



## ABSTRACT

### THE EFFECTS OF ACCOUNTING POLICY DECISIONS ON TRENDS IN REPORTED CORPORATE EARNINGS PER SHARE

By

Barry Edwin Cushing

A review of the financial literature indicates that there is concern among the financial community about the current state of flexibility in accounting principles. Much of this concern can be traced to the loss of inter-period comparability of the financial statements of firms which implement changes in their accounting policies or other accounting policy decisions. Accountants have responded to this concern by publishing in the accounting literature many essays dealing with the issues of flexibility, uniformity and comparability. However, research into the effects of accounting policy decisions on reported earnings has been meager.

This study examines financial information related to 580 accounting policy decisions implemented by American corporations during the period from 1955 to 1966, each of which was the cause of a qualified auditor's opinion. An attempt was made in each instance to determine

the effect of the accounting policy decision on the reported earnings per share of the company. Using an arbitrarily established set of materiality criteria, these effects were then classified as either (1) material, (2) less material, or (3) immaterial.

A method of analysis was developed which enabled a categorization of the decisions with material and less material effects as either consistent or inconsistent with the existence within the firm of a motive to report a more smoothly rising trend of reported earnings. Of the total of 249 accounting policy decisions which were considered to have a material effect on the reported earnings of the implementing firms, 167, or 67 per cent, had effects which were consistent with an income smoothing motive in the year of the implementation. The direction of the effect on reported earnings was to increase earnings in 192 cases, or 77 per cent of the total of 249. In addition, ten of these decisions were considered to have had effects consistent with a "housecleaning" motive; that is, they resulted in decreased earnings in a year of already substantially below average earnings, and benefitted the reported earnings of subsequent years.

Of seventy-six decisions with a less material effect, thirty, or 39.5 per cent, were categorized as having effects which were consistent with an income smoothing motive in the year of their implementation, while the remaining forty-six had effects inconsistent with such a motive.

These proportions are significantly different from the corresponding proportions among the decisions with a material effect. This difference is interpreted as indicative of a tendency for decisions with a more material effect to be implemented during a period in which they will have a minimum of unfavorable effect upon the earnings trends of the implementing companies, whereas decisions with less material effects are not as carefully timed. An examination of the trends of reported earnings of some companies after the year of implementation of their decisions reveals support for this interpretation.

It was concluded that the present treatment of the effects of changes in accounting policy on the financial statements, involving qualification of the audit report and footnote disclosure, is in some cases inadequate. Two proposals for improving the reporting of these events and their effects were suggested in this study. One of these was to make mandatory the restatement of the financial statements of at least one prior year in the annual report of a year in which a change was implemented, in order that the financial statements of the two most recent periods would always have been prepared on a consistent basis. An alternative suggestion was to require placement of the dollar effect of a change in accounting policy among the extraordinary items (only in the year of the change) in order that income from operations would always have been prepared on a consistent basis in the two most recent periods.



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EARNINGS PER SHARE

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## CHAPTER I

### INTRODUCTION

Members of the accounting profession with whom this writer has associated occasionally tell stories about corporate managements who wish to portray their company's financial position and results of operations in the best possible light, and are willing to stretch the bounds of acceptable accounting as far as possible in order to do so. Such "tales" usually concern a company whose earnings had been destined to take a sharp dip until several changes and adjustments were made in its accounting policies, enabling the company to report its "n"th consecutive increase in earnings over the prior year, and to describe its success using glowing phraseology within the glossy pages of its annual report.

Within the accounting literature can be found similar reports. For example, Michael Schiff has made an investigation of the financial statements of Chock Full O'Nuts Corporation, which he claims illustrate "the choice of accounting method as a device available to managers attempting to make stockholders

happy."<sup>1</sup> Similarly, Maurice Moonitz has commented on his experience: "As one highly-placed executive told me, 'My objective is to report the same earnings per share as last year, plus five cents, and I will attain that objective if the independent accountants let me.'"<sup>2</sup>

Often the implication derived from such stories is that the existence of the circumstances they describe provides a strong argument for narrowing the range of acceptable alternative accounting practices. If the freedom of choice among alternative practices was taken from management, it might be expected that the comparability of financial statements between time periods would be improved.

However, the removal of management's flexibility in preparing and presenting the financial statements of corporations would be a serious step. The existence of a few incidents of apparent manipulation does not enable one to conclude that accounting policy decisions are usually motivated by a desire on the part of management to make its performance appear favorably. It

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<sup>1</sup>Michael Schiff, "Accounting Tactics and the Theory of the Firm," Journal of Accounting Research, 4, No. 1, Spring, 1966, p. 62.

<sup>2</sup>Maurice Moonitz, "Discussion Comments," in R. K. Jaedicke, Y. Ijiri, and O. Nielsen, (eds.) Research in Accounting Measurement, American Accounting Association, 1966, p. 121.

could very well be that most accounting policy decisions made by management are made for sound reasons.

What this discussion suggests is that knowledge of the motivation behind accounting policy decisions made by corporations would be useful in deciding upon the desirability of the flexibility of choice among alternative accounting practices that managements now have. However, such knowledge of motivation is unlikely to be obtainable directly.

Still, each year many firms make major accounting policy decisions, the most common of which involve a change in some aspect of their financial accounting practices. Often these decisions will have a substantial effect upon the reported earnings of these companies. A close examination of the financial data involved in several of these decisions could reveal consistent patterns which would be useful in establishing an understanding of the reasons behind the changes. This dissertation will report the results of such an examination.

### Background

Personal concern about the usefulness of corporate financial statements as currently prepared in meeting the needs of investors and others who provide resources for use by corporate entities has led me to an interest

in this subject. That this concern is shared by others in the financial community is evidenced by numerous recent articles in financial periodicals. For example, Forbes recently made this statement in a lead article: "Corporate earnings figures have become little more than a composite of a great many accounting estimates and judgments. At worse, this opens possibilities for the baldest of manipulation. At best it can make seemingly comparable companies report quite uncomparable statements."<sup>3</sup>

Similarly, The Wall Street Journal regularly expresses concern in feature articles over the problems encountered by investors in extracting meaningful information from corporate annual reports. In a May 12, 1966 feature article, the Journal asserted that "these 'generally accepted' principles are so varied, and can be applied so flexibly, that investors can hardly be blamed for sometimes throwing up their hands in confusion when trying to compare a company's current results with its past performance, or with the results of a competitor."<sup>4</sup> Six months later a Journal

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<sup>3</sup>"What Are Earnings? The Growing Credibility Gap," Forbes, May 15, 1967, p. 30.

<sup>4</sup>"Accounting Reform: Pending CPA Rulings Expected to Clarify Firms' Profit Reports," The Wall Street Journal, May 12, 1966.

feature was even more critical in declaring "it's often impossible to meaningfully compare one company's results with another's; even comparing a company's results in one year with its performance in another year can be difficult."<sup>5</sup>

Articles appearing in the Financial Analysts Journal, another bellweather of the feelings of the financial community, often suggest that the current state of accounting is less than optimal. Consider this comment by David Norr in one recent issue: "it is up to those involved in preparing statements - management, accountants, regulatory bodies and the exchanges - to provide us with more comparable and more significant data."<sup>6</sup> More recently Estes and Brown state that "Most accountants and analysts would agree, however, that current financial statements are not sufficiently comparable between companies and between industries, and that presently acceptable methods permit arbitrary manipulation of financial reporting."<sup>7</sup>

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<sup>5</sup>Lee Berton, "CPA's Under Fire: Auditors' Critics Seek Wider, Faster Action in Reform Practices," The Wall Street Journal, November 15, 1966.

<sup>6</sup>David Norr, "Accounting and Analysis," Financial Analysts Journal, May-June 1964, p. 38.

<sup>7</sup>Ralph W. Estes, CPA, and Homer A. Brown, CPA, "Comparability and Flexibility," Financial Analysts Journal, May-June 1966, p. 65.



These expressions of concern should be cause for reflection among accountants, and it can be said that the accounting profession has certainly not been unconcerned over the usefulness of corporate financial statements. Within the accounting literature of the past several years can be found many essays dealing with the problems of uniformity, comparability, and the wide range of acceptable alternative accounting methods. For example, in a booklet published "for purposes of discussion" of accounting problems, Arthur Andersen & Co., one of the largest and best known firms of Certified Public Accountants, led off with this statement: "The accounting profession in the United States is faced with the necessity of establishing sound accounting principles on an authoritative basis - principles that will eliminate the wide range of alternative practices now available under what are called 'generally accepted accounting principles,' and that will produce financial reporting that is fair to all segments of our complex society. The need is urgent."<sup>8</sup>

A central concern of most of the criticisms from the financial community seems to be the issue of comparability. There are two aspects to this issue,

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<sup>8</sup> Arthur Andersen & Co., Accounting and Reporting Problems of the Accounting Profession, October 1962, (preface).

(1) comparability among the statements of two or more entities, and (2) comparability of the statements of a single entity over time. Responding to this criticism, John L. Carey, then Executive Director of the American Institute of Certified Public Accountants, delineated these issues in this manner: "While the users of financial statements have every right to expect consistency of accounting practices in a given company from year to year, comparability among companies is considerably more complex and the prospects, therefore, more remote."<sup>9</sup>

A study made for the purpose of determining the relative importance of these two aspects of comparability was recently published in The Accounting Review. On the basis of analysis of data generated by a computer simulation model, the author concluded that, "Consistent application of accounting policies, however diverse these policies may be, will lead to earnings per share results that depict economic fluctuations more accurately and similarly than even moderately inconsistent applications of accounting policies, however initially similar these may have been."<sup>10</sup>

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<sup>9</sup>John L. Carey, "CPAs Under Fire?" Financial Analysts Journal, January-February 1967, p. 36.

<sup>10</sup>Andrew M. McCosh, "Accounting Consistency - Key to Stockholder Information," The Accounting Review, Vol. XLII, No. 4, October 1967, p. 699.

The present study will focus on the problem of the comparability of financial statements between periods. The complexity of the problem of inter-company comparability, together with the implication drawn from the McCosh research that consistency between periods is more important in the analysis of trends than consistency between companies, both combine to suggest that the former subject may be a more productive research topic.

#### Accounting Policy Decisions and Management Motives

If Mr. Carey's assertion that financial statement users have every right to expect consistency of accounting practices within a company over time is accepted, it might then be asked: is this expectation fulfilled? Of course it cannot be stated that corporations never depart from consistent application of accounting principles - indeed, such a situation would be indicative of a stagnancy in corporate accounting which would be undesirable. The claim of most companies which make a change in application of accounting principles is usually to the effect that the change represents an improvement in the company's financial reporting. But the frequency of appearance of critical comments in recent financial literature, as quoted earlier, indicates that not all outside observers agree. For example, one author has articulately expressed his skepticism relative

to the motives of management in choosing accounting principles: "if you can imagine that, in wrestling with the choice of depreciation methods the minds of those involved in the decision were ever troubled by the question of which approach resulted in the fairer presentation of performance, you have a more lively imagination than have I."<sup>11</sup>

Any number of motivations, some honorable and some perhaps less honorable, could influence a managerial decision to change an accounting principle and thereby detract from the comparability of successive sets of financial statements. A list of the more important of such motivations includes:

- (1) tax advantages - the new policy is consistent with a tax treatment which results in a lower tax liability than its alternative.
- (2) isomorphic superiority - the new policy reflects reality better than its alternative.
- (3) simplicity - the new policy is easier to use and understand than its alternative.
- (4) industry conformity - the new policy is used by other similar firms in the same industry.

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<sup>11</sup>Charles E. Johnson, "Management's Role in External Accounting Measurements," in R. K. Jaedicke, Y. Ijiri, and O. Nielsen (eds.), Research in Accounting Measurement, American Accounting Association, 1966, p. 91.

- (5) inter-divisional conformity - the new policy was adopted at one or more corporate divisions (often newly acquired) in order to conform their policies to those of the corporation as a whole.
- (6) authoritative acceptability - the new policy has been ruled preferable by some authoritative body.
- (7) window dressing - the new policy has an effect on the balance sheet which is considered advantageous.
- (8) desired effect on earnings - the new policy has an effect on reported earnings, either immediately or over time, which is considered advantageous.

Although it is admittedly not possible to examine the information disclosed relative to any given accounting policy change and thereby determine which of the above motives had the major influence on the decision, it is nevertheless possible to conclude from such examination that the decision was either consistent or not consistent with any given motive. For example, if a firm changes from straight line depreciation to an accelerated method, it cannot be inferred that this change was motivated by a desire to reduce the tax liability, but

it is reasonable to conclude that such a change is consistent with a tax minimization motive.

The present study will examine information pertaining to a large number of accounting policy decisions and attempt to classify their effects as being either consistent or inconsistent with the existence of a motive to affect reported earnings in a favorable manner. The analysis will concern itself only with the immediate effects on reported earnings of an accounting policy change - reasoning that the long run effects are much more uncertain or even indeterminate, both from the viewpoint of the corporate decision maker and the researcher. Support for this view was cited by Stephen A. Zeff in published discussion comments following the presentation of a paper on this subject at Stanford University in 1965: "It was stated by a practitioner in the session . . . that it was his experience that managers were much more responsive and attentive to exigencies operating solely during the year in which changes in accounting policy are being considered. Long-term effects did not, in his opinion, seem to be governing."<sup>12</sup>

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<sup>12</sup>Stephen A. Zeff, "Discussion Comments," Research in Accounting Measurement, ed. by Robert K. Jaedicke, Yuji Ijiri, and Oswald Nielsen, American Accounting Association, 1966, p. 251.

Three types of effects on the current year's reported earnings which might be considered desirable are postulated:

- (1) income maximization - the adoption of the new policy results in the reporting of higher current earnings than would have been reported had the old policy been consistently followed.
- (2) income smoothing - the adoption of the new policy results in reducing the magnitude of, or eliminating, a temporal fluctuation from a smoothly rising trend of reported earnings.
- (3) housecleaning - in a year in which reported earnings would otherwise be highly disappointing anyway, the adoption of the new policy has the effect of eliminating a substantial amount of inventory, fixed asset, or intangible costs which would otherwise be a burden on the reported earnings of a number of future periods.

This latter phenomenon may require clarification, and for this purpose let us look at an example from the study. In 1962 Paramount Pictures Corporation, which had been reporting profits for a number of years, reported a very sizeable loss of \$4.16 per share. In that same year the decision had been made to expense a large amount of previously capitalized developmental type expenditures, amounting to \$0.53 per share. The

loss if this decision had not been made would have been \$3.63 per share. Therefore the amount of additional disappointment brought about by Paramount's accounting policy change in 1962 was probably minor, especially in relation to the favorable effect on future reported earnings.<sup>13</sup>

The methodology utilized in classifying the effects of accounting policy changes as consistent or inconsistent with the above desirable effects on reported earnings will be discussed in Chapter II. At this point a critique of related studies as reported in the accounting literature will be offered.

#### Analysis of Related Literature

In 1953 Samuel R. Hepworth extensively discussed the possibility that management might use its discretion in choosing accounting principles "for smoothing or leveling the amplitude of periodic net income fluctuations."<sup>14</sup> Hepworth discussed several advantages that such a policy might have: (1) maintaining the confidence of owners and creditors in management, (2) holding down

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<sup>13</sup>The Forbes article "What Are Earnings?" contains a discussion of this subject on page 42. It makes note of a tendency for housecleaning to occur in a year in which new management has taken over a company.

<sup>14</sup>Samuel R. Hepworth, "Smoothing Periodic Income," The Accounting Review, XXVIII, No. 1, January 1953, p. 32.



labor unrest which is caused when a sharp rise in net income is unaccompanied by a similar boost in wages, (3) contributing to a more stable market psychology and level of economic activity, and (4) lowering taxes, an advantage which was particularly relevant in the era of excess profits taxes. He then surveyed several accounting techniques which were available to management for smoothing net income. Hepworth made no attempt to empirically support his discussion.

In a 1964 article Myron Gordon set forth the income smoothing theorem in a more formal manner. He advanced four propositions concerning the tendency for management's job security to increase with stockholder satisfaction, but at a decreasing rate. He then stated this theorem: "Given that the above four propositions are accepted or found to be true, it follows that a management should within the limits of its power, i.e., the latitude allowed by accounting rules, (1) smooth reported income, and (2) smooth the rate of growth in income."<sup>15</sup>

Then before a seminar at Stanford University in 1965, Gordon and two colleagues presented the first known empirical test of the income smoothing hypothesis. That test examined the behavior of 21 firms in the

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<sup>15</sup>Myron J. Gordon, "Postulates, Principles and Research in Accounting," The Accounting Review, XXXIX, No. 2, April 1964, p. 262.

chemical industry with respect to the investment credit. Exponential smoothing was used to estimate earnings figures that were normal with respect to average industry growth, average growth of each individual company, and average rate of return of each individual company. According to Gordon, Horwitz and Meyers: "The 21 corporations have been classified according to whether their treatment of the investment credit raised (flow through) or lowered (allocated) income and whether their income was above or below normal under each criterion discussed above. . . ." "The chi-square test was used to test the null hypothesis that the method of accounting for the investment credit is independent of the rate of growth of earnings per share."<sup>16</sup> The form of the contingency table utilized for the chi-square test is illustrated in Table 1.1 on the following page. The alternative, or smoothing, hypothesis reflecting the expectations of the researchers was that firms reporting above normal earnings would have used the allocation treatment of the investment credit, whereas firms reporting below normal earnings would have used the flow

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<sup>16</sup>Myron J. Gordon, Bertrand N. Horwitz & Phillip T. Meyers, "Accounting Measurements and Normal Growth of the Firm," in R. K. Jaedicke, Y. Ijiri and O. Nielsen, (eds.), Research in Accounting Measurement, American Accounting Association, 1966, p. 227.

Table 1.1 Contingency table used in the Gordon-Horwitz-Meyers study

Accounting Treatment	Reported Earnings	
	Above Normal	Below Normal
Flow through	I	II
Allocate	III	IV

through treatment. Because of the small sample size, the chi-square statistic did not turn out to be significant at the five per cent level. However the results did tend to support the income smoothing hypothesis.

The Gordon-Horwitz-Meyers methodology contains several major limitations which were not pointed out in the published discussion comments following the paper. These limitations will be discussed here and a brief indication will be given of how the income smoothing portion of this study will improve upon these shortcomings.

First, the use of exponential smoothing to estimate an earnings level consistent with management's goals involves serious problems. The exponential smoothing technique may often predict a decline from the prior period's earnings, and this is completely inconsistent with management's goals as typically expressed - to

show a continuous pattern of improvement in performance. A superior method of predicting earnings would involve projecting from past trends while always imposing the constraint that the predicted level must be higher than the level of the previous year.

The second major limitation of the Gordon-Horwitz-Meyers study is their failure to segregate decisions whose effect on reported earnings was immaterial from those whose effect was material. It seems unlikely that a company with average earnings of, say, \$1,000,000 would be concerned about the effect on earnings of a \$1,000 item, and to include a significant number of such insignificant items in the study could easily distort the results. The elimination from consideration of decisions whose effect is less than some percentage of income or average income, and also less than some percentage of the change in income from the prior period, would seem to be appropriate.

The final shortcoming of the Gordon-Horwitz-Meyers methodology to be discussed is somewhat more complex and involves the appropriateness of the chi-square technique. Consider the following hypothetical earnings per share data:

	Firm A	Firm B
predicted earnings per share	\$ 2.00	\$ 2.00
earnings per share using flow through	\$ 2.25	\$ 2.05
earnings per share using allocation	\$ 1.95	\$ 1.75

Now refer back to the contingency table on page 16. Notice that the smoothing hypothesis of Gordon-Horwitz-Meyers predicts that a smoothing motivation would cause firms to appear in cells II and III. Now notice that if firms A and B use the flow through treatment their reported earnings will be above normal and they will appear in cell I. If, on the other hand, firms A and B use the allocation treatment their earnings will be below normal and they will appear in cell IV. There is no way for these firms to appear in predicted cells II and III, regardless of what choice they make or what motives they harbor. Yet by inspection one can easily see that if these firms are motivated by a desire to smooth reported net income, firm A will choose the allocation treatment that brings it to within \$0.05 of normal earnings, and firm B will choose the flow through treatment for similar reasons.

This little illustration has shown that the chi-square technique is inappropriate for classifying accounting policy decisions as regards their smoothing or non-smoothing effects. Such a classification must involve a closer examination of the individual circumstances involved in each such decision. In each case an attempt must be made to determine if reported earnings under the policy adopted are closer to, or further away from, normal earnings than they would have been under the alternative policy.

