ABSTRACT

AN EMPIRICAL EXAMINATION OF FINANCIAL STATEMENT PRESENTATION OF THE CORPORATE INCOME TAX EXPENSE

By

James Robert Hasselback

This research examines the extent to which the financial reporting of corporate income taxes is in accordance with certain disclosure requirements of the Accounting Principles Board and whether the extent of adherence to these requirements is related to (1) corporate Federal income tax rate incurred, (2) corporate size, and (3) independent auditor.

There have been several APB Opinions issued since 1962 concerning the financial reporting of income taxes in financial statments to shareholders. Four income tax disclosure requirements and the placement of the income tax expense in the income statement are selected for analysis, as follows:

1. Disclosure of the method of accounting for investment credits and amounts included in income for the year.
2. Disclosure of the current and deferred income tax figures in the income statement.
3. Disclosure of the income tax effect of extraordinary items.
4. Disclosure of the amounts of tax loss carryforwards not included in the income for the loss year with expiration dates.
5. Placement of income tax expense (relating to income before extraordinary items) in the income statement.

A random sample of 300 corporations is taken from companies listed on the New York and American Stock Exchanges.

The sample is classified two ways by tax rate (high and low), two ways by size (large and small), and nine ways by independent auditor, representing each of the "Big-8" with all others comprising the ninth group. The study analyses variables that make up the financial reporting of income taxes in annual reports to shareholders and tests for significant differences to these particular classifications.

The statistical test applied is a three-factor analysis of variance applied to log transformations of cell proportions. Using a 30-cell table, various hypotheses were tested to determine the existence of any relationships between each of the three main factos and the four APB Opinion income tax reporting requirements and the placement of the income tax expense.

The analysis of the location of the income tax expense resulted in the most important finding of significance in the study. The relationship of corporate size (when measured by assets but not revenues) and the location of the income tax expense in the income statement is statistically significant at the .05 level. Large corporations are more likely to include the income tax expense as an element among the operating expenses than are small corporations.

The Federal income tax rate when measured either by the flow-through method or by the normalized method also shows a relation with its placement. Low Federal income tax rate corporations are more likely to include the tax

among the operating expenses than are high Federal income tax rate corporations. The results were significant at the .05 level when Federal income tax rates were measured either by the flow-through or the normalized methods.

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CHAPTER I

PURPOSE OF STUDY AND LITERATURE REVIEW

This study examines the financial reporting of corporate income tax expense in both annual reports to shareholders and 10-K reports to the Securities and Exchange Commission (SEC). Specifically, the study examines the extent to which the financial reporting of corporate income taxes is in accordance with pronouncements of the Accounting Principles Board (APB); and whether the extent of adherence to these pronouncements as well as the location of tax expense in the income statement are related to (1) effective corporate Federal income tax rate, (2) corporate size, and (3) independent auditor.

A random sample of 300 corporations is taken from companies listed on the New York and American Stock Exchanges. The sample is classified two ways by tax rate incurred (high and low), two ways by size (large and small), and nine ways by independent auditor. The study analyzes dependent variables that make up the financial reporting of income taxes in annual reports to shareholders and tests for significant differences relating to these particular classifications, which are the independent variables.

The main thrust of this study is to examine the extent to which corporate annual reports to shareholders adhere to the disclosure requirements of APB Opinion Nos. 2, 4, 11, 23, and 24[1] insofar as these pronouncements pertain to the financial reporting of income taxes. It should be noted that corporate annual reports to shareholders are usually less detailed than 10-K reports to the SEC. The latter are prepared in accordance with reporting requirements of the SEC whereas the former are prepared in accordance with somewhat different reporting requirements of the Financial Accounting Standards Board (FASB) and its predecessor, the Accounting Principles Board. (The study examines adherence to income tax disclosure requirements of APB Opinions only; the FASB has not as yet issued any pronouncement on the financial reporting of income taxes although a pronouncement on the financial reporting of income taxes by oil and gas producing firms is about to be issued.[2]) The 10-K reports are used, together with a questionnaire, to determine the extent of adherence of corporate annual reports to APB Opinions.

APB INCOME TAX DISCLOSURE REQUIREMENTS

There have been several APB Opinions issued since 1962 concerning the financial reporting of income taxes in financial statements to shareholders. In the following discussion, these pronouncements are examined along with the reasons for selecting for study only some of the financial reporting disclosure requirements within these pronouncements.

The financial reporting of income taxes as specified in APB Opinions can be broken down into two distinct areas: (1) the computation of income tax expense, and (2) disclosure requirements.[3] The computation of income tax expense involves such matters as interperiod tax allocation and the method of accounting for investment credits; such matters affect the computation of net income before extraordinary items and the final net income figure. Disclosure requirements involve the presentation of other income tax information in the annual report, either parenthetically or in footnotes. It could be argued that nonadherence to computational requirements is a more serious departure from generally accepted accounting principles than nonadherence to disclosure requirements; that the former requires the issuance of an adverse opinion by the independent auditor whereas the latter may not;[4] and that since this researcher is unaware of the issuance of any adverse opinion in conjunction with the financial statements of NYSE and AMEX companies, complete adherence to these computational requirements can be assumed. In any event, the present study is limited to examining extent of adherence to APB Opinion income tax expense disclosure requirements; extent of adherence to APB Opinion income tax expense computation requirements is not examined in this study.

APB Opinion No. 2 "Accounting for the 'Investment Credit'" is an early APB pronouncement on the financial

reporting of income taxes that still remains partially in effect.[5] The Opinion requires the deferral method, whereby the effect of the investment credit is included in income over the productive life of the related asset and not only in the year in which the asset is placed into service.[6] Shortly after the issuance of APB Opinion No. 2, the SEC issued Accounting Series Release No. 96 in which it sanctioned the flow-through method, whereby the effect of the investment credit is included in income of the particular years in which the credit is taken, as an alternative to the deferral method.[7] This was followed by the issuance of APB Opinion No. 4, also entitled "Accounting for the 'Investment Credit'," which sanctions the flow-through method as a less desirable but acceptable alternative to the deferred method.[8] Neither APB pronouncement sanctioned reporting an investment credit as a subsidy by way of contribution of capital by the government to the taxpayer-corporation. Both the deferral and flow-through methods of accounting for investment credits represent computational aspects of the financial reporting of income tax expense.

Paragraph 11 of APB Opinion No. 4 requires "that whichever method of accounting for the investment credit is adopted, it is essential that full disclosure be made of the method followed and amounts involved, when material."[9] The amount of investment credit taken into income by a corporation in any particular year can have a significant

bearing on net income after taxes and therefore is important from both predictive and social responsibility viewpoints (as discussed on pages 22-26). Therefore, an examination will be made of the extent to which corporations adhere to these disclosure requirements.

APB Opinion No. 11 "Accounting for Income Taxes"[10] is the heart of the income tax disclosure requirements of the APB. This Opinion requires the comprehensive use of the deferred method of interperiod income tax allocation.[11] The requirement is of a computational nature and, accordingly, adherence to it is not examined in this study.

Paragraph 60 of APB Opinion No. 11 requires the following presentation of corporate income tax expense in the income statement:

> In reporting the results of operations the components of income tax expense for the period should be disclosed, for example:
> a. Taxes estimated to be payable
> b. Tax effects of timing differences
> c. Tax effects of operating losses.
> These amounts should be allocated to (a) income before extraordinary items and (b) extraordinary items and may be presented as separate items in the income statement or, alternatively, as combined amounts with disclosure of the components parenthetically or in a note to the financial statements.[12]

Cursory reading of annual reports has shown that many corporations have not adhered to these requirements. As discussed later, these required disclosures are important for both predictive and social responsibility goals. Therefore, annual reports are examined to determine the extent

of adherence to requirements (a) and (b) of paragraph 60. Corporations reporting losses for the period studied are eliminated from the study for reasons discussed later (see Chapter II, page 37); therefore, adherence to disclosure requirements of (c) is not examined in this study.

Allocation of income taxes between income before extraordinary items and extraordinay items is viewed as a computational requirement. Accordingly, adherence to this requirement is assumed, for reasons elaborated upon previously. But disclosure of the tax effects of extraordinary items is another matter. This study examines the extent to which corporations disclose the tax effects of extraordinary items consistent with the second sentence of paragraph 60. Such disclosures are important in determining the effective tax rate incurred by a corporation.

APB Opinion No. 11 also requires disclosure of the amounts of any operating carryforwards not included in income for the loss period, together with expiration dates.[13] Adherence to this disclosure requirement is studied because a cursory reading of annual reports suggests that some corporations are not adhering to it although this information is useful for predictive purposes.

APB Opinion No. 11 requires that "when the tax benefits of loss carryforwards are not recognized until realized in full or in part in subsequent periods, the tax benefits should be reported in the results of operations of those

periods as extraordinary items."[14] Accordingly, the financial reporting of the tax benefits of carryforward losses is viewed as a computational requirement and adherence to it is assumed, for reasons mentioned previously.

Paragraph 63b of APB Opinion No. 11 requires that disclosure be made of significant amounts of any other unused deduction or credits, such items as capital losses, contribution carryovers, and foreign tax credits, together with expiration dates.[15] Few corporations have these items and fewer still could be shown to fail to disclose them. Therefore, no analysis is made of this disclosure requirement.

Another important provision of APB Opinion No. 11 requires disclosure of the "reasons for significant variations in the customary relationship between income tax expense and pre-tax accounting income . . . ."[16] However, the teeth of this requirement are removed by the remainder of the statement: "if they are not otherwise apparent from the financial statements or from the nature of the entity's business."[17] In view of the wording of this disclosure requirement, it is virtually impossible to determine whether a corporation is or is not in violation of it.

Balance sheet deferred tax debits and credits must be classified as current and noncurrent consistent with APB Opinion No. 11.[18] These current and deferred debits and credits are often buried among other current assets and liabilities; hence it is again virtually impossible to

determine the extent of adherence to this classification requirement. Therefore, an analysis is not made to the extent of adherence to this disclosure requirement.

APB Opinion Nos. 23 and 24 require interperiod allocation of income taxes for undistributed earnings of subsidiaries or, for subsidiaries with specified circumstances, the disclosure of amounts on which taxes have not been allocated;[19] in this respect APB Opinion Nos. 23 and 24 take a partial approach to interperiod tax allocation whereas APB Opinion No. 11 takes a comprehensive approach.

The Accounting Principles Board, in Opinion No. 23, concluded that "it should be presumed that all undistributed earnings of a subsidiary will be transferred to the parent company," thereby necessitating interperiod tax allocations. However, the Opinion further states that "no income taxes should be accrued by the parent company, if sufficient evidence shows that the subsidiary has invested or will invest the undistributed earnings indefinitely or that the earnings will be remitted in a tax-free liquidation." Under these circumstances, a permanent difference arises.

APB Opinion No. 24 requires the accrual of deferred income taxes on undistributed earnings of investments in common stock accounted for by the equity method (other than subsidiaries and corporate joint ventures). The Opinion states in part:

> If evidence indicates that an investor's equity in undistributed earnings of an investee will be realized in the form of dividends, an investor should recognize income taxes attributable to the timing difference as if the equity in earnings of the investee that the investor included in income were remitted as a dividend during the period, recognizing available dividend-received deductions and foreign tax credits. Income taxes of the investor company should also include taxes that would have been withheld if the undistributed earnings had been remitted as dividends. If evidence indicates that an investor's equity in undistributed earnings of an investee will be realized by ultimate dispositon of the investment, an investor should accrue income taxes attributable to the timing difference at capital gains or other appropriate rates, recognizing all available deductions and credits.

Nonadherence to these disclosure requirements conceivably can be determined by examining the annual report for the following year or the 10-K reports or by a questionnaire. It is likely, however, that a corporation either discloses these undistributed earnings on which taxes have not been allocated or allocates taxes on these and other timing differences without breaking down the component deferred taxes. Accordingly, because the subsidiary must be under specified circumstances for this disclosure requirement to pertain, adherence to it is not examined in this study.

Adherence to these four disclosure requirements is determined individually in the following manner, A corporation that makes each disclosure in its annual report is considered to adhere to each disclosure requirement.

On the other hand, a corporation that does not make each disclosure is still adhering to the particular disclosure requirement if it does not have the particular item that requires disclosure; a corporation is not adhering to the particular disclosure requirement if it has the particular item but does not disclose it. Unfortunately, the latter can be determined objectively only if the corporation makes such a disclosure in either its annual report for the following year, its 10-K report for the same or the following year, or in response to a questionnaire. A corporation that neither discloses the particular item in one of these places nor explicitly states that it does not have such an item will be classified as indeterminate with respect to its adherence to the particular disclosure requirement.

In addition to the four APB Opinion disclosure requirements that are studied, an additional analysis is made of the location in the income statement of income tax expense relating to income before extraordinary items. Income tax expense is deducted separately from net income before income taxes to determine net income after income taxes, or is included among the operating expenses. Whereas the SEC requires the use of the former presentation in 10-K reports,[20] both presentations are acceptable in annual reports to shareholders. The former presentation reflects in part the continuing controversy over the nature of the income

tax--specifically, whether it is an expense or a distribution of income.[21] An analysis of the placement of income tax expense is related to the question of whether some corporations are attempting to obscure the amount of their income taxes (see pages 24-26).

To summarize, four income tax disclosure requirements and the location of the income tax expense in the income statement are selected for analysis, as follows:

1. Disclosure of method of accounting for investment credits and amounts included in income for the year.
2. Disclosure of the current and deferred income tax figures in the income statement.
3. Disclosure of the income tax effect of extraordinary items.
4. Disclosure of the amounts of tax loss carryforwards not included in income for the loss year with expiration dates.
5. Location of income tax expense (relating to income before extraordinary items) in the income statement.

In the remainder of this study, all five items selected for analysis are occasionally referred to as the "APB Opinion income tax disclosure requirements." This terminology is used for simplicity even though the last item--income tax location in the income statement--is not an APB Opinion disclosure requirement.

PURPOSE AND MOTIVATION OF THE STUDY

There are three major reasons for research into the financial reporting of corporate income taxes in financial statements, pertaining to (1) increased disclosure for predictive purposes; (2) social responsibility reporting; and

(3) follow-up on related studies.

Increased Disclosure for Predictive Purposes

A. Introduction

Analysts and other readers of published income statements are sometimes puzzled by the low percentage relationships they observe between Federal income taxes and pre-tax accounting income. This section analyzes the underlying tax-law provisions and financial reporting practices which can create this condition.

As an example, consider the following data from the 1972 Annual Report of Xtra Incorporated:

XTRA INCORPORATED

Income before Provision for Federal Income Tax	$6,413,235
Provision for Federal Income Taxes	1,588,000
Net Income	$4,825,235

Federal income taxes amount to only 24.8 percent of pretax accounting income. However, the corporate tax rates in 1972 and 1973 were:

1. 22 percent of the first $25,000 of taxable income--the "normal tax."
2. 26 percent additional on the taxable income in excess of $25,000--the "surtax."

For firms with taxable incomes in excess of $1,000,000, the overall Federal income tax rate in 1972 and 1973 approaches 48.0 percent. Table 1-1 illustrates the behavior

of the overall Federal income tax rate for taxable incomes from $25,000 to $2,000,000. If the entire Xtra Incorporated pretax accounting income of $6,413,235 were taxable at the 1972 rates, its effective tax rate would have been approximately 47.9 percent.

Clearly, the financial statement user must determine the reasons for any unusual relationships between income and income taxes if he is to accurately forecast future levels of net income after income taxes.[22] The underlying conditions that give rise to an unusually low income tax rate must be studied to determine whether, and to what extent, they will persist into the future.

TABLE 1-1

TAXABLE PROFIT AND EFFECTIVE TAX RATES

Taxable Profit	Effective Tax Rate
$ 25,000	22.0%
50,000	35.0
100,000	41.5
300,000	45.8
500,000	46.7
700,000	47.1
1,000,000	47.4
2,000,000	47.9

B. Tax Laws Pertaining to Period Studied[23]

The tax laws contain a number of features which, when combined with current financial reporting practices, result in reporting of income tax expense that is a smaller

percentage of pretax accounting income than the statutory rates:

1. Taxation of more than $25,000 of income at the "normal-tax" rate of only 22 percent.
2. Taxation of portions of pretax accounting income at the 30 percent capital gains rate.
3. Partial or complete exemption of some income from taxation.
4. Other special tax-reducing features (statutory depletion, investment credits, etc.).

1. Income taxes at the "normal" rate

The first $25,000 of a corporation's taxable income is taxed at 22 percent, the "normal" rate. Taxable income over $25,000 is taxed at 48 percent--the 22 percent normal rate plus the 26 percent "surtax." However, the income statements in some corporate annual reports cover a number of legally separate corporate entities--they are consolidated financial statements. If these legally separate corporate entities file individually, more than $25,000 of the pretax accounting income of the consolidated group may be exempted from the surtax, resulting in a low effective tax rate on consolidated pretax accounting income. Table 1-1 indicates an effective tax rate of 41.5 percent on $100,000 of taxable income. If this income represented the consolidated income of four separate corporations, each of which files its own tax return, the effective tax rate would be as low as 22 percent if the $100,000 of income were divided equally among the four corporations.

Since the first $25,000 of taxable income is not subject to the 26 percent surtax, this amount is sometimes referred to as the "surtax exemption". The election to take a surtax exemption for each corporation of a controlled group carries with it an additional tax of six percent on the first $25,000 of taxable income. With the passage of the Tax Reform Act of 1969, the multiple surtax exemptions available to members of a controlled group are being phased out over a six-year period.[24] Thus, for calendar year 1972, the original surtax exemption has been reduced to $12,500 with further reductions until the end of 1974.[25]

2. Capital gains tax

Beginning with 1971, a maximum tax of 30 percent is applicable to capital gains of corporations; previously the rate was 25 percent. If capital gains are included in pretax accounting income, they reduce the overall effective tax rate. For example, assume that XYZ Corporation has pretax accounting income of $100,000, including a $30,000 capital gain. The capital gains provision reduces the overall effective Federal income tax rate to 37.1 percent from 41.5 percent if no part of the taxable income was a capital gain.

If the capital gain is material in amount and meets the criteria under APB Opinion No. 30 for extraordinary items,[26] it must be excluded from pretax accounting income before extraordinary items.[27] The associated tax effect is

then deducted directly from the separately reported capital gain and therefore does not influence the normal relationship between pretax accounting income and income tax expense. This type of presentation is illustrated by the "net-of-tax" treatment of a material gain reported as an extraordinay item in the 1972 Lykes-Youngstown Corporation annual report.

LYKES-YOUNGSTOWN CORPORATION

Income before extraordinary items	$17,580,000
Gain on sale of investment, less income tax of $2,447,000	8,018,000
Net income for the year	$25,598,000

The gross gain would be $10,465,000 ($8,018,000 plus $2,447,000). The tax of $2,447,000 amounts to approximately 23.4% of the gain.

