), *Accountancy in the 1980's —Some Issues*, (The Council of Arthur Young Professors, 1977).
Hoxsey, J. M. B., "Accounting for Investors," *Journal of Accountancy* (October 1930), pp. 251–284.
Ijiri, Yuji, *The Foundations of Accounting Measurement* (Prentice-Hall Inc., 1967).
———, "Logic and Functions in Accounting," in Robert Sterling and William Bentz (eds.), *Accounting in Perspective*, (South-Western Publishing Co., 1971).
———, *Theory of Accounting Measurement* (American Accounting Association, 1975).

Copyright © 2001 All Rights Reserved

Interstate Commerce Commission, *Accounting for Federal Income Taxes*, 318 I.C.C. 803, U.S. Government Printing Office.
Jensen, Michael C., "Towards a Theory of the Press," unpublished paper, Graduate School of Management, University of Rochester, June 1976.
——— and William H. Meckling, "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure," *Journal of Financial Economics*, (October 1976), pp. 305–360.
——— and William H. Meckling, "On 'The Labor Managed' Firm and the Codetermination Movement," Public Policy Working Paper Series GPB 77-2, Center for Research in Government Policy and Business, Graduate School of Management, University of Rochester, February 1977.
Johnson, Arthur M., *Government-Business Relations* (Charles E. Merrill Books, 1965).
Kehl, Donald, *Corporate Dividends* (The Ronald Press Company, 1941).
Kester, Roy B., "Sources of Accounting Principles," *Journal of Accountancy*, (December 1942), pp. 531–535.
Leake, P. D., *Depreciation and Wasting Assets and Their Treatment in Assessing Annual Profit and Loss* (1912), reprinted by Arno Press, 1976.
Leffler, Keith and Jerold Zimmerman, "A Theory of Municipal Government Agency Costs, Organizational Form, and Scale," working paper, Graduate School of Management, University of Rochester (July 1977).
Litherland, D. A., "Fixed Asset Replacement a Half Century Ago," reprinted in Michael Chatfield (ed.), *Contemporary Studies in the Evolution of Accounting Thought* (Dickenson Publishing Co., Inc., 1968), pp. 167–175.
Littleton, A. C., *Accounting Evolution to 1900* (1933), reprinted by Russell & Russell, 1966.
Matheson, Ewing, *The Depreciation of Factories, Mines and Industrial Undertakings and Their Valuation* (1893), reprinted by Arno Press, 1976.
Mattessich, Richard, "Towards a General and Axiomatic Foundation of Accountancy; with an Introduction to the Matrix Formulation of Accounting Systems," *Accounting Research*, (October 1957), pp. 328–355.
Mautz, Robert K., "The Role of the American Accounting Association in Accounting Research," *Research in Accounting Measurement*, Robert Jaedicke, Yuji Ijiri and Oswald Nielsen (eds.) (American Accounting Association, 1966).
——— and Jack Gray, "Some Thoughts on Research Needs in Accounting," *The Journal of Accountancy*, (September 1970), pp. 54–62.
McCraw, Thomas K., "Regulation in America: A Review Article," *Business History Review*, (Summer 1975), pp. 159–183.
Meckling, William H., "Towards a Theory of Representative Government," presented at the Third Annual Conference on Analysis and Ideology, Interlaken, Switzerland, June 4, 1976 (1976a).
———, "Values and the Choice of the Model of the Individual in the Social Sciences," *Revue Suisse d'Economic Politique et de Statistique* (December 1976b), pp. 545–560.
Moonitz, Maurice, "Accounting Principles—How They are Developed," in Robert Sterling (ed.), *Institutional Issues in Public Accounting*, (Scholars Book Company, 1974a), pp. 143–171.
———, *Obtaining Agreement on Standards in the Accounting Profession* (American Accounting Association, 1974b).
Mueller, Dennis C., "Public Choice: A Survey," *The Journal of Economic Literature* (June 1976), pp. 395–433.
Mundheim, Robert H., "Foreword, Symposium on Securities Regulation," *Law and Contemporary Problems* (Summer 1964), pp. 647–652.
Nash, Luther R., *Anatomy of Depreciation* (Public Utilities Reports, Inc., 1947).
Niskanen, William A., *Bureaucracy and Representative Government* (Aldine-Atherton, 1971).
Paton, William A., *Accounting Theory—With Special Reference to the Corporate Enterprise* (New York: The Ronald Press Company, 1922). Re-issued in 1962 by A.S.P. Accounting Studies Press, Ltd. Reprinted by Scholars Book Co., 1973.
———, *Accounting* (Macmillan Company, 1924).
——— and A. C. Littleton, *An Introduction to Corporate Accounting Standards* (American Accounting Association, 1940).
Peltzman, Sam, "Towards a More General Theory of Regulation," *Journal of Law and Economics*, (August 1976), pp. 211–240.