The next study of accounting policy decisions to be discussed is a dissertation which was completed at Indiana University in 1966. This study focussed on changes in accounting policies by a number of companies, and their effect on reported earnings per share. The author examined the annual reports of 50 randomly selected companies for a ten-year period, and found that a total of 163 accounting policy decisions were made. The direction of the effect on reported earnings per share was determinable in 121 of these decisions. Of these, 55 per cent increased reported earnings per share whereas 45 per cent decreased reported earnings per share. In only sixty-one cases was the effect on reported earnings per share greater than the rule-of-thumb 5 per cent materiality criterion.<sup>17</sup>

This study makes a contribution in revealing the relative proportion of changes with increasing effects and with decreasing effects on reported earnings per share. However, it is unfortunate that information was not reported regarding what these proportions would have been after excluding changes whose effects were very minor in size. Furthermore the study tells us nothing

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<sup>17</sup> Robert Eugene Boggs, The Effect of Accounting Policy Decisions on Reported Earnings Per Share of Common Stock, D.B.A. Dissertation, Indiana University, Graduate School of Business, 1966.

about the smoothing effects of the decisions examined. For example, it would have been interesting to note what percentage of the changes with a decreasing effect merely tended to dampen an above normal year for the companies involved.

The final study to be considered here is a study of income smoothing in which a methodology quite similar to that of Gordon-Horwitz-Meyers was used. This study by Copeland and Licastro appeared in July 1968. The two significant differences between the two studies were that Copeland and Licastro defined smoothed earnings for a year as equal to the reported earnings of the prior year, and that the variable they examined was dividends from subsidiaries carried on the cost basis by the parent.

Copeland and Licastro used the chi-square test, and the inadequacy of this test for such a study has already been discussed. Similarly Copeland and Licastro made no attempt to segregate decisions whose effects relative to earnings were immaterial from those whose effects were more significant. Furthermore their definition of smoothed earnings insured that not just some, but all of their normal earnings predictions were inconsistent with the managerial goal of reporting continually improving earnings performances. It was apparently due to this last limitation that they drew the following

conclusion: "Evidence from our test tends to support the hypothesis that managers do not attempt to smooth by using the dividend-income technique."<sup>18</sup>

### Summary

This chapter has attempted to establish, by reviewing recent literature, that there is concern among members of the financial community about the current state of flexibility in accounting principles. It was suggested that much of this concern can be traced to the loss of inter-period comparability of financial statements when accounting policy decisions involving changes in consistent application of accounting principles are made. Some of the major possible motives leading to changes in accounting policies by corporations were listed. The need for additional research on this subject was inferred after a review of recent empirical work revealed several inadequacies which it was felt could be eliminated.

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<sup>18</sup>Ronald M. Copeland and Ralph Licastro, "A Note on Income Smoothing," The Accounting Review, Vol. XLIII, No. 3, July 1968, p. 545.



## CHAPTER II

### METHODOLOGY

The possibility has been discussed that accounting policy decisions may be motivated by a desire to influence reported earnings, and it has been suggested that three desirable effects on reported earnings might be (1) increasing reported earnings, (2) smoothing reported earnings, and (3) housecleaning. It has also been established that an examination of the circumstances involved in a given accounting policy decision will enable a determination of whether or not those circumstances are consistent with the possible existence of a motive to produce one of these effects. This determination would be quite easy in the case of a decision whose effect is to increase or decrease reported earnings, provided there is adequate disclosure. However, to classify a decision according to whether its effects are consistent with a motivation to smooth the trend of reported earnings is more difficult. In order to clarify this problem an attempt will be made to describe the point of view of the person within the firm who is responsible for ensuring that the firm's pattern

of reported earnings over time reflects the steady and sure growth which has become so attractive to investors. This person will be referred to as the Earnings Trend Planner. The problems of the Earnings Trend Planner are twofold: (1) determining in each period the level of reported earnings which should represent the goal for the firm, and (2) determining how to achieve or approach the achievement of that goal, given the latitude allowed by the currently existing flexibility of generally accepted accounting principles. These problems will be discussed separately.

#### The Earnings Trend Planner - Goals

In the long run the goal-setting phase of the Earnings Trend Planner's role involves estimating the firm's future long run average rate of growth, and then setting goals for the reported earnings of individual periods such that if these goals are met the firm's actual rate of growth in reported earnings will be exactly equal to the long run average. In this way, the deviation around the trendline will be minimized and the trendline will be perfectly smooth.

In the short run the goal-setting problem of the Earnings Trend Planner is partially characterized by the firm's immediately preceding reported earnings trend. Several types of past trends can be distinguished, and

the Earnings Trend Planner's most likely goals in each case can be deduced:

- (1) If the firm's immediately preceding trend of reported earnings is inclined upward, the Earnings Trend Planner is faced with estimating the level of reported earnings which best reflects a continuation of this upward inclination, while giving consideration to the firm's ability to maintain and improve upon that level in future periods. An upward inclination may be variable or steady. In either case the basic goal-setting problem is the same. However the problem becomes more difficult as the degree of variability of the past trend is increased.
- (2) If the immediately past earnings trend is inclined downward, the Earnings Trend Planner is faced with the problem of finding a base level for a future upward trend of reported earnings. If he feels that the prior period's level of reported earnings is appropriate for this purpose, he must next determine the present level of reported earnings which best reflects the beginning of a new upward earnings trend. If the past downward drift in the trend of reported earnings is indicative of uncertainty

relative to future earnings, the Earnings Trend Planner must typically be conservative in this circumstance. However, because of the emphasis upon corporate earnings growth and improved performance, his minimum goal will be to show an increase in earnings of at least \$0.01 per share. The upper limit on the choice of an earnings goal for the firm in this case will once again be a function of the expectations of the Earnings Trend Planner with respect to whether or not the firm will be able to maintain and improve upon the earnings level which it reports. If in this situation the goal of a relatively small increase in reported earnings over the prior period can be attained, it will provide an excellent background for future, larger increases in the rate of growth in reported earnings, while still furnishing an indication to stockholders that the past trend is being reversed.

- (3) If the prior period's reported earnings are considerably below some preceding trend level, then it is likely that the Earnings Trend Planner has established a base for a new trend of reported earnings, and except in extreme

circumstances, the firm should be able to sustain an upward trend in reported earnings for a considerable period of time. In some cases the Earnings Trend Planner may feel that a sharp rise in reported earnings, up to the level of the prior trend, would be an appropriate goal. However, this is probably shortsighted, unless subsequently higher levels can be sustained with no difficulty, since a slow and steady rise is much more desirable and feasible than a sharp rise to a level which the firm may not be able to improve upon. To begin this slow and steady rise, the minimum goal of the Earnings Trend Planner must again be to report an increase in earnings per share of at least \$0.01. Of course, the upper limit on the choice of an earnings goal for the firm in this circumstance will again be constrained by the expectations of the Earnings Trend Planner with respect to whether or not the firm will be able to maintain and improve upon the level of earnings which it chooses to report. If the goal of a small increase in reported earnings per share can be attained, this will once again enable future increases to

be made larger, in order to give the appearance of an accelerated rate of growth.

- (4) In some circumstances, a downward drift or sharp dip in reported earnings may have resulted in the reporting of a net loss. From such a position it is essential that the Earnings Trend Planner's goal be to move into a profitable position, but still give himself a small base from which to sustain growth in the trendline of reported earnings. These contrasting goals are ideally met in a nominal earnings per share level of at least \$0.01.

#### The Earnings Trend Planner - Methods

The previous section discusses the goals of the Earnings Trend Planner as though little trouble is involved in reaching a state in which these goals are achieved in the statement of net income. However, the ideal of equating reported earnings with goal earnings in all fiscal periods is unlikely to be realized with perfect success. The consistently measured results of operations for the typical firm are likely to show a variability over time which is in conflict with the carefully established goals of the Earnings Trend Planner.

However, corporate management must be looked upon as having some capacity to affect any period's level of reported earnings per share, within limits, by means of accounting policy decisions which may affect items on the income statement in a manner independent of the firm's operations during the period. Thus if reported earnings would otherwise be below the perceived goal level, corporate management has available certain options within the area of its accounting policies which could be taken to increase reported earnings and reduce the divergence from the goal. Conversely, options also exist for the case where reported earnings would otherwise be above the perceived goal level, and a decrease therein is considered desirable.

The existence of this situation is a direct result of the fact that accounting is not an exact science, and that the "earnings" of a corporate entity over a particular period is not a property capable of precise measurement. A great deal of judgment is involved in the process of allocating the effects of many transactions of various kinds to short periods in the life of the corporate entity. This latitude in judgment corresponds with a multitude of possible amounts which could be reported as the "net earnings" of the corporate entity during a particular period.

Samuel Hepworth in his classic article "Smoothing Periodic Income" pointed out some of the areas where the exercise of judgment within the scope of generally accepted accounting principles would affect reported income. These areas include deferred charge and intangible asset accounting, write-offs of obsolete or damaged inventory, the decision as to capitalization or expensing of major property repairs, and the determination of whether a particular transaction is ordinary or extraordinary.

The existence of alternative methods of accounting for such items as depreciation, inventory, the investment tax credit, pension costs, acquisitions, carrying basis of investments, and intangible assets, among others, creates the possibility that a firm may switch from one such method to another when both are encompassed under generally accepted accounting principles. Since many areas exist where two or more alternative methods are acceptable, and since several of the items involved represent large items of cost or revenue on many corporate income statements, the potential for manipulating reported earnings by means of changes from one set of acceptable alternatives to another is great.<sup>1</sup> However, the making

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<sup>1</sup>The Forbes article "What Are Earnings? The Growing Credibility Gap" presents a modified actual case of an income statement of one company prepared on two alternative



of such changes is constrained by the existence of the consistency standard established by the independent accounting profession as a safeguard for investors. The consistency standard states that where accounting principles, practices, and methods of application have not been consistently observed in the current period relative to the prior period, the statements and notes must disclose this fact, and must also disclose the nature of the changes and their effects on the financial statements.<sup>2</sup> Such changes, where material in amount, must also be referred to in the auditor's opinion, which reference would constitute a qualification of that opinion.<sup>3</sup>

Thus the use of changes in accounting methods to achieve the reported earnings goal of the Earnings Trend Planner has a cost which must be balanced against the benefits of attaining the goal. One corporate executive's opinion of the degree of importance attached by his contemporaries to a qualified audit report was quoted by

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sets of methods - one "liberal" and the other "conservative." The difference in the two net income figures is quite large. See Forbes, op. cit., p. 28-29.

<sup>2</sup>The Committee on Auditing Procedure of the American Institute of Certified Public Accountants, Auditing Standards and Procedures, 1963, p. 42.

<sup>3</sup>Ibid., pp. 45-46, 58-59.

The Wall Street Journal: "'The last thing any company wants is an auditor's exception,' says the president of a big Eastern manufacturing concern. 'It guarantees a lively annual meeting.'"<sup>4</sup>

The benefits of making a change in accounting policy vary with the circumstances. If reported earnings would otherwise exceed or come close to the goal, these benefits are much less than if reported earnings would otherwise be substantially lower than the goal and maybe lower than the reported earnings of the prior year as well. The greatest benefit to be obtained from a change in accounting policy is in the case of a change which has the effect of increasing reported earnings so that a threatened dip in the earnings trend in the year of the change is averted.

In conclusion, the existence of alternative methods and practices of accounting under the scope of generally accepted accounting principles enlarges the number of options available to the Earnings Trend Planner in his efforts to achieve the earnings goals he has set for his firm to report. For those who view the reporting of a smooth pattern of corporate earnings as a desirable state of affairs (a group which includes some bankers, government

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<sup>4</sup>"Accounting Reform," The Wall Street Journal, May 12, 1966.

officials, economists, and stockholders, as well as corporate officials) the existence of these alternatives, and of the possibilities for affecting reported earnings by means of switching between them, will be seen in a favorable light. For those who are fearful that in many cases a smooth pattern of reported earnings might conceal relevant information about trends in the earnings of the firms involved, and thereby impair the capacity of the investment community to appraise the performances of some corporate managers in meeting their responsibilities to stockholders, the existence of these alternatives should be cause for concern.

#### Methodology of the Smoothing Study

Definitions. - The behavior of the Earnings Trend Planner as described on the preceeding pages is synonymous with what is often referred to in the accounting literature as "income smoothing." A brief summarization of this definition of income smoothing, or earnings trend planning, is given here: the periodic establishment of a goal level of reported earnings for a firm which reflects a steadily and evenly rising earnings trendline, and the use of accounting adjustments not generated by the firm's operations during the period to affect reported earnings in a manner which will assist in attaining the goal.

The event whose occurrence provides the basic source data for this research will be referred to as an "accounting policy decision." For purposes of this study, an accounting policy decision will be defined as encompassing two circumstances. The first of these is a departure from generally accepted accounting principles which has been referred to in the audit report accompanying the financial statements under study. The other is a lack of consistency in the application of generally accepted accounting principles in the financial statements of one period relative to the prior period which has been referred to in the accompanying audit report. Accounting policy decisions of these types must be referred to by the independent accountant in his report according to the first and second standards of reporting of the Committee on Auditing Procedure of the American Institute of Certified Public Accountants. In clarifying these standards the Committee has stated that "the term 'principles of accounting' as used in the reporting standards is construed to include not only accounting principles and practices, but also the methods of applying them."<sup>5</sup> Subsequent references in the present study to "principles," "policies," or "methods" should be interpreted as having equivalent meanings in accordance with the above discussion.

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<sup>5</sup>The Committee on Auditing Procedure, op. cit., p. 42.

In this study it is intended to use reported earnings per share data and data on the per share effects of accounting policy decisions as a basis for analysis. Frequent references will be made to "reported earnings" or "reported net income." Unless otherwise indicated, such phrases should be interpreted as a reference to reported earnings per share.

Data Sources. - The source for discovering accounting policy decisions for purposes of this study has been the annual listing by Accounting Trends and Techniques of consistency qualifications in the auditor's reports of 600 companies included in their survey of the accounting aspects of corporate annual reports. The 600 companies themselves range in size from very large to small, and according to Volume 2 of the survey, "constitute a cross section of industrial corporations."<sup>6</sup> In each annual volume, a table presents a breakdown of audit report qualifications according to the reason for qualification, i.e., the type of account category involved. The overwhelming majority of these qualifications were made because of a departure from consistent application of generally accepted accounting principles (often referred

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<sup>6</sup>American Institute of Certified Public Accountants, Accounting Trends and Techniques, II, (1948), p. 3.

to hereafter as a "change in accounting policy"). A very few others referred to departures from generally accepted accounting principles. Table 2.1 on the following page is a reproduction of these tables for the years 1947 through 1966.

An examination of Table 2.1 reveals evidence of the strong impact on accounting policy decisions of tax law. For example, adoptions of the LIFO inventory method were at their peak in 1950 and 1951, shortly after the method was deemed allowable for tax purposes by the Code of 1948. Changes in depreciation method were at their highest level in 1954 and 1955, which follows the acceptance of accelerated depreciation methods for tax purposes by the Code of 1954. Also in 1954 most of the abnormally high number of changes in the category "Other Income and Cost Items" were adoptions of the accrual method of accounting for certain estimated expenses, such as vacation pay, whose deduction was permitted by the Code of 1954. (This section of the 1954 Code was later repealed.)

The impact of authoritative pronouncements on accounting policy decisions is less obvious from Table 2.1, but is very evident in the large number of changes in treatment of the investment tax credit in 1964, which followed Securities and Exchange Commission and American Institute of Certified Public Accountants

Table 2.1 Qualified audit opinions

Financial Statement Item	Statement year ended:																Totals
	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	
LIFO Inventory Method-initial adoption or readoption	20	4	0	47	25	3	3	0	5	7	3	1	2	1	0	1	125
LIFO Inventory Method-abandonment or modification	1	0	4	14	6	1	1	0	3	0	2	2	7	5	2	0	53
Other Methods of Inventory Valuation	3	6	8	3	5	4	5	4	7	3	4	3	5	5	4	6	87
Fixed Assets	4	0	1	1	1	7	1	1	1	1	1	2	2	1	2	2	35
Other Assets	1	0	2	0	5	3	4	1	2	1	3	1	5	1	3	1	44
Liabilities, Deferred Credits or Surplus Adjustments	0	3	2	1	2	0	2	1	0	0	1	0	0	6	1	0	21
Deferred Income	0	0	0	0	0	0	0	3	1	2	1	0	2	3	0	3	17
Vacation Pay Deduction	3	1	1	0	0	2	6	16	7	1	1	1	1	2	0	0	42
Depreciation, Depletion, Amortization	4	15	16	5	5	11	12	71	48	16	13	24	15	8	13	23	338
Other Income and Cost Items	15	12	16	21	11	11	3	75	14	1	9	9	10	11	6	8	254
Investment Credit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67
Principles of Consolidation	6	5	11	6	10	8	8	11	10	15	11	9	18	11	19	10	193
Totals	57	46	61	98	70	50	45	183	98	47	49	52	67	54	54	55	1276

(hereafter AICPA) pronouncements to the effect that an alternative treatment was acceptable. Less evident is the effect of the AICPA's Accounting Research Bulletin No. 44 (revised) in July 1958, which urged that recognition be given to deferred income taxes if depreciation for tax purposes exceeded that taken for reporting purposes. Also having a minor impact was the declaration in paragraph 8 of the Accounting Research Bulletin No. 51 in August 1959, that it was no longer acceptable to credit capital surplus with the excess of equity in net assets of purchased subsidiaries over cost; this impact is revealed by the above-average number of entries in the category "Liabilities, Deferred Credits or Surplus Adjustments" in 1960.

Accounting Trends and Techniques reveals each year the names of most of the companies whose audit report qualifications are included in the tabulation of Table 2.1. Those company names which are omitted tend to be from categories which account for the largest numbers of qualifications, particularly depreciation, which accounts for 48 per cent of the missing company names, and consolidation policy, which accounts for 32 per cent. An attempt was made to obtain from the AICPA the names of the few companies which were not given but this attempt was only successful relative to qualifications in the year 1966; apparently records are not



kept for this information prior to 1964. The accounting policy decisions referred to in these audit report qualifications for which company names were revealed or later discovered in the years 1955 through 1966 constitute the universe of events for purposes of this study.

Table 2.2 below discloses the number of missing names

Table 2.2 Number of audit report qualifications from total revealed by Accounting Trends and Techniques for which no company name was disclosed or later discovered

Year	Total Qualifications	Company Names Not Discovered	Universe of Events for This Study
1955	98	14	84
1956	47	4	43
1957	49	0	49
1958	52	12	40
1959	67	22	45
1960	54	5	49
1961	54	14	40
1962	55	9	46
1963	30	1	29
1964	88	0	88
1965	43	0	43
1966	29	0	29
Totals	666	81	585*

\* In five of these cases, information needed to make an analysis was unobtainable. Therefore, such an analysis was completed in only 580 of these cases.

included in the total number of qualifications for each of these years. As is evident from this table, missing names in eight of the twelve years constitute only 12 per cent of the total number of qualifications. To obtain this relatively small number of company names would have required a search of 600 annual reports in each of the eight years, an effort which was not considered to be worth undertaking. In addition, in five cases, information needed to make an analysis could not be obtained, even through correspondence, and so these five companies were also dropped from the study, lowering to 580 the total number of accounting policy decisions examined.

The election to exclude from this study accounting policy decisions for years prior to 1955 was made primarily because Accounting Trends and Techniques did not begin to list the names of companies upon which its tabulations were based until 1955. The names of only eight companies with qualified opinions in 1954 were obtained from illustrative material in Accounting Trends and Techniques - this is a very small percentage of the total of 183 qualifications in that year. A second reason for excluding analysis of effects of changes in accounting method prior to 1955 is that disclosure of such effects is much less adequate in this period than in more recent periods.

Method of Analysis. - Now that the availability of information relative to a large number of instances of accounting policy decisions has been established, the discussion will turn to the appropriate method of analyzing these decisions. The effect of these decisions on reported earnings in the year of the decision is disclosed or is obtainable in the vast majority of these cases. It must be determined in each case whether the decision had an effect which was consistent with the existence of motives characterized by the Earnings Trend Planner. To do this requires a comparison of reported earnings including the effect of the decision with what reported earnings would have been excluding the effect of the decision, and a judgment as to which of these figures comes closest to satisfying the goals of the Earnings Trend Planner. If reported earnings including the effect of the decision comes closer to satisfying these goals, then the accounting policy decision can be classified as having an effect consistent with a motivation to smooth the (rising) trendline of reported earnings. If reported earnings excluding the effect of the decision is closer to these goals, then the existence of the accounting policy decision is inconsistent with an income smoothing motivation.