APB Opinion No. 30, issued in 1973, narrowed drastically the definition of extraordinary items; many items that were formerly classified as extraordinary are now reported with normal operations. This Opinion has the effect of increasing the number of corporations that report income tax expense which, as a percentage of pretax accounting income, is below the statutory rates.

3. Partial and complete exemptions

Certain items are included in pretax accounting income which are either wholly or partially excluded from taxable income. For example, interest revenue on state or municipal obligations is wholly exempt from taxation, although it is included in pretax accounting income. If the nontaxable

income is material in amount, it produces a low effective tax rate. This is revealed in the data below from the 1972 annual report of Chase Manhattan Corporation:

CHASE MANHATTAN CORPORATION

Profit before income taxes	$210,221,111
Income tax	61,908,128
Income tax as a % of profit before income taxes	29.4%

A breakdown of Chase Manhattan's gross revenues for 1972 reveals $85,648,570 of interest on state and municipal securities. This item alone largely explains the low tax percentage of 29.4 percent. If this revenue is excluded, the ratio of tax to profit is approximately 49.7 percent.

Other items often included in pretax accounting income but partially or wholly exempt from taxation include:

1. Dividends received. In general, 85 percent of such dividends are not subject to taxation. This "dividends received deduction" will be raised to 100 percent over a six-year period for members of a controlled group.[28]

2. Equity in undistributed profits of unconsolidated subsidiaries. This item is not considered income under the current law.

4. Other tax-reducing provisions

For most of a 12-year period, beginning with the Revenue Act of 1962, taxpayers could reduce Federal income taxes by acquiring certain qualified assets.[29] This investment tax credit amounted to as much as 7 percent of the cost of qualified assets. The investment tax credits taken in a given

year are typically used, in whole or in part, to reduce the income tax provision (expense) for the year. This treatment explains a large part of the low effective tax rates in many published income statements. To illustrate, consider the following data from the 1972 Annual Report of Trans World Airlines:

TRANS WORLD AIRLINES

Profit before income taxes	$43,697,000
Income tax	9,893,000
Tax percentage	22.6%

In the footnotes to its 1972 Annual Report, Trans World Airlines reported that the 1972 tax expense was reduced by investment tax credits of $10,129,000. If these tax credits are added to the reported income tax of $9,893,000, the tax percentage would be approximately 45.8 percent. In this case the tax credits largely explain the unusually low effective tax rate.

Another tax-reducing feature is the percentage depletion deduction granted companies that extract natural resources. The best known is the oil depletion allowance which is 22.0 percent of the revenue from the property, subject to certain overall limitations. Percentage depletion deductions for tax purposes usually exceed depletion expense for financial reporting purposes, since the latter is based upon the cost of the property rather than upon the revenues from the property. Accordingly, taxable income is usually less than pretax accounting income, producing a lower than normal

relationship between income tax expense and pretax accounting income.[30]

Other special features affecting the income tax and pretax accounting relationship include (1) the inclusion of foreign subsidiary profits in consolidated reports which may not be subject to U.S. income taxes; (2) the effects of operating loss carryovers; and (3) the use by some regulated industries of flow-through tax accounting for depreciation timing differences.

A major objective of financial accounting is to provide financial information that is useful for decision making. The recent report of the American Institute of Certified Public Accountants (AICPA) study group on the objectives of financial statements states that "an objective of financial statements is to provide users with information for predicting, comparing, and evaluating earning power." [31] Toward this end, accounting attempts to disclose those aspects of an economic entity's experience which are relevant to make judgments about its future. To improve (not necessarily increase) accounting disclosure means to increase its usefullness.

The Securities Acts have the same perspective of user information. A typical description of the goals of the Securities Act of 1933 and the Securities Exchange Act of 1934 is notes by Mundheim:

> 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 interest can be adequately protected without unduly restricting the ability of business ventures to raise capital.[32]

As already noted, APB Opinion No. 11 requires disclosure of the "reasons for significant variations in the customary relationships between income tax expense and pretax accounting income if they are not otherwise apparent from the financial statements or from the nature of the entity's business." [33] But few corporations make such disclosures;[34] presumably, it is maintained that the reasons for any significant variations are in fact apparent.

This study recommends additional disclosures of income tax data in annual reports to shareholders. These additional disclosures should enable users of financial statements to better understand the reasons underlying any differences between the Federal income tax rate incurred and the statutory rate, and therefore enable them to distinguish between one-time and continuing tax advantages and to appraise the significance of changing tax rates. Such disclosures should contribute to more efficient capital markets. The weight of recent empirical studies convincingly suggests that security markets are relatively efficient--specifically, that individual company stock prices fully reflect all publicly available information about the companies; and that efforts to analyze this information cannot be expected to produce superior investment returns for the given risks. For example, one cannot expect to earn superior rates of return by

analyzing annual reports or announcements of dividends or stock splits. But as Lorie and Hamilton note,

> there is a curious paradox.... That is, market prices will promptly and fully reflect what is knowable about the companies whose shares are traded only if investors seek to earn superior returns, make conscientious and competent efforts to learn about the companies whose securities are traded, and analyze relevant information promptly and perceptively. If that effort were abandoned the efficiency of the market would diminish rapidly.[35]

Although the empirical studies do not as convincingly demonstrate the efficiency of securities markets to compound all information (whether publicly available or unavailable) into stock market prices, it is clear that fuller disclosure of income tax information in annual reports should increase market efficiency by making publicly available what may not have been publicly available.

For reporting purposes the question is often raised regarding how much information is necessary. If the question is asked "would you prefer more disclosure or less?" most people would say, "why more, of course!" Certainly, surveys made of financial analysts reveal their desire for more information.[36] But then we ask, (or should ask), "more disclosure at what price?", for disclosure is not a free good. Like most goods, its production entails costs.

Nevertheless, the value of information disclosed in financial statements may exceed its cost. This research study assumes that presentation of additional income tax information is of value for predictive purposes and that

the benefits exceed the costs. The immediate out-of-pocket costs of presenting additional Federal income tax information in annual reports to shareholders should be negligible since corporations are required to present the same information in 10-K reports to the SEC.

Social Responsibility Accounting

Bedford, in writing about the expansion of corporate financial disclosure to meet the public's right to know, states the following:

> Accounting theory seems to have increasingly assumed that the public does have a right to know much more than had previously seemed appropriate. There appears to be a close relationship between the increasing social and legal emphasis on the public right to know and the increasing emphasis of theoretical proposals for the expansion of accounting disclosures. As the social right to know becomes increasingly taken for granted, accounting-theory proposals seem to emphasize expanded disclosures even though the effect may not be in the immediate best interest of the company. Thus the rights of the public appear to be viewed as more important than the right of the company in several theoretical accounting-disclosure proposals.[37]

From a social responsibility point of view, there are at least two reasons for requiring a corporation to more fully disclose those factors that affect its Federal income tax: (1) to provide the means of determining whether or not it is paying its "fair share" of Federal income taxes and (2) to prevent a corporation from implying that its Federal income tax is a greater percentage of its net income before taxes than is the true case.

"Fair Share"--Although the statutory corporate income tax rate is 48 percent on taxable income in excess of $25,000,

the effective Federal income tax rate incurred by many corporations is considerably less. This difference arises because the computation of taxable income includes numerous provisions considered perfectly reasonable by some but considered unreasonable tax expenditures or subsidies by others.

Charles A. Vanik of the the United States House of Representatives noted that, ignoring accounting deferrals, the effective Federal corporate income tax rate for 1972 was 29 percent, a figure well below the statutory rate of 48 percent.[38] On the basis of a study of 145 companies selected from Fortune's list of large corporations[39] and other data taken from public sources (such as reports to regulatory agencies and annual reports to shareholders), he argued that large corporations actually have been reducing their tax rates in recent years.

Vanik showed that in the tax year 1972 there were 11 profitable corporations of 90 studied that paid no Federal income tax; in addition to three industrials that paid no tax, 14 of the remaining 58 industrials paid less than 10 percent.[40] These corporations apparently avoid Federal taxes through legal write-offs, investment tax credits, and loss carryovers from prior years. Vanik stated that small businesses do not have the ability to fully utilize the tax benefits available to large businesses. He further notes that the tax subsidy system of the Internal Revenue Code encourages the rich to get richer, the big to become bigger, and the small to lose out.[41] It should be stressed

that these corporations have done nothing illegal in lowering their effective tax rates; they have simply taken advantage of the many provisions of the tax laws.

Other commentators also claimed that individuals and corporations are not paying their "fair share" of Federal income taxes.[42] In recent years, public attention has been focused on individuals and corporations that pay little or no Federal income taxes while earning substantial income.[43] For example, Walter F. Mondale, a member of the tax-writing Senate Finance Committee, stated that

> it is long past time to enact reform to end this growing tax avoidance by the rich. Everyone, from the president on down, should pay their fair share in taxes. The average working American has already seen more than enough of this kind of artful tax-dodging. He is fed up--and rightly so--with a system that forces him to pay more so the rich can pay less.[44]

It is not the intent of this thesis to define what amount of taxes should be paid in order for a company to be paying its "fair share." But with fuller disclosure of income tax data by corporations in their published financial statements, society is better able to evaluate the equity by which income taxes are assessed and decide if there is a need for changes in the tax laws.

Inadequate Disclosure of Taxes--Complex financial reporting procedures used by corporations and especially conglomerates have made it difficult to accurately estimate the actual Federal income tax paid or incurred for a particular year.

The following quotation from Philip M. Stern's The

Rape of the Taxpayer aptly notes this problem:

> At times, corporate chieftains have exhibited an acute tenderness to the charge that their companies pay less than their share of taxes. One such, whose response was astounding, if only for its gall, was Stewart S. Cort, Board Chairman of the Bethlehem Steel Corporation. In September, 1972, Mr. Cort felt moved to have his company take out a full-page advertisement (tax-deductible, of course) in Forbes magazine. It featured a personal message from Chairman Cort which sought, in part, to rebut the contention, made in the 1972 Presidential campaign, that his company and other corporations "aren't . . . paying our 'fair share'" of taxes. How can that be, Mr. Cort wondered, when "our total tax expense was . . . $155 million in 1970"? An odd phrase, "total tax expense." What did it mean? Close scrutiny of company reports discloses that his "tax expense" is made up of Social Security taxes, property taxes, and state and foreign taxes. The phrase omits any mention of Federal income tax--perhaps because Bethlehem Steel paid none in either 1969 or 1970 (when it received refunds from Uncle Sam of $53 million and $14 million, respectively, despite before-tax profits of nearly $300 million in those two years). Yet Mr. Cort's tax-deductible message asks the reader to "think twice before swallowing all this balony about large corporations not carrying their fair share of the tax burden." All of this might have been less objectionable had it not been part of an ad headlined I SAY LET'S KEEP THE CAMPAIGN HONEST and urging the reader to beware of candidates' statements that may be "faulty, ill-founded, or misleading."[45]

It is often impossible to determine the Federal income tax expense for the year from an examination of the annual report to shareholders because it may be combined with local, state, and foreign income taxes. Specifically, a recent survey of 136 corporate annual reports revealed that in the provision for income taxes, the Federal income tax was combined with other income taxes in 116 reports whereas it was disclosed separately in only 20 reports.[46] This suggests that some corporations may be attempting to appear

to be incurring a higher Federal income tax rate than is actually the case. A corporation's income tax rate is often computed by dividing the tax figure in the income statement by "Before Tax Income." If the resulting percentage approaches 48 percent, it may appear that the corporation is paying its "fair share." Annual report users may not understand that the income tax figure often includes state, local, and foreign income taxes as well as Federal income taxes. Added disclosure may be needed to inform rather than mislead. Because the Federal tax system is based on self-assessment and voluntary compliance, it is essential that the public be confident in its fairness and integrity.

A major aim of this study is to determine if the extent of disclosure of income taxes in annual reports to shareholders is related to the Federal income tax rate incurred. Extent of adherence to relevant disclosure requirements of APB Opinions is used as a surrogate for the extent of Federal income tax disclosure in annual reports to shareholders. The reason for using this surrogate is that the disclosure requirements of APB Opinions represent the only disclosure requirements pertaining to the financial reporting of income taxes in annual reports to shareholders; they are the only disclosures that can be tested empirically.

Follow-up on Related Studies

This study also represents a logical extension of previous studies, as the following review of the literature

makes apparent.

Independent Auditor Influence--One of the generally accepted auditing standards is that "informative disclosures in the financial statements are to be regarded as reasonably adequate unless otherwise stated in the [auditor's] report."[47] What this "reasonably adequate standard of informative disclosure" really represents is, for practical purposes, left to the judgment of the independent auditor. Different auditors may have different interpretations of the disclosure requirements of APB Opinions. Accordingly, an independent auditor may influence the extent of disclosure in financial statements on which he reports; the degree of influence may differ from one auditor to another.[48]

Several researchers have attempted to determine if relationships exist between particular independent auditing firms and particular reporting practices. The results of these studies are mixed.

In a study of changes in the financial reporting of the investment credit by 300 companies between 1963 and 1964, Neumann found that the likelihood of a consistency qualification for an accounting change was not related to the particular auditing firm.[49]

However, as part of a study of firms receiving an auditor's consistency qualification during the 1959-68 period, Gosman concluded that sample companies audited by Price Waterhouse and Co. were more likely to receive a consistency qualification than sample companies audited by

other CPA firms; Coopers & Lybrand's (formerly Lybrand, Ross Bros., & Montgomery) clients were less likely to receive such qualifications.[50] The study consisted of 100 firms randomly selected from those listed in the 1969 Fortune 500.

Frishkoff[51] used multiple discriminant analysis to test for relationships among the materiality of changes in accounting principles, the size of the auditing firm, and whether audit opinions were qualified or unqualified as to consistency in the application of accounting principles. The size of the auditing firm performing the audit was not found to be a significant discriminatory variable.

Smith and Smith[52] utilized communication theory as the basis for measuring the performance of communication of financial reporting. Two readability formulas were applied to financial statement notes of the first fifty of Fortune's list of 500 largest industrial corporations for 1969 to measure the adequacy of communication. They found that a relationship does not exist between the identity of external auditors and the comprehension ease level of financial statement notes.

Singhvi and Desai[53] found that a difference exists in the quality of disclosure in financial statements of firms audited by large and small CPA firms. In their study, the "Big-8" were classified as large and the remaining CPA firms were small. The empirical work in their study was limited to shareholder annual reports of 100 listed and 55

unlisted corporations for fiscal years ending between April 1, 1965, and March 31, 1966.

As a logical extension of these previous research efforts, the present study tests for a relationship between the independent auditor and both extent and adherence to APB Opinion income tax disclosure requirements and location of income tax expense in the income statement.

Corporate Size Influence--The Singhvi and Desai study[54] also found a positive relationship between the asset size of a corporation and the quality of disclosure. They used an index of disclosure including 34 items. Breaking corporations into eight size classifications, they found that the quality of disclosure in annual reports of each successive group was greater on average than the preceding smaller group.

By holding the percentage change in income relatively constant, Frishkoff found that larger firms were less likely than smaller firms to receive qualified audit opinions for changes in accounting principles.[55] However, Stringer[56] took issue with Frishkoff, especially the 25 percent of income cut-off that Frishkoff employed to distinguish between material and immaterial changes. Stringer held that the proper cut-off should be 5 percent and, using this cut-off, that Frishkoff's data do not provide significant evidence of discrimination between small and large companies.

This study also tests for a relationship between corporate size and adherence to APB Opinion disclosure requirements.

Congressman Vanik, in a 1972 study, stated:

> The average effective [cash paid] tax rate of all American corporations in 1969 was 37 percent. But the average tax rate for the top 100 industrial corporations was 26.9 percent. This means that the smaller corporations appear to be paying a rate above the average. It is my estimate that the smaller corporations--those under the top 100--pay, on the average, a rate of 44 percent.[57]

This appears to be a reversal of the "ability to pay" principle on which the individual income tax is supposedly based. Do small businesses have the same ability to fully utilize the tax benefits available to large businesses? The Vanik study encompassed only the largest 100 industrial corporations. This study expands upon the Vanik study to test his contention that large corporations pay lower Federal income tax rates than small corporations.

APPROACH AND ORGANIZATION OF THE STUDY

This study is an effort to identify some of the characteristics of the financial reporting of income taxes in the hope that the knowledge of such characteristics may shed light on the motives behind such financial reporting practices. A plan for the remaining three chapters follows.

Chapter II includes a statement of the hypotheses to be tested. The research methodology and the data collection techniques are described.

Chapter III contains the raw data collected and reports the results of the hypotheses subject to statistical analysis.

Finally, Chapter IV provides a summary of the findings as well as the conclusions and implications drawn therefrom.

The limitations of the present study and suggestions for further research are also discussed.

FOOTNOTES

1. The American Institute of Certified Public Accountants through its Accounting Principles Board issued 31 Opinions between November, 1962, and June, 1973, concerning various generally accepted accounting principles.

2. The proposed Statement would require interperiod income tax allocation with respect to intangible drilling and development costs and some other costs associated with oil and gas properties. Financial Accounting Standards Board, "Accounting for Income Taxes--Oil and Gas Producing Companies" (Stamford, Connecticut: April 1975).

3. John C. Burton, Chief Accountant for the SEC, stated the following regarding the SEC's role in accounting: "I think that we now have an active role in the broad reporting areas of disclosure and financial reporting and it comes into accounting in a number of respects, but I see no reason to think that the SEC is going to become the center of accounting principles in the foreseeable future." "An Interview with John C. Burton," Management Accounting (May 1975), p. 22.

4. The AICPA's first Standard of Reporting states: "The report shall state whether the financial statements are presented in accordance with generally accepted principles of accounting." American Institute of Certified Public Accountants, Auditing Standards and Procedures (New York: AICPA, 1963), p. 16.

5. American Institute of Certified Public Accountants, Accounting Principles Board, Opinion No. 2, "Accounting for the 'Investment Credit'" (New York: AICPA, 1962).

6. APB Opinion No. 2, paragraph 13.

7. Securities and Exchange Commission, Accounting Series Release No. 96, "Accounting for the 'Investment Credit'" (January 10, 1963).

8. American Institute of Certified Public Accountants, Accounting Principles Board, Opinion No. 4 (Amending No. 2), "Accounting for the 'Investment Credit'" (New York: AICPA, 1964), paragraph 9.

9. APB Opinion No. 4, paragraph 11.

10. American Institute of Certified Public Accountants, Accounting Principles Board, Opinion No. 11, "Accounting

for Income Taxes" (New York: AICPA, 1967).