Copyright © 2001 All Rights Reserved

Pichler, Joseph A., "An Economic Analysis of Accounting Power," in Robert Sterling (ed.), *Institutional Issues in Public Accounting* (Scholars Book Co., 1974), pp. 45–73.
Pollins, Harold, "Aspects of Railway Accounting Before 1868," reprinted in A. Littleton and B. Yamey (eds.), *Studies in the History of Accounting* (Richard D. Irwin, Inc., 1956), pp. 332–355.
Posner, Richard A., "Theories of Economic Regulation," *Bell Journal of Economics and Management Science* (Autumn 1974), pp. 335–358.
Prakash, Prem and Alfred Rappaport, "Information Inductance and Its Significance for Accounting," *Accounting, Organizations and Society*, Vol. 2, No. 1, (1977), pp. 29–38.
Rappaport, Louis H., *SEC Accounting Practice and Procedure*, Third Edition (Ronald Press, 1972).
Riggs, Henry E., *Depreciation of Public Utility Properties* (McGraw Hill Book Co., 1922).
Ripley, William Z., "Stop, Look, Listen!", *The Atlantic Monthly* (September, 1926), pp. 380–399.
Saliers, Earl A., *Depreciation; Principles and Applications*, Third Edition (Ronald Press Company, 1939).
Sanders, Thomas H., "A Review of Reviews of Accounting Progress," *Journal of Accountancy* (January 1946), pp. 9–26.
———, Henry R. Hatfield, and Underhill Moore, *A Statement of Accounting Principles* (American Institute of Accountants, 1938).
Scott, DR, "The Basis for Accounting Principles," THE ACCOUNTING REVIEW (December 1941), pp. 341–349.
Shackleton, Ken, "Government Involvement in Developing Accounting Standards: The Framework," *Management Accounting* (U.K.), (January 1977), pp. 17–21.
Smith, Clifford, "On the Theory of Lending," unpublished paper, Working Paper Series No. 7635, Graduate School of Management, University of Rochester, 1976.
Sprouse, Robert T. and Maurice Moonitz, "A Tentative Set of Broad Accounting Principles for Business Enterprises," *Accounting Research Study No. 3* (American Institute of Certified Public Accountants, 1962).
Sterling, Robert R., "Accounting Research, Education and Practice," *Journal of Accountancy* (September 1973), pp. 44–52.
——— (ed.), *Institutional Issues in Public Accounting* (Scholars Book Co. 1974).
Stigler, George J., "The Theory of Economic Regulation," *Bell Journal of Economics and Management Science* (Spring 1971), pp. 3–21.
———, "Do Economists Matter?", *Southern Economic Journal* (January 1976), pp. 347–363.
Storey, Reed K., "Revenue Realization, Going Concern and Measurement of Income," THE ACCOUNTING REVIEW (April 1959), pp. 232–238.
———, *The Search for Accounting Principles* (American Institute of Certified Public Accountants, 1964).
Sweeney, Henry W., *Stabilized Accounting* (Harper & Bros. Publishers, 1936).
U.S. Congress, Senate, Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary, Hearings, *The Petroleum Industry*, Part I, 94th Congress, 1st Session, 1975.
U.S. Congress, Senate, Subcommittee on Reports, Accounting and Management of the Committee on Government Operations, *The Accounting Establishment: A Staff Study* (Metcalf Staff Report), 94th Congress, 2nd Session, 1976.
U.S. Department of Commerce, Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970* (U.S. Government Printing Office, 1975).
U.S. Securities and Exchange Commission, "Administrative Policy on Financial Statements," *Accounting Series Release No. 4*, (April 25, 1938).
U.S. Securities and Exchange Commission, *Tenth Annual Report of the Securities and Exchange Commission: Fiscal Year Ended June 30, 1944* (1945).
Watts, Ross L., "Accounting Objectives," working paper series no. 7408, Graduate School of Management, University of Rochester, April 1974.
———, "Corporate Financial Statements, A Product of the Market and Political Processes," *Australian Journal of Management* (April 1977), pp. 53–75.
——— and Jerold L. Zimmerman, "Towards a Positive Theory of the Determination of Accounting Standards," THE ACCOUNTING REVIEW (January 1978), pp. 112–134.
Wilcox, E. B. and R. H. Hassler, "A Foundation for Accounting Principles," *Journal of Accountancy* (October 1941), pp. 308–314.
Zeff, Stephen A., *Forging Accounting Principles in Five Countries: A History and an Analysis of Trends*, Arthur Andersen Lecture Series (Stipes Publishing Co., 1972).

Copyright © 2001 All Rights Reserved

———, "Comments on 'Accounting Principles—How They are Developed'," in Robert R. Sterling (ed.), *Institutional Issues in Public Accounting* (Scholars Book Co., 1974), pp. 172–178.

———, "Paton on the Effects of Changing Prices on Accounting: 1916–1955," unpublished manuscript (March 1978).

Zimmerman, Jerold L., "The Municipal Accounting Maze: An Analysis of Political Incentives," *Studies on Measurement and Evaluation of the Economic Efficiency of Public and Private Nonprofit Institutions*, supplement to the *Journal of Accounting Research* (1977), pp. 107–144.

Copyright © 2001 All Rights Reserved

Copyright of Accounting Review is the property of American Accounting Association and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.