The relationship of these two figures to the earnings of the prior year is very important to this analysis.

For example, if one of these figures is higher than reported earnings for the prior year, while the other is lower, then the first is obviously more consistent with the primary goal of the Earnings Trend Planner - to report a pattern of continuous growth in earnings.

The three-capital-letter code which has been used in classifying the effects of accounting policy decisions characterizes each decision according to (1) whether reported earnings excluding the effect of the decision would have been below (B) or above (A) earnings reported for the prior year, (2) whether the decision increased (I) or decreased (D) reported earnings, and (3) whether reported earnings including the effect of the decision are below (B) or above (A) those of the prior year. Under this scheme there are six possible codings: BIB, BIA, AIA, BDB, ADB, and ADA. Each of these codings is sub-coded with either a small "s" if the decision has a smoothing effect, or with a small "n" if the decision has a non-smoothing effect.

The codings of BIB and BIA will always be sub-coded "s" because the effects of the decisions characterized by these codings are always consistent with a smoothing motivation. In both cases the earnings figure which would have been reported excluding the effect of the decision is below the prior year's reported earnings, and in both cases the effect of the decision is to

increase reported earnings, moving them toward the goal of reflecting an increase in reported earnings relative to the prior year. In the case coded BIB this goal is approached but not achieved; in the case coded BIA it is achieved.

A similar analysis will reveal that the codings ADB and BDB will always be sub-coded "n." However, those decisions coded AIA or ADA may sometimes be sub-coded "s" and sometimes "n." In these latter cases a numerical approximation of the earnings goal of the firm will have to be calculated, and whenever reported earnings including the effect of the decision are closer to this goal than they would have been excluding the effect of the decision, the effect will be coded AIAs or ADAs. Conversely whenever reported earnings excluding the effect of the decision would have been closer to this goal than reported earnings including the effect of the decision, the effect will be coded AIAn or ADAn.

Thus there are eight possible notations (combined capital-letters codes and small letter sub-codes) which represent eight possible circumstances with respect to the direction of the effect on earnings of the change and the relationship of earnings before and after the change to reported earnings of the prior year. Each of these notations is described individually in Table 2.3 on the following page.

Table 2.3 Description of the circumstances represented by the notations used in this study

	Notation	Earnings Before The Decision Relative to the Prior Year	Direction of Decision Effect	Earnings After The Decision Relative to the Prior Year	Estimate of Goal Needed?
Smoothing Changes	BIBs	Below prior year	Increase	Still below	No
	BIAs	Below prior year	Increase	Above prior year	No
	AiAs	Above prior year	Increase	Above prior year and closer to goal	Yes
	ADAs	Above prior year	Decrease	Above prior year and closer to goal	Yes
Non- Smoothing Changes	BDBn	Below prior year	Decrease	Further below	No
	ADBn	Above prior year	Decrease	Below prior year	No
	ADAn	Above prior year	Decrease	Above prior year and further away from goal	Yes
	AiAn	Above prior year	Increase	Above prior year and further away from goal	Yes

The next step which must be considered is the calculation, where necessary, of a level of reported earnings which is consistent with an income smoothing motivation. At this point reference to the section on the goals of the Earnings Trend Planner will be useful. Recall that there are four sets of circumstances which the Earnings Trend Planner may face in setting a goal for reported earnings. In the second and third cases, the prior year's reported earnings had been below a preceding trend, and it was concluded that the goal of the Earnings Trend Planner would be to report earnings which had increased over the prior year by at least \$0.01 per share, and by at most an amount not so large as to reduce the firm's chances for subsequent increases in reported earnings per share. This goal can be characterized by establishing in these cases a level of reported earnings which is \$0.01 above the reported earnings of the prior year as the goal for judging whether or not the effect an accounting policy decision is consistent with an income smoothing motivation. The only circumstances in the notational system which relate to these cases will be represented by either the notation ADAs or AIAAn. This means that when the earnings goal is to increase reported earnings by at least \$0.01 per share, an accounting policy decision which decreases reported earnings while still leaving the figure higher than that

reported in the prior year will be considered to have a smoothing effect, whereas an accounting policy decision which increases reported earnings even though the figure would have been higher than the level of the prior year without the decision will be considered to have a non-smoothing effect.

The previous discussion also included the instance where the firm had reported a loss in the prior year and it was concluded that the goal of the Earnings Trend Planner in this case would be to report net earnings of at least \$0.01 per share. In these cases this figure will be established as the numerical approximation of the earnings goal of these firms.

The final case which the Earnings Trend Planner might face is the more regular case in which the prior trend of reported earnings is upward, and he is faced with determining the level of reported earnings which best reflects a continuation of this upward trend. There are sophisticated methods available with which to make this calculation, but a simpler calculation will be more than adequate for this purpose. The increase in reported earnings per share which is perceived to be optimal can probably be sufficiently approximated by averaging the increases of some number of prior years. A weighted average which gives greater weight to the increases in more recent years would also seem to be



appropriate. The number of prior years which will be considered in making this calculation will be five, since the frequent presentation of five years summaries in corporate annual reports indicates that corporate managers may feel that this is the period which readers of financial statements are interested in relative to an evaluation of trends in corporate operations. Over a five-year period there will be four changes in reported earnings, starting with the change of the fourth preceding year relative to the fifth. Thus there will be four figures used in computing the weighted average increase. The weights arbitrarily chosen will be simple and systematic - the most recent increase or decrease in reported earnings per share will receive a weight of .4, the second most recent .3, the third most recent .2, and the most remote a weight of .1. In formula form, letting  $G_t$  be the estimate of goal earnings per share in the current year  $t$  which is being computed, and  $Y_{t-1}$  to  $Y_{t-5}$  be the reported earnings per share of the previous five years, the estimate can be stated in the following manner:

$$G_t = Y_{t-1} + .4 (Y_{t-1} - Y_{t-2}) + .3 (Y_{t-2} - Y_{t-3}) + \\ .2 (Y_{t-3} - Y_{t-4}) + .1 (Y_{t-4} - Y_{t-5})$$

Of course where  $G_t$  is computed to be less than  $Y_{t-1}$ , the case is one of a downward trend in reported earnings,

and the rules for computing  $G_t$  in these cases have been previously discussed.

Now to summarize the procedure which will be used to analyze and classify the effects of accounting policy decisions:

1. Determine the effect of the decision on earnings, which will enable a comparison of the earnings figure actually reported with the figure which would have been reported had the decision not been made.
2. Classify the decision according to its effects as one of the following: BIBs, BIAs, BDBn, ADBn, AIA, or ADA. (See Table 2.3).
3. If the above classification is ADA or AIA, calculate the estimated goal earnings per share  $G_t$  for the firm in the year of the decision (using the above formula where applicable).
  - a. If reported earnings per share including the effect of the decision are closer to the goal than they would have been excluding the effect of the decision, "s" is the appropriate sub-script.
  - b. If reported earnings per share excluding the effect of the decision would have been closer to the goal than reported earnings per share including the effect of the decision, "n" is the appropriate sub-script.

A further refinement of this methodology involves establishing a set of criteria for ignoring those accounting policy decisions whose effect on earnings is immaterial. Once again it is felt that a simple set of criteria is adequate for purposes of this study. The effect on reported earnings per share of an accounting policy decision has been considered immaterial if such effect is (1) less than 10 per cent of the reported earnings per share, and (2) less than 50 per cent of the change in reported earnings per share relative to the prior year. However, as a check on the appropriateness of the above criterion, a smaller criterion has been used for decisions which do not meet the above criterion. The effect is considered immaterial under this criterion if it is (1) less than 5 per cent of reported earnings per share and (2) less than 25 per cent of the change in reported earnings per share relative to the prior year. A comparison of the results under each of these criteria will be presented in Chapter IV.

A few other operational rules should be described here. On a few occasions the use of earnings per share figures in this study may lead to a circumstance where earnings per share are "equal to" those of the prior year, instead of "below" or "above." In all these cases the "below" or "above" categorization can be made with reference to dollar earnings.

Other situations requiring an additional set of operational rules are those in which one corporation has made more than one accounting policy decision in the same year, and these are referred to in plural form in the auditor's report. In these cases the following rules have been followed:

- (a) If the effect on reported earnings of each decision taken individually is material, treat each as a separate decision.
- (b) If the effect on reported earnings of one or more decisions is material, while the effect of one or more others is immaterial, ignore the decisions with immaterial effects.
- (c) If the effect on reported earnings of two or more decisions is immaterial individually, but material in the aggregate, consider the aggregate effect as being one accounting policy decision.

Several accounting policy decisions were treated somewhat differently because of the fact that the statements of the prior year or years were restated to reflect the effect of a change in accounting policy as though the new policy had been in effect in those years. In these cases the effect that the decision had on the reported earnings of the year of the change relative to the reported earnings of the prior year is somewhat more difficult to determine.

The effect of the decision is not considered to be simply the difference between reported earnings in the year of the implementation of the decision and what reported earnings for that year would have been had the decision not been implemented. Instead in these cases for purposes of categorizing these decisions and for determining the materiality of their effects, the net effect of the decision and restatement on the increase or decrease in reported earnings relative to the prior year is computed.

For example consider the following two cases:

	<u>ACF Industries, Inc., (1962)</u>	<u>Chemetron Corp. (1960)</u>
Earnings per share of the prior year as previously reported	\$ 2.29	\$ 1.50
Per share effect of restatement	+1.29	+0.11
Earnings per share of the prior year after restatement	3.58	1.61
Current per share earnings not including the decision effect	2.87	1.26
Per share effect of the decision on current earnings	+1.34	+0.45
Current reported earnings per share	4.21	1.71

In the first case the company changed its policy with respect to investments in subsidiaries such that these subsidiaries were consolidated instead of being carried on the statements at cost. Had the change and accompanying restatement not been made, reported earnings

per share would have increased from \$2.29 in 1961 to \$2.87 in 1962, or by an amount of \$0.58. After adjusting for the effects of the change and restatement, reported earnings per share rose from a revised \$3.58 in 1961 to \$4.21 in 1962, or by an amount of \$0.63. Thus the net effect of the implementation of this decision is considered to be \$0.63 minus \$0.58 or an increase of \$0.05, which effect is so small that it does not meet even the lesser of the two materiality tests just discussed.

In the second case a similar change was made from the cost basis of carrying investments in subsidiaries to the equity basis. Had the change and accompanying restatement not been made in this case, reported earnings per share would have decreased from \$1.50 in 1959 to \$1.26 in 1960, or by an amount of \$0.24. After adjusting for the effects of the change and restatement, reported earnings per share increased from a revised \$1.61 in 1959 to \$1.71 in 1960, or by an amount of \$0.10. The net effect of the implementation of this decision is computed as \$0.24 plus \$0.10 or an increase of \$0.34, which effect is very material. This analysis enables us to classify this decision in the BIAs category.

Less than 5 per cent of the total number of accounting policy decisions which were classified as having a material effect on reported earnings in the year of the change involved restatement of the prior year's reported

earnings figure. The nature of these decisions will be discussed separately in Chapter III.

Another type of accounting policy decision requires mention here because of characteristics differing from the usual. This decision is indicated by a qualified audit report for the reason that after a pooling of interest the company has not restated its prior year's financial statements to show comparable statements for the pooled entity over time. In these cases, the effect of the pooling on the current year's earnings is interpreted as the effect of the accounting policy decision for purposes of analysis. Technically, however, this decision has an effect only on the statements of prior years, in that they are not restated in accordance with generally accepted accounting principles. For example, in 1966 Beatrice Foods Company reported earnings per share of \$2.95, up from \$2.49 in 1965. However, the \$2.95 included \$0.52 from companies acquired in transactions accounted for as poolings of interest, whereas the \$2.49 was not restated for these transactions. Thus the effect of the incorrectly accounted for poolings was to transform what would otherwise have been a decline in reported earnings per share from \$2.49 in 1965 to \$2.43 in 1966 into a sharp rise in reported per share earnings. Interpreting the effect of the pooling on the 1966 earnings as the effect of this accounting policy decision enables

a categorization of this decision as BIAs. This simplification will have no effect on the smoothing categorization in these cases as long as the earnings of the absorbed company or companies are not significantly different in the year of the merger from the prior year. This type of analysis was resorted to because of the nondisclosure by these companies of what the restated prior year's figures would have been. Again the number of these cases was very small - less than 5 per cent of the total number of decisions with a material effect on reported earnings in the year of the change.

### Summary

This chapter has postulated the existence within the firm of a hypothetical individual, referred to as the Earnings Trend Planner, whose responsibility it is to ensure that the firm's pattern of reported earnings over time reflects the steady and sure growth which has become so attractive to investors. His point of view in setting the earning's goals of the firm was discussed. Several methods available to him of taking advantage of the existence of flexibility in generally accepted accounting principles in order to affect reported earnings in a manner necessary to achieve these goals were mentioned.

This chapter has also described the methodology of this research in analyzing the effects of accounting



policy decisions. This methodology relies to a great extent upon the postulated behavior of the Earnings Trend Planner.

### CHAPTER III

#### RESULTS OF THE ANALYSIS OF ACCOUNTING POLICY DECISIONS

This chapter will present the results of an analysis of 580 accounting policy decisions by American corporations during the twelve-year period from 1955 through 1966. The discussion will focus upon the categorizations of the effects of these decisions according to the methodology described in Chapter II as either to increase or decrease reported net income, as either to smooth or not to smooth reported net income, and as to have a "housecleaning" effect.

Of the 580 accounting policy decisions which were analyzed as a basis for this study, 246, or about 42 per cent, did not pass the weaker of the two materiality tests previously described - that is, their effect on income was both (1) less than 5 per cent of reported net income and (2) less than 25 per cent of the change in reported net income relative to the prior year. Of this group, a large proportion were decisions which affected balance sheet figures only and thus had no direct effect on reported earnings in the year of the decision. This group also includes a large number of accounting policy

decisions whose effect on reported earnings was not disclosed, but was described in the financial statements or audit report as "immaterial" or "not significant."

The remainder of this group consists of cases where the decision had an effect on earnings which was disclosed but which was simply not large enough to meet the test.

Of the 325 accounting policy decisions<sup>1</sup> whose effect was material under the weaker of the two materially tests, 249 were also material according to the stronger of the two tests: their effect was either (1) equal to or greater than 10 per cent of the reported net income, or (2) equal to or greater than 50 per cent of the change in reported net income relative to the prior year. This latter group of 249 decisions will be the focus of the remainder of this study. The major reason for applying a weaker materiality test to the decisions whose effects on reported earnings were not large enough to meet the stronger test was to examine the following hypothesis: a greater proportion of those accounting policy decisions whose effects are of a relatively higher degree of

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<sup>1</sup>This total includes a net amount of nine decisions whose effect is an aggregation of the effects of decisions which were not material separately but were material in the aggregate (see rules for multiple decision situations on page 49). This amount of nine reconciles of two sub-totals just given with the overall total of 580 accounting policy decisions.

materiality will tend to have a favorable effect on reported earnings than of those decisions whose effects were relatively less material. The discussion of the conclusions relative to this hypothesis is included in Chapter IV.

#### Increasing and Decreasing Effects

Of the total of 249 accounting policy decisions with a material effect on income, 192, or 77 per cent, had the effect of increasing reported earnings in the year the decision was made. The remaining fifty-seven, or 23 per cent, had the effect of decreasing reported earnings in the year of the decision. In each of the twelve individual years covered by this study, the number of these decisions which had the effect of increasing reported earnings outnumbered those which had the effect of decreasing earnings.

#### Smoothing and Non-Smoothing Effects

Of the 249 accounting policy decisions with a material effect on earnings which were analyzed in this study, 167, or 67 per cent, were classified as having the effect of smoothing the pattern of reported earnings over time by way of their effect on reported earnings in the year of the decision relative to the reported earnings of prior periods. The remaining eighty-two decisions, representing 33 per cent of the total, were classified as

having an effect inconsistent with a purely smoothing goal. In eleven of the twelve individual years covered by this study, the decisions with a smoothing effect outnumbered those with a non-smoothing effect. Table 3.1 below presents a breakdown of the 249 accounting policy decisions into the eight classifications described in Chapter II. Table 3.2 on the following page presents one illustrative example from the study for each of the eight notational classifications, in order that the reader might become familiar with the type of situation indicated by each of the notations.

Table 3.1 Categorization of the effects of accounting policy decisions according to the smoothing notational system

Decisions with Smoothing Effects		Decisions with Non-Smoothing Effects	
Category	Number	Category	Number
BIBs	79	BDBn	16
BIAs	38	ADBn	8
AIAs	21	ADAn	4
ADAs	29	AIAAn	54
TOTAL	167	TOTAL	82

Table 3.2 Examples of situations corresponding to the notational categorizations used in this study

Name of Company and Year	Prior Year's Per Share Earnings	Projected Per Share Earnings	Per Share Earnings Before Decision	Per Share Effect of Decision	Per Share Earnings After Decision	Notational Category
Eversharp, Inc. 1965	\$1.86	N/A*	\$1.50	\$0.16	\$1.66	BIBs
Riegel Paper Co. 1965	1.78	N/A*	1.67	0.28	1.95	BIAS
Utah-Idaho Sugar Co. 1966	1.38	\$1.54	1.43	0.17	1.60	AIAS
The Boeing Company 1965	5.64	6.53	10.74	(1.18)	9.56	ADAS
Schenley Industries 1960	3.07	N/A*	0.85	(0.35)	0.50	BDBn
Endicott Johnson 1957	3.06	N/A*	3.24	(0.27)	2.97	ADBn
Union Carbide 1956	4.83	5.40	4.90	(0.04)	4.86	ADAn
Owens-Illinois 1965	2.73	2.98	2.98	0.40	3.38	AIAAn

\*Not Applicable - in these cases a projected earnings figure is not necessary for the classification (See Table 2.3 and related discussion).

### Accounting Policy Decisions Involving Restatement of Prior Year's Reported Earnings

Only seven of the total of 249 accounting policy decisions with a material effect on reported earnings involved restatement of the reported earnings figures for the prior year or years. Of these, five had effects categorized as consistent with a smoothing motivation. Of the total of seven, five involved changes from the cost basis of carrying investments in subsidiaries to either the equity basis or to full consolidation. Several other accounting policy decisions involving restatement of prior year's earnings reports, most of which were changes from the cost basis of carrying subsidiary investments, were classified as having an immaterial effect on the trend of reported earnings in the year of the decision relative to the prior year. (See Chapter II, pages 50-51 for an illustration of this analysis.)

### Trends in the Categorizations

A breakdown of the accounting policy decisions classified in each of the eight categories in each of the twelve years of this study is presented in Table 3.3 on page 61.

Several spin-off tables have been developed from Table 3.3 in order to enable a more meaningful analysis

Table 3.3 Categorization of the effects of accounting policy decisions by years

Year	Smoothing Decisions					Non-Smoothing Decisions					Total Decisions
	BIBs	BIBs	AIAs	ADAs	Total	BDBn	ADBn	ADAn	AIAn	Total	
1955	4	2	1	4	11	1	2	0	9	12	23
1956	5	1	1	2	9	1	1	1	1	4	13
1957	7	1	3	2	13	2	1	0	1	4	17
1958	7	1	1	3	12	1	1	0	0	2	14
1959	3	2	2	6	13	1	1	0	4	6	19
1960	10	5	1	1	17	2	0	1	2	5	22
1961	8	3	1	1	13	1	1	0	4	6	19
1962	8	5	0	3	16	3	0	0	4	7	23
1963	2	5	1	1	9	1	0	0	6	7	16
1964	15	6	5	2	28	1	1	1	14	17	45
1965	6	3	2	3	14	1	0	0	6	7	21
1966	4	4	3	1	12	1	0	1	3	5	17
Total	79	38	21	29	167	16	8	4	54	82	249



of trends in the categorizations over time. In these tables the twelve-year period has been broken down into three four-year periods, which are 1955 through 1958, 1959 through 1962 and 1963 through 1966.