11. Ibid., paragraph 34.

12. Ibid., paragraph 60.

13. Ibid., paragraph 63a.

14. Ibid., paragraph 45. (Italics in original.)

15. Ibid., paragraph 63b.

16. Ibid., paragraph 63c.

17. Ibid.

18. Ibid., paragraph 57.

19. American Institute of Certified Public Accountants, Accounting Principles Board, Opinion No. 23, "Accounting for Income Taxes--Special Areas" (New York: AICPA, 1972), paragraphs 9 and 14; Accounting Principles Board, Opinion No. 24, "Accounting for Income Taxes--Investments in Common Stocks Accounted for by the Equity Method (Other than Subsidiaries and Corporate Joint Ventures)" (New York: AICPA, 1972), paragraph 7.

20. Securities and Exchange Commission, Regulation S-X, Rule 5-03(15).

21. See Hugo Nurnberg, Cash Movements Analysis of the Accounting for Corporate Income Taxes (East Lansing, Michigan: Division of Research, Graduate School of Business Administration, Michigan State University, 1971), pp. 8-14.

22. "An Interview with John C. Burton," p. 21. "We think by giving them better data we can encourage them in the direction of doing a better job, thus leading, we hope, to more efficient capital markets."

23. Since the time (July 1, 1972 and June 30, 1973) encompassed by this study, there have been several changes in the Internal Revenue Code:

    The present $25,000 exemption from the corporate surtax has been increased to $50,000. Further, the tax rate on the first $25,000 of taxable income was cut to 20%, while the rate for the second $25,000 remains at 22%, the same rate previously applied to corporate taxable income not subject to the corporate surtax. For corporations with at least $50,000 in taxable income, the

savings will come to $7,000 over the old rates. The increase in the surtax exemption applies only to 1975; after that, the rates revert to the rates discussed.

The percentage depletion deduction for oil and gas wells for most large firms has been eliminated but the new law permits a so-called small producer exception that permits many oil and gas producers to continue to claim percentage depletion although at a lesser rate than was previously available. The 22% rate begins to drop gradually after 1980 to 15%.

The investment credit has been temporarily increased to 10% on property placed in service during the period starting January 22, 1975 and ending December 31, 1976. An additional 1% credit is available for certain employee stock ownership plans.

The provisions of the Code that are discussed in the text are the provisions pertaining over the period encompassed by this study.

24. See Sec. 1564(a) for details.

25. Reg. 1564-1.

26. American Institute of Certified Public Accountants, Accounting Principles Board, Opinion No. 30, "Reporting the Results of Operations--Reporting the effects of disposal of a segment of a business, and extraordinary, unusual and infrequently occurring events and transactions" (New York: AICPA, 1973).

27. APB Opinion No. 9 recommends that material extraordinary items "be segregated from the results of ordinary operations and shown separately in the income statement..." (page 113). The extraordinary items would be reported net-of-tax. See American Institute of Certified Public Accountants, Accounting Principles Board, Opinion No. 9, "Reporting the Results of Operations" (New York: AICPA, 1966).

28. See Sec. 1564(b) for details.

29. The investment credit was suspended from October 10, 1966 to March 9, 1967. It was terminated from April 19, 1969 until March 31, 1971.

30. See Footnote 2 above.

31. Study Group on the Objectives of Financial Statements,

Objectives of Financial Statements (New York: AICPA, 1973), p. 62.

32. Robert Mundheim, "Forward, Symposium on Securities Regulation," Law and Contemporary Problems (Summer 1964), p. 648.

33. APB Opinion No. 11, paragraph 63c.

34. Eugene E. Comiskey and James R. Hasselback, "Analyzing the Profit-Tax Relationship," Financial Management (Winter 1973), pp. 57-62.

35. James H. Lorie and Mary T. Hamilton, The Stock Market: Theories and Evidence (Homewood, Illinois: Richard D. Irwin, Inc., 1973), p. 98.

36. R. K. Mautz, Financial Reporting by Diversified Companies (New York: Financial Executives Research Foundation, 1968), p. 124.

37. Norton Bedford, Extensions in Accounting Disclosure (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1973), p. 145.

38. "House Democrat Says 11 Big Firms Avoided Paying Any Federal Income Tax Last Year," The Wall Street Journal (August 2, 1973), p. 5.

39. These include the top 100 industrial corporations; 20 airlines, railroad, and trucking corporations; 10 telephone, electric power, and gas transmission corporations; the six largest retailing corporations; and the nine largest commercial banks.

40. The Wall Street Journal (August 2, 1973), p. 5.

41. Charles A. Vanik, "Corporate Federal Tax Payments and Federal Subsidies to Corporations," Congressional Record-House (1972), p. H6709.

42. Philip M. Stern, The Rape of the Taxpayer (New York: Random House, 1973), pp. 209-210; Charles A. Vanik, "Corporate Federal Tax Payments and Federal Subsidies to Corporations for 1972," Congressional Record-House (August 1, 1973), p. H7180.

43. Joseph A. Pechman, "Distribution of Federal and State Income Taxes by Income Classes," The Journal of Finance (May 1972), p. 180.

44. "402 Americans Earning $100,000 Charged with Artful

Tax-Dodging," Lansing State Journal (March 14, 1973), p. F-2.

45. Stern, pp. 209-210.

46. Accounting Trends & Techniques, 26th Edition (New York: AICPA, 1972).

47. American Institute of Certified Public Accountants, Auditing Standards and Procedures (New York: AICPA, 1963), p. 16.

48. See John L. Carey, The CPA Plans for the Future (New York: AICPA, 1965), pp. 128-133.

49. Frederick L. Neumann, "The Auditing Standard of Consistency," Empirical Research in Accounting: Selected Studies 1968, pp. 8-16.

50. Martin L. Gosman, "Characteristics of Firms Making Accounting Changes," The Accounting Review (January 1973), pp. 1-11.

51. Paul Frishkoff, "An Empirical Investigation of the Concept of Materiality in Accounting," Empirical Research in Accounting: Selected Studies 1970, p. 128.

52. James E. Smith and Nora P. Smith, "Readability: A Measure of the Performance of the Communication Function of Financial Reporting," The Accounting Review (July 1971), p. 560.

53. Surendra S. Singhvi and Harsha B. Desai, "An Empirical Analysis of the Quality of Corporate Financial Disclosure," The Accounting Review (January 1971), p. 129-138.

54. Singhvi and Desai.

55. Frishkoff.

56. Kenneth W. Stringer, "Discussion of an Empirical Investigation of the Concept of Materiality in Accounting," Empirical Research in Accounting: Selected Studies 1970, p. 133-137.

57. Vanik (1972), p. H6707 (emphasis added).

CHAPTER II

RESEARCH QUESTIONS, DESCRIPTION OF THE RESEARCH DESIGN, AND APPLICATION

SELECTION OF THE SAMPLE

The data for this study are gathered from a random sample of 300 corporations listed on the New York and American Stock Exchanges. Because of the difference in the number of corporations listed on each exchange, the sample of 300 consists of 167 New York Stock Exchange and 133 American Stock Exchange listed corporations (from among 1,524 NYSE and 1,215 AMEX listed corporations). The sample, therefore, is of corporations that investors are quite interested in--publicly held corporations whose shares are traded on the two largest stock exchanges in the United States.

Rather than one overall simple random sample, a proportional stratified random sample is used in the study. As discussed on the next page, some corporations are eliminated in the selection process. It was expected that more AMEX corporations would be eliminated than NYSE corporations. Therefore, stratification is used to insure that AMEX corporations are represented in the final sample of 300 corporations.

Each corporation on each exchange is assigned a number and the selection of corporations from each exchange is made through the use of a random number table. During the selection process, a company is eliminated if it incurred a loss for the year of study or is either a real estate investment trust (REIT), a foreign corporation, or an investment trust. The latter corporations are eliminated because they would pay little or no Federal income taxes because of their tax status. Corporations with losses are eliminated because of the problem of computing meaningful tax rates. The random selection continues until the requisite 300 corporations are obtained. A total of 26 NYSE listed corporations and 42 AMEX listed corporations are eliminated in this way.

Appendix I indicates the 300 corporations finally selected for the sample; Appendix II indicates those corporations eliminated and the reasons for the elimination.

REASONS FOR SELECTION

A substantial portion of these 300 corporations are quite large. Accordingly, assuming that Stempf's assertion that "what is good accounting practice for the large [corporation] sets a standard for all"[1] is valid, this study should reveal the standards which have been established for reporting corporate income taxes.

Similarly, since most of the large certified public accounting firms are represented in this sample, this research should disclose any auditor effect on the financial

reporting of income taxes by the most prominent section of the public accounting profession.

Finally, the published annual reports and 10-K reports of these corporations are readily available.

DATA SOURCE

For each corporation, extent of adherence to APB Opinion disclosure requirements is determined by examining the annual report to shareholders for the fiscal year ending between July 1, 1972 and June 30, 1973, the year of study. This study is limited to the annual report for one year because of the near-impossibility of obtaining adequate Federal income tax data before July 1, 1972. The SEC explicitly requires disclosure in 10-K reports for years ending after June 30, 1972 of both the current and deferred Federal income tax figures;[2] thus 10-K reports can be used to test for extent of adherence to APB Opinions in annual reports to shareholders only for fiscal years ending after July 1, 1972. Most of the Federal income tax information is gathered from the 10-K report for the year of study. However, the following year's annual report to shareholders or 10-K report is also utilized if tax information for the year of study is presented therein. A questionnaire is mailed to each corporation that does not disclose the necessary information in either its annual reports to shareholders or 10-K reports for either the year of study or the follow-up year.

The following data are taken from the financial

statements and footnotes thereto:

1. location of income tax expense in the income statement
2. amount of income taxes--both current and deferred--in the annual report
3. amount of Federal income taxes--both current and deferred--in the 10-K report
4. disclosure of income tax effect of extraordinary items
5. amount of tax loss carryforward with expiration dates
6. method of accounting for and amounts of investment credit (included in income, deferred in the accounts, and any carryforward)
7. amount of net income after income taxes
8. net amount of extraordinary items
9. total assets
10. net sales or revenues
11. independent auditor

TAX RATE INFLUENCE

Research Problem

The major goal of this portion of the study is to determine if a relationship exists between corporate Federal income tax rates and adherence to APB Opinion income tax disclosure requirements or location of income tax expense in the income statement.

The statutory Federal income tax rate for the year of study is 22 percent on the first $25,000 of taxable income and 48 percent on any excess over $25,000. However, the effective rates incurred by corporations may differ significantly from 48 percent because of the various provisions of the tax law discussed in Chapter I and various financial reporting practices discussed below. Corporate income tax rates may be measured by users in different ways and this study selects two measures of the effective Federal income

tax rate for use in the analysis.

The rationale underlying this part of the study is the hypothesis that corporations with low Federal income tax rates are attempting to obscure this fact; indeed, that they are attempting to create the impression that a greater percentage of their income is paid as Federal income taxes than is actually the case. For example, by not disclosing the tax effects of extraordinary items, although such disclosures are required by APB Opinion No. 11, it is impossible to compute an effective income tax rate for the corporation. In some instances, the rate incurred on extraordinary items may be significantly lower than the rates incurred on income before extraordinary items because of lower capital gains rates or other tax-reducing provisions. These lower rates would have the effect of reducing the overall tax rate; by not reporting the tax on extraordinary items, these lower rates cannot be as readily determined.

As pointed out in Chapter I, this portion of the research is justified because income tax disclosures are important for predictive purposes and because of the claims of an increasing number of commentators that many corporations are not paying their "fair share."[3]

Methodology

The accounting followed in income tax returns may differ in material respects from the accounting employed in the preparation of financial statements included in annual reports to shareholders and 10-K reports to the SEC. For

example, companies may use the sum-of-the-year's-digits depreciation method in their income tax returns even though they use the straight-line depreciation method in their financial statements.

Comprehensive income tax allocation for these resulting timing differences is required under generally accepted accounting principles.[4] Comprehensive income tax allocation is based on the theory that income tax expense should be recognized in the published financial statements in the period in which the taxable revenue or tax deductible expense is included in pre-tax income; if there is a timing difference in the recognition of the revenue or expense for tax and financial accounting purposes, its tax effect should be deferred until the timing difference reverses. The deferral of the tax effect is accomplished by reporting an adjustment to income tax expense in the income statement together with a deferred tax debit or credit in the balance sheet.

Because a Federal income tax rate based on the income tax expense reported in the income statement (the normalized rate) may differ from a rate based on the actual tax paid to the government (the flow-through rate), both rates are computed.

The use of the two methods of computing Federal income tax rates facilitates a comparison of the methods and raises questions as to why any differences in results may exist. By measuring the tax rate both ways, any problem of

definition is highlighted. A researcher may be accused of using the incorrect measure of the Federal income tax rate when one or the other measure is used. By performing the statistical tests using both methods to compute rates, this problem is avoided.

For each corporation, the computation of its Federal income tax rate is calculated by dividing its total Federal income taxes by its total net income before Federal income taxes. The numerator used in computing the normalized Federal income tax rate is total Federal income taxes pertaining to net income before extraordinary items, extraordinary items, and prior period adjustments; the denominator is the sum of net income after taxes, extraordinary items net of taxes, prior period adjustments net of taxes, and total Federal income taxes computed for the numerator. The numerator used in computing the flow-through tax rate is the current Federal taxes pertaining to net income before extraordinary items, extraordinary items, and prior period adjustments; the denominator is the denominator derived above for the normalized rate. A possible bias may arise in computing the flow-through rate. Specifically, if a corporation does not show a current and deferred breakdown of the tax effect of an extraordinary item, it is assumed that the entire amount is current. The amount of this tax in relation to the total tax and the validity of this assumption comprise the potential bias.

For those corporations that fail to break down income

into the Federal, state, local, and foreign components in the annual report to shareholders or 10-K report for the year of study, an estimate is made of the Federal income taxes alone whenever the annual report to shareholders or 10-K report for the following year shows such a breakdown; the proportion of total income taxes that are Federal income taxes for the year of study is assumed to be equal to the proportion in the following year. A questionnaire is sent to those companies where reasonable estimates cannot be made. (Appendix III illustrates the procedures used to compute Federal income tax rates; Appendix IV contains the questionnaire.)

Corporations for which the Federal income tax rate cannot be determined from the available data (annual reports, 10-K reports) or the questionnaire are classified as indeterminate. The remaining corporations are ranked by their Federal income tax rates in descending order; the first half of these corporations are classified as high income tax rate corporations and the other half are classified as low income tax rate corporations.

CORPORATE SIZE INFLUENCE

Research Problem

The major goal here is to determine if a relationship exists between corporate size and adherence to APB Opinion income tax disclosure requirements or location of income tax expense in the income statement.

A positive relationship between the size of a corporation and the quality of disclosure might exist for several reasons. Perhaps small corporations are more fearful than large corporations that full disclosure would endanger their competitive positions. Or perhaps large corporations are more in the public eye and therefore more subject to shareholders' and analysts' pressure for fuller disclosure than small corporations. Alternatively, perhaps large corporations disclose more information than small corporations in order to minimize pressure from anti-trust regulatory agencies. Finally, perhaps large corporations disclose more information than small corporations because they are more conscious of their social responsibility.

Methodology

The same random sample of 300 corporations is used. The 300 corporations are ranked in descending order by size, using total assets for a first ranking and total net revenues for a second ranking. The top 150 corporations are classified as large corporations and the bottom 150 are classified as small corporations.

INDEPENDENT AUDITOR

Research Problem

The major goal is to determine the relationship between the independent auditor and adherence to APB Opinion income tax disclosure requirements or location of income tax expense in the income statement.

Methodology

The same random sample of 300 corporations is used, divided into nine groups by auditors--eight groups for corporations audited by each of the "Big-8" accounting firms and a ninth group for corporations audited by all other accounting firms.

STATISTICAL TESTS

The statistical test applied is a three-factor analysis of variance. As the name implies, the analysis-of-variance procedure attempts to analyze the variation in a dependent variable and assign portions of this variation to each of a set of independent variables. The reasoning is that dependent variables vary only because of variation in a set of unknown independent variables. The objective of the analysis of variance is to locate important independent variables in a study and to determine how they interact and affect the dependent variables.

The three factors are corporate Federal income tax rate, corporate size, and corporate independent auditor. Factor A, corporate Federal income tax rate, has two levels representing high and low Federal income tax rate corporations. Factor B, corporate size, has two levels representing large and small corporations. Factor C, independent auditor, has nine levels representing each of the "Big-8" accounting firms and a ninth level for accounting firms other than the "Big-8." The dependent variables are

classificatory--adherence, nonadherence, and indeterminacy to APB Opinion disclosure requirements, and the location of income tax expense in the income statement, as discussed more fully in Chapter I.

In addition to being interested solely in the effect one variable (independent) has on another variable (dependent), investigators frequently ask whether this effect is the same for all levels of a second, independent variable. If this effect is not the same, an interaction between the two independent variables is said to exist. Because of the possibility of accepting relationships that may be caused by other factors, the interrelationships of the three main factors--Federal income tax rate, corporate size, and independent auditor--are also tested.

In this analysis one must consider:

Three main effects
- Federal income tax rate
- Corporate size
- Independent auditor

Three two-factor interactions
- Federal income tax rate x Corporate size
- Federal income tax rate x Independent auditor
- Corporate size x Independent auditor

One three-factor interaction
- Federal income tax rate x Corporate size x Independent auditor

Twenty 36-cell tables, similar to the one on the following page, are used to compile the data on the five dependent variables. That is, with the Federal income tax rate measured two ways (flow-through and normalized) and corporate size measured two ways (sales and assets), each of the five

dependent variables requires four tables, or a total of twenty tables.

THREE-WAY ANALYSIS OF VARIANCE

Corporate Size		Large		Small	
Federal Income Tax Rate		High	Low	High	Low
Independent Auditor	AA				
	AY				
	CL				
	EE				
	HS				
	PM				
	PW				
	TR				
	Other				

The information contained in each of the 36 cells with respect to each of the four disclosure requirement variables consists of the number of corporations in that cell that (1) adhere to the disclosure requirement, (2) do not adhere to the disclosure requirement, and (3) for which adherence or nonadherence to the requirement cannot be determined. The information in each cell for the income tax location variable consists of the number of corporations that report income tax expense separately and the number of corporations that include it among operating expenses.

The cell information is then computed as frequencies and a logit transformation used in order to perform the three-way analysis of variance. From the viewpoint of theory,

the analysis of proportions presents more difficulties than the analysis of normally distributed continuous variables. Few exact results are available. The logit transformation is one of the approximate methods used in practice. If the proportions in the cells cover a wide range from close to zero up to 50 percent or beyond, it is reasonable to expect that row and column effects are more likely to be additive on a logit scale than on the original proportion scale. In the scale of proportions, row and column effects cannot be strictly additive over the whole range. The logit transformation pulls out the scale near 1 and 100%, so that the scale extends from $-\infty$ to $+\infty$. In the logit analysis row and column effects may be additive, whereas in the proportion scale for the same data, there might be interactions that are entirely a consequence of the scale.[5]

The hypotheses to be tested include:

H_{o_1}: there is no difference in adherence to APB Opinion income tax disclosure requirements among auditors

H_{a_1}: there is a difference in adherence to APB Opinion income tax disclosure requirements among auditors

H_{o_1}: $u_{AA} = u_{AY} = u_{CL} = u_{EE} = u_{HS} = u_{PM} = u_{PW} = u_{TR} = u_{O}$

H_{a_1}: H_{o_1} is not true

The proportions of the nine rows are relevant to this question. Stated differently, the null hypothesis becomes: The row proportions do not differ.