Table 3.4 below presents the number of classifications in each of the eight notational categories in each four-year period. One trend is particularly evident from this table - the number of accounting policy decisions categorized as BIAs tripled in the second period relative to the first, and again showed an increase in the third period relative to the second. Situations

Table 3.4 Categorization of accounting policy decisions by four-year periods

Period:	1955- 1958	1959- 1962	1963- 1966	Total
<u>Category</u>				
BIBs	23	29	27	79
BIAs	5	15	18	38
AIBs	6	4	11	21
ADAs	11	11	7	29
BDBn	5	7	4	16
ADBn	5	2	1	8
ADAn	1	1	2	4
AIBn	11	14	29	54

categorized BIAs are ones in which the accounting policy decision had an extremely favorable effect on reported earnings. The effect of this type of decision is such that reported earnings increase over the prior year, whereas without the decision reported earnings would have been below those of the prior year.

One possible explanation for the dramatic increase in situations of this type might be that the tremendous emphasis in recent years on growth companies as attractive investment alternatives has contributed toward a tendency for corporate managements to consider a declining earnings pattern as more and more unacceptable. This statement contains the implication that the motives of the managers involved in making these accounting policy decisions may have been primarily to affect the pattern of reported earnings in a favorable manner. Since statements concerning motives in these cases only achieve the status of conjecture, the reader must be left to form his own conclusions.

Support for the "growth emphasis" explanation is also to be found in the decline in the number of situations categorized ADBn over the three periods. These cases are the exact opposite of the BIAs situations in that the accounting policy decision has the extremely unfavorable effect of causing reported earnings to decline from the prior year, whereas in the absence of the

decision an increase would have been registered. The small number of decisions in this category precludes drawing any strong conclusions from this trend, but the trend itself is pronounced - there were over twice as many instances of this situation in the first period relative to the second, and twice as many in the second period as in the third.

Table 3.5 below reveals almost no trend over time in the relative proportions of accounting policy decisions with smoothing effects and with non-smoothing effects. The percentage of decisions with smoothing effects in each period is quite close to the overall percentage of

Table 3.5 Relative proportions of decisions with smoothing and non-smoothing effects by four-year periods

Years	Smoothing Changes		Non-Smoothing Changes	
	Number	Percentage	Number	Percentage
1955-1958	45	67.2%	22	32.8%
1959-1962	59	71.1%	24	28.9%
1963-1966	63	63.6%	36	36.4%
Total	167	67.1%	82	32.9%

67.1 per cent. However, Table 3.6 below does reveal a trend in the relative proportions of decisions with increasing effects and those with decreasing effects. In particular the percentage of decisions with an increasing effect shows a pronounced rise over time, until in the most recent period 85.9 per cent of the decisions have the effect of increasing reported earnings. This trend once again corresponds with increasing emphasis on earnings growth as an indicator of superior performance by a company.

#### Interpretation of the Findings

Although the information concerning trends is interesting, by far the most significant fact revealed

Table 3.6 Relative proportions of decisions with increasing and decreasing effects by four-year periods

Years	Increasing Effects		Decreasing Effects	
	Number	Percentage	Number	Percentage
1955-1958	45	67.2%	22	32.8%
1959-1962	62	74.7%	21	25.3%
1963-1966	85	85.9%	14	14.1%
Total	192	77.1%	57	22.9%

thus far by these findings is that the vast majority of accounting policy decisions analyzed in this study which were considered to have a material effect on reported income had an effect which was not unfavorable to the reported earnings of the companies involved. A total of 77 per cent of all of these decisions had the effect of increasing reported earnings. Of the remaining 23 per cent of all decisions which had the effect of decreasing reported earnings, over half or 12 per cent of the total were classified as smoothing decreases - that is they had the effect of converting an above normal rise in reported earnings from the prior year into a more moderate and normal rise. Thus only 11 per cent of the total of these accounting policy decisions could be said to have had an unfavorable effect on reported earnings in the year of the change, and many of these unfavorable short run effects may have been more than offset by the favorable long run effects arising from the fact that a change in accounting policy which decreases earnings in one year may relieve subsequent years from the burden of the charges involved or may enrich subsequent years with the recognition of deferred income. These latter occurrences will soon be discussed under the heading of housecleaning.

What explanation can be offered for the fact that the vast majority of accounting policy decisions analyzed

in this study had a favorable effect on reported earnings? One possible explanation is that the primary motivation behind the majority of these accounting policy decisions is to influence reported earnings in a desirable manner. Although this explanation may be correct in some of the cases examined in this study, particularly in some of these situations characterized by the notation BIAs, it is unlikely that this explanation would hold in most of these cases. For one thing a major change in accounting policy will have effects on the reported earnings of a number of periods beyond the period of the change itself, which was the only one considered in examining the effects on reported earnings for purposes of this study. Thus it is unlikely that the effect of a change on reported earnings in the year of the change will be the sole consideration in the decision to make or not to make the change. For another thing there are a number of good theoretical and practical reasons for making switches in accounting methods - some of the more important of these were listed on pages 9 and 10 of Chapter I. In many of the changes examined in this study, one or more of these explanations was offered by management as the reason for their particular decision. It seems unlikely that corporate managers were insincere in the majority of these cases. Thus the conclusion that the

primary motivation behind the majority of accounting policy decisions is to influence reported earnings in some desired manner must be rejected.

However, the findings of this study have yet to be explained. An alternative explanation of the fact that most of the accounting policy decisions analyzed in this study had a favorable effect on reported earnings lies not in the conclusion that the desire to report a favorable trend of earnings contributes directly to the making of such decisions, but instead in the inference that this desire manifests itself indirectly, after the decision to change has already been made, by influencing the judgment as to which fiscal period the decision should be implemented in order to exert the maximum favorable effect, or the minimum unfavorable effect, upon reported earnings. It is this conclusion which, in this author's judgment, is more supported by logic and by the evidence of this study. However, this is at best a subtle distinction, and may not affect the reader's feelings as to whether or not such activity is objectionable in financial reporting.

The circumstances surrounding the most common of the accounting policy decisions examined in this study - a change in accounting method - are thus visualized as follows: a decision has been reached by the management of a particular corporation that a method of accounting

alternative to the one being used in preparing their company's financial reports would be a more appropriate method for the company to use in those reports. At the same time, however, the knowledge is available that the switch will have a significant effect on the earnings report in the year of the change. If the effect of the change is to increase reported earnings, the implementation of the decision is unlikely to be delayed because of this effect. However, if the effect of the switch would be to decrease reported earnings, there may be considerable pressure to delay its implementation until the company has an above-average year, and even then the desire to compare favorably with competitors may still produce pressure to delay such a change. Thus the implementation of an accounting policy decision which would decrease reported earnings significantly in the year of the decision may be delayed indefinitely.

The fact that the sentiments characterized by the above discussion do exist among corporate managers is evidenced by this recent quote from The Wall Street Journal: "'What you want,' says the head of one company, 'is a nice steady rise in per share earnings - no surprises, especially on the downside.'"<sup>2</sup> Thus the conclusion

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<sup>2</sup>Charles N. Stabler, "The Conglomerates: Even Accountants Find Some Financial Reports of Combines Baffling," The Wall Street Journal, August 5, 1968.



at this point must be that the desire to report a favorable trend of reported earnings may often have an indirect effect on an accounting policy decision through its effect on the timing of the implementation of the decision, but in most cases probably does not have the direct effect of causing the decision to be made.

### Housecleaning

Accounting policy changes with housecleaning effects were described in Chapter I as consisting of the adoption of a policy whose immediate effect is to decrease reported earnings in the year of the decision, when such earnings would otherwise be quite disappointing anyway, and when the decision has the effect of eliminating a substantial amount of charges which would otherwise be a burden on the reported earnings of a number of future periods, or of deferring a substantial amount of income in order to augment the earnings of future periods.

The housecleaning phenomenon may be related to the problem discussed in the previous section involving the timing of a change in accounting policy which will have the effect of decreasing the reported earnings of the year in which the change is made. We concluded previously that there might be a tendency to delay such changes until an above average year is reached, but there might also be a tendency to make such a change in a year in

which operating results are substantially below average and the making of the change would not be expected to add a great deal to the already high level of disappointment expected to result from the reporting of an abnormally low level of earnings. Indeed, in these cases the effect of the change can be cited as one major reason for the disappointing earnings performance, thereby taking some of the spotlight off of management's possible shortcomings.

The purpose of this discussion will be to secure a set of objective criteria for establishing that a particular accounting policy decision had a house-cleaning effect. The two major factors which must be present are: (1) earnings which would be reported without the accounting policy decision are substantially below an acceptable level, and (2) the decision must be expected to have a favorable impact on the earnings reports of periods subsequent to the period of the decision.

The chief measurement problem raised by the above criteria involves deciding when reported earnings are "substantially below an acceptable level." Certain broad guidelines can be set - for example a net loss is certainly substantially below an acceptable level, as would be an earnings level less than half of the reported earnings of the prior year. The exact point between

50 per cent and 100 per cent of the prior year's reported earnings which constitutes a level substantially less than acceptable is not a point susceptible to precise location. Fortunately in this study no situations were discovered which required the resolution of this borderline dilemma - in all cases under discussion here the per share earnings level which would have been reported without the accounting policy decision was either a net loss or was less than 50 per cent of the prior year's level of reported earnings.

The second major criterion characterizing an accounting policy decision with an housecleaning effect is that the decision must be expected to have a favorable impact on the earnings reports of periods subsequent to the period of implementation of the decision. This criterion rules out such accounting policy decisions as the adoption of LIFO inventory costing, the shortening of useful asset lives, and the adoption of accelerated depreciation methods, which may have an adverse effect on the reported earnings of a going concern for a number of periods subsequent to that in which the decision is implemented. The type of decisions which do meet this criterion includes write offs of large blocks of costs which would otherwise have been deferred, and the switch to deferral of income recognition on contract sales.

Table 3.7 on the following page contains information relating to the ten cases included in this study which were considered to be decisions having a house-cleaning effect according to the criteria discussed above. All of these cases were categorized as having a non-smoothing effect in the year of the change, and most were categorized BDBn under the smoothing notational system.

An Analysis of the Financial Statement Items Involved  
in the Accounting Policy Decisions

The purpose of this section is to present and discuss the breakdown of the total of 249 accounting policy decisions with a material effect on reported income examined in this study according to the type of financial statement item involved in the decision. This breakdown, with a minimal description of the more common accounting policy decisions, is presented in tabular form in Table 3.8A and 3.8B on pages 75-77.

The financial statement item involved in by far the largest number of these accounting policy decisions was depreciation. A total of sixty-five of these decisions were related to depreciation, which is about 26 per cent of the total of 249 decisions examined. Of the sixty-five decisions involving depreciation, forty-four, or 68 per cent were classified as having the effect of

Table 3.7 Housecleaning situations discovered in this study

Name of Company and year	Prior Year's Per Share Earnings	Per Share Earnings Before Decision	Per Share Effect of Decision	Per Share Earnings After Decision	Nature of the Decision*
Heywood Wakefield	1966 \$1.68	\$(2.74)	\$(0.89)	\$(3.63)	B 2
Digitronics	1965 (2.07)	(2.66)	(0.63)	(3.29)	B 7
Paramount Pictures	1962 4.23	(3.36)	(0.53)	(4.16)	B 7
Twentieth Century-Fox Film Corporation	1961 (1.17)	(7.54)	(1.49)	(9.03)	B 2
Douglas Aircraft	1960 (8.86)	(3.45)	(1.64)	(5.09)	B 3
Fairchild Engine & Airplane	1960 0.50	(1.77)	(0.20)	(1.97)	B 3
Schenley Industries	1960 3.07	0.85	(0.35)	0.50	B10
Fairchild Engine & Airplane	1958 0.17	(2.61)	(3.13)	(5.74)	B 3
Loew's Incorporated	1957 0.88	0.13	(0.22)	(0.09)	B10
Kuner-Empon Company	1957 0.52	(0.02)	(0.22)	(0.24)	B 2

\* See the Appendix and Table 3.8A and 3.8B for an explanation of this code.

Table 3.8A Nature of the accounting policy decisions

Nature of Decisions with Decreasing Effects	Number Catego- rized as		
	Smoothing	Non- Smoothing	Total
<u>Decisions Involving Inventories</u>			
1. Discontinuance or reduced use of LIFO inventory	5	2	7
2. Including previously expensed costs in inventory	0	3	3
3. Miscellaneous inventory changes	9	3	12
Inventories Subtotals	14	8	22
<u>Decisions Involving Depreciation</u>			
4. Discontinuance or reduced use of accelerated depreciation	26	11	37
5. Extending depreciable asset lives	9	4	13
6. Miscellaneous depreciation changes	2	1	3
Depreciation Subtotals	37	16	53
<u>Decisions Involving Subsidiary Accounting</u>			
7. Transfer of excess of equity over cost of subsidiaries acquired from capital surplus to deferred credit, and subsequent amortization of credit	2	2	4
8. Adopting equity basis of carrying investment	8	0	8

Table 3.8A (Continued)

Nature of Decisions with Decreasing Effects	Number Catego- rized as		
	Smoothing	Non- Smoothing	Total
<u>Decisions Involving Subsidiary Accounting (continued)</u>			
9. Consolidating subsidiaries previously carried at cost	5	5	10
Subsidiary Accounting Subtotals	15	7	22
<u>Other Individual Categories</u>			
10. Capitalizing as intangible assets certain previously expensed costs	17	3	20
11. Suspending or otherwise lowering pension provision	7	1	8
12. Flowing-through previously deferred investment tax credit	24	12	36
13. Implementation of pooling of interest without restating prior year's figures	4	2	6
14. Other miscellaneous changes and combinations of above	20	5	25
TOTALS	138	54	192

Table 3.8B Nature of the accounting policy decisions

Nature of Decisions with Decreasing Effects	Number Catego- rized as		
	Smoothing	Non- Smoothing	Total
<u>Decisions Involving Inventories</u>			
1. Adoption or expanded use of LIFO inventory	6	2	8
2. Expensing previously inventoried costs	1	3	4
3. Writing-off anticipated contract losses	0	3	3
4. Miscellaneous inventory changes	2	2	4
Inventories Subtotals	9	10	19
<u>Decisions Involving Depreciation</u>			
5. Adoption of accelerated depreciation methods	5	3	8
6. Shortening depreciable asset lives	2	2	4
Depreciation Subtotals	7	5	12
<u>Other Individual Categories</u>			
7. Expensing items previously capitalized as intangible assets	2	3	5
8. Began recognizing deferred tax expense	5	1	6
9. Revised method of computing pension cost	2	2	4
10. Other miscellaneous changes	4	7	11
TOTALS	29	28	57



smoothing reported income in the year that the decision was implemented. This percentage is not significantly different from the overall proportion of decisions with a smoothing effect, which was 67 per cent, which indicates that there is no support for the belief that depreciation is more likely, or less likely, than other financial statement items to be the vehicle through which a smoothing motive is satisfied.

Accounting policy decisions involving inventory accounted for the second largest category, as they numbered forty-one, or about 16 per cent of the total. Decisions involving the investment tax credit were third in frequency as they accounted for thirty-six accounting policy decisions, or about 14 per cent of the total. The next most frequent type of accounting policy decision involved switches made between expensing and capitalizing intangible and related costs, which numbered twenty-five, or about 10 per cent of the total. Following this were various policy decisions relating to the accounting for subsidiary companies, which numbered twenty-two, or about 9 per cent of the total. Finally decisions involving the pension provision numbered twelve, or about 5 per cent of the total.

The relative proportions of accounting policy decisions with smoothing effects and decisions with non-smoothing effects in each of the above categories defining the

financial statement items involved in the decisions are in no cases significantly different from the overall proportion of 67.1 per cent smoothing decisions and 32.9 per cent non-smoothing decisions. This indicates that none of the above financial statement items is significantly more likely or less likely than the others to be used as a device for smoothing reported income.

### Appendix

The appendix, on pages 157-190, provides the significant information relative to each of the 249 accounting policy decisions discussed in this chapter. The information provided in tabular form in this appendix includes the name of the company, the fiscal year of the financial statements in which the decision was implemented, the company's per share earnings for the prior year, the projected per share earnings for the company (where applicable), the level of per share earnings which would have been reported in the absence of the decision, the per share effect of the decision (parentheses indicating a decreasing effect and no parentheses indicating an increasing effect), the reported level of per share earnings after the decision, the notational category in which the decision was classified (refer to Table 2.3 on page 43), and finally a one

letter-one number code which is keyed to Tables 3.8A and 3.8B on pages 75-77 indicating briefly the nature of the change.

### Summary

This chapter has presented and discussed the major findings of this study from the analysis of the effects of 249 accounting policy decisions with a material effect on the reported earnings of the year in which they were implemented. It was found that 192 of these decisions, or 77 per cent, had the effect of increasing reported earnings, while the remainder decreased reported earnings. It was found that 167 of these decisions, or 67 per cent, had the effect of smoothing reported earnings in the year of implementation relative to the immediately preceding years, while the remainder had a non-smoothing effect. Ten of these decisions were construed as having had a "housecleaning" effect. The financial statement items involved most often in these accounting policy decisions were depreciation, inventories, and the investment tax credit in that order.

The significance of these findings to the accounting profession and the implications contained for policy-making bodies within the profession have not yet

been discussed. Such discussion will be deferred until Chapter VI, at which time all evidence, including that presented thus far and that to be presented subsequently, can be considered.

## CHAPTER IV

### SUPPLEMENTARY TOPICS OF INVESTIGATION

The preceding chapter has presented the basic findings of this study. This chapter will present the results of a number of supplementary analyses, each based upon the data in Chapter III together with extensions thereof. The first such topic will be a discussion of the characteristics of that set of accounting policy decisions whose effect on reported earnings in the year of the change was material at either 5 per cent of reported earnings per share for that year, or 25 per cent of the increase or decrease in reported earnings per share relative to the prior year, but was not material under the stricter set of criteria used for the effects of the decisions discussed in Chapter III (the former set will hereafter be referred to as having "less material" effects than the latter, whose effects will simply be referred to as "material"). The second such topic will be an examination of the timing of decisions with material effects which resulted in decreased earnings in the year of the decision. The third and final topic will be a detailed inspection of

the earnings trends of those firms who have made three or more accounting policy decisions whose effects on reported earnings in the year of the decision were material.

#### Decisions with Less Material Effects

As noted in the previous chapter, of the 325 accounting policy decisions whose effect on reported earnings in the year of the decision was material under the weaker of the two materiality tests, 249 were also material according to the stronger test. The remaining seventy-six constitute that set of accounting policy decisions which will be referred to as having "less material" effects. The totals in each of the categorizations of the effects of this set of accounting policy decisions according to the smoothing notational system are given in Table 4.1 on the following page.

As can be seen from Table 4.1, the proportion of these decisions with "less material" effects which resulted in increased reported earnings in the year the decision was implemented is about the same as the corresponding proportion for the decisions with material effects. Altogether, fifty-six of the total of seventy-six of these decisions, or 74 per cent, had the effect of increasing reported earnings in the year of the decision, as opposed to 77 per cent of the decisions with a material effect of the same kind.

Table 4.1 Categorization of the effects of "less material" accounting policy decisions according to the smoothing notational system\*

Decisions with Smoothing Effects		Decisions with Non-Smoothing Effects	
Category	Number	Category	Number
BIBs	16	BDBn	10
AIBs	4	ADAn	0
ADAs	10	AIBn	36
TOTAL	30	TOTAL	46

\*The notations BIBs and ADBn are not included here because in the cases described by these notations the effect of the change is always at least 100 per cent of the increase or decrease in reported earnings relative to the prior year, and thus will always pass the stricter of the two materiality tests.

However, as is also evident from Table 4.1, the relative proportions of smoothing and non-smoothing effects among these decisions with "less material" effects is strikingly different from the corresponding proportion among the decisions with a material effect. That this difference in proportion is statistically significant can be demonstrated by the application of a chi-square test to these data as shown in Table 4.2 on page 85.

Table 4.2 Chi-square test of the significance of the difference between the proportion of material decisions with smoothing and non-smoothing effects, and the proportion of "less material" decisions with smoothing and non-smoothing effects

		Effects on Earnings	
		Smoothing	Non-Smoothing
Degree of Materiality	Material	O = 167 E = 150.9	O = 82 E = 98.1
	Less Material	O = 30 E = 46.1	O = 46 E = 29.9

"O" refers to the observed value in the cell.

"E" refers to the expected value in the cell.

The chi square statistic is computed as

$$\begin{aligned}
 \chi^2 &= \sum_{i=1}^4 \frac{(O_i - E_i)^2}{E_i} \\
 &= (16.1)^2 / 150.9 + (16.1)^2 / 98.1 + (16.1)^2 / 46.1 + (16.1)^2 / 29.9 \\
 &= 1.72 + 2.64 + 5.62 + 8.67 \\
 &= 18.65
 \end{aligned}$$



The chi-square statistic of 18.65 is significant at a level of confidence of .001, which indicates that an explanation of this difference in relative proportions on the basis of chance must be rejected.

An alternative explanation of this result can be formulated in terms of an alternative hypothesis which is consistent with the interpretation of the evidence of the previous chapter. Such an alternative hypothesis would read thusly: the greater the degree of materiality of the effect of an accounting policy decision on the firm's reported earnings in the year of implementation of the decision, the greater the likelihood that such implementation will be timed such that its effect will tend to smooth the trend of reported earnings of the firm.

A more detailed analysis of these accounting policy decisions with a "less material" effect along the lines of that made in Chapter III, was not made. The major purpose of collecting the information just presented was as a means of judging which of the two materiality tests was more appropriate. It was believed that decisions whose effects were "less material" would not show any significant tendency to have either smoothing effects or non-smoothing effects, and that, therefore, the larger of the two materiality tests was more appropriate. This belief is supported by the data presented in this section.

### Decisions with Decreasing Effects

This section will analyze those accounting policy decisions with a material effect on reported earnings in the year of the decision which decreased the reported earnings figure of that year. Decisions considered to have a "housecleaning" effect will be excluded, since the benefits thereof are long run in nature, and in this analysis short run decision timing considerations will be explored. The major purpose of this section is to inquire into the plausibility of the contention made in the previous chapter that accounting policy decisions which will decrease reported earnings when implemented might tend to be delayed until the effect of the decrease on the firm's trend of reported earnings is least disadvantageous.

The accounting policy decisions which represent the subject matter of this analysis number forty-six, which total is the difference between fifty-seven material decisions which had the effect of decreasing reported earnings in the year of implementation and the ten of these which were classified as having "housecleaning" effects, plus one other case where the company was acquired in the year subsequent to implementation of its accounting policy decision, which makes it impossible

to obtain all the information needed for this analysis. The information used in this analysis in each of the forty-six cases includes (1) reported earnings per share for the year prior to the implementation of the decision, (2) the earnings per share figure which would have been reported in the year of implementation of the decision had the decision not been made, (3) reported earnings per share in the year of implementation of the decision, and (4) reported earnings per share for the year subsequent to the decision.

The analysis consists of determining for each company which of the three years would have been the "best" for purposes of implementing the decision, which would have been the "second best" and which would have been the "worst." The second of the three years is considered "better than" the first if (2) above is higher than (1), and vice versa. The third year is considered "better than" the second if (4) above is higher than (3), and vice versa. The third year is considered "better than" the first if (4) is higher than (1), and vice versa. The results of this analysis are presented in Table 4.3 on the following page.

A glance at Table 4.3 reveals evidence which supports the contention that accounting policy decisions which will decrease reported earnings in the year of their implementation might tend to be delayed, or "timed," so

Table 4.3 Rankings of year prior to, year of, and year subsequent to implementation of accounting policy decisions with the effect of decreasing reported earnings

Number of Cases in Which Year Ranked As:	First Year	Second Year	Third Year
"Best"	4	18	24
"Second Best"	15	22	9
"Worst"	27	6	13

as to have a minimum harmful effect on the trend of reported earnings of the firm. The first year, or year prior to implementation of the decision, appeared as the "best" year in only four of the forty-six cases, and appeared as the "worst" year in twenty-seven, or over half of the forty-six cases. It would be assuming too much to draw the conclusion that the managements of these firms were considering the implementation of the decision in the year prior to its actual implementation, and decided to delay it because the firm was having a relatively poor year, and because of knowledge that subsequent years would be better. However, the unusual tendency for the year prior to implementing these decisions to be inferior to the two subsequent years demands an explanation, and the contention made earlier about the timing of these decisions must certainly be accepted as plausible.

From Table 4.3 it can also be seen that the second year, or year of implementation of the decision, was the "worst" year to do so in only six of the forty-six cases. The fact that this number is relatively very small also supports the contention made about the timing of implementation of accounting policy decisions which decrease reported earnings in the year when made.

This section must therefore conclude that additional support has been provided for the contention that a tendency exists to delay the implementation of accounting policy decisions which will decrease reported earnings in order that their effect on the trend of reported earnings will be least harmful.

#### Analysis of Individual Companies which Frequently Implemented Accounting Policy Decisions with a Material Effect on Reported Earnings

This section will present a brief discussion of the reported earnings trends of five companies, each of which implemented three or more accounting policy decisions between 1955 and 1966, and of the extent to which these trends were affected by the effects of each firm's accounting policy decisions. Accompanying each discussion will be a graph of the individual company's reported earnings per share over time, and a table containing the actual data from which the corresponding graph is

composed. In each graph the plain line connects reported earnings per share figures in consecutive years, the dashed lines represent what would have been the line connecting the reported earnings per share figure in the year prior to a decision with the earnings per share figure which would have been reported in the year of a decision had no such decision been made, and the arrows pointing up or down in the year of a decision represent the per share effect of that decision in the year of its implementation.

One of the major purposes of this section is to utilize these companies which most frequently implemented decisions which materially affected reported earnings in order to graphically illustrate the types of situations discussed previously, in hopes that an understanding of the nature of the situations examined in this study might be enhanced. The other major purpose is to discover if the frequency of accounting policy decisions by these companies is indicative of an apparent long term strategy on the part of the particular firm to "manage" its trend of reported earnings. One other thing which might be accomplished by the graphical presentation, though only in a superficial sense, is an indication by inspection of whether or not some of these decisions have the same smoothing or non-smoothing effect in a long-term sense that they were categorized as having in a short-term

sense according to the methodology presented in Chapter II.

Colorado Fuel & Iron Corporation. - This company, which has subsequently changed its name to CF & I Steel Corporation, made a total of four accounting policy decisions with a material effect on reported earnings during the twelve-year period of this study. The first of these, implemented in 1955, was an extension of the estimated useful lives for depreciation purposes of property acquired under Certificates of Necessity. As can be seen on the following page from Figure 1, and Table 4.4 below which accompanies it, the effect of this decision

Table 4.4 Supplementary data for Figure 1

Year	Reported Earnings Per Share*	Effect of Decision	Year	Reported Earnings Per Share*	Effect of Decision
1950	\$2.14		1957	\$ 3.52	
1951	3.95		1958	0.42	
1952	2.14		1959	0.98	- 0.12
1953	2.50		1960	(1.34)	
1954	2.09		1961	0.04	
1955	3.30	+ 0.51	1962	(1.87)	+ 0.98
1956	4.13		1963	0.83	+ 6.79
			1964	1.47	

\* Adjusted for stock splits and stock dividends. ( ) indicates net loss.

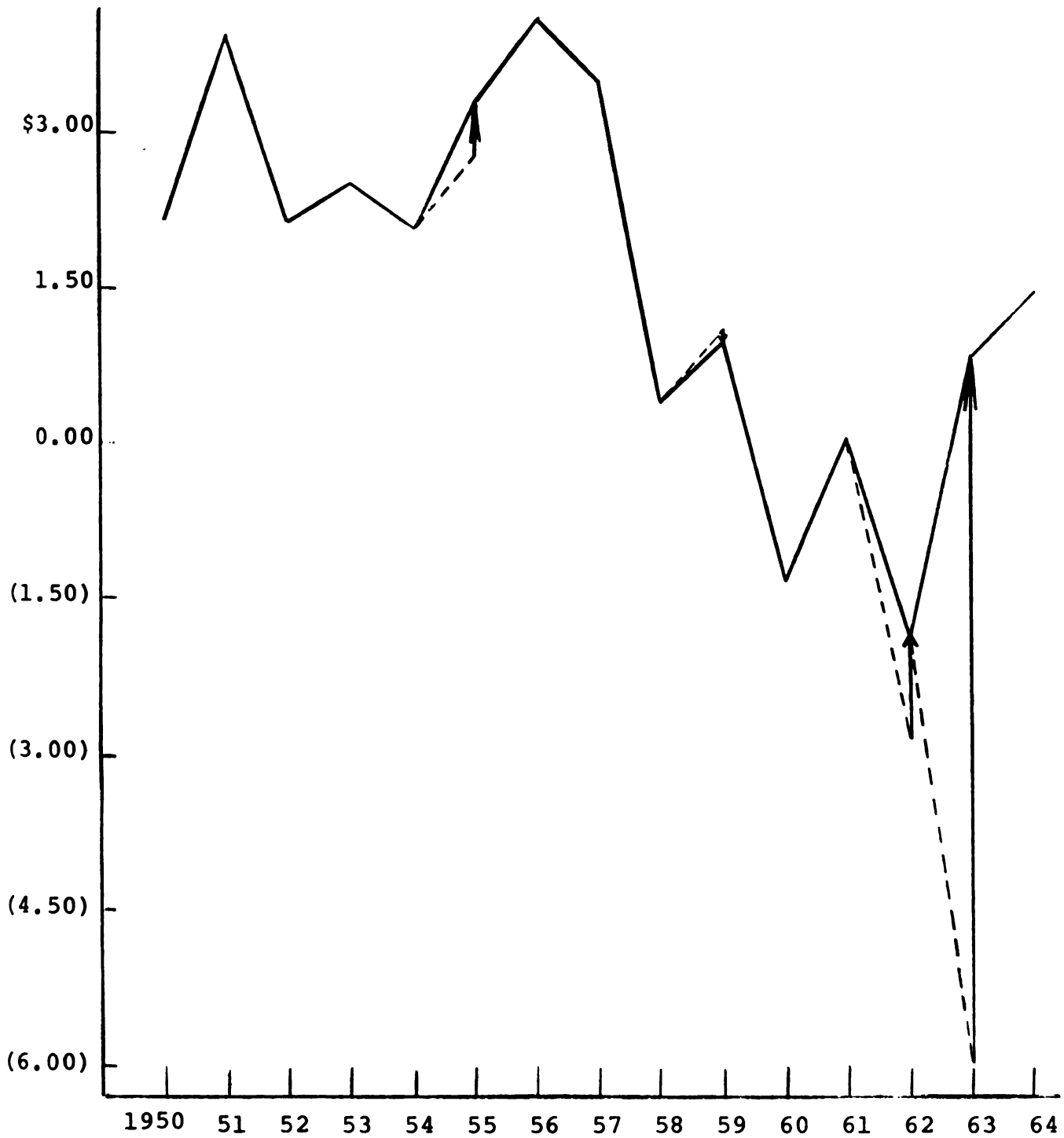


Figure 1

Colorado Fuel &amp; Iron Corporation



is properly categorized as AIAAn. The non-smoothing designation is due to the fact that, even without the effect of this decision, reported earnings had recovered sharply from the somewhat depressed level of the prior year.

The second accounting policy decision implemented by Colorado Fuel & Iron Corporation during this period was the extension of the firm's use of the LIFO inventory method to additional classes of inventory, which was done in 1959. This had the effect of decreasing reported earnings per share in that year, and of dampening a sharp rise in the firm's trend of reported earnings from the prior year. It was therefore properly categorized as ADAs.

The remaining two accounting policy decisions implemented by this company took place during what appeared to be a very critical period in the firm's history, and both had a large and extremely favorable effect in this period of relatively poor operating performance. The first of these was a change from accelerated to straight line depreciation in 1962, which reduced by over one-third the net loss per share which would otherwise have been reported in that year. The effect of this change in policy was categorized as BIBs. In the following year, 1963, an accounting policy decision was made to change to the current operating

income concept, thereby excluding from reported net income several items, of which the principal amount was represented by losses on disposals of plants, which had been included in the income statement in the prior year. The degree of magnitude of the effect of this change relative to the average income of this firm was probably greater than any other single effect of an accounting policy decision examined in the course of this study. The effect of this change was to transform a huge per share net loss into a modest net income per share in the firm's annual report. This effect was categorized as BIAs.

The L. S. Starrett Company. - The discussion of this company will involve three accounting policy decisions made by it during the twelve-year period examined in this study. The first of these took place in 1959, and involved a revision in the firm's method of computing its provision for retirement plan cost. The effect of this on the trend of reported earnings was that, by causing the firm to report higher earnings in 1959 than would have otherwise been reported, the magnitude of the firm's drop in earnings from the prior year was greatly reduced, as can be seen from Figure 2 on the following page. The effect of this decision was therefore categorized as BIBs.

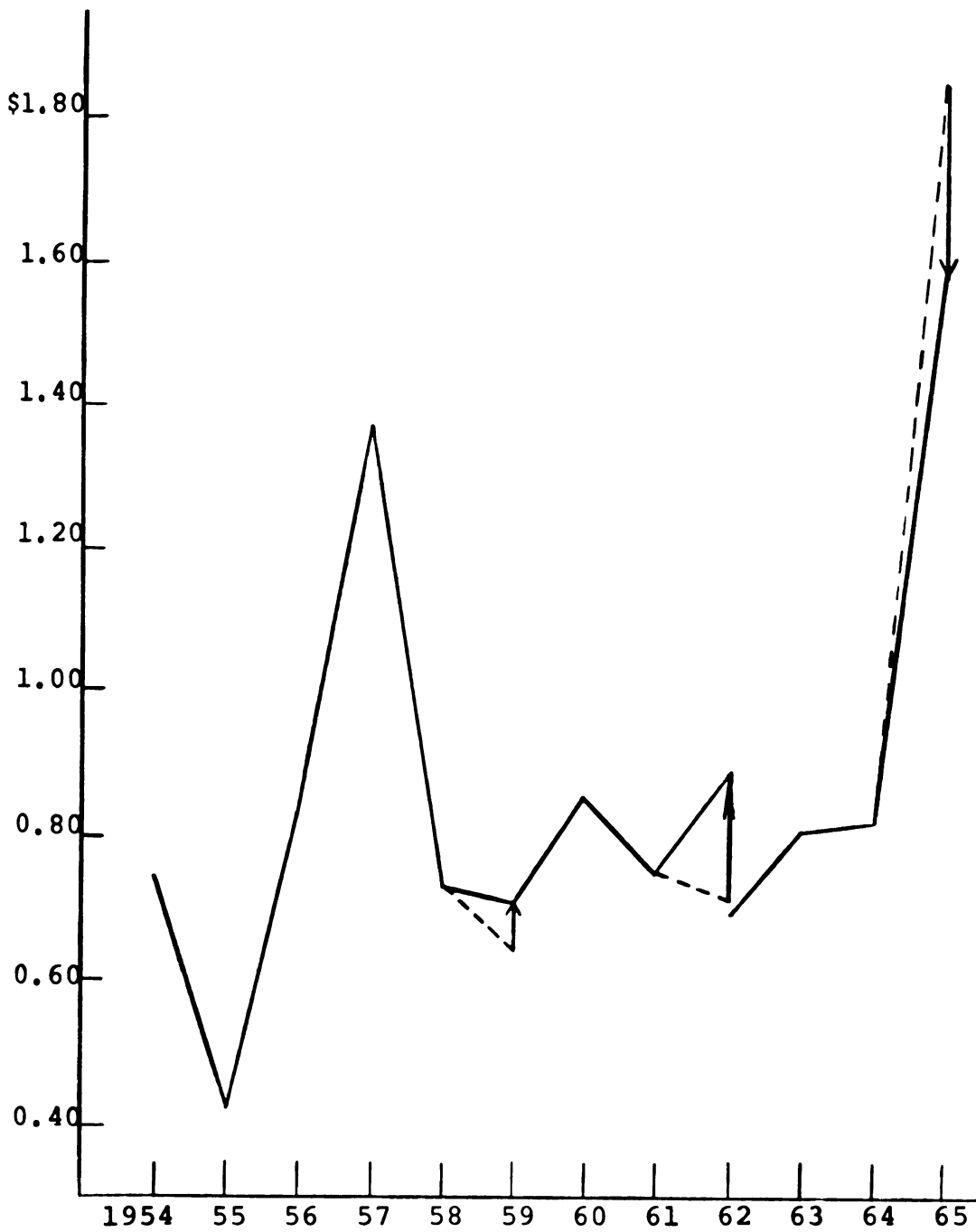


Figure 2

The L. S. Starrett Company

Table 4.5 Supplementary data for Figure 2

Year	Reported Earnings Per Share*	Effect of Decision	Year	Reported Earnings Per Share*	Effect of Decision
1954	\$ 0.75		1961	\$ 0.75	
1955	0.42		1962	0.89	+ 0.18
1956	0.84		1962 (revised)		
1957	1.37			0.69	
1958	0.73		1963	0.81	
1959	0.71	+ 0.07	1964	0.82	
1960	0.86		1965	1.58	- 0.27

\* Adjusted for stock splits and stock dividends.

The second of the accounting policy decisions made by this company was the decision made in 1962 to capitalize a relatively large patent expenditure, which under the previous policy would have been expensed in that year. As a result of this decision, a decline in reported earnings from the prior year was averted, and the company achieved a substantial increase in reported earnings relative to the prior year. This decision was therefore properly categorized as BIAs.

In 1963 this company began to consolidate some of its subsidiaries, and as a result the earnings figures for 1962 were restated. In Figure 2 the originally

reported figure is shown connected to the figures for years prior to 1962, and the restated figure is connected to the figures for years subsequent to 1962. The effect of this change in policy was not included among those interpreted as having a material effect.

The third and last of the accounting policy decisions to be discussed here involved two separate decisions implemented in 1965 whose combined effect was to decrease reported earnings, and thereby dampen a still substantial rise in the earnings trend from the prior year. One of these decisions was to create a reserve for unusual foreign risks from credits which would normally have been included in the income statement as part of the consolidated net income. The other decision was once again a revision of the method of computing the cost of retirement plans for the stated purpose of providing a more level cost. The effect of these decisions was categorized as ADAs.

Some observations can be made about this company and its record. First, from inspection of the chart it appears that in a long run sense its accounting policy decisions had a smoothing effect, in that those which increased reported earnings were implemented in years of poor results relative to both prior and subsequent years, and conversely the one which decreased reported earnings was implemented in a year of excellent earnings

performance for this company. Thus the short-run categorizations, all of which indicated that this company's accounting policy decisions had smoothing effects, were completely consistent with what appeared to be the long-run effects. Secondly, the fact that this company twice revised its method of computing the provision for cost of retirement plans within a span of seven years suggests that perhaps this company considers that category of expense as an appropriate one in which to make income smoothing adjustments.

Houdaille Industries. - This company made a total of three accounting policy decisions with a material effect on reported earnings during the twelve-year period of this study. The first of these was implemented in 1956 and involved the adoption of an accelerated depreciation method, which resulted in the reporting of a lower earnings per share amount than would otherwise have been reported. Despite the effect of this decision, however, the chart on the following page reveals that the trend of reported earnings per share rose from the prior year by an ample amount, and the effect of this decision was thus categorized as ADAs.

The second of these decisions, which was implemented five years later in 1961, involved a switch back from accelerated to straight line depreciation. The effect of

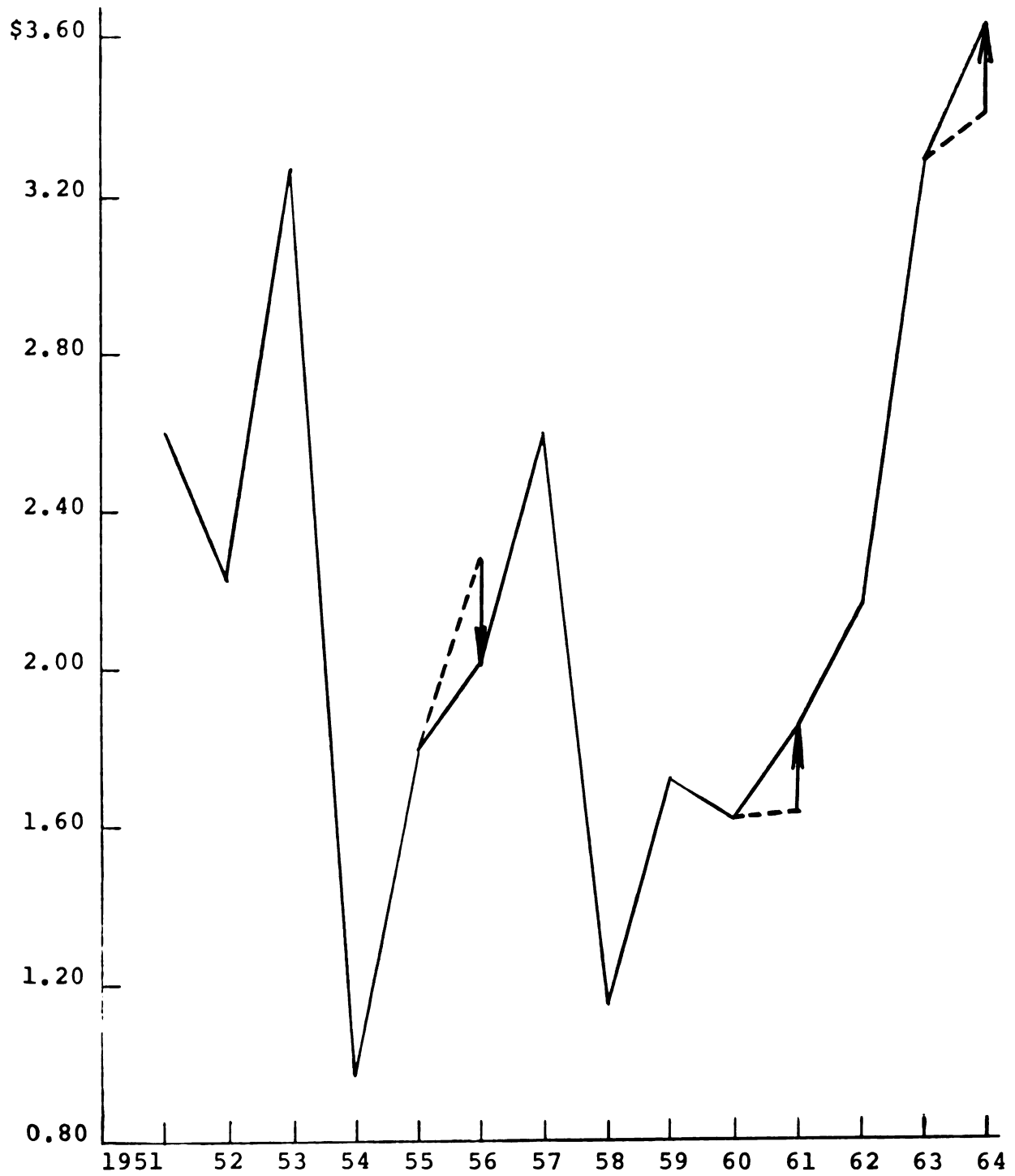


Figure 3

Houdaille Industries

Table 4.6 Supplementary data for Figure 3

Year	Reported Earnings Per Share*	Effect of Decision	Year	Reported Earnings Per Share*	Effect of Decision
1951	\$ 2.61		1958	\$ 1.15	
1952	2.22		1959	1.72	
1953	3.47		1960	1.62	
1954	0.97		1961	1.85	+ 0.22
1955	1.79		1962	2.16	
1956	2.02	- 0.26	1963	3.28	
1957	2.60		1964	3.62	+ 0.22

\* Adjusted for stock splits and stock dividends

this decision was the reporting of higher earnings per share than would otherwise have been reported, and since without this effect the trend of reported earnings per share would have risen by a small but adequate amount from the prior year, the effect of this decision was categorized as AIA. However, in light of subsequent earnings reports, as is apparent from the chart, this non-smoothing designation seems inappropriate in a long-term sense.

The final decision implemented by Houdaille was a change from the deferral method of accounting for the investment tax credit to the flow through method in 1964.



This had the effect of increasing reported earnings per share over what would otherwise have been reported for 1964. Although the trend of reported earnings would have increased relative to 1963 without the effect of this decision, the amount of this increase in the trend was inadequate in relation to the past performance of the trend. The earnings projection formula used in this study projected a goal for reported earnings per share of \$3.86, and because the effect of this decision was to move reported earnings closer to this goal, it was categorized as AIAs.

Endicott Johnson Corporation. - This company also made three accounting policy decisions with a material effect on reported earnings during the twelve-year period of this study. The first of these took place in 1957 and involved the adoption of an accelerated depreciation method. This decision lowered reported earnings per share, and the effect on the trend of reported earnings, as can be seen from Figure 4 on the following page, was to transform an increase relative to the prior year into a decline. This type of effect, categorized as ADBn, is extremely unfavorable, and occurred very infrequently in this study - only eight of the total of 249 decisions effects examined in this study were of this type.

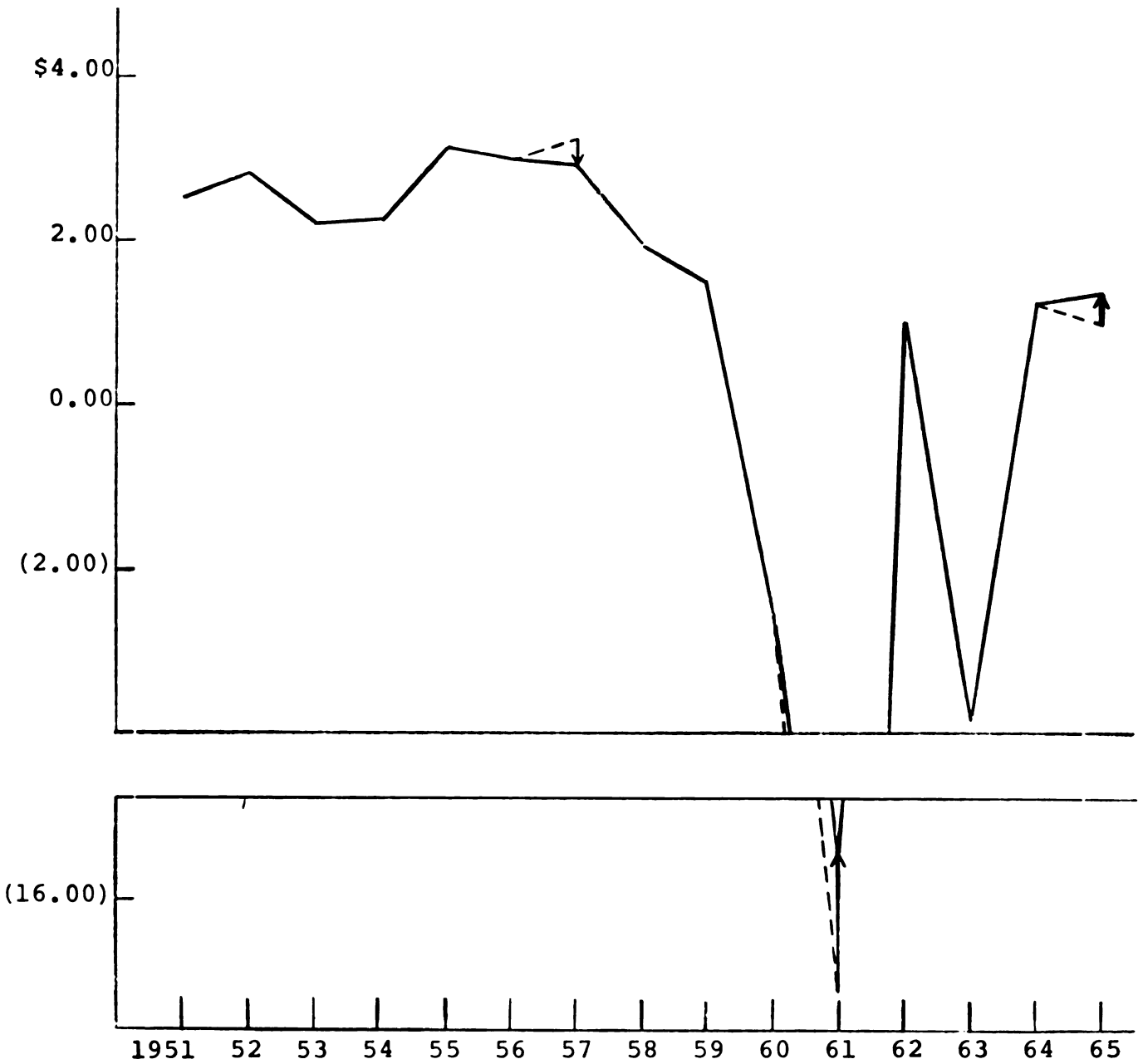


Figure 4  
Endicott Johnson Corporation

Table 4.7 Supplementary data for Figure 4

Year	Reported Earnings Per Share*	Effect of Decision	Year	Reported Earnings Per Share*	Effect of Decision
1951	\$ 2.52		1959	\$ 1.50	
1952	2.82		1960	(2.53)	
1953	2.23		1961	(15.42	+ 1.68
1954	2.28		1962	1.04	
1955	3.15		1963	(3.80)	
1956	3.06		1964	1.25	
1957	2.97	- 0.27	1965	1.37	+ 0.32
1958	1.98				

\* Adjusted for stock splits and stock dividends. ( ) indicates loss.

The second of this company's accounting policy decisions to be discussed here took place in 1961, which was an extremely poor year in its earning's history as a huge per share loss was reported. In this year the company suspended the recording of any provision for pension cost, which reduced the amount of the reported net loss. The effect of this decision was thus categorized as BIBs.

The final accounting policy decision of this company to be discussed here was made in 1965. In that year the

company switched back to straight line depreciation from its accelerated method. This change increased the amount reported as earnings per share over what it otherwise would have been, and as can be seen from the chart, had the extremely favorable effect of transforming a decline in the trend of reported earnings from the prior year into an upward sloping trend. The effect of this decision was thus categorized as BIAs.

Beatrice Foods Company. - This company's record over the twelve-year period of this study is probably the most flagrant example of non-compliance with generally accepted accounting principles in order to perpetuate a smoothly rising earnings trendline. As can be seen from inspection of Figure 5 on the following page, every one of this company's six accounting policy decisions with a material effect on reported earnings during this period contributed significantly to what appears to be an almost perfectly smooth and rising trend of reported earnings.

The first of these decisions, which was implemented in 1959, involved recognition for the first time by the company of a tax expense, and a corresponding deferred tax liability, for the tax saving generated by the use of an accelerated method for tax purposes and the straight line method for book purposes. This change, which was

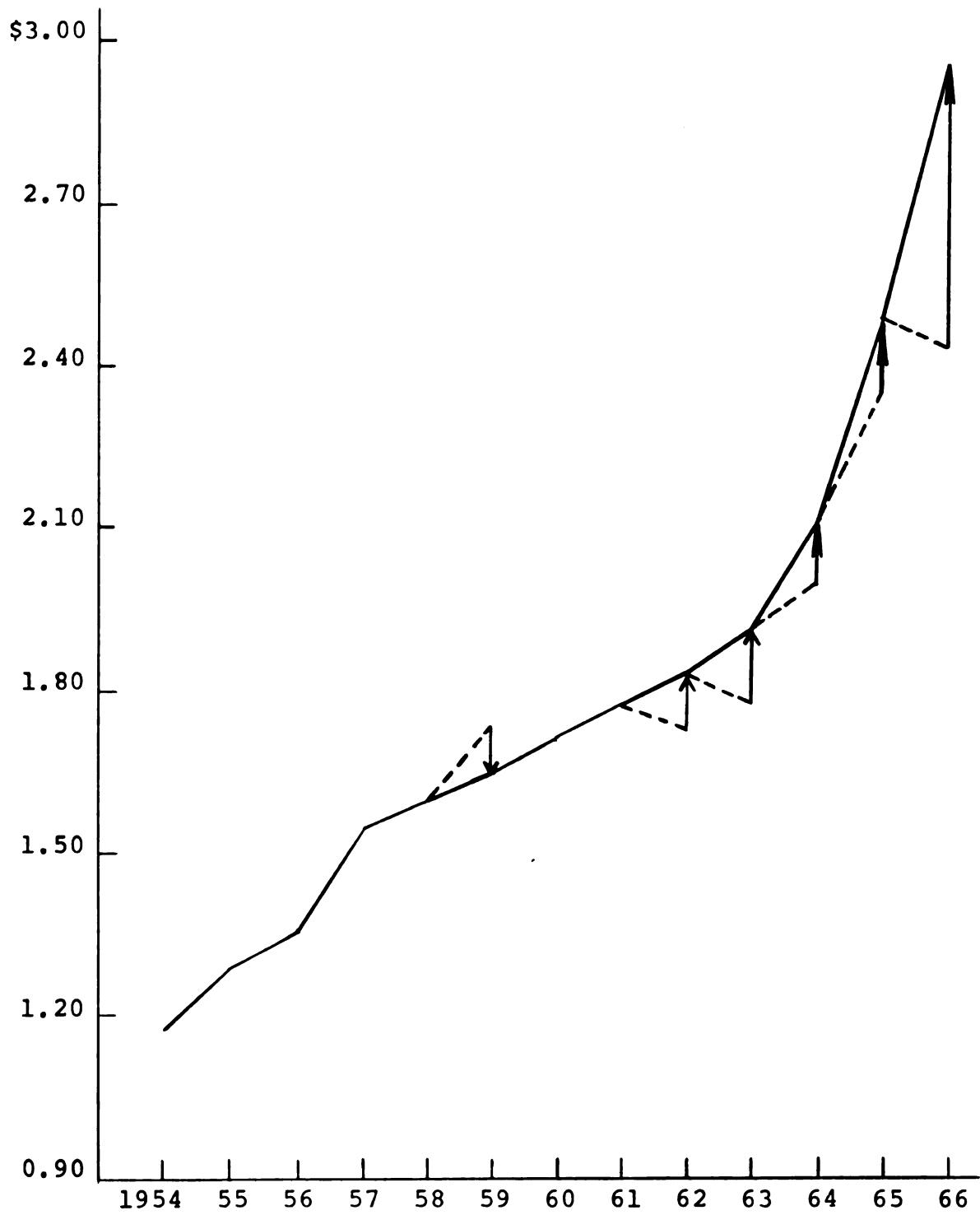


Figure 5

Beatrice Foods Company

Table 4.8 Supplementary data for Figure 5

Year	Reported Earnings Per Share*	Effect of Decision	Year	Reported Earnings Per Share*	Effect of Decision
1954	\$ 1.17		1961	\$ 1.77	
1955	1.28		1962	1.83	+ 0.11
1956	1.35		1963	1.91	+ 0.14
1957	1.54		1964	2.11	+ 0.11
1958	1.59		1965	2.49	+ 0.14
1959	1.64	- 0.09	1966	2.95	+ 0.52
1960	1.71				

\* Adjusted for stock splits and stock dividends

recommended by the American Institute of Certified Public Accountant's Accounting Research Bulletin No. 44 (revised) in July 1958, resulted in the reporting of lower earnings by Beatrice Foods than would otherwise have been reported in 1959. Its effect on the trend of reported earnings was to dampen an otherwise above-average rise from the prior year, and it was thus categorized as ADAs.

For five years in a row, from 1962 to 1966, this company's auditors noted an exception to consistent application of generally accepted accounting principles in the company's financial statements. In each case the

reason was the same - the company had acquired other companies in poolings of interest and had not restated its prior year's comparative statements on a pooled basis. In 1962, 1963 and 1966 the effect of including the earnings of companies newly acquired in poolings as part of Beatrice Foods' earnings for those years, even though prior years were not accordingly pooled, was to transform a decline in the trend of reported earnings from the respective prior years into an increase over those prior years. These effects were thus categorized as BIAs. However, in 1964 and 1965 the effect was to transform an already adequate rise in the earnings trendline into an even greater rise which appeared, by past standards, to be excessive. In those years the effect was categorized as AIA's. In a long-term sense, however, as is apparent from inspection of Figure 5, these decisions in 1964 and 1965 did not appear to have any non-smoothing effect on the trend of reported earnings, since in subsequent years the firm was able to improve still further upon these levels of reported earnings.

### Summary

In this chapter a comparison was made of those accounting policy decisions whose effect on reported earnings was considered to be material with those whose effect was considered "less material." It was concluded

that the greater the degree of materiality of the effect of an accounting policy decision on reported earnings in the year of implementation, the greater the likelihood that the effect of such decision will be to smooth the trend of reported earnings relative to prior years.

Also in this chapter an examination was made of the timing of those accounting policy decisions with the effect of decreasing reported earnings in the year of implementation. The evidence indicated that the implementation of these decisions may have been postponed in order that their effect on reported earnings would be least unfavorable at the point of eventual implementation.

Finally this chapter discussed briefly the trends of reported earnings of five companies which made three or more accounting policy decisions with a material effect on reported earnings during the twelve-year period of this study from 1955 to 1966. Graphical presentations of earnings per share over time made for these companies - The L. S. Starrett Company and Beatrice Foods Company - suggest that perhaps these companies are planning and carrying out income smoothing on a long-term basis.



## CHAPTER V

### A COMPARISON OF TWO GROUPS OF FIRMS

This chapter will present a comparison of selected characteristics of two groups of firms at particular points in time. One group will consist of those firms which made an accounting policy decision which had an extremely favorable effect on their trend of reported earnings. These will be the firms whose decisions were coded BIAs according to the smoothing notational system. This group will consist of 38 firms, and will be referred to operationally as the "trend raisers."

The other group whose characteristics at a point in time will be compared with those of the trend raisers will consist of firms which made an accounting policy decision which had an extremely unfavorable effect on their trend of reported earnings. These will be the firms whose decisions were coded ADBn according to the smoothing notational system. This group will consist of eight firms, and will subsequently be referred to as the "trend reducers" for operational purposes.

It has been concluded earlier in this study that, for any particular accounting policy decision it is not

possible to determine from the type of examination made in this study whether or not a particular motive led to the making of the decision. However, it is possible to conclude from examining the effects of a particular decision whether or not those effects are consistent with a particular motivation. Those accounting policy decisions whose effect on the trend of reported earnings was coded BIAs are the most obviously consistent with a motive to influence reported earnings in a favorable manner. This is true because these decisions have the effect of reversing the firm's trend of reported earnings relative to the prior year in order that its slope is rising, whereas without the effect of the decision the trend would have been declining from the prior year. Those accounting policy decisions whose effect on the trend of reported earnings was coded ADBn are exactly the opposite in terms of effect on the trend. They transform what would have been a rising trend of reported earnings from the prior year without the effect of the decision into a declining trend for the firm. Thus these decisions may be considered as being the most obviously inconsistent with a motive to influence reported earnings in a favorable manner.

The decision to compare the characteristics of the BIAs firms, or trend raisers, with ADBn firms, or trend reducers, was made because these two groups are at

opposite extremes with respect to the likelihood that the motive to influence the trend of reported earnings in a favorable manner contributed directly to the making of their respective accounting policy decisions. In none of the other circumstances represented by the remaining codes in the smoothing notational system is the effect of the decision so obviously beneficial or disadvantageous. Therefore, if statistically significant differences are discovered in the characteristics of these two groups of firms, it might be possible to explain these differences by proceeding from the assumption that the trend raisers were motivated in making their accounting policy decisions to a large degree by a desire to report a favorable trend of reported earnings, whereas the trend reducers were not so motivated. Similarly, but conversely, the differences in characteristics of the two groups, if found to be statistically significant, might possibly be utilized to explain the apparent difference in motives of the two groups, and to support the contention that a difference in motives actually existed.

#### Characteristics Used as a Basis of Comparison

Many various financial and policy characteristics were considered for use in making the comparison of trend raisers with trend reducers. Several of these were

rejected.<sup>1</sup> The major reasons for such rejection were (1) no logical relationship could be deduced between differences in the characteristics between the two groups of firms, and the differences in their motives for making an accounting policy decision, (2) the characteristics could not be measured accurately, and (3) information was not available on the characteristics for the particular firms at the relevant points in time.

The characteristics of the trend raisers and trend reducers which will be discussed here, together with the hypothesized relationships between the two groups relative to the measure of each characteristic, are presented individually below.

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<sup>1</sup>Characteristics which were considered for discussion here and rejected include measures of corporate risk, such as the percentage of debt in the firm's capital structure; the percentage of management ownership of the firm's common stock; a measure of corporate diversification; the percentage of sales represented by research and development expenditures; the percentage of earnings paid out as dividends, and the trend in that percentage; a classification according to whether or not a favorable prediction was made in the firm's annual report in the year prior to implementation of its accounting policy decision; the number of changes in public accountants made by the firm within some period prior to and subsequent to implementation of its decision; the percentage of sales consisting of revenue from the federal government; and measures of corporate growth.

Price-Earnings Ratios. - It is generally acknowledged that one of the most important factors supporting a high price-earnings multiple is a healthy trend of growth in earnings per share - both past and expected. Thus if the price-earnings ratio for a particular firm is already relatively high, the reporting of a decline in the firm's earnings per share from the prior period could very possibly contribute to a decline in its price-earnings multiple. A simultaneous drop in reported earnings per share and in the price-earnings multiple will produce a "whiplash" effect on the price of the firm's common stock in the securities market, causing it to decline sharply. This could arouse or aggravate great dissatisfaction among stockholders with the existing corporate management.

A recent case which was spotlighted in the news represents an excellent illustration of this type of "whiplash" effect. In 1967 Litton Industries common stock sold as high as \$120.375 on reported earnings for the fiscal year ended July 31, 1967 of \$2.60 per share. At this high price Litton's price-earnings ratio was over forty-six. However, in January of 1968, Litton announced a sharp decline in second quarter earnings per share, from \$0.67 per share in the same period one year earlier, to \$0.21 per share. According to an analysis of the case in Fortune, "In the market Litton stock

dropped eighteen points in one week. By early March it was down nearly 50 per cent from its 1967-68 high, \$120.375."<sup>2</sup> "Analysts are predicting per-share earnings of \$2 to \$2.25, down from \$2.60 last year."<sup>3</sup> Based on this estimate of earnings Litton stock, selling at its low of sixty-two early in 1968, was selling at a price-earnings multiple in the range of twenty-seven and one half to thirty-one. Thus a decline in reported earnings estimated at about 20 per cent led to a decline in the price earnings multiple of about 30 per cent to 35 per cent, which combined to produce a decline in the stock price of almost 50 per cent.

This example illustrates how the existence of a high price-earnings ratio can place considerable pressure on corporate management to avoid the reporting of a decline in earnings per share, especially if a portion of the price-earnings multiple is attributable to an expectation of continued increases in earnings per share. A company whose stock is selling at a low multiple of earnings, however, faces no such pressure,<sup>4</sup> and can be

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<sup>2</sup>William S. Rukeyser, "Litton Down to Earth," Fortune, Vol. LXXVII, No. 4, April, 1968, p. 139.

<sup>3</sup>Ibid., p. 186.

<sup>4</sup>This statement is less true now, in 1968, than it was generally during the period of this study, 1955-1966, because of the recent trend toward acquisition of under-valued companies by conglomerates and other merger-hungry companies.

less concerned with immediate earnings performance, and thus more concerned with implementing accounting policy decisions for reasons more appropriate than a desire to favorably affect the trend of reported earnings per share.

The null hypothesis in the comparison of the price-earnings ratios of the trend raisers and trend reducers is that there will be no difference between these two groups relative to this characteristic. The alternative hypothesis, which has been developed in the preceding discussion, is that the trend raisers will have a higher price-earnings ratio than the trend reducers. A discussion of the statistical test used for this hypothesis, together with a discussion of the findings, will be presented after all the other hypotheses regarding the characteristics being compared have been developed.

Ratio of Stock Price to Book Value Per Share. - Although book value per share has many weaknesses as a measurement, the ratio of stock price to book value per share was chosen as a basis for comparison as a check on the comparison of price-earnings ratios, which can be distorted if reported earnings are abnormally low or negative. A high ratio of stock price to book value per share might therefore be partially attributable to an expectation of earnings growth, which would place pressure upon corporate management to avoid reporting a decline in earnings

per share. A low ratio of stock price to book value is evidence of minimal expectation of earnings growth, which means that management may feel little pressure from stockholders to avoid reporting lower earnings, and may therefore have a motive for implementing an accounting policy decisions other than to affect favorably the firm's trend of reported earnings per share.

The null hypothesis in the comparison of the ratios of stock price to book value per share of the trend raisers and trend reducers is that there will be no difference between the two groups relative to this variable. The alternative hypothesis, developed above, is that the trend raisers will have a higher ratio of stock price to book value per share than the trend reducers.

Propensity to Issue Common Stock in Acquisitions. - A prominent basic finance textbook, in listing the reasons for business combinations from the point of view of the acquiring firm, states that:

. . . we may seek an acquisition in order to take advantage of a high price-earnings ratio on our common stock. If we can trade our stock for that of another company with a low price-earnings ratio, we may succeed in raising the price of our own shares and still benefit the stockholders of the other concern. Instead of spending cash, we issue stock, or 'Chinese money' as it is sometimes called.<sup>5</sup>

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<sup>5</sup>Robert W. Johnson, Financial Management, 3rd edition, (Boston: Allyn and Bacon, Inc., 1966), p. 653.



It is thus apparent that an attitude exists in the field of finance that a firm's stock is a good substitute for cash in financing an acquisition program, particularly if the stock is selling at a high price relative to earnings. Given this attitude, it follows that an acquisition-minded firm will be anxious to avoid reporting any news that might adversely affect the price of its stock, such as the news that earnings per share have declined from the prior year. Conversely, a firm less interested in acquisition of other companies will be subject to a lesser degree of pressure to avoid reporting a decline in earnings per share relative to the prior year.

The measurement of the concept of "propensity to issue common stock in acquisitions" will consist of a categorization of each firm as either having a "high" or "low" propensity. The details of the operational rules used in this categorization will be presented along with the actual findings in the latter portion of this chapter. The null hypothesis to be tested is that there is no difference between the trend raisers and trend reducers with regard to the proportion of each group having a high propensity to issue common stock in acquisitions and having a low propensity. The alternative hypothesis, based upon the foregoing reasoning, is that the proportion of the trend raisers with a high propensity

to issue common stock in acquisitions is greater than the corresponding proportion of the trend reducers, or that the proportion of the trend reducers with a low propensity to issue common stock in acquisitions is greater than the corresponding proportion of the trend raisers.

Existence of Outstanding Stock Options. - A prominent accounting academician recently stated his belief that "If favorable accounting reports increase the market-ability and enhance the demand for and price of corporate shares, the payoff in prestige may be accompanied by an incentive bonus to managers who receive some of their compensation through the medium of stock options."<sup>6</sup>

This strongly suggests that a connection exists between the existence of outstanding stock options to acquire a firm's common stock by its executives, and the motive to avoid reporting an unfavorable level of earnings per share, such as a level that represents a decline from the preceding year.

The null hypothesis in the examination of this characteristic is that an equal proportion of trend

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<sup>6</sup> Charles E. Johnson, "Management's Role in External Accounting Measurements," Research in Accounting Measurement, ed. by R. K. Jaedicke, Y. Ijiri, and O. Nielsen, American Accounting Association, 1966, p. 89.

raisers and trend reducers will be found to have had stock options outstanding among their executives at the end of the fiscal period in which their respective accounting policy decisions were implemented. The alternative hypothesis, which is consistent with the viewpoint expressed in the preceding paragraph, is that the proportion of the trend raisers which will be found to have had stock options outstanding among their executives at the end of the fiscal period in which their respective accounting policy decisions were implemented will be greater than the corresponding proportion of the trend reducers.

Propensity to Obtain Capital via Issuance of Convertible Securities. - For the firm whose management considers convertible securities as a desirable means of obtaining capital funds, the creation of favorable expectations among investors with regard to the firm's future prospects must necessarily be a goal of the firm's management. The existence of this goal would make the reporting of a decline in earnings per share from the prior period an undesirable circumstance for the firm. Thus the existence of evidence that a particular firm has a propensity to obtain capital via the issuance of convertible securities might indicate that a motive exists for the management of that firm to avoid reporting a decline in

earnings per share from the prior year. Conversely, the lack of evidence that a particular firm has such a propensity might indicate the lack of this particular pressure to avoid reporting a decline in earnings per share from the prior year.

The null hypothesis in the examination of this characteristic is that an equal proportion of trend raisers and trend reducers will be found to display a propensity to obtain capital via the issuance of convertible securities. The alternative hypothesis, logically developed in the preceding paragraph, is that the proportion of the trend raisers which will be found to display a propensity to obtain capital via the issuance of convertible securities will be greater than the proportion of the trend reducers found to have this propensity.

Quality of Disclosure in Corporate Annual Reports. - If the accounting policy decisions of the trend raisers were motivated by a desire to favorably affect the trend of reported earnings of the firm, it would seem that the managements of these firms would wish to disclose in their annual reports a minimum of information with respect to their decision and its effect, in order to reduce suspicion with regard to their motives. If the accounting policy decisions of the trend reducers were motivated for reasons which the firm's management

considered to be in the best interests of the firm and the investing public, and since their effect on the trend of reported earnings was very unfavorable, it would seem that the managements of these firms would wish to disclose clearly in their annual reports the relevant information with respect to the effects of the decision, and would wish to disclose it in all presentations in which the results of the prior year are compared with the results of the current year. However, if there is no difference in the motives of these two groups in implementing their respective accounting policy decisions, there would be no reason to expect a significant difference between the two groups with respect to the quality of disclosure of the effects of these decisions in their annual reports.

The null hypothesis in the comparison of the two groups with respect to quality of disclosure is that there is no difference between the two groups with respect to the quality of disclosure in their annual reports of the effects of their respective accounting policy decisions on the trend of reported earnings per share from the prior year. The alternative hypothesis, developed in the preceding paragraph, is that the trend raisers will be found to have a lower quality of disclosure than the trend reducers with respect to the effects of their respective accounting policy decisions.

### Results of the Statistical Tests

Price-Earnings Ratios. - The two components of this ratio were measured as follows: "earnings" is the reported earnings per share of the firm in the fiscal year of implementation of its accounting policy decision; "price" is the median price per share of the firm's common stock during the calendar year which preceded the year in which the firm's fiscal period ended if that fiscal period ended in January or February, or during the calendar year which was equivalent to the year in which the firm's fiscal period ended if that fiscal period ended in the months of March through December inclusive.

The Mann-Whitney U test was used to test the null hypothesis that there is no difference in the price-earnings ratios of the trend raisers and trend reducers against the alternative that the trend raisers tend to have higher price-earnings ratios. This test is designed "for testing the null hypothesis that two samples come from identical populations against the alternative that these populations have unequal means."<sup>7</sup>

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<sup>7</sup>John E. Freund, Mathematical Statistics (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1962), p. 290. For another excellent discussion of this test, see Sidney Siegel, Nonparametric Statistics for the Behavioral Sciences (New York: Mc-Graw-Hill Book Company, Inc., 1956), pp. 116-127.

In using this test the price-earnings ratios of the eight trend reducers and thirty-seven trend raisers<sup>8</sup> were ranked from the lowest, which received a rank of one, to the highest, which received a rank of forty-five. The ranks assigned to the trend reducers were 1, 11, 13, 14, 22, 26, 27 and 40. By inspection a slight tendency for these ranks to cluster at the lower end of the scale can be noted.

Since for samples as large as the one here, the sampling distribution of the U statistic rapidly approaches the normal distribution, a z value was computed for use with the familiar table of areas under the normal curve. The z value in this test was 0.89, which has a one-tailed probability  $p = .1867$  of occurring under the null hypothesis. Although this value is not small enough to suggest rejection of the null hypothesis at any reasonable level of confidence, it does add some measure of plausibility to the arguments used in developing the alternative hypothesis.

One of the problems in obtaining statistically significant results (at a significance level, of say, 0.10) in this and all other tests in this chapter is

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<sup>8</sup>One of the trend raisers reported a net loss per share, and was excluded since no meaningful price-earnings ratio could be computed.

that the size of the group of trend reducers is very small. Generally the power of a test to reject the null hypothesis when it is false increases with an increase in the size of the sample. Another difficulty which is peculiar to a test using price-earnings ratios is the weakness of the ratio as a basis for comparison when earnings figures are abnormally low for a particular firm. The second of these difficulties may be partially eliminated in the next test.

Ratio of Stock Price to Book Value Per Share. - In measuring the two components of this ratio, "price" is measured in the same manner as in the previous test, and "book value per share" is measured, using figures from the firm's balance sheet at the end of the fiscal year in which its accounting policy decision was implemented, as total assets minus intangible assets, minus liabilities, and minus claims of preferred stockholders, and divided by the total number of common shares outstanding.<sup>9</sup>

Once again the Mann-Whitney U test was used, this time to test the null hypothesis that there is no difference among the trend raisers and trend reducers with respect to their ratios of stock price to book

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<sup>9</sup>This value is computed in Moody's Industrials under the heading of "net tangible assets per common share."



value per share against the alternative that the trend raisers tend to rank higher on the basis of this ratio. The eight trend reducers and thirty-eight trend raisers were ranked from lowest to highest values of this ratio. The ranks assigned to the trend reducers were 3, 5, 10, 13, 16, 33, 34 and 35. Once again an inspection reveals a slight tendency for these ranks to cluster at the lower end of the scale.

The z value computed in this test was 1.13. This value has an one-tailed probability  $p = .1292$  of occurring under the null hypothesis. This value is not small enough to enable rejection of the null hypothesis at a level of confidence of 0.10, but it is quite a bit smaller than the p of .1867 which was computed in the previous test. This result must be interpreted as lending some measure of support to the arguments made in developing the alternative hypothesis.

Propensity to Issue Common Stock in Acquisitions. - In measuring this concept the number of acquisitions in which the firm issued its common stock or convertible preferred stock within the seven-year period encompassing the four fiscal years prior to the fiscal year of implementation of the firm's accounting policy decision, the fiscal year of implementation itself, and the two subsequent years, was determined for each firm. If this

number was zero or one, the firm was categorized as having a low propensity to issue common stock in acquisitions. If this number was two or greater, the firm was categorized as having a high propensity to issue common stock in acquisitions.

Of the eight trend reducers, all eight were categorized as having a low propensity to issue common stock in acquisitions. One of this group issued its common stock in one merger during the relevant period, whereas the remaining seven did not issue stock in any mergers throughout the seven-year period.

Of the thirty-eight trend raisers, fifteen were categorized as having a high propensity to issue common stock in acquisitions, whereas the remaining twenty-three were categorized as low on this scale. The trend raiser which issued its stock in the largest number of mergers was Beatrice Foods Company, which acquired thirty-one companies during the five years prior to, and two years subsequent to February 28, 1966, in exchange for common or convertible preferred stock. An analysis of this company's trend of reported earnings and of the influence of accounting policy decisions thereon during the twelve-year period of this study was presented in Chapter IV.

The exact probability of occurrence of the above results under the null hypothesis was computed by means

of the Fisher exact probability test<sup>10</sup> as  $p = .0301$ . This enables us to reject the null hypothesis at a significance level as small as .05 in favor of the alternative hypothesis that firms which behave as trend raisers have a higher propensity to issue common stock in acquisitions than firms which behave as trend reducers. The explanation that firms with a high propensity to issue common stock in acquisitions have a motive to avoid reporting a decline in earnings per share, and therefore act to satisfy that motive by behaving as trend raisers, has been supported by this result.

Existence of Outstanding Stock Options. - For purposes of this test, firms were categorized as either having or not having stock options outstanding among officers and executives of the firm at the end of the fiscal period in which their respective accounting policy decisions were implemented. Of the thirty-eight trend raisers, twenty-one did have stock options outstanding among their executives, whereas only three of the eight trend reducers displayed this trait. Although the prediction of the alternative hypothesis that a greater proportion of the trend raisers would have stock options outstanding among executives than the trend reducers was

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<sup>10</sup>See Siegel, Nonparametric Statistics, pp. 96-104, for a discussion of this test.

confirmed, the result was not extreme enough to allow rejection of the null hypothesis using the chi-square test.

Propensity to Obtain Capital via Issuance of Convertible

Securities. - For purposes of this test, firms were categorized as either having or not having convertible securities outstanding at some time during the seven-year period including the four fiscal periods prior to implementation of the firm's accounting policy decision, the year of implementation, and the two years subsequent to the year of implementation. Of the thirty-eight trend raisers, fourteen, or 36 per cent, did display this trait. Of the eight trend reducers, only two, or 25 per cent displayed this trait. Thus the relative frequencies among the two groups were as predicted by the alternative hypothesis. However, once again the result was not extreme enough to enable rejection of the null hypothesis by means of the chi-square test.

The five tests just presented were all quite similar because they all involved some element relating to the residual equity of the two groups of firms. The purpose of each test was to establish that a difference existed between the trend raisers and the trend reducers, in order that this difference could be explained with reference to the author's hypothesis that the motives of

the two groups in making and implementing their respective accounting policy decisions were different, and specifically that the motives of the trend raisers were to favorably influence the price of the common stock of their respective firms. It is important to note that in each of the five tests the results were consistent with the author's prediction, although in only one case was the result of a degree of extremity sufficient to enable rejection of the null hypothesis that the two groups did not differ.

Quality of Disclosure in Corporate Annual Reports.<sup>11</sup> -

The measurement of this concept consisted of assigning each firm a score from zero to six. The assignment of this score was based upon a set of six questions to which a yes or no answer could be determined from an examination of each firm's annual report for the fiscal year in which its particular accounting policy decision was implemented. The score for a particular firm was equivalent to the number of yes answers determined from this examination. The questions upon which this measurement was

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<sup>11</sup>The concept of measuring disclosure of effects of accounting policy decisions was adopted from T. Ross Archibald, "The Return to Straight-Line Depreciation An Analysis of A Change in Accounting Method," (unpublished research manuscript presented at the University of Chicago in 1967).

based are presented in Table 5.1 on the following page. A score of six represents the highest quality of disclosure measured by this scale, whereas a score of zero represents the lowest.

As can be seen from inspection of Table 5.1, the measure of quality of disclosure is concerned with both the location of disclosures within corporate annual reports, and with the clarity and thoroughness with which the effects of the accounting policy decision were disclosed. Questions 1, 2, 4 and 6 respectively, seek to determine if the decision and its effects were mentioned anywhere other than the audit report, footnoted in the income statement, mentioned in the verbal narrative (usually the president's letter) or mentioned in the "highlights" comparison or multi-period summary.

Questions 3 and 5 are concerned with the clarity and thoroughness of disclosure. Question 3 was designed specifically to contribute to a lower score for those firms which did not disclose the net of tax effect of their accounting policy decisions, or which only disclosed the effect the decision would have had if it would have been implemented in the prior year. Question 5 is only relevant in the cases of the trend raisers and trend reducers, and attempts to determine if the information that the effect of the accounting policy decision was to change the direction of the firm's trend of reported

Table 5.1 Questions used as a basis for scaling  
quality of corporate disclosure of the  
effects of accounting policy decisions

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1. Was reference to the change made in any place in the annual report other than the auditor's opinion?
  2. Was there reference in the income statement to a footnote describing the change beside the statement item or items affected, or beside net income?
  3. Was the exact dollar amount of the effect on reported earnings of the accounting policy decision disclosed?
  4. In the verbal description of the company's results compared to the prior year, was reference made to the fact that this comparison was significantly affected by the accounting policy decision?
  5. Was there reference anywhere in the report to the specific fact that reported earnings were higher (lower) than the prior year solely because of the accounting policy decision, and would have been lower (higher) than the prior year without the decision?
  6. In either the five or ten-year summary, or the opening "highlights" type comparison, was there a reference beside the current year's net income or earnings per share figure to a note indicating that the amount was significantly affected by the accounting policy decision?
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earnings relative to the prior year was offered to the reader or was left to him to discover.

The results of answering this set of questions by inspection of the annual reports of the eight trend reducers and thirty-eight trend raisers are summarized in Table 5.2 below. As can be seen from an inspection of this table there is almost no tendency for one group to have higher or lower scores than the other. The average score of the trend reducers was 2.63, whereas the average score of the trend raisers was 2.68. Thus the

Table 5.2 Scores of trend raisers and trend reducers on quality of disclosure scale

Score	Trend Raisers	Trend Reducers
0	1	0
1	4	3
2	11	2
3	14	0
4	6	2
5	2	0
6	0	1
	38	8



tendency of these results is not in the predicted direction of higher quality of disclosure for trend reducers and lower quality of disclosure for trend raisers, but the tendency is so very slight that it could not be statistically significant using any test.

### Summary

This chapter has compared two groups of firms, the trend raisers and trend reducers, on the basis of six characteristics. The direction of the results of five out of six of these tests was as predicted by a deductive framework proceeding from the assumption that the motives of the trend raisers in implementing their accounting policy decisions differed from those of the trend reducers in that the trend raisers wished to favorably influence the trend of reported earnings of their firms. However, only one of these tests revealed a statistically significant difference in the characteristic between the two groups. Specifically from this test it was concluded that trend raisers have a higher propensity to issue common stock in acquisitions than trend reducers. These results tend to add some measure of plausibility to the argument that the motives of these two groups in implementing their respective accounting policy decisions were different.

## CHAPTER VI

### CONCLUSIONS AND IMPLICATIONS

#### Summary and Conclusions

The major findings and conclusions of this study are summarized one by one in order of presentation in the dissertation. Each is numbered according to the chapter from which it came.

- 1.1 Despite the concern within the financial community about the current state of flexibility in accounting principles, and despite the frequency of lack of inter-period comparability of financial statements when changes in consistent application of accounting principles or other accounting policy decisions are implemented by firms, the research and literature regarding the effects of accounting policy decisions on reported earnings is inadequate.
- 1.2 Although it is not possible to determine that the motive behind any particular accounting policy decision was to influence reported earnings in a desirable manner, it is possible to determine from an analysis of the effects of such a decision whether or not those effects are consistent with a

motive to influence reported earnings in a desirable manner.

- 1.3 Effects of accounting policy decisions on reported earnings which might be considered desirable include income maximization, income smoothing, and housecleaning.
- 2.1 Income smoothing involves two elements: (1) the periodic establishment by corporate management of a goal for reported earnings of a firm which reflects a steadily and evenly rising trend of reported earnings relative to past periods, and (2) the use of accounting policy decisions which affect reported earnings, but whose effects do not reflect any aspect of the firm's operations during the period, in order to achieve or move toward the goal.
- 3.1 Of a total of 249 accounting policy decisions with a material effect on reported earnings which were analyzed in this study, 192, or 77 per cent, had effects which were consistent with an income maximization motive in the year of their implementation; 167, or 67 per cent, had effects which were consistent with an income smoothing motive in the year of their implementation; and ten decisions had effects which were consistent with a housecleaning motive.

- 3.2 It was concluded that one explanation of the evidence that a large majority of the accounting policy decisions analyzed in this study had a favorable effect on earnings per share was most appropriate. That explanation is that a tendency exists to postpone the implementation of those decisions whose effect on reported earnings would be unfavorable until such time as that effect would be less unfavorable, whereas those decisions whose effect on reported earnings would be favorable are not postponed in this manner. An alternative explanation that a majority of accounting policy decisions are initiated solely because of a desire to influence reported earnings was rejected.
- 3.3 The financial statement items involved in the largest proportion of these accounting policy decisions were depreciation (27 per cent), inventory (17 per cent), and the investment tax credit (15 per cent).
- 4.1 The greater the degree of materiality of the effect of an accounting policy decision on reported earnings in the year of implementation, the greater the likelihood that the effect of such decision will be to smooth the trend of reported earnings relative to prior years.

- 4.2 An examination was made of reported earnings in the year prior to, year of, and year subsequent to implementation of those accounting policy decisions which decreased the reported earnings of the firm in the year of implementation. This examination revealed evidence confirming the earlier conclusion that the implementation of these decisions may have been postponed in order that their effect on reported earnings would be least unfavorable at the point of eventual implementation.
- 5.1 Comparisons of selected characteristics of trend raisers and trend reducers reveal some evidence that the motives of these two groups in implementing their respective accounting policy decisions may have differed, and that the primary motive of the trend raisers may have been to favorably effect the trend of reported earnings of the firm.

#### Implications for the Investment Community

The essence of these conclusions can be stated as follows: evidence is available in this study that the comparability of financial statements between periods has at times been affected by accounting policy decisions in a manner resulting in a more favorable appearance of managerial performance, even though the effects of these decisions upon measures of performance do not reflect

actual managerial performance. This evidence has implications for existing stockholders, potential stockholders, and analysts. These groups will be discussed in turn.

For the existing stockholders of a firm, the knowledge that an unfavorable trend in the measures of performance of the firm might be obscured from the view of those in the securities markets is in some respects a comforting thought. In light of the fact that stock prices are intimately related to such measures of corporate performance as earnings per share, trends in earnings per share, return on investment, and profit margin, the disclosure of poor or below average performance of the firm on the basis of these measurements could result in a serious decline in the price of the firm's stock in the securities markets, thereby reducing the value of the stockholder's investment in the firm. However, this is a short run point of view. A stockholder who wishes to evaluate the relative performance of his company and its management will have to rely upon the above-mentioned measures of performance, whose reliability is to some extent made suspect by the evidence of this study. Thus in the long run the stockholders of a particular firm may find that the current state of affairs in the area of corporate reporting of financial in view of the evidence presented in this study, may in

some cases be unsatisfactory in helping them to attain their goals.

For the potential stockholder, whose knowledge of accounting may be slight, the evidence of this study should in no way be comforting. If he is relatively sophisticated and relies upon financial information in evaluating a potential investment, he must be careful in making use of certain information in his analysis. In particular he must be cautious in utilizing any analysis which is based upon trends of reported earnings. A comparison of one company's trend of reported earnings with that of another may not be reliable. The prediction of future reported earnings based upon a projection from past reported earnings also demands caution. The dependability of the calculation of a growth rate in earnings per share is suspect, since not only might the reported earnings of the most current year be inflated, but those of the base year might also have been deflated. Therefore, unless he is familiar with accounting, the potential stockholder of a firm should seek the advice of a reliable financial analyst who is familiar with accounting before basing his investment decisions on information of this sort.

The function of a security analyst is to evaluate the investment securities of a particular firm and to advise his clients or employers as to his conclusions.

His value to his clients or employers, who are potential investors in the securities subject to his evaluation, stems from his specialized knowledge, which presumably includes a knowledge of corporate accounting. Therefore the analyst has the responsibility of recognizing those circumstances in which the comparability of a firm's financial statements between periods has been affected by accounting policy decisions, and of applying his knowledge of accounting in order that his conclusions will take into account the lack of comparability. The analyst should at the very least consider the effect of an accounting policy decision on the trend of reported earnings of the firm relative to its prior fiscal period. The methodology of this study provides a framework for such an analysis.

The security analyst should recognize the importance of the auditor's opinion in bringing to light cases of lack of consistent application of accounting principles. However he should be aware that some people in the field of accounting believe that the motive to utilize accounting policy decisions in order to affect financial reports in a favorable manner may be satisfied in many cases without outsiders being aware of it. Thus Zeff asks, "Is it not probable that managers can achieve a particular income goal by alternating . . . policies which are ordinarily not revealed to readers of financial



statements? The effects of changes in these policies could be much more powerful than the effects of changes in policies that, by custom, are accorded greater visibility in the financial statements."<sup>1</sup> This thought should encourage even greater caution on the part of the security analyst in forming a judgment on the basis of growth rates and reported earnings trends.

The financial analyst may be in an unique position with respect to potential improvements in financial reporting. Corporate managers must endeavor to maintain a good relationship with analysts because of the influence which they have among investors. Thus the analyst may be able to obtain some cooperation if he demands greater comparability of a firm's financial reports over time and greater disclosure of accounting policies which contribute to a lack of such comparability. However, such an effort by analysts would probably demand a level of knowledge of accounting equivalent to that of public accountants. Still the potential effect upon corporate financial reporting of a concerned and critical community of financial analysts is great.

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<sup>1</sup>Stephen A. Zeff, "Discussion Comments," Research in Accounting Measurement, ed. by Robert K. Jaedicke, Yuji Ijiri, and Oswald Nielsen, American Accounting Association, 1966, p. 250.

### Implications for Authoritative Bodies in the Field of Financial Reporting

In this section, the use of the term "authoritative bodies" should be interpreted as a reference to the Securities and Exchange Commission (hereafter SEC) and the American Institute of Certified Public Accountants (hereafter AICPA). The status of the SEC as an authoritative body in accounting stems from the power it has, by law, to prescribe corporate accounting practices and the form of corporate financial statements. However, the SEC has generally not used this power, but instead has relied upon the accounting profession to develop its own practices, and upon the AICPA to encourage and recommend improvements in these practices. Therefore this section will refer solely to policies of the AICPA, although the reader should keep in mind that the SEC has the ultimate legal power to perform the function of prescribing corporate accounting practices.

The policy of the AICPA with respect to lack of comparability of financial statements due to accounting policy decisions is stated in Chapter 8 of its publication Auditing Standards and Procedures. The essence of this policy is that,

When a change has been made in the accounting principles employed during the year or years the independent auditor is reporting upon . . . and the change has a material effect upon

financial position or results of operations, he should refer in his opinion paragraph to a note to the financial statements which adequately describes the change and its effect, or describe adequately in his report the nature of the change and its effect. Where the change affects net income, the disclosure should include the amount by which net income is affected after consideration of related income taxes.<sup>2</sup>

This policy of qualification and disclosure is sufficient to bring to light cases where accounting policy decisions have affected the comparability of the financial statements of successive periods, and to reveal the effect of such decisions on reported earnings of the year of implementation of the decision. However, it is not sufficient to prevent misleading comparisons in the opening "highlights" section of corporate annual reports, in the president's letter to the stockholders, or in the multi-period summary, which presentations are quite frequent in corporate annual reports. Such misleading comparisons were made in a large proportion of the annual reports examined in this study, even though in all of these cases the annual report contained a qualified expression of opinion by the independent auditor.

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<sup>2</sup>The Committee on Auditing Procedure of the American Institute of Certified Public Accountants, Auditing Standards and Procedures, Statements on Auditing Procedure No. 33 (New York: American Institute of Certified Public Accountants, Inc., 1963), pp. 45-46.

Thus it is apparent that the present policy of authoritative bodies in the area of financial reporting has not been efficient in discouraging corporate managements who are motivated to implement an accounting policy decision in order to favorably affect the financial reports of their firm.

There are alternative suggestions concerning how authoritative bodies should deal with the problem of lack of comparability of corporate financial reports of successive periods caused by accounting policy decisions. In view of the evidence of this study with regard to the possibly misleading effects of lack of comparability of financial statements between periods, perhaps these alternatives should be discussed here.

Some have suggested that uniformity of accounting principles and procedures would greatly reduce the lack of comparability that now exists, not only between the financial statements of individual firms for successive periods, but also among the financial statements of all firms relative to each other. It is probably true that if this solution were implemented, the lack of comparability between the financial statements of individual firms for successive periods would be greatly reduced, since much of the lack of comparability evidenced in this study was due to changes in the treatment of a particular item from one acceptable method to another.

However, many accountants do not feel that the imposition of uniform principles and procedures upon corporate reporting would reduce or eliminate lack of comparability of financial statements of different entities. It is often pointed out that the application of identical accounting principles and procedures to different sets of circumstances will produce statements which are just as much lacking in comparability as those produced by the application of different accounting principles and procedures to identical sets of circumstances. This belief, together with the problems that would be involved in selecting one set of accounting principles and procedures from among many, and the roadblock to progress in accounting that uniformity might impose, combine to make it unlikely that this solution will be implemented in the foreseeable future.

One less drastic solution aimed at the specific problem of lack of comparability of financial statements of individual firms between periods would be the imposition of a requirement that all changes in accounting policy must be accompanied by a retroactive restatement of the financial statements of the prior period as though the new policy had been in effect during that period. Under this policy the financial statements of at least the two most recent periods would be comparable. The AICPA now considers it preferable that, in the cases

of those changes in accounting policy which typically involve retroactive or prior period adjustments, the financial statements presented for prior years should be restated. An example would be a change from the cost basis of carrying investments in subsidiaries to the equity basis, which is usually accompanied by a write-up of the investment, which is in effect a prior period adjustment. In these and similar cases, the AICPA's position is that a "change in the application of accounting principles may create a situation in which retroactive application is appropriate. In such situations, these changes should receive the same treatment as that for prior period adjustments"<sup>3</sup> which treatment was described earlier in the same publication: "When comparative statements are presented, corresponding adjustments should be made of the amounts of net income (and the components thereof) and retained earnings balances (as well as of other affected balances) for all of the periods reported therein, to reflect the retroactive application of the prior period adjustments."<sup>4</sup>

One reason that the above statement of policy is not applicable to all cases of changes in accounting

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<sup>3</sup> The Accounting Principles Board of The American Institute of Certified Public Accountants, Reporting the Results of Operations, Opinions of the Accounting Principles Board No. 9 (New York: The American Institute of Certified Public Accountants, Inc., 1967), p. 116.

<sup>4</sup>Ibid., p. 113.

policy is that in many cases the determination of the effect on the current year's reported earnings of a change is not independent of the determination of the retroactive effect on the prior year. For example, assume that a company has changed from straight-line to accelerated depreciation. If the retroactive effect of this new policy on the prior year's statements is recorded as if the policy had been in effect at that time, the amount of effect upon the current year will be affected. This problem could only be solved by assuming that the current year (year of implementation of the change) is the second year under the new policy.

A second reason why the above statement of policy is often not applied in cases of changes in accounting policy is that in many cases the determination of the retroactive effect on prior year's reported figures of a change in accounting policy may be excessively difficult. However, this writer can think of no cases in which such a determination would be impossible. Therefore the decision as to whether or not prior year's reported figures should be restated for the effect of a change in accounting policy should be based upon a comparison of the costs to individual firms with the benefits to users of financial reports.

If the policy were adopted by the AICPA of requiring restatement of the figures of at least one prior year for the effect of a change in consistent application of accounting principles, the burden of the additional cost of conforming to this policy would fall upon the firms implementing such changes. The type of change in accounting policy for which it would be most difficult to determine or estimate what effect the change would have had if it had been in effect during the prior year would be a change in the method of inventory pricing. However, it would seem that it would not impose excessive hardship upon a firm to delay the implementation of a change in accounting policy of this sort for one year, in order to compile the information relative to the effects of such a change on the financial statements of two successive years. Therefore, under this type of AICPA policy, the additional burden to an individual firm in implementing a change in accounting policy would involve either working with the prior year's records to determine the effect the change would have had if it had been made in that year, or where this is not practicable, delaying the implementation of such a change for one year.

The benefits of the adoption of such a policy by the AICPA would accrue to the users of financial reports. The evidence of this study has shown that changes in



accounting policy more times than not enhance the comparison of the current year's results with those of the prior year. To the extent that this evidence is the result of motives of corporate management to improve or avoid the deterioration of measures of their performance, such a requirement by the AICPA would result in less use of accounting policy changes to satisfy such motives. Those changes which were still implemented after the adoption of such a requirement would be more likely to have been motivated by a desire to report better financial information to the investment community.

All indications from this brief discussion are that the AICPA should seriously consider the suggested alternative treatment of the effects of changes in accounting policy. However, the suggested approach does raise some additional problems. For example, assuming that the requirement were in effect, cases would arise where firms would have determined the effect of a change in the current period with the expectation of implementing the change in the subsequent period. In reporting the current period's financial statements, management would know that some figures in these statements are to be restated in the next year's report, and it would know exactly what the amounts of these restatements are to be. A difficult question arises here with respect to how much disclosure would be

appropriate in the financial statements of the period prior to implementation of a change in accounting policy.

Another problem with this suggested treatment of changes is that even under the requirement of restatement of prior year's figures, changes in accounting policy could still be implemented for purposes of affecting measures of managerial performance in a favorable manner. Often a particular accounting policy has very different effects in two subsequent years. The adoption of such a policy could give a boost to the earnings of the year of implementation while restatement of the prior year's figures could decrease reported earnings for that year; both of these effects would enhance the comparison of the two years. Evidence of occurrences of this sort was presented earlier in this study in Chapter III in the section entitled "Accounting Policy Decisions Involving Restatement of Prior Year's Reported Earnings." However, the likelihood of these kinds of effects is relatively small.

One other treatment of the effects of a change in accounting policy will be discussed here as an alternative to the present solution of consistency qualifications together with disclosure. This would involve treating the amount of the effect of a change in accounting policy on net earnings in a manner similar to the treatment of

an extraordinary item in the income statement. In the year of the change only, this amount would be segregated from the results of operations as computed on a basis consistent with the prior year, which would be described as "net earnings before extraordinary items and the effects of changes in accounting policy." As a result this measure of the results of normal operations would be computed on a basis consistent with that of the prior year. Among the extraordinary items would be included the effect of any change or changes, appropriately described by account title, as well as among the footnotes. The final net earnings figure would not have been measured on a basis consistent with that of the prior year, which inconsistency is no different than under the current AICPA policy. The effects of changes would only be included among the extraordinary items in the first year under the new accounting method. In all subsequent years they would not be segregated, but instead included in the normal manner in the computation of "net earnings before extraordinary items." In this manner, the income statements of the current and immediately preceding period, which are almost always presented in corporate annual reports, would always be comparable down through the computation of "net earnings before extraordinary items and the effects of changes in accounting policy."

As an illustration of this procedure, consider the actual case of Endicott Johnson Corporation, which in fiscal 1965 changed its method of depreciation to the straight line method, which change had the effect of increasing reported 1965 earnings by \$262,000. The comparative income statements for 1965 and 1964 were presented as follows (condensed for illustrative purposes):

	<u>1965</u>	<u>1964</u>
Net Sales	\$129,519,513	\$127,082,970
Depreciation Expenses	2,521,196	2,927,891
All Other Costs and Expenses	125,888,032	123,088,801
	<hr/>	<hr/>
Net Earnings	\$ 1,110,285	\$ 1,066,278
Special Credit	292,133	232,980
	<hr/>	<hr/>
Net Earnings and Special Credit	\$ 1,402,418	\$ 1,299,258

(The company had no tax expense for the years 1964, 1965, and 1966 due to a loss carry-forward.)

Under the suggested revised procedure, these comparative statements would have appeared as follows:

	<u>1965</u>	<u>1964</u>
Net Sales	\$129,519,513	\$127,082,970
Depreciation Expense - Accelerated Basis	2,783,196	2,927,891
All Other Costs and Expenses	<u>125,888,032</u>	<u>123,088,801</u>
Net Earnings before Special Credit and Effect of Change in Accounting Policy	\$ 848,285	\$ 1,066,278
Special Credit	292,133	232,980
Effect of Change in Depre- ciation Method from Accelerated to Straight Line	<u>262,000</u>	
Net Earnings and Special Credit	\$ 1,402,418	\$ 1,299,258

The comparative statements for the following year would then revise the 1965 income statement in order that it be on a comparable basis with the 1966 statement:

	<u>1966</u>	<u>1965</u>
Net Sales	\$145,416,326	\$129,519,513
Depreciation Expense - Straight Line Basis	2,645,471	2,521,196
All Other Costs and Expenses	<u>140,559,793</u>	<u>125,888,032</u>
Net Earnings Before Special Credit	\$ 2,211,098	\$ 1,110,285
Special Credit	<u>753,249</u>	<u>292,133</u>
Net Earnings	\$ 2,964,347	\$ 1,402,418

As can be seen from this example, under this procedure the financial statements of the two most recent periods would always be on a comparable basis down to the computation of "net earnings before extraordinary items and the effects of changes in accounting policy."

From the viewpoint of the firm, the requirement of this sort of presentation would involve no additional costs or burden beyond that which is now assumed in disclosing the nature and effects of changes in accounting policy. From the viewpoint of the reader of financial reports, it might be argued that the additional detail involved in such a presentation would result in more confusion than understanding. The benefit to the reader would stem from having presented to him, side by side in comparative income statements, one measure of net earnings (current operating income) which was computed on a basis consistent with that of the prior year. Under the present requirements the reader is usually left to determine for himself what net earnings would have been had accounting principles and procedures been consistently followed, which requires adjusting the reported earnings figure for the effect of the change.

This second suggested alternative treatment of the effects of changes in accounting policy also appears to be worthy of serious consideration by the AICPA. These

alternatives were offered for consideration because it was felt that something was wrong with the current situation, and that the findings of this research make it evident that this feeling is justified. The implementation of an accounting policy decision with judicious timing can be used as part of a strategy to manipulate any firm's trend of reported earnings in a manner designed to convince investors and others that the firm is enjoying great success. For those who believe that activity of this sort is extremely limited in scope or nonexistent, a glance in Chapter III at the lopsided proportion of accounting policy decisions whose effect on the trend of reported earnings of the firm was favorable relative to the proportion for which the effect was unfavorable should provide very little comfort. This evidence is presented in the hope that it will be useful in deciding whether or not a change in the treatment of the effects of accounting policy decisions is needed. The suggested alternatives are presented as an indication that this author believes that such a change deserves extremely serious consideration.

## APPENDIX

Explanation. - The following table contains all the relevant