H_{o_2}: there is no difference in adherence to APB Opinion income tax disclosure requirements among large and small corporations

H_{a_2}: there is a difference in adherence to APB Opinion income tax disclosure requirements among large and small corporations

$H_{o_2}: u_B = u_S$ $\qquad$ $H_{a_2}: u_B \neq u_S$

The proportions of the two columns bear upon this question and the null hypothesis can be stated: The column proportions do not differ.

H_{o_3}: there is no difference in adherence to APB Opinion income tax disclosure requirements among high and low Federal income tax rate corporations

H_{a_3}: there is a difference in adherence to APB Opinion income tax disclosure requirements among high and low Federal income tax rate corporations

$H_{o_3}: u_H = u_L$ $\qquad$ $H_{a_3}: u_H \neq u_L$

The proportions of the two arrays relate to this question. Alternatively, the null hypothesis can be stated: The proportions of the arrays do not differ.

H_{o_4}: there are no interaction effects among the three main factors (Federal income tax rate, corporate size, and independent auditor)

H_{a_4}: there is an interaction effect among the three main factors

FOOTNOTES

1. Victor H. Stempf, "Trends in Accounting Procedure," The Journal of Accountancy (June 1940), p. 454.

2. "SEC Adoption of Amendments to Regulation S-X," Federal Securities Law Reports, Number 429 (June 26, 1972), p. 14.

3. Philip M. Stern, The Rape of the Taxpayer (New York: Random House, 1973), pp. 209-210; Charles A. Vanik, "Corporate Federal Tax Payments and Federal Subsidies to Corporations for 1972," Congressional Record-House (August 1, 1973), p. H7180.

4. American Institute of Certified Public Accountants, Accounting Principles Board, Opinion No. 11, "Accounting for Income Taxes" (New York: AICPA, 1967), paragraph 34.

5. George W. Snedecor and William G. Cochran, Statistical Methods (6th edition; Ames, Iowa: Iowa State University Press, 1967), p. 494.

CHAPTER III

RESULTS OF THE STUDY

DATA GATHERING PROCEDURE

After the sample of 300 corporations was selected, the annual report of each corporation for the year of study was analyzed to determine corporate revenues, corporate assets, independent auditor, flow-through and normalized Federal income tax rates, adherence or nonadherence to each of the four APB Opinion disclosure requirements, and the placement of income tax expense in the income statement. Where any of the preceding information was missing, the following year's annual report and the two years' 10-Ks were also analyzed. Questionnaires were sent to the 88 corporations that did not disclose this information in any of these sources. Fifty-seven corporations provided the information requested in the questionnaire or a follow-up letter, for a response rate of 65 percent.

Fifty-six corporations were queried on current-deferred Federal income tax information, 48 on the investment credit, eight on extraordinary items, and five on loss carryforwards; several corporations were queried on more than one item.

FLOW-THROUGH FEDERAL INCOME TAX RATE COMPUTATION

The flow-through Federal income tax rate for each corporation was determined in the manner discussed in Chapter II. Because of the lack of complete information, the flow-through Federal income tax rate of 25 corporations could not be determined precisely. A flow-through tax rate figure was available for most of these 25 corporations, but it included taxes other than just Federal income taxes. Nine of the 25 corporations were classified as low flow-through Federal income tax rate corporations; each of these corporations had a flow-through rate of less than 27.3 percent, even when the rate included other than Federal income taxes. (It was assumed that these nine corporations did not have combinations of positive Federal income taxes and negative other income taxes for the same year.) Sixteen corporations could not be classified into either the high or low tax rate groups and were deleted.

The remaining 284 corporations were then classified into two equal groups representing the two levels of flow-through Federal income tax rates. The 142 corporations above 31.5 percent were classified as high flow-through Federal income tax rate corporations and the 142 below 31.5 percent were classified as low flow-through Federal income tax rate corporations.

NORMALIZED FEDERAL INCOME TAX RATE COMPUTATION

The normalized Federal income tax rate for each corporation was determined in the manner discussed in Chapter II. For 15 of the 300 corporations a normalized Federal income tax rate could not be determined precisely because of a lack of complete information. An income tax rate could be computed for each of these 15 corporations, but it included local, state, or foreign income taxes. Seven of the 15 corporations were classified as low normalized Federal income tax rate corporations; each of these corporations had a normalized rate of less than 39.3 percent even when the rate included other than Federal income taxes. (It was assumed that these seven corporations did not have combinations of positive Federal income taxes and negative other income taxes for the same year.) Eight corporations could not be classified into the high and low tax rate groups and were deleted.

The remaining 292 corporations were then classified into two equal groups representing the two levels of normalized Federal income tax rates. The 146 corporations above 40.2 percent were classified as high normalized Federal income tax rate corporations and the 146 below 40.2 percent were classified as low normalized Federal income tax rate corporations.

CLASSIFYING CORPORATIONS BY SIZE ACCORDING TO REVENUES

The ranking of the 300 corporations by reported revenues resulted in a range from $20,194,000,000 to $1,073,000, with a median of $99,000,000. The 150 corporations above the median were classified as large corporations and the 150 below it were classified as small corporations.

Net revenues was used as the basis of classification; this amount generally represents what is considered in the particular instance to be gross revenues less returns, allowances, and trade discounts. For this classification, it is assumed that all 300 corporations report revenues on a comparable basis, notwithstanding well-known variations in practice.[1]

CLASSIFYING CORPORATIONS BY SIZE ACCORDING TO ASSETS

A ranking of the corporations by total assets resulted in a range from $51,171,600,000 to $149,000, with a median of $86,500,000. The 150 corporations above the median were classified as large corporations and the 150 below it were classified as small corporations.

CLASSIFYING CORPORATIONS BY AUDITOR

The random sample of 300 corporations taken from the New York and American Stock Exchanges revealed the following classification by auditor:

Arthur Andersen	49
Arthur Young	27
Coopers & Lybrand	26
Ernst & Ernst	23
Haskins & Sells	31
Peat Marwick	41
Price Waterhouse	37
Touche Ross	28
Others	38
	300

The above breakdown of the 300 sampled corporations may not be in the same proportion as the population of all corporations listed on the NYSE and AMEX. Certain auditing firms may audit particular classes of corporations that are not included in the sample, such as real estate investment trusts.

This classification was then used in the analysis involving the nine-way classification by auditor.

ANOVA PROCEDURE

Tables 3-1 through 3-20 give the frequency counts for the twenty three-way classifications. In Tables 3-1 through 3-16, each cell lists the frequencies of adherence, nonadherence, and indeterminacy, in that order. In Tables 3-9 through 3-16, the number of corporations for which the disclosure requirement is not applicable is given in the right-hand corner of each cell. Tables 3-17 through 3-20 pertain to the dependent variable location of income tax expense in the income statement. The first number listed in each cell is the frequency of corporations that report income tax expense as a separate deduction from net income and the second number is the frequency of corporations that

include income tax expense among operating expenses.

An analysis of variance procedure was applied to the binary data resulting after deleting the indeterminates. A logit transformation was first performed. The logit for each cell was calculated as follows:

$$Y = \ln((A + .5)/(N + .5))$$

where ln denotes the log to base e, A denotes the frequency of adherence (or frequency of tax expense reported separately in the case of the location variable), and N denotes the frequency of nonadherence (or frequency of tax expense included among operating expenses in the case of the location variable).[2] An estimate of the variance of Y is provided by $\hat{\sigma}^2 = (A+N+1)/[(A+.5)(N+.5)]$. A weighted least squares analysis of variance with cell weights $\hat{\sigma}^{-1}$ was performed on each of the Y variables for Tables 3-1 through 3-8 and 3-17 through 3-20; the results are reported in corresponding Tables 3-1a through 3-8a and 3-17a through 3-20a. The analysis of variance was not performed for Tables 3-9 through 3-16. Inspection of the cell frequencies in these tables reveals that the disclosure requirements were applicable to few corporations, that nonadherence was minimal for those to which it did apply, and that an analysis of variance would therefore reveal no significant sources of variation.

The three-way analysis of variance for each of the indicated tables was computed using the Statistical Analysis System (SAS) package program designed and implemented by Barr and Goodnight,[3] and on file at the Northeast Regional

Data Center of the University of Florida.

For each dependent variable, an analysis of variance table is produced. Listed as sources of variation are all the effects specified in the governing model, any relevant pooled effects, a RESIDUAL term (if appropriate), and the corrected total. Degrees of freedom, sum of squares, and mean squares are tabulated. The RESIDUAL sum of squares is the CORRECTED TOTAL sum of squares less all the sums of squares computed for effects.

The variations attributed to each source and degrees of freedom are given in the ANOVA tables. The levels of significance were determined in regard to Chi-Square distributions, the large sample null distributions. The Chi-Square distribution was used because each cell was converted into a proportion. This conversion results in a single observation for each cell and thus a replication factor necessary for the F statistic is lacking. Because the sample sizes are not very large, these levels should not be interpreted as exact measures of significance.

In the analysis of adherence to each of the APB Opinion disclosure requirements studied, any indeterminate responses were deleted from the analysis and the remaining yes-no dichotomy analyzed by the three factors. Such deletion assumes that the true state of indeterminate firms (either adhering or not adhering) is in the same proportion as determinate firms. Deletion of these indeterminate responses is necessitated because of the lack of data, but may result

in a confounding error. Unfortunately, no other procedure seems reasonable, since the ANOVA tests are designed to test for significant differences in cell proportions and are unconcerned with the population proportions per se. Moreover, the ANOVA procedure is unable to handle a three-way response for each cell, so the indeterminate responses cannot be analyzed separately.

INVESTMENT CREDIT DISCLOSURE REQUIREMENT ANALYSIS

The first disclosure requirement investigated concerned the investment credit. As discussed in Chapter I, corporations are required to disclose the amount and method of accounting for investment credits, when material.

Among the 300 corporations, it was found at the outset that 213 corporations provided information concerning the investment credit in their annual report for the year of study. Of the remaining 87 corporations, further analysis determined that 49 corporations either had no investment credit to report or an amount determined to be insignificant; 18 corporations were found to have an investment credit exceeding five percent of their normalized Federal income tax and thus in violation of the investment credit disclosure requirement. No determination could be made for the remaining 20 corporations.

One corporation did disclose the dollar amount of the investment credit but was classified as a nonadherer because it did not disclose the method used to account for the

investment credit.

The raw data for the investment credit disclosure requirement are presented in Tables 3-1 through 3-4; the numbers in the cells represent, from top to bottom, adherers, nonadherers, and indeterminates.

The SAS ANOVA computer program was then applied to the logit transformation of the data presented in Tables 3-1 through 3-4, after deleting the 20 indeterminate corporations. Two hundred seventy corporations remained in the analysis using the flow-through Federal income tax rate, since six of the indeterminate investment credit corporations were also indeterminate flow-through Federal income tax rate corporations (300-16-20+6=270). Using the normalized Federal income tax rate, 274 corporations remained after eliminating the 20 indeterminate investment credit corporations. Two of the indeterminate normalized Federal income tax rate corporations were also indeterminate investment credit corporations (300-8-20+2=274).

Tables 3-1a through 3-4a present the results of the ANOVA analysis, indicating the dependent variable, the Chi-Square result, and the level of significance for each main effect and interaction. Level of significance is indicated only when it is less than .4.

An analysis of the results from the ANOVA reveals no relationship between any of the three main effects (corporate size, corporate tax rate, and independent auditor) and adherence or nonadherence to the APB Opinion investment credit

Table 3-1

ANALYSIS OF INVESTMENT CREDIT DISCLOSURE REQUIREMENT

Size by Revenue, Flow-Through Federal Income Tax Rate, Auditor

Corporate Size		Large		Small		
Federal Income Tax Rate		High	Low	High	Low	Totals
Independent Auditor	AA	11 2 0	10 2 1	6 0 0	8 1 4	35 5 5
	AY	9 0 0	6 1 0	5 0 0	4 1 0	24 2 0
	CL	6 0 0	10 1 0	5 0 1	3 0 0	24 1 1
	EE	6 0 0	1 1 0	11 0 0	4 0 0	22 1 0
	HS	5 0 0	8 0 0	7 1 1	6 1 1	26 2 2
	PM	6 0 0	13 2 0	10 3 0	6 0 0	35 5 0
	PW	7 0 0	14 1 1	5 0 0	6 0 1	32 1 2
	TR	6 0 1	5 0 0	9 0 0	3 0 2	23 0 3
	Other	6 0 0	5 0 0	12 1 0	8 0 1	31 1 1
Totals		62 2 1	72 8 2	70 5 2	48 3 9	252 18 14

Size	
Large	Small
134	118
10	8
3	11

Tax Rate	
High	Low
132	120
7	11
3	11

TABLE 3-1a

ANOVA RESULTS OF INVESTMENT CREDIT ANALYSIS

Size by Revenue, Flow-Through Federal Income Tax Rate, Auditor

FACTOR	CHI-SQUARE RESULT	DEGREES OF FREEDOM	LEVEL OF SIGNIFICANCE
Main Effects			
Size	.0090	1	--
Tax Rate	.5927	1	--
Auditor	3.4357	8	--
2-Way Interactions			
Size x Tax Rate	.3779	1	--
Size x Auditor	3.3870	8	--
Tax Rate x Auditor	2.5937	8	--
3-Way Interaction			
Size x Tax Rate x Auditor	1.6449	8	--

Table 3-2

ANALYSIS OF INVESTMENT CREDIT DISCLOSURE REQUIREMENT

Size by Assets, Flow-Through Federal Income Tax Rate, Auditor

Corporate Size		Large		Small		
Federal Income Tax Rate		High	Low	High	Low	Totals
Independent Auditor	AA	11 2 0	10 2 1	6 0 0	8 1 4	35 5 5
	AY	9 0 0	8 1 0	5 0 0	2 1 0	24 2 0
	CL	5 0 0	10 1 0	6 0 1	3 0 0	24 1 1
	EE	6 0 0	1 0 0	11 0 0	4 1 0	22 1 0
	HS	5 0 0	10 0 0	7 1 1	4 1 1	26 2 2
	PM	5 0 0	16 2 0	11 3 0	3 0 0	35 5 0
	PW	6 0 0	15 1 1	6 0 0	5 0 1	32 1 2
	TR	4 0 0	6 0 2	11 0 1	2 0 0	23 0 3
	Other	3 0 0	3 0 1	15 1 0	10 0 0	31 1 1
	Totals	54 2 0	79 7 5	78 5 3	41 4 6	252 18 14

Size	
Large	Small
133	119
9	9
5	9

Tax Rate	
High	Low
132	120
7	11
3	11

TABLE 3-2a

ANOVA RESULTS OF INVESTMENT CREDIT ANALYSIS

Size by Assets, Flow-Through Federal Income Tax Rate, Auditor

FACTOR	CHI-SQUARE RESULT	DEGREES OF FREEDOM	LEVEL OF SIGNIFICANCE
Main Effects			
Size	.3399	1	--
Tax Rate	.8360	1	--
Auditor	3.0763	8	--
2-Way Interactions			
Size x Tax Rate	.1351	1	--
Size x Auditor	3.2407	8	--
Tax Rate x Auditor	2.6167	8	--
3-Way Interaction			
Size x Tax Rate x Auditor	1.1125	8	--

Table 3-3

ANALYSIS OF INVESTMENT CREDIT DISCLOSURE REQUIREMENT

Size by Revenue, Normalized Federal Income Tax Rate, Auditor

Corporate Size		Large		Small		
Federal Income Tax Rate		High	Low	High	Low	Totals
Independent Auditor		8	13	10	5	36
		1	3	0	1	5
	AA	2	1	1	2	6
		7	8	3	6	24
		1	0	0	1	2
	AY	0	0	1	0	1
		6	10	5	3	24
		0	1	0	0	1
	CL	0	0	1	0	1
		5	2	9	6	22
		0	1	0	0	1
	EE	0	0	0	0	0
		4	9	7	7	27
		0	0	2	0	2
	HS	0	0	1	0	1
		4	15	8	8	35
		0	2	1	2	5
	PM	0	0	1	0	1
		10	12	7	4	33
		0	1	0	0	1
	PW	0	1	1	0	2
		4	7	10	2	23
		0	0	0	0	0
	TR	1	0	1	2	4
		6	4	16	6	32
		0	0	0	1	1
	Other	0	0	2	0	2
		54	80	75	47	256
		2	8	3	5	18
	Totals	3	2	9	4	18

Size	
Large	Small
134	122
10	8
5	13

Tax Rate	
High	Low
129	127
5	13
12	6

TABLE 3-3a

ANOVA RESULTS OF INVESTMENT CREDIT ANALYSIS

Size by Revenue, Normalized Federal Income Tax Rate, Auditor

FACTOR	CHI-SQUARE RESULT	DEGREES OF FREEDOM	LEVEL OF SIGNIFICANCE
Main Effects			
Size	.0453	1	--
Tax Rate	1.2230	1	.270
Auditor	2.6284	8	--
2-Way Interactions			
Size x Tax Rate	.0544	1	--
Size x Auditor	3.1203	8	--
Tax Rate x Auditor	3.4722	8	--
3-Way Interactions			
Size x Tax Rate x Auditor	1.8542	8	--

Table 3-4

ANALYSIS OF INVESTMENT CREDIT DISCLOSURE REQUIREMENT

Size by Assets, Normalized Federal Income Tax Rate, Auditor

Corporate Size		Large		Small		
Federal Income Tax Rate		High	Low	High	Low	Totals
Independent Auditor	AA	9	12	9	6	36
		1	3	0	1	5
		2	1	1	2	6
	AY	7	10	3	4	24
		0	1	1	0	2
		0	0	1	0	1
	CL	5	10	6	3	24
		0	1	0	0	1
		0	0	1	0	1
	EE	5	2	9	6	22
		0	0	0	1	1
		0	0	0	0	0
	HS	4	11	7	5	27
		0	0	2	0	2
		0	0	1	0	1
	PM	2	19	10	4	35
		0	2	1	2	5
		0	0	1	0	1
	PW	9	13	8	3	33
		0	1	0	0	1
		0	1	1	0	2
	TR	4	6	10	3	23
		0	0	0	0	0
		1	1	1	1	4
	Other	2	3	20	7	32
		0	0	0	1	1
		1	0	1	0	2
Totals		47	86	82	45	256
		1	8	4	5	18
		4	3	8	3	18

Size	
Large	Small
133	123
9	9
7	11

Tax Rate	
High	Low
129	127
5	13
12	6

TABLE 3-4a

ANOVA RESULTS OF INVESTMENT CREDIT ANALYSIS

Size By Assets, Normalized Federal Income Tax Rate, Auditor

FACTOR	CHI-SQUARE RESULT	DEGREES OF FREEDOM	LEVEL OF SIGNIFICANCE
Main Effects			
Size	.4679	1	--
Tax Rate	1.0635	1	.301
Auditor	2.8269	8	--
2-Way Interactions			
Size x Tax Rate	.0955	1	--
Size x Auditor	3.4304	8	--
Tax Rate x Auditor	2.9476	8	--
3-Way Interaction			
Size x Tax Rate x Auditor	2.2988	8	--

disclosure requirement, and no significant interactions. Indeed, the lowest level of significance was .27.

The one major point to be made from the investment credit research is that in the sample of 300 corporations, 18 were found to be in violation of the APB Opinion disclosure requirements and another 20 may also be in violation.

TIMING DIFFERENCE DISCLOSURE REQUIREMENT ANALYSIS

Under APB Opinion No. 11, corporations are required to disclose the components of income tax expense for the period that represent taxes estimated to be payable currently and the tax effects of timing difference. These amounts may be presented as separate items in the income statement or combined in the income statement with disclosure of the components parenthetically or in a note to the financial statements.

From an analysis of the 300 corporations, it was determined that 69 corporations did not present sufficient information for the computation of both the flow-through and normalized income tax figures. A further search was made of the following year's annual report, the two years' 10-K reports, and a follow-up questionnaire sent where a determination still could not be made. Forty-one of these corporations were in violation of the disclosure requirement; 19 of the corporations were not in violation, and adequate information was not available on the remaining nine corporations to classify them as either adhering or

not adhering to these disclosure requirements.

To be classified as a nonadherer of the timing difference disclosure requirement, it was necessary that the undisclosed difference between the normalized and the flow-through tax expense be at least five percent of the normalized figure.

There were 284 corporations remaining in the analysis using the flow-through Federal income tax rate and 283 in the analysis using the normalized Federal income tax rate. The nine corporations that were indeterminate as to timing difference were also indeterminate as to the flow-through Federal income tax rate, thus no further eliminations were necessary (300-16-9+9=284). Nine additional indeterminate timing difference corporations were eliminated for normalized purposes (300-8-9+0=283). Two of the nonadherers when measured by the flow-through rate and three nonadherers when measured by the normalized rate were eliminated in Tables 3-5 through 3-8 because of indeterminate Federal income tax rates.

The raw data for the timing difference disclosure requirement are presented in Tables 3-5 through 3-8; the numbers in the cells represent, from top to bottom, adherers, nonadherers, and indeterminates.

The SAS ANOVA computer program was applied to the logit transformation of the data in Tables 3-5 through 3-8; the results are presented in Tables 3-5a through 3-8a.

Table 3-5

ANALYSIS OF INCOME TAX COMPONENT DISCLOSURE REQUIREMENT

Size by Revenue, Flow-Through Federal Income Tax Rate, Auditor

Corporate Size		Large		Small		
Federal Income Tax Rate		High	Low	High	Low	Totals
Independent Auditor	AA	12	12	4	8	36
		1	1	2	5	9
		0	0	0	0	0
	AY	6	7	5	3	21
		3	0	0	2	5
		0	0	0	0	0
	CL	6	9	6	2	23
		0	2	0	1	3
		0	0	0	0	0
	EE	6	2	11	4	23
		0	0	0	0	0
		0	0	0	0	0
	HS	5	7	7	5	24
		0	1	2	3	6
		0	0	0	0	0
	PM	5	14	13	5	37
		1	1	0	1	3
		0	0	0	0	0
	PW	6	15	5	6	32
		1	1	0	1	3
		0	0	0	0	0
	TR	6	2	9	4	21
		1	3	0	1	5
		0	0	0	0	0
	Other	5	5	12	6	28
		1	0	1	3	5
		0	0	0	0	0
	Totals	57	73	72	43	245
		8	9	5	17	39
		0	0	0	0	0

Size	
Large	Small
130	115
17	22
0	0

Tax Rate	
High	Low
129	116
13	26
0	0

TABLE 3-5a

ANOVA RESULTS OF INCOME TAX COMPONENT ANALYSIS

Size by Revenue, Flow-Through Federal Income Tax Rate, Auditor

FACTOR	CHI-SQUARE RESULT	DEGREES OF FREEDOM	LEVEL OF SIGNIFICANCE
Main Effects			
Size	1.8912	1	.169
Tax Rate	1.9807	1	.160
Auditor	6.2836	8	--
2-Way Interactions			
Size x Tax Rate	3.7769	1	.053
Size x Auditor	6.9482	8	--
Tax Rate x Auditor	4.1356	8	--
3-Way Interactions			
Size x Tax Rate x Auditor	4.1288	8	--

Table 3-6

ANALYSIS OF INCOME TAX COMPONENT DISCLOSURE REQUIREMENT

Size By Assets, Flow-Through Federal Income Tax Rate, Auditor

Corporate Size		Large		Small		
Federal Income Tax Rate		High	Low	High	Low	Totals
Independent Auditor	AA	12	12	4	8	36
		1	1	2	5	9
		0	0	0	0	0
	AY	6	8	5	2	21
		3	1	0	1	5
		2	0	0	0	2
	CL	5	9	7	2	23
		0	2	0	1	3
		0	0	0	0	0
	EE	6	1	11	5	23
		0	0	0	0	0
		0	0	0	0	0
	HS	5	8	7	4	24
		0	2	2	2	6
		0	0	0	0	0
	PM	4	17	14	2	37
		1	1	0	1	3
		0	0	0	0	0
	PW	5	16	6	5	32
		1	1	0	1	3
		0	0	0	0	0
	TR	4	5	11	1	21
		0	3	1	1	5
		0	0	0	0	0
	Other	2	4	15	7	28
		1	0	1	3	5
		0	0	0	0	0
Totals		49	80	80	36	245
		7	11	6	15	39
		0	0	0	0	0

Size	
Large	Small
129	116
18	21
0	0

Tax Rate	
High	Low
129	116
13	26
0	0

TABLE 3-6a

ANOVA RESULTS OF INCOME TAX COMPONENT ANALYSIS

Size by Assets, Flow-Through Federal Income Tax Rate, Auditor

FACTOR	CHI-SQUARE RESULT	DEGREES OF FREEDOM	LEVEL OF SIGNIFICANCE
Main Effects			
Size	1.1423	1	.287
Tax Rate	2.4266	1	.120
Auditor	6.1086	8	--
2-Way Interactions			
Size x Tax Rate	4.6653	1	.031
Size x Auditor	4.7398	8	--
Tax Rate x Auditor	3.5808	8	--
3-Way Interaction			
Size x Tax Rate x Auditor	5.7129	8	--

Table 3-7

ANALYSIS OF INCOME TAX COMPONENT DISCLOSURE REQUIREMENT

Size by Revenue, Normalized Federal Income Tax Rate, Auditor

Corporate Size		Large		Small		
Federal Income Tax Rate		High	Low	High	Low	Totals
Independent Auditor	AA	8 1 2	16 1 0	7 3 1	5 3 0	36 8 3
	AY	5 3 0	8 0 0	3 1 0	5 2 0	21 6 0
	CL	5 1 0	10 1 0	6 0 0	2 1 0	23 3 0
	EE	5 0 0	3 0 0	9 0 0	6 0 0	23 0 0
	HS	3 1 0	9 0 0	7 2 1	5 2 0	24 5 1
	PM	3 1 0	16 1 0	9 0 1	9 1 0	37 3 1
	PW	9 1 0	13 1 0	7 1 0	4 0 0	33 3 0
	TR	3 2 0	5 2 0	10 1 0	3 0 1	21 5 1
	Other	6 0 0	3 1 0	13 2 3	5 2 0	27 5 3
Totals		47 10 2	83 7 0	71 10 6	44 11 1	245 38 9

Size	
Large	Small
130	115
17	21
2	7

Tax Rate	
High	Low
118	127
20	18
8	1

TABLE 3-7a

ANOVA RESULTS OF INCOME TAX COMPONENT ANALYSIS

Size by Revenue, Normalized Federal Income Tax Rate, Auditor

FACTOR	CHI-SQUARE RESULT	DEGREES OF FREEDOM	LEVEL OF SIGNIFICANCE
Main Effects			
Size	.5584	1	--
Tax Rate	.1011	1	--
Auditor	5.1384	8	--
2-Way Interactions			
Size x Tax Rate	3.7337	1	.054
Size x Auditor	6.3916	8	--
Tax Rate x Auditor	2.7659	8	--
3-Way Interaction			
Size x Tax Rate Auditor	3.5419	8	--

Table 3-8

ANALYSIS OF INCOME TAX COMPONENT DISCLOSURE REQUIREMENT

Size by Assets, Normalized Federal Income Tax Rate, Auditor

Corporate Size		Large		Small		
Federal Income Tax Rate		High	Low	High	Low	Totals
Independent Auditor	AA	9 1 2	15 1 0	6 3 1	6 3 0	36 8 3
	AY	4 3 0	10 1 0	4 1 0	3 1 0	21 6 0
	CL	4 1 0	10 1 0	7 0 0	2 1 0	23 3 0
	EE	5 0 0	2 0 0	9 0 0	7 0 0	23 0 0
	HS	3 1 0	10 1 0	7 2 1	4 1 0	24 5 1
	PM	1 1 0	20 1 0	11 0 1	5 1 0	37 3 1
	PW	8 1 0	14 1 0	8 1 0	3 0 0	33 3 0
	TR	4 1 0	5 2 0	9 2 0	3 0 1	21 5 1
	Other	3 0 0	2 1 0	16 2 3	6 2 0	27 5 3
	Totals	41 9 2	88 9 0	77 11 6	39 9 1	245 38 9

Size		Tax Rate	
Large	Small	High	Low
129 18 2	116 20 7	118 20 8	127 18 1

TABLE 3-8a

ANOVA RESULTS OF INCOME TAX COMPONENT ANALYSIS

Size by Assets, Normalized Federal Income Tax Rate, Auditor

FACTOR	CHI-SQUARE RESULT	DEGREES OF FREEDOM	LEVEL OF SIGNIFICANCE
Main Effects			
Size	.3082	1	--
Tax Rate	.1855	1	--
Auditor	5.8205	8	--
2-Way Interactions			
Size x Tax Rate	3.3563	1	.067
Size x Auditor	5.1237	8	--
Tax Rate x Auditor	2.5918	8	--
3-Way Interaction			
Size x Tax Rate x Auditor	5.3351	8	--

The ANOVA Tables 3-5a through 3-8a reveal no significant main effects but significant (or at least marginally significant) two-way interaction between corporate size and tax rate. The column totals of Tables 3-5 through 3-8 show that in each case there is a slight to moderate increase in adherence rate in going from a high to a low tax rate for large corporations and a moderate to large decrease in adherence rate in going from a high to a low tax rate for small corporations. A priori, it might be expected that large corporations with low tax rates are least likely to adhere to the timing difference disclosure requirement, but this expectation is not supported by the data. Although other explanations for the significance of this interaction are conceivable, they are largely conjectural and therefore will not be offered here.

Although the adherence-nonadherence is at best only weakly related to any of the three factors studied, it is significant that at least 13 percent of the sampled corporations are in violation of this particular disclosure requirement.

EXTRAORDINARY ITEMS DISCLOSURE REQUIREMENT ANALYSIS

Several APB Opinions call for disclosure of income taxes pertaining to income before extraordinary items and the income tax effects of extraordinary items themselves.

Of the 300 corporations, it was found that 208 reported no extraordinary items in their income statement. Of the

remaining 92 corporations, 82 were found to be adhering to the disclosure requirement, four were not adhering, and there was insufficient information for such a determination for six corporations. To be classified as not adhering to this disclosure requirement, the undisclosed income tax effect of the extraordinary item had to be at least five percent of the total normalized income tax.

Because only four corporations were found in violation of this disclosure requirement, the ANOVA was not performed on the data.

In the presentation of the raw data in Tables 3-9 through 3-12, the numbers in the cells to the left represent, from top to bottom, adherers, nonadherers, and indeterminates, whereas the numbers in the cells at the right represent firms that do not report extraordinary items. Two of the indeterminate extraordinary item corporations were among the eight eliminated.

TAX CARRYFORWARD DISCLOSURE REQUIREMENT ANALYSIS

APB Opinion No. 11 requires disclosure of the amounts of any operating loss carryforwards not included in net income for the loss period, together with expiration dates.

This disclosure requirement was found to apply potentially to only 35 of the 300 corporations. Thirty of these 35 corporations adhered to the disclosure requirement, three did not, and information was not available to make a determination for two corporations. Nonadherence was considered

Table 3-9

ANALYSIS OF EXTRAORDINARY ITEMS DISCLOSURE REQUIREMENT

Size by Revenue, Flow-Through Federal Income Tax Rate, Auditor

Corporate Size		Large		Small		
Federal Income Tax Rate		High	Low	High	Low	Totals
Independent Auditor	AA	2 0 0 11	3 1 0 9	1 0 0 5	3 0 0 10	9 1 0 35
	AY	2 0 0 8	2 0 0 4	3 0 0 2	3 0 0 2	10 0 0 16
	CL	1 0 0 5	1 0 0 10	0 0 0 6	1 0 1 1	3 0 1 22
	EE	2 0 0 4	1 0 0 1	2 0 0 9	1 0 0 3	6 0 0 17
	HS	2 0 0 3	2 0 0 6	2 0 0 7	3 0 1 4	9 0 1 20
	PM	0 0 0 6	5 1 0 9	5 0 0 8	4 0 0 2	14 1 0 25
	PW	1 1 0 5	5 0 0 11	0 0 0 5	5 0 1 1	11 1 1 22
	TR	2 0 0 5	3 0 1 1	1 0 0 8	2 0 1 2	8 0 2 16
	Other	3 0 0 3	1 0 1 3	0 1 0 11	3 0 0 7	7 1 1 24
	Totals	15 1 0 50	23 2 2 54	14 1 0 61	25 0 4 32	77 4 6 197

Size	
Large	Small
38 3 2 104	39 1 4 93

Tax Rate	
High	Low
29 2 0 111	48 2 6 86

Table 3-10

ANALYSIS OF EXTRAORDINARY ITEMS DISCLOSURE REQUIREMENT

Size by Assets, Flow-Through Federal Income Tax Rate, Auditor

Corporate Size	Large		Small		
Federal Income Tax Rate	High	Low	High	Low	Totals
Independent Auditor AA	2 0 0 11	2 1 0 10	1 0 0 5	4 0 0 9	9 1 0 35
AY	2 0 0 8	5 0 0 3	3 0 0 2	0 0 0 3	10 0 0 16
CL	0 0 0 5	1 0 0 10	1 0 0 6	1 0 1 1	3 0 1 22
EE	2 0 0 4	1 0 0 0	2 0 0 9	1 0 0 4	6 0 0 17
HS	2 0 0 3	3 0 0 7	2 0 0 7	2 0 1 3	9 0 1 20
PM	1 0 0 4	7 1 0 10	4 0 0 10	2 0 0 1	14 1 0 25
PW	0 1 0 5	5 0 0 12	1 0 0 5	5 0 1 0	11 1 1 22
TR	1 0 0 3	3 0 2 3	2 0 0 10	2 0 0 0	8 0 2 16
Other	2 0 0 1	0 0 1 3	1 1 0 13	4 0 0 7	7 1 1 24
Totals	12 1 0 44	27 2 3 58	17 1 0 67	21 0 3 28	77 4 6 197

Size	
Large	Small
39 3 3 102	38 1 3 95

Tax Rate	
High	Low
29 2 0 111	48 2 6 86

Table 3-11

ANALYSIS OF EXTRAORDINARY ITEMS DISCLOSURE REQUIREMENT

Size by Revenue, Normalized Federal Income Tax Rate, Auditor

Corporate Size	Large		Small		
Federal Income Tax Rate	High	Low	High	Low	Totals
Independent Auditor AA	1 0 0 10	4 1 0 12	3 0 0 8	1 0 0 7	9 1 0 37
AY	2 0 0 6	2 0 0 6	3 0 0 1	4 0 0 3	11 0 0 16
CL	1 0 0 5	1 0 0 10	0 0 1 5	1 0 0 2	3 0 1 22
EE	1 0 0 4	2 0 0 1	1 0 0 8	2 0 0 4	6 0 0 17
HS	1 0 0 3	3 0 0 6	2 0 0 8	3 0 0 4	9 0 0 21
PM	0 0 0 4	5 1 0 11	2 0 0 8	7 0 0 3	14 1 0 26
PW	2 1 0 7	4 0 0 10	2 0 1 5	3 0 0 1	11 1 1 23
TR	2 0 0 3	3 0 1 3	2 0 0 9	1 0 1 2	8 0 2 17
Other	2 0 0 4	2 0 0 2	3 0 0 15	1 1 0 5	8 1 0 26
Totals	12 1 0 46	26 2 1 61	18 0 2 67	23 1 1 31	79 4 4 205

Size	
Large	Small
38 3 1 107	41 1 3 98

Tax Rate	
High	Low
30 1 2 113	49 3 2 92

Table 3-12

ANALYSIS OF EXTRAORDINARY ITEMS DISCLOSURE REQUIREMENT

Size by Assets, Normalized Federal Income Tax Rate, Auditor

Corporate Size	Large		Small		
Federal Income Tax Rate	High	Low	High	Low	Totals
Independent Auditor AA	1 0 0 11	3 1 0 12	3 0 0 7	2 0 0 7	9 1 0 37
AY	2 0 0 5	5 0 0 6	3 0 0 2	1 0 0 3	11 0 0 16
CL	0 0 0 5	1 0 0 10	1 0 1 5	1 0 0 2	3 0 1 22
EE	1 0 0 4	2 0 0 0	1 0 0 8	2 0 0 5	6 0 0 17
HS	1 0 0 3	4 0 0 7	2 0 0 8	2 0 0 3	9 0 0 21
PM	0 0 0 2	8 1 0 12	2 0 0 10	4 0 0 2	14 1 0 26
PW	1 1 0 7	4 0 0 11	3 0 1 5	3 0 0 0	11 1 1 23
TR	2 0 0 3	2 0 2 3	2 0 0 9	2 0 0 2	8 0 2 17
Other	1 0 0 2	1 0 0 2	4 0 0 17	2 1 0 5	8 1 0 26
Totals	9 1 0 42	30 2 2 63	21 0 2 71	19 1 0 29	79 4 4 205

Size	
Large	Small
39 3 2 105	40 1 2 100

Tax Rate	
High	Low
30 1 2 113	49 3 2 92

to exist if the amount of carryforward was not disclosed in the annual report, regardless of magnitude.

In the presentation of the raw data in Tables 3-13 through 3-16, the numbers in the cells to the left represent, from top to bottom, adherers, nonadherers, and indeterminates, whereas the numbers in the cells at the right represent firms that do not report operating loss carryforwards; one nonadherer and one indeterminate were among the 16 corporations eliminated in Tables 3-13 and 3-14, and one nonadherer and two indeterminates were among the eight corporations eliminated in Tables 3-15 and 3-16.

Since the number of nonadherers was small, the ANOVA was not performed on the data.

LOCATION OF INCOME TAX EXPENSE ANALYSIS

Income tax expense is either reported separately or included among the operating expenses in the income statement. Two hundred fifty-nine corporations reported income tax expense separately and 41 corporations included it among operating expenses. After eliminating the indeterminate Federal income tax rate corporations, the totals became 244 and 40 for the flow-through analysis, and 252 and 40 for the normalized analysis presented in Tables 3-17 through 3-20; the numbers in the cells represent, from top to bottom, firms that deduct tax expense separately and firms that include it among the operating expenses. Tables 3-17a through 3-20a present the results of the ANOVA analysis.

TABLE 3-13

ANALYSIS OF TAX CARRYFORWARD DISCLOSURE REQUIREMENT

Size by Revenue, Flow-Through Federal Income Tax Rate, Auditor

Corporate Size	Large		Small		
Federal Income Tax Rate	High	Low	High	Low	Totals
Independent Auditor AA	0 0 0 13	0 0 0 13	0 0 0 6	3 0 0 10	3 0 0 42
AY	0 0 0 9	2 0 1 4	0 0 0 5	1 0 0 4	3 0 1 22
CL	0 0 0 6	1 0 0 10	0 0 0 6	0 0 0 3	1 0 0 25
EE	0 0 0 6	1 0 0 1	0 0 0 11	0 0 0 4	1 0 0 22
HS	0 0 0 5	0 1 0 7	1 0 0 8	1 0 0 7	2 1 0 27
PM	0 0 0 6	3 0 0 12	2 0 0 11	2 1 0 3	7 1 0 32
PW	0 0 0 7	5 0 0 11	0 0 0 5	2 0 0 5	7 0 0 28
TR	0 0 0 7	2 0 0 3	0 0 0 9	2 0 0 3	4 0 0 22
Other	0 0 0 6	0 0 0 5	0 0 0 13	2 0 0 7	2 0 0 31
Totals	0 0 0 65	14 1 1 66	3 0 0 74	13 1 0 46	30 2 1 251

Size	
Large	Small
14 1 1 131	16 1 0 120

Tax Rate	
High	Low
3 0 0 139	27 2 1 112

TABLE 3-14

ANALYSIS OF TAX CARRYFORWARD DISCLOSURE REQUIREMENT

Size by Assets, Flow-Through Federal Income Tax Rate, Auditor

Corporate Size	Large		Small		
Federal Income Tax Rate	High	Low	High	Low	Totals
Independent Auditor AA	0 0 0 13	0 0 0 13	0 0 0 6	3 0 0 10	3 0 0 42
AY	0 0 0 9	3 0 1 5	0 0 0 5	0 0 0 3	3 0 1 22
CL	0 0 0 5	1 0 0 10	0 0 0 7	0 0 0 3	1 0 0 25
EE	0 0 0 6	1 0 0 0	0 0 0 11	0 0 0 5	1 0 0 22
HS	0 0 0 5	0 1 0 9	1 0 0 8	1 0 0 5	2 1 0 27
PM	0 0 0 5	4 0 0 14	2 0 0 12	1 1 0 1	7 1 0 32
PW	0 0 0 6	5 0 0 12	0 0 0 6	2 0 0 4	7 0 0 28
TR	0 0 0 4	2 0 0 6	0 0 0 12	2 0 0 0	4 0 0 22
Other	0 0 0 3	0 0 0 4	0 0 0 16	2 0 0 8	2 0 0 31
Totals	0 0 0 56	16 1 1 73	3 0 0 83	11 1 0 39	30 2 1 251

Size	
Large	Small
16 1 1 129	14 1 0 122

Tax Rate	
High	Low
3 0 0 139	27 2 1 112

TABLE 3-15

ANALYSIS OF TAX CARRYFORWARD DISCLOSURE REQUIREMENT

Size By Revenue, Normalized Federal Income Tax Rate, Auditor

Corporate Size	Large		Small		
Federal Income Tax Rate	High	Low	High	Low	Totals
Independent Auditor AA	0 0 0 11	0 0 0 17	1 0 0 10	1 0 0 7	2 0 0 45
AY	1 0 0 7	1 0 1 6	0 0 0 4	1 0 0 6	3 0 1 23
CL	0 0 0 6	1 0 0 10	0 0 0 6	0 0 0 3	1 0 0 25
EE	0 0 0 5	1 0 0 2	0 0 0 9	0 0 0 6	1 0 0 22
HS	0 0 0 4	0 1 0 8	2 0 0 8	0 0 0 7	2 1 0 27
PM	0 0 0 4	3 0 0 14	1 1 0 8	3 0 0 7	7 1 0 33
PW	1 0 0 9	4 0 0 10	1 0 0 7	1 0 0 3	7 0 0 29
TR	0 0 0 5	2 0 0 5	2 0 0 9	0 0 0 4	4 0 0 23
Other	0 0 0 6	0 0 0 4	2 0 0 16	0 0 0 7	2 0 0 33
Totals	2 0 0 57	12 1 1 76	9 1 0 77	6 0 0 50	29 2 1 260

Size	
Large	Small
14 1 1 133	15 1 0 127

Tax Rate	
High	Low
11 1 0 134	18 1 1 126

TABLE 3-16

ANALYSIS OF TAX CARRYFORWARD DISCLOSURE REQUIREMENT

Size by Assets, Normalized Federal Income Tax Rate, Auditor

Corporate Size		Large		Small		
Federal Income Tax Rate		High	Low	High	Low	Totals
Independent Auditor	AA	0 0 0 12	0 0 0 16	1 0 0 9	1 0 0 8	2 0 0 45
	AY	1 0 0 6	2 0 1 8	0 0 0 5	0 0 0 4	3 0 1 23
	CL	0 0 0 5	1 0 0 10	0 0 0 7	0 0 0 3	1 0 0 25
	EE	0 0 0 5	1 0 0 1	0 0 0 9	0 0 0 7	1 0 0 22
	HS	0 0 0 4	0 1 0 10	2 0 0 8	0 0 0 5	2 1 0 27
	PM	0 0 0 2	4 0 0 17	1 1 0 10	2 0 0 4	7 1 0 33
	PW	1 0 0 8	4 0 0 11	1 0 0 8	1 0 0 2	7 0 0 29
	TR	0 0 0 5	2 0 0 5	2 0 0 9	0 0 0 4	4 0 0 23
	Other	0 0 0 3	0 0 0 3	2 0 0 19	0 0 0 8	2 0 0 33
	Totals	2 0 0 50	14 1 1 81	9 1 0 84	4 0 0 45	29 2 1 260

Size	
Large	Small
16 1 1 131	13 1 0 129

Tax Rate	
High	Low
11 1 0 134	18 1 1 126

TABLE 3-17

ANALYSIS OF LOCATION OF THE INCOME TAX EXPENSE

Size by Revenue, Flow-Through Federal Income Tax Rate, Auditor

Corporate Size		Large		Small		
Federal Income Tax Rate		High	Low	High	Low	Totals
Independent Auditor	AA	13 0	9 4	6 0	11 2	39 6
	AY	9 0	6 1	5 0	4 1	24 2
	CL	5 1	5 6	6 0	3 0	19 7
	EE	6 0	1 1	10 1	4 0	21 2
	HS	5 0	6 2	7 2	6 2	24 6
	PM	6 0	14 1	12 1	4 2	36 4
	PW	6 1	11 5	4 1	4 3	25 10
	TR	7 0	5 0	8 1	5 0	25 1
	Other	5 1	5 0	12 1	9 0	31 2
Totals		62 3	62 20	70 7	50 10	244 40

Size	
Large	Small
124 23	120 17

Tax Rate	
High	Low
132 10	112 30

TABLE 3-17a

ANOVA RESULTS OF INCOME TAX LOCATION ANALYSIS

Size by Revenue, Flow-Through Federal Income Tax Rate, Auditor

FACTOR	CHI-SQUARE RESULT	DEGREES OF FREEDOM	LEVEL OF SIGNIFICANCE
Main Effects			
Size	.8534	1	.356
Tax Rate	7.2678	1	.008
Auditor	7.0843	8	--
2-Way Interactions			
Size x Tax Rate	.5648	1	--
Size x Auditor	6.8949	8	--
Tax Rate x Auditor	4.1160	8	--
3-Way Interaction			
Size x Tax Rate x Auditor	2.3300	8	--

TABLE 3-18

ANALYSIS OF LOCATION OF THE INCOME TAX EXPENSE

Size by Assets, Flow-Through Federal Income Tax Rate, Auditor

Corporate Size	Large		Small		
Federal Income Tax Rate	High	Low	High	Low	Totals
Independent Auditor AA	13 0	8 5	6 0	12 1	39 6
AY	9 0	7 2	5 0	3 0	24 2
CL	4 1	5 6	7 0	3 0	19 7
EE	6 0	1 0	10 1	4 1	21 2
HS	5 0	7 3	7 2	5 1	24 6
PM	5 0	15 3	13 1	3 0	36 4
PW	5 1	12 5	5 1	3 3	25 10
TR	4 0	8 0	11 1	2 0	25 1
Other	2 1	4 0	15 1	10 0	31 2
Totals	53 3	67 24	79 7	45 6	244 40

Size	
Large	Small
120 27	124 13

Tax Rate	
High	Low
132 10	112 30

TABLE 3-18a

ANOVA RESULTS OF INCOME TAX LOCATION ANALYSIS

Size by Assets, Flow-Through Federal Income Tax Rate, Auditor

FACTOR	CHI-SQUARE RESULT	DEGREES OF FREEDOM	LEVEL OF SIGNIFICANCE
Main Effects			
Size	3.8891	1	.049
Tax Rate	5.0156	1	.025
Auditor	7.4796	8	--
2-Way Interactions			
Size x Tax Rate	.3760	1	--
Size x Auditor	7.0229	8	--
Tax Rate x Auditor	3.8361	8	--
3-Way Interaction			
Size x Tax Rate x Auditor	2.6306	8	--

TABLE 3-19

ANALYSIS OF LOCATION OF THE INCOME TAX EXPENSE

Size by Revenue, Normalized Federal Income Tax Rate, Auditor

Corporate Size	Large		Small		
Federal Income Tax Rate	High	Low	High	Low	Totals
Independent Auditor AA	11 0	13 4	9 2	8 0	41 6
AY	8 0	7 1	4 0	6 1	25 2
CL	6 0	4 7	6 0	3 0	19 7
EE	5 0	2 1	8 1	6 0	21 2
HS	4 0	7 2	8 2	5 2	24 6
PM	4 0	16 1	10 0	7 3	37 4
PW	9 1	9 5	5 3	3 1	26 10
TR	5 0	7 0	10 1	4 0	26 1
Other	6 0	3 1	17 1	7 0	33 2
Totals	58 1	68 22	77 10	49 7	252 40

Size	
Large	Small
126 23	126 17

Tax Rate	
High	Low
135 11	117 29

TABLE 3-19a

ANOVA RESULTS OF INCOME TAX LOCATION ANALYSIS

Size by Revenue, Normalized Federal Income Tax Rate, Auditor

FACTOR	CHI-SQUARE RESULT	DEGREES OF FREEDOM	LEVEL OF SIGNIFICANCE
Main Effects			
Size	.6813	1	--
Tax Rate	5.4812	1	.012
Auditor	9.3213	8	.327
2-Way Interactions			
Size x Tax Rate	3.5200	1	.054
Size x Auditor	7.0695	8	--
Tax Rate x Auditor	1.9706	8	--
3-Way Interaction			
Size x Tax Rate x Auditor	4.7374	8	--

TABLE 3-20

ANALYSIS OF LOCATION OF THE INCOME TAX EXPENSE

Size by Assets, Normalized Federal Income Tax Rate, Auditor

Corporate Size	Large		Small		
Federal Income Tax Rate	High	Low	High	Low	Totals
Independent Auditor AA	11 1	12 4	9 1	9 0	41 6
AY	7 0	9 2	5 0	4 0	25 2
CL	5 0	4 7	7 0	3 0	19 7
EE	5 0	2 0	8 1	6 1	21 2
HS	4 0	8 3	8 2	4 1	24 6
PM	2 0	18 3	12 0	5 1	37 4
PW	8 1	10 5	6 3	2 1	26 10
TR	5 0	7 0	10 1	4 0	26 1
Other	3 0	2 1	20 1	8 0	33 2
Totals	50 2	72 25	85 9	45 4	252 40

Size	
Large	Small
122 27	130 13

Tax Rate	
High	Low
135 11	117 29

TABLE 3-20a

ANOVA RESULTS OF INCOME TAX LOCATION ANALYSIS

Size by Assets, Normalized Federal Income Tax Rate, Auditor

FACTOR	CHI-SQUARE RESULT	DEGREES OF FEEEDOM	LEVEL OF SIGNIFICANCE
Main Effects			
Size	2.5605	1	.109
Tax Rate	4.0601	1	.044
Auditor	9.6242	8	.293
2-Way Interactions			
Size x Tax Rate	2.5537	1	.110
Size x Auditor	6.3026	8	--
Tax Rate Auditor	1.8201	8	--
3-Way Interactions			
Size x Tax Rate x Auditor	2.3292	8	--

The relationship of corporate size (measured by assets but not revenues) and the location of income tax expense in the income statement are statistically significant. As can be seen more clearly in Table 3-21, large corporations are more likely than small corporations to report income tax expense among the operating expenses. All 300 corporations are used in this test since size and location of income tax expense are known. Using a Chi-Square test of independence, the computed Chi-Square is 4.77 for Table 3-21, significant at the .029 alpha level.[4]

TABLE 3-21

LOCATION OF INCOME TAX EXPENSE AND CORPORATE SIZE MEASURED BY ASSETS

	Corporate Size	
Placement of Income Tax	Large	Small
Deducted Separately	123	136
Among Operating Expenses	27	14

There is also a statistically significant relationship between Federal income tax rate (either flow-through or normalized) and the location of income tax expense in the income statement. As can be seen more clearly from Tables 3-22 and 3-23 (abstracted from Tables 3-16 through 3-20), low Federal income tax rate corporations are more likely than high Federal income tax rate corporations to report income tax expense among the operating expenses. Here, the computed Chi-Square is 11.64 for Table 3-22 (revenue or asset size and flow-through rate), significant at the

.001 alpha level; and 9.39 for Table 3-23 (revenue or asset size and normalized rate), significant at the .001 alpha level.

TABLE 3-22

FLOW-THROUGH FEDERAL INCOME TAX RATE AND SIZE MEASURED BY REVENUES OR ASSETS

	Flow-Through Rate	
Placement of Income Tax	High	Low
Deducted Separately	132	112
Among Operating Expenses	10	30

TABLE 3-23

NORMALIZED FEDERAL INCOME TAX RATE AND SIZE MEASURED BY REVENUES OR ASSETS

	Normalized Rate	
Placement of Income Tax	High	Low
Deducted Separately	135	117
Among Operating Expenses	11	29

The ANOVA analysis in Tables 3-19a and 3-20a also indicate statistically significant interactions between the tax rate main effect, measured by the normalized rate, and the size main effect, measured either by revenues (α = .054) or assets (α = .110). This comes about because 22 of 29 and 25 of 29 low normalized Federal income tax rate corporations that reported income taxes among operating expenses were also large revenue or asset corporations, respectively.

RESULTS OF THE HYPOTHESES TESTING

Four individual hypotheses were presented in Chapter II to be tested with respect to adherence or nonadherence to four APB Opinion disclosure requirements along with the income statement classification of income taxes, the last loosely referred to below as an APB Opionion disclosure requirement:

H_{o_1}: there is no difference in adherence to APB Opinion income tax disclosure requirements among auditors

H_{a_1}: there is a difference in adherence to APB Opinion income tax disclosure requirements among auditors

H_{o_2}: there is no difference in adherence to APB Opinion income tax disclosure requirements between large and small corporations

H_{a_2}: there is a difference in adherence to APB Opinion income tax disclosure requirements between large and small corporations

H_{o_3}: there is no difference in adherence to APB Opinion income tax disclosure requirements between high and low Federal income tax rate corporations

H_{a_3}: there is a difference in adherence to APB Opinion income tax disclosure requirements between high and low Federal income tax rate corporations

H_{o_4}: there are no interaction effects among the three main factors (Federal income tax rate, corporate size, and independent auditor)

H_{a_4}: there is an interaction effect among the three main factors

Since the location of the income tax expense in the income statement does not fall within the technical classification of an APB Opinion disclosure requirement, the following discussion separates the four APB Opinion

disclosure requirements from the income tax location analysis.

Each of the four APB Opinion disclosure requirements must be judged individually to determine an acceptance or rejection of the first null hypothesis. Differences in adherence to the four APB Opinion disclosure requirements were not significant among corporations audited by the nine groups of independent auditors. Therefore, the first null hypothesis cannot be rejected.

The second null hypothesis of no difference in adherence to APB Opinion disclosure requirements between large and small corporations also cannot be rejected. Differences in adherence to the four individual APB Opinion disclosure requirements were not significant between large and small corporations.

The third null hypothesis of no difference in adherence to APB Opinion disclosure requirements between high and low Federal income tax rate corporations also cannot be rejected. Differences in adherence to the four individual APB Opinion disclosure requirements were not significant between high tax rate and low tax rate corporations.

The fourth null hypothesis of no interactions in adherence to APB Opinion disclosure requirements among the three main variables (auditor, size, tax rate) can be rejected in one instance--the size-tax rate interaction for the timing difference disclosure requirement. Any interpretation of this interaction is conjectural, however, for its

direction is not as anticipated.

The income tax location comparison with the three main effects did result in some statistically significant differences. No relationship was found between the independent auditor and the location of the income tax expense in the income statement. However, when size was measured by assets, large corporations were found to be more likely than small corporations to report income tax expense among operating expenses, and thus the null hypothesis of no differences can be rejected. No significance was found to exist when size was measured by revenues.

A significant relationship was found between the tax rate and the location of income tax expense in the income statement, whether a flow-through or normalized Federal income tax rate is used. Low tax rate corporations tend to report income taxes among operating expenses rather than as a separate deduction. Thus, the null hypothesis of no differences among high and low Federal income tax rate corporations can be rejected.

Two interactions of marginal significance were found in the analysis of the position of income tax expense in the income statement. Specifically, both relate to interactions between firm size and tax rate, where the tax rate is normalized and firm size is measured either by revenues or assets.

FEDERAL INCOME TAX RATE-CORPORATE SIZE RELATIONSHIP

Vanik's contention that small businesses do not have the ability to fully utilize the tax benefits available to large businesses is supported by this study. The classification of large and small was used for corporate size together with the actual Federal income tax rates. The null hypothesis that large corporations do not incur lower Federal income tax rates than small corporations was tested with the test statistic:

$$Z = \frac{X_2 - X_1}{\sqrt{\frac{S_1^2}{n_1} \quad \frac{S_2^2}{n_2}}}$$

where: X_1 = average Federal income tax rate of large corporations

X_2 = average Federal income tax rate of small corporations

S_1^2 = variance of large corporation's Federal income tax rates

S_2^2 = variance of small corporation's Federal income tax rates

n_1 = number of large corporations

n_2 = number of small corporations

Twenty-five indeterminate flow-through Federal income tax rate corporations and 15 indeterminate normalized Federal income tax rate corporations are eliminated in the respective tests. This leaves 144 large corporations and

133 small corporations in the flow-through test and 146 large and 139 small corporations in the normalized test.

Using the flow-through Federal income tax rate and revenues as the size criterion results in a Z of 1.584; the null hypothesis can be rejected at the .057 level of significance. Thus the average flow-through Federal income tax rates of 24.6% for large corporations and 28.9% for small corporations are significantly different; large corporations have lower tax rates than small corporations, which is consistent with Vanik's contention.

Using the flow-through Federal income tax rate and assets as the size criterion results in an even more significant Z of 2.797; the null hypothesis can be rejected at the .003 level of significance. The average flow-through Federal income tax rate is 23.1% for large corporations and 30.5% for small corporations.

Although Vanik's assertion pertained only to the flow-through Federal income tax rate, similiar analyses were performed using normalized Federal income tax rates. The results were even more significant than with the flow-through Federal income tax rate. Using revenues as the size criterion results in a Z of 2.007, significant at the .022 level; the average normalized Federal income tax rate was 33.9% for large corporations and 37.7% for small corporations. Using assets as the size criterion results in a Z of 3.290, significant at the .001 level; the average normalized Federal income

tax rate was 32.8% for large corporations and 38.9% for small corporations.

FOOTNOTES

1. See Accounting and Reporting Problems of the Accounting Profession (Chicago: The Firm, 1962), pp. 97-101.

2. George W. Snedecor and William G. Cochran, Statistical Methods (6th edition; Iowa State University Press, Ames, Iowa, 1967), p. 494.

3. Anthony James Barr and James Howard Goodnight, A User's Guide to the Statistical Analysis System, (Raleigh, North Carolina, August 1972), p. i38-152.

4. The Chi-Square results from Tables 3-21 through 3-24 were derived from the 2x2 contingency tables provided rather than the results of the 3-way ANOVA. The results may differ slightly from the ANOVA because the cells in the ANOVA are converted to proportions with a transformation applied. The following Chi-Square test statistic is used:

$$\chi^2 = \frac{N(O_{11}O_{22}-O_{12}O_{21})^2}{n_1 n_2 (O_{11}+O_{21})(O_{12}+O_{22})}$$

where N = total number of corporations in test
n_1 = number of corporations in upper group
n_2 = number of corporations in lower group

CHAPTER IV

SUMMARY, IMPLICATIONS, AND LIMITATIONS

SUMMARY

This study examines the extent to which corporate annual reports to shareholders are in accordance with the income tax disclosure requirements of APB Opinions Nos. 2, 4, 11, 22, 23, and 24 It also considers the validity of contentions that the burden of corporate income taxes is not equal for large and small corporations.

Consistent with these APB Opinions, the following income tax disclosures should be made either in the income statement, in the balance sheet, or in the footnotes:

1. Taxes estimated to paid currently.
2. Tax effects of timing differences, both currently and cumulatively.
3. Tax effects of investment credits.
4. Tax effects of operating losses
5. Tax effects of extraordinary items.

Also, the balance sheet or footnotes should disclose:

6. Refundable taxes arising from the utilization of carrybacks of losses and credits.
7. Future tax benefits anticipated from the use of net operating loss carryforwards.
8. Deferred investment credits that may be reflected as reductions of accounting tax provisions in future years.
9. Amounts of any loss carryforwards not recognized in the loss period, together with expiration dates.
10. Significant amounts of any other unused deductions

or credits, together with expiration dates.
11. Reasons for significant variations in the customary relationships between income tax expense and pretax accounting income, if they are not otherwise apparent.

Four income tax disclosure requirements and the location of the income tax expense in the income statement were selected for analysis, as follows:

1. Disclosure of the method of accounting for investment credits and amounts included in income for the year.
2. Disclosure of current and deferred income tax figures in the income statement.
3. Disclosure of the income tax effect of extraordinary items.
4. Disclosure of the amounts of tax loss carryforwards not included in income for the loss year with expiration dates.
5. Placement of income tax expense (relating to income before extraordinary items) in the income statement.

A random sample of 300 corporations was taken from the New York and American Stock Exchanges. Corporations that were real estate investment trusts, investment trusts, foreign corporations, or incurred a loss for the year of study were eliminated from consideration. Annual reports to shareholders for the fiscal year ending between July 1, 1972 and June 30, 1973 were used for the year of study. Adherence or nonadherence to each of the four disclosure requirements studied and the location of income tax expense in the income statement was determined by analyzing the annual reports for the year of study and the following year, the 10-K reports of the two years, and a follow-up questionnaire sent where a determination still could not be made.

Adherence or nonadherence to the selected disclosure requirements was analyzed by corporate Federal income tax

rate, corporate size, and independent auditor through a three-way analysis of variance. Corporate income tax rate was measured two ways, flow-through and normalized; corporate size was also measured two ways, by revenues and by assets.

Corporations were classified into two groups of 142 corporations each, representing high and low flow-through Federal income tax rates; and two groups of 146 corporations each, representing high and low normalized Federal income tax rates. The 300 corporations were also broken into two equal groups representing large and small corporations. These two factors plus a nine-way classification by auditor resulted in a 36-cell breakdown for each of the four income tax APB Opinion disclosure requirements and income tax location. A total of 20 individual 36-cell tables resulted since the Federal income tax rate and the corporate size were each measured two ways.

For the four income tax APB Opinion disclosure requirements, each cell of each table included the number of corporations adhering to the particular disclosure requirement, not adhering to the requirement, and an indeterminate classification, where appropriate. For the income tax location in the income statement each cell of each table included the number of corporations including the expense among the operating expenses and the number reporting it as a separate deduction.

The 12 tables relating to the APB disclosure

requirements for investment credits and current versus deferred income taxes as well as the income tax location in the income statement were analyzed by an SAS ANOVA computer program. The indeterminates of each disclosure requirement were deleted before the computer program was applied. The eight tables relating to the APB disclosure requirements for the tax effects of extraordinary items and the tax effects of loss carryforwards were not analyzed by the SAS ANOVA computer program, since these requirements were applicable to only a small number of corporations and an even smaller number were found in violation.

SUMMARY OF RESEARCH FINDINGS

Although not statistically significant in relation to corporate size, tax rate, or auditor alone, nonadherence to each of the four APB Opinion income tax disclosure requirements was found in this study. More interesting, the study found a statistically significant difference in the location of income tax expense, depending on corporate size (measured by assets but not revenues) and tax rate (either flow-through or normalized). Large corporations were more likely than small corporations to include income tax expense among operating expenses; low Federal income tax rate corporations were more likely than high Federal income tax rate corporations to report income tax expense among operating expenses. No relationship was found among corporations by auditors and the location of income tax expense. There was

also a significant relationship in effective Federal income tax rates between large and small corporations, regardless of how tax rate and size are measured. Large corporations incur lower effective tax rates than small corporations.

IMPLICATIONS OF THE STUDY

The implications of this study are many. First, a significant number of corporations did not adhere to selected APB Opinion income tax expense disclosure requirements. Since the sample is random, this finding of nonadherence can be projected to the population comprising the New York and American Stock Exchanges. If Stempf is correct in contending that the accounting practice for the large corporation sets the standard for all, one wonders about the credibility of accounting disclosure practices of other corporations. A further question can be raised concerning the causes of these violations. If corporations are required to disclose these selected items, what is the basis for nonadherence? Is the independent auditor remiss in granting a clean opinion in the face of nonadherence to these APB Opinion disclosure requirements? Who is the policeman to see that the APB Opinion disclosure requirements are enforced?

The nonadherence to presently required APB Opinion income tax disclosure requirements makes prediction of future net income more difficult. Without the "required" information, let alone additional information, the prediction of future income tax rates is difficult. The required

disclosures may help to explain the existing variations in tax rates and facilitate the prediction process.

This study found that 13 percent of the corporations were not adhering to the timing difference disclosure requirement. Nonadherence to this requirement makes it impossible to determine the flow-through income tax rate. However, this is only the tip of the iceberg as far as "social responsibility" accounting is concerned. The APB Opinions require only that the components of income taxes be disclosed; they do not require disclosure of Federal income tax current and deferred components.

In most cases, it was necessary to consult sources other than annual reports to shareholders to compute the Federal income tax rates; even with these other sources, the rates for several corporation could not be computed. It is nearly impossible to determine whether or not corporations are incurring their "fair share" of Federal income taxes when the information is not readily available in their annual reports. Outside report users may equate income tax expense with Federal income taxes, whereupon some corporations will appear to be incurring higher Federal tax rates than is the true situation. Even if outside report users do not equate the two, they are still unable to compute the Federal income tax rates because of a lack of information.

The finding that low Federal income tax rate corporations tend to report income tax expense among operating

expenses rather than as a separate deduction tends to support the hypothesis that low Federal income tax rate corporations attempt to obscure their favorable Federal income tax rate status. This hypothesis is further supported by the fact that most corporations do not fully disclosue the Federal income tax components of income tax expense in their annual reports to shareholders, although it should be noted that such disclosures are not presently required. Thus, the contentions of Vanik and Stern (cited in Chapter I) tend to be supported. Note, however, that any conclusions concerning the motivations for these disclosure practices are necessarily conjectural; this study has not examined the minds of corporate managers.

Increased disclosure of Federal income tax information is necessary if society is to effectively evaluate the equity by which income taxes are assessed and decide whether there is a need for changes in the tax laws.

LIMITATIONS OF THE RESEARCH

A major limitation of this study is the availability of flow-through and normalized Federal income tax rate figures. For a few corporations the researcher made a judgment as to whether the corporation was a high or low Federal income tax rate corporation; several other corporations were deleted in the analysis for lack of Federal income tax rates.

The sample is not a random sample of all corporations,

but only of those corporations listed on the New York and American Stock Exchanges. Therefore, statistical inferences are limited to corporations listed on these two exchanges. However, the corporations listed on these exchanges comprise the vast majority of the country's sales and assets, and statistical inferences concerning their financial reporting practices should be of interest in their own right.

The sample also may not be representative of all corporations listed on the New York and American Stock Exchanges because certain corporations were eliminated. Specifically, loss corporations as well as REITs, investment trusts, and foreign corporations were excluded. Additionally, it is questionable whether small corporations are included in the sample, since the sample is selected from the two largest stock exchanges. However, the availability of information limits the sample to these two groups. Perhaps the comparison is better explained in terms of large and "smaller" corporations.

The accounting literature is concerned almost exclusively with listed corporations; in fact, many recent empirical studies sample only Fortune 500 or New York Stock Exchange corporations. Accordingly, the sample underlying this study is less restrictive than those of many other studies. Once again, the results should be of interest per se, notwithstanding the limited population from which the sample is drawn.

The sample is limited to profitable corporations, as

discussed in Chapter II. This feature was necessary for tax rate computation purposes and should have had no effect on the relationship of corporate size and auditor with disclosure practices.

The original stratification of the sample into two parts representing the New York and American Stock Exchanges was based on the total number of corporations listed on each exchange. The requisite number of corporations was then selected for each. A larger number of corporations were deleted during the selection process from the American Stock Exchange than from the New York Stock Exchange. This resulted in the remaining firms listed on the American Stock Exchange having a slightly larger probability of being included among the final 300 corporations studied than is indicated from the relative number of firms listed on each exchange. Perhaps a better procedure would be to eliminate ineligible corporations before beginning the sampling procedure and then stratify according to the number of firms remaining. Of course, this would involve determining the status of over 2,700 corporations according to the selection criteria, a task avoided under the sampling plan employed.

Some significance may have been lost because the sample of 300 corporations was spread over 36 cells, resulting in only a few responses in some of the cells. With a larger sample size, it might have been possible to find some more definite relationships, especially among the auditors.

Because of the cell sizes, a logit transformation was applied to the data. Transforming the data may cause some differences in results. However, the transformation was necessary to avoid interactions that may be a consequence of the scale.

Some corporations were deleted from the study for lack of sufficient data to determine Federal income tax rates and adherence or nonadherence to individual APB Opinion disclosure requirements. Deletion implicitly assumes that such corporations adhere or do not adhere to disclosure requirements in the same proportions as the corporations remaining in the sample. Although some confounding of variables may result, this is inevitable given the nature of the subject. There may also be a possible confounding due to the unknown materiality criteria applied by the individual firms and their auditors in deciding just what constitutes adherence to APB Opinion income tax expense disclosure requirements. For this reason, some firms that where found to be not adhering to these disclosure requirements might have concluded that the amounts involved were immaterial and hence that disclosure was unnecessary. Accordingly, all of the previous findings must be tempered by this unknown materiality factor.

SUGGESTIONS FOR FURTHER RESEARCH

A follow-up study of the reasons for nonadherence to APB Opinion income tax disclosure requirements readily sug-

gests itself. Such a study could proceed by requesting explanations from the managements and the independent auditors for the nonadherence to the disclosure requirements.

Another logical extension of the present study is a study of the extent to which income tax figures reported in annual reports to shareholders are broken down by jurisdiction. The present study only analyzed the extent to which corporations adhered to particular APB Opinion disclosure requirements. Corporations may meet these disclosure requirements by presenting overall income tax figures without indicating the Federal, state, local and foreign components. It was often impossible to determine the Federal income tax rates from the annual reports to shareholders, resulting in corporations knowingly or unknowingly obscuring their effective Federal income tax rates.

Still another logical extension of the present study is a study of the extent of adherence to SEC 10-K income tax disclosure requirements. This follow-up study would be quite appropriate in light of the new SEC income tax disclosure requirements.[1]

The present study could also be extended by expanding the sample size to include all NYSE and AMEX firms. This would alleviate the cell size problem of this study and increase the power of the statistical tests.

Finally, the present methodology suggests itself for studies of other financial reporting disclosure requirements,

as specified in APB Opinions, FASB Statements, or SEC releases. Of course, the "fair share" and social accountability rationales would not be adequate for such studies; other rationales would have to be developed.

FOOTNOTES

1. U.S., Securities and Exchange Commission, Regulation S-X, Rule 3-16(o), "General Notes to Financial Statements." Effective for fiscal years ending on or after December 28, 1973.

APPENDICES

APPENDIX I

CORPORATIONS INCLUDED IN SAMPLE

ACF Industries
ADM Industries
A. J. Industries
Abbott Labs
Aberdeen Manufacturing
Admiral
Airborne Freight
Airpax Electronics Inc.
Airwick Industries Inc.
Allied Control Co. Inc.
Alpha Portland Industries
Aluminum Company of America
American Brands
American Business Products
American Chain & Cable Co.
American Medicorp
American Standard
Ampex Corporation
Apache Corporation
Apco Oil Corporation
Arkansas Louisiana Gas Company
Armin Corporation
Ashland Oil
ASPRO, Inc.
Associated Food Stores Inc. New York
Automatic Service Company
Automation Industries
Avon Products
Babcock & Wilcox
Bartons Candy
Beneficial Corporation
Bertea Corporation
Beverly Enterprise
Bio-Dynamics
Brad Ragan Inc.
Bradford Computer
Briggs & Stratton
B. Brody Seating Company
Brunswick
Budget Industries Inc.
Bulova Watch Company Inc.
Burns International Security
California Financial
Campbell Soup
Canoga Industries
Capital Reserve
Carnation Company

APPENDIX I con't

Caterpillar
Certron Corporation
Charter Company
Chase Manhattan
Chesebough Ponds Inc.
Chock Full O'Nuts
Cincinnati Gas & Electric
Cincinnati Milacron Inc.
Circle K Corporation
City Gas Company of Florida
Clark Consolidated Industries
Clarkson Industries
Coleman Company Inc.
Colonial Sand & Stone
Commercial Metals
Condec Corporation
Connelly Containers
Continental Copper & Steel
Contintental Investment
Crouse Hinds Company
Cummins Engine
Cutler-Hammer
Cyprus Mines Corporation
Dan River
Data Documents
Dean Whitter
Deltona Corporation
Den-Tal-Ez
Dillingham
R. R. Donnelley
du Pont
ESB Inc.
Easco Corporation
Eason Oil Company
Eastern Airlines
Electronic Data Systems Corporation
Essex Chemical Corporation
Fairchild Camera
Federal Sign & Signal Corporation
Financial Corporation of Santa Barbara
Financial Federation Inc.
Financial General Bankshares
Firestone Tire & Rubber
Food Fair Stores
Ford Motor Company
Frank's Nursery Sales Inc.
Freeport Minerals
A. L. Garber, Inc.
Gaynor-Stafford Industries
General American Oil

APPENDIX I con't

General Cigar
General Development
General Portland Inc.
General Telephone & Electronics
Genuine Parts Company
Getty Oil
Gillette Company
Gimbel Brothers
Gino's Inc.
Gladding Corporation
Glover Inc.
Goldblatt Bros. Inc.
Gorin Stores
Gulton Industries Inc.
NMW
Hallcraft Homes
Hamilton Cosco Inc.
Hampshire Designers
Handy & Harman
John H. Harland Company
Harte Hanks Newspapers
Harvey Group Inc.
Walter E. Heller International
Hercules
Hi Shear
High Voltage Engineering
Hofmann Industries
Honeywell
Geo. A. Hormel
House of Fabrics
House of Ronnie, Inc.
Howell Industries
Huffman Manufacturing Company
Huntington Health
ICN Pharmaceuticals
IMC Magnetics
Illinois Central Industries
International General Industries
International Harvester
International Multifoods
Interpace
Investors Diversified Services
Iowa Electric Light & Power Company
Iroquois Brands
Irvin Industries Inc.
Johnson & Johnson
Jupiter Industries
K-Tel International
Kaiser Cement
Kansas-Nebraska Natural Gas

APPENDIX I con't

Kay Corporation
Kelsey Hayes
Key Company
Killearn Properties
Kit Manufacturing
S. S. Kresge
LFE Corporation
Leath & Company
Leisure Technology
Lenox Incorporated
Libby McNeill & Libby
Lloyds Electronics Inc.
Long Island Lighting
Lowenstein & Sons
LVO Corporation
Lykes-Youngstown
MCA
MEM Company, Inc.
Madison Square Garden Corporation
Mangel Stores Corporation
Mark Controls Corporation
Marlene Industries
Masonite Corporation
Maul Brothers
Arthur G. McKee
Medalist Industries Inc.
Microdot
Milton Roy Company
Moog Inc.
Morrison-Knudsen
Mount Vernon Mills
Munford Inc.
Munsingwear
NVF Company
National City Lines
National Distributing
National Industries
National Paragon Corporation
National Presto Industries
National Semiconductor
National Service Industries Inc.
National Standard
National Steel
New Idria Mining & Chemical
Newcor Inc.
Northern Natural Gas
OKC Corporation
Offshore Company
Ogden
Ohio Art
Ohio Brass
Olla Industries

APPENDIX I con't

Onan Corporation
Oriole Homes Corporation
Outboard Marine
Overhead Door Corporation
Owens Corning
Oxford First
PPG Industries
PSA
Pacific Savings & Loan
Pargas, Inc.
Park Electrochemical
Parkway Distributors
Penn Engineering
Perkin Elmer
Permaneer Corporation
Potlatch Corporation
Pratt & Lambert Inc.
Public Services of New Hampshire
Puget Sound Public and Lighting
Pullman Incorporated
Quaker Oats Company
Raymond Precision
Reserve Oil & Gas Company
Resistoflex Corporation
Revlon Inc.
Rio Grande Industries
Rogers Corporation
Royal Industries
Rust Craft
Ryerson & Haynes Inc.
SCA Services
SOS Consolidated
Safeway Stores Inc.
Sambo's Restaurant
San Jose Water Works
Santa Fe Industries
Sav-on-Drugs
Schering Plough Corporation
Scot Lad Foods
Security Plastics
Seligman & Associates
Shell Oil Company
Shenandoah Oil Corporation
Sherwood Medical Industries
Henry I. Siegel Company, Inc.
Sifco Industries
Sigma Instruments
Signode Corporation
Simplicity Pattern

APPENDIX I con't

Singer Company
Skaggs Companies
Smith International
Solitron Devices Inc.
Soundesign Corporation
Southdown Inc.
Southern Pacific
Southland Corporation
Spring Mills Inc.
Standard Motor Products
Stardust Inc.
Stelbar Industries Inc.
Stevcoknit Inc.
Superior Surgical Manufacturing
Synalloy Corporation
Taft Broadcasting
Tampa Electric
Tandy Corporation
Teleflex Inc.
Texas Instruments
Texas Utilities
Textron
Thiokol Chemical
Trans World Airlines
Traingle Industries
UMC Industries
Union Carbide
United Dollar Stores
U. S. Home Corporation
United States Radium Corporation
United States Tobacco
Valle's Steak House
Varo Inc.
Veeco Instruments Inc.
Viacom International
Victor Comptometer
Voplex Corporation
WUI, Inc.
Watsco Inc.
Weatherhead Company
West Point Pepperell
Weyerhaeuser
Whiting Corporation
Wieboldt Stores
Wilshire Oil Company of Texas
Wilson Brothers
Winn Dixie Stores Inc.
Wrather Corporation
Xerox Corporation
Xtra, Inc.
Zero Manufacturing Company
Zimmer Homes

APPENDIX II

CORPORATIONS ELIMINATED IN SELECTION PROCESS AND REASON

NEW YORK STOCK EXCHANGE

Alcan Aluminum	Canadian
American Century Mortgage	REIT
Arcata National Corp.	Loss
Barlett Mortgage	REIT
Chicago Milwaukee Corp.	Loss
Contintental Can	Loss
Distillers Corp.	Canadian
Dome Mines Limited	Canadian
Duplan Corp.	Loss
First National Stores	Loss
First Real Estate Equity Mortgage	REIT
Greater Washington Investors	Loss
INA Investment Securities	Investment Fund
Institutional Investors Trust	REIT
Japan Fund	Investment Fund
National Union Electric Co.	Loss
Newhall Land and Farming	Loss
Niagara Share	Investment Fund
North America Mortgage Investment	REIT
Pacific Petroleums	Canadian
Petroleum Corporation of America	REIT
Pueblo International	Loss
F & M Schaefer	Loss
Shell Transport	British
Unilever Ltd.	British
Wachovia Realty Investments	REIT

APPENDIX II con't

AMERICAN STOCK EXCHANGE

Aerodex Inc.	Loss
All American Industries	Loss
Alliance Tire	Israeli
American Israeli Paper	Israeli
Aquitaine Co. of Canada Ltd.	Canadian
Arwood Corporation	Loss
Atlas Consolidated	Filipino
BT Mortgage Investors	REIT
Beneficial Standard Mortgage	REIT
Bow Valley Industries	Canadian
Canadian Homestead Oils Ltd.	Canadian
Canadian Hydrocarbons	Canadian
Domtar Ltd.	Canadian
Euthenics Systems	Loss
Family Record Plan Inc.	Loss
Federal Resources Corporation	Loss
Fidelco Growth Investors	REIT
Fields Plastics and Chemicals	Loss
M. H. Fishman Co. Inc.	Loss
Foodarama Supermarkets	Loss
Giant Yellowknife Mines	Canadian
Hayden Stone Inc.	Loss
Hudson's Bay Oil and Gas Co.	Canadian
Hycel, Inc.	Loss
Interphoto Corp.	Loss
Larwin Realty	REIT
LIBCO Corp.	Loss
Marinduque Mining	Filipino
Mego International	Loss
Mortgage Growth Investors	REIT
Movielab Inc.	Loss
NJB Prime Investors	REIT
O'okiep Copper	South African
Penobscot Shoe Co.	Loss
Prarie Oil Royalties	Canadian
Realty Equities	Loss
Supercrete Ltd.	Canadian
Unionamerican Mortgage and Equity Trust	REIT
United National Corp.	Loss
Wichita Industries	Loss
Wilson Pharmaceutical and Chemical	Loss
Zion Foods	Loss

APPENDIX III

COMPUTATION PROCEDURES FOR FEDERAL INCOME TAX RATES

In computing the Federal income tax rates (flow-through and normalized), each corporation's income statement was recast as follows if not already in this format:

Net income before Federal income taxes		xx
Federal income taxes:		
Current	xx	
Deferred	xx	
Total Federal income taxes		xx
Net income		xx

The "current Federal income taxes: represents the flow-through figure for computational purposes and the "Total Federal income taxes" represents the normalized figure. Each of these figures was divided by "Net income before Federal income taxes" to derive the flow-through and normalized Federal income tax rates.

This recasting was necessary whenever Federal income taxes were included among the operating expenses or whenever the income tax section included other taxes in addition to Federal income taxes. Thus, all taxes other than Federal income taxes were considered operating expenses of the corporation. A good example (though not part of the present study) is Gulf Oil Corporation. Its 1974 income statement includes a $4,723,000,000 item among the operating expenses entitled "Taxes on income and general taxes." Note 8 to the statements shows the following (all figures in millions of dollars:

United States taxes	
Current income	$241
Investment tax credits	(51)
Deferred income	(129)
Consumer excise	802
Sales, use, ad valoren and other	212
Total United States taxes	1075
Foreign taxes	
Current income	2641
Deferred income	48
Consumer excise	692
Sales, use, ad valoren and other	267
Total foreign taxes	3648
	$4723

Only the first three items are included in the computation of flow-through and normalized Federal income tax rates; the remaining items are included as operating expenses. Thus, the flow-through Federal income tax is $190,000,000 ($241,000,000 - 51,000,000) and the normalized Federal tax is $61,000,000 ($241,000,000 - 51,000,000 - 129,000,000). The $61,000,000 normalized Federal income tax is then added to the net income figure of $1,065,000,000 to arrive at a net income before Federal income taxes of $1,126,000,000.

Recast income statements were also necessary for corporations reporting extraordinary items, gains and losses from discontinued operations net of taxes, and prior period adjustments. Items of this nature were restated in the form above and combined in the respective classifications.

The major difficulty in recasting these statements involved corporations that reported extraordinary items. Quite often the statements disclosed the income tax effect

of the extraordinary items but did not break the figure into its current and deferred components. In such situations, the total tax effect was considered current. The income statement of Dan River Inc. for 1972 illustrates this procedure:

Earnings before income taxes	$6546
Provision for income taxes	2565
Earnings before extraordinary gain	3981
Extraordinary gain net of $840 income taxes	1160
Net earnings	$5141

The current and deferred Federal income taxes were $1020 and $1087, respectively. Therefore, the flow-through figure became $1860 (1020 + 840); the normalized figure, $2947 (1020 + 840 + 1087); with the denominator at $8088 (5141 + 2947).

Federal income tax rates could not be computed for corporations that did not disclose Federal and other income taxes. However, if such a breakdown was disclosed the following year, the same proportions were assumed to apply to the year of study. For example, Aberdeen Manufacturing Company did not disclose a breakdown between Federal and state income taxes for 1972; for 1973, the provisions for current and deferred state income taxes comprised one-sixth of the provisions for total current and deferred income taxes. Therefore, both the total flow-through and normalized income tax rates were reduced by one-sixth to arrive at the Federal tax rates for 1972, the year of study.

Federal income tax rates could not be computed for

corporations that did not disclose any of the following items: Federal income taxes per se; a breakdown of Federal income taxes into current and deferred components; or income tax effects of gains or losses from discontinued operations, extraordinary items, or prior period adjustments.

APPENDIX IV

QUESTIONNAIRE

COLLEGE OF BUSINESS ADMINISTRATION • UNIVERSITY OF FLORIDA • GAINESVILLE 32611
Accounting Department
904-392-0155

November 1974

Dear Sir:

As part of a research project on the financial reporting of corporate income taxes, I need to obtain certain tax information regarding your corporation's 1972 annual report. I was able to obtain most of the data needed on your corporation from published reports with the exception of current and deferred Federal income taxes and the investment credit.

Will you please provide the information pertaining to the current and deferred Federal income taxes and the investment credit requested below. You may use the bottom of this sheet and enclose it in the return envelope provided.

This information is required in 10-K reporting to the Securities and Exchange Commission.

Thank you for your cooperation.

Sincerely,

James R. Hasselback
Assistant Professor

For the 1972 annual report:

Amount of current Federal income tax _____

Amount of deferred Federal income tax _____

Method used in accounting for the investment credit:

Flow-through _____ Deferral _____

Amount of investment credit written off in the annual report _____

SELECTED BIBLIOGRAPHY

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BOOKS

Barr, Anthony James, and Goodnight, James Howard. A User's Guide to the Statistical Analysis System. Raleigh, North Carolina: Student Supply Stores, North Carolina State University, August 1972.

Bedford, Norton M. Extension in Accounting Disclosure. Englewood Cliffs, New Jersey: Prentice-Hall., 1973.

Carey, John L. The CPA Plans for the Future. New York: AICPA, 1965.

Glass, Gene V., and Stanley, Julian C. Statistical Methods in Education and Psychology. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1970.

Goodman, Hortense, and Lorensen, Leonard. Illustrations of Interperiod Tax Allocation. New York; AICPA, 1974.

Janson, Ernest C., MacLean, John A., and Wright, David T. Financial Reporting and Tax Practices in Nonferrous Mining, 3rd Edition. New York: Coopers & Lybrand, 1974.

Lorie, James H., and Hamilton, Mary T. The Stock Market: Theories and Evidence. Homewood, Illinois: Richard D. Irwin, Inc., 1973.

Mautz, R. K. Financial Reporting by Diversified Companies. New York: Financial Executives Research Foundation, 1968.

Nurnberg, Hugo. Cash Movements Analysis of the Accounting for Corporate Income Taxes. East Lansing, Michigan: Division of Research, Graduate School of Business Administration, Michigan State University, 1971.

Siegel, Sidney. Nonparametric Statistics for the Behaviorial Sciences. New York: McGraw-Hill, 1956.

Snedecor, George W., and Cochran, William G. Statistical Methods, 6th Edition. Ames, Iowa: Iowa State University Press, 1967.

Stern, Philip M. The Rape of the Taxpayer. New York: Random House, 1973.

ARTICLES AND PERIODICALS

Adlman, Monroe. "Accounting for Income Taxes--Effect on Corporate Earnings." The Tax Executive (October, 1968), 1-7.

Beaver, William H., Kennelly, John W., and Voss, William M. "Predictive Ability as a Criterion for the Evaluation of Accounting Data." The Accounting Review (October, 1968), 675-683.

Benston, George J. "The Value of the SEC's Accounting Disclosure Requirements." The Accounting Review (July, 1969), 515-532.

Cochran, W. G. "The Chi-Square Test of Goodness of Fit." Annuals of Mathematical Statistics (Volume XXIII, 1952), 315-345.

Coleman, Almand R. "Controversial Areas of Corporate Reporting Practices." Financial Executive (October, 1969), 36-41.

Comiskey, Eugene E., and Hasselback, James R. "Analyzing the Profit Tax Relationship." Financial Management (Winter, 1973), 57-62.

Corcoran, W. Waune, and Leininger, Wayne E., Jr. "Financial Statements--Who Needs Them?" Financial Executive (August, 1970), 34-47.

Cushing, Barry E., and Deakin, Edward B. "Firms Making Accounting Changes: A Comment." The Accounting Review (January, 1974), 104-111.

Dasher, Paul E., and Copeland, Ronald M. "Some Further Evidence on 'Criteria for Judging Disclosure Improvement'." Journal of Accounting Research (Spring, 1971), 32-37.

Davidson, Sidney. "Accounting and Financial Reporting in the Seventies." The Journal of Accountancy (December, 1969), 29-37.

Frishkoff, Paul. "An Empirical Investigation of the Concept of Materiality in Accounting." Empirical Research in Accounting: Selected Studies 1970, 116-129.

Gosman, Martin L. "Characteristics of Firms Making Accounting Changes." The Accounting Review (January, 1973), 1-11.

"An Interview With John C. Burton." Management Accounting (May, 1975), 19-23.

Morley, Michael F. "A Defense of Deferred Taxation Provisions." The Accountant's Magazine (April, 1973), 178-184.

Mundheim, Robert. "Forward, Symposium on Securities Regulation." Law and Contemporary Problems (Summer, 1964), 648.

Neumann, Frederick L. "The Auditing Standard of Consistency." Empirical Research in Accounting: Selected Studies 1968, 8-16.

_____. "The Incidence and Nature of Consistency Exception." The Accounting Review (July, 1969), 546-554.

Norr, David. "What a Financial Analyst Wants From an Annual Report." Financial Executive (August, 1970), 20-23.

Nurnberg, Hugo. "Observations on the Financial Reporting of Depreciation and Income Taxes." Financial Executive (December, 1971), 32-37.

Pechman, Joseph A. "Distribution of Federal and State Income Taxes by Income Classes." The Journal of Finance (May, 1972), 179-191.

Pointer, Larry Gene. "Disclosing Corporate Tax Policy." The Journal of Accountancy (July, 1973), 56-61.

Ronen, Joshua. "Some Effects of Sequential Aggregation in Accounting on Decision-Making." Journal of Accounting Research (Autumn, 1971), 307-332.

Singhvi, Surendra S. "Disclosure to Whom? Annual Financial Reports to Stockholders and to Securities and Exchange Commission." The Journal of Business (July, 1968), 347-351.

Smith, Ephraim P., and VanGermeersch, Richard G. "Excerpts From a Survey Report on Application and Impact of APB Opinion No. 11 on Deferred Income Taxes." The CPA Journal (March, 1973), 246-247.

Smith, James E., and Smith, Nora P. "Readability: A Measure of the Performance of the Communication Function of Financial Reporting." The Accounting Review (July, 1971), 552-561.

Stallman, James C. "Toward Experimental Criteria for Judging Disclosure Improvement." Empirical Research in

Accounting: Selected Studies 1969, 29-43.

Stempf, Victor H. "Trends in Accounting Procedures." The Journal of Accountancy (June, 1940), 454.

Stringer, Kenneth W. "Discussion of An Empirical Investigation of the Concept of Materiality in Accounting." Empirical Research in Accounting: Selected Studies 1970, 133-137.

Surrey, Stanley S. "The United States Income Tax System--The Need for a Full Accounting." The Journal of Accounancy (February, 1968), 57-61.

Wakeford, H. W. "Tax Information Banks and Other Lenders Want in Evaluating Financial Statements." Taxation for Accountants (March, 1973), 152-157.

Watson, A. J. "Do Financial Statements Communicate?" The Journal of Accountancy (April, 1969), 59-60.

AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

Accounting Principles Board, Opinion No. 2, "Accounting for the Investment Credit," New York, November, 1962.

_____, Opinion No. 4, "Accounting for the Investment Credit,: New York, March, 1964.

_____, Opinion No. 11, "Accounting for Income Taxes," New York, March, 1964.

_____, Opinion No. 23, "Accounting for Income Taxes--Special Areas," New York, April, 1972.

_____, Opinion No. 24, "Accounting for Income Taxes--Investments in Common Stock Accounted for by the Equity Method (Other than Subsidiaries and Corporate Joint Ventures)," New York, April, 1972.

_____, Opinion No. 30, "Reporting the Results of Operations --Reporting the effects of disposal of a segment of a business, and extraordinary, unusual and infrequently occurring events and transactions," New York, June, 1973.

Auditing Standards and Procedures, New York, 1963.

Accounting Trends and Techniques, 26th Edition, New York, 1972.

Study Group on the Objectives of Financial Statements, Objectives of Financial Statements, New York, 1973.

U.S. SEC COMMISSION

Accounting Series Release No. 96, "Accounting for the Investment Credit." January 10, 1963.

Regulation S-X, Rule 3-16(o), (as amended June 23, 1972 and before December 28, 1973).

Regulation S-X, Rule 3-16(o), (as amended December 28, 1973).

Regulation S-X, Rule 5-03(15).

NEWSPAPERS

Lansing State Journal, "402 Americans Earning $100,000 Charged With Artful Tax-Dodging," March 14, 1973, p. F-2.

Detroit Free Press, "Settled by IRS for $2.2 Million," May 5, 1973, p. 28.

The Wall Street Journal, "House Democrat Says 11 Big Firms Avoided Paying Any Federal Income Tax Last Year," August 2, 1973, p. 5.

MISCELLANEOUS

Congressional Record - House, "Corporate Federal Tax Payments and Federal Subsidies to Corporations," July 19, 1972.

_____, "Corporate Federal Tax Payments and Federal Subsidies to Corporations for 1972," August 1, 1973.

Forbes, (advertisement), "I Say Let's Keep the Campaign Honest. Mobilize "Truth Squads"...," September 1, 1972, p. 29.

Internal Revenue Code, Sec. 1564(a) and Reg. 1564-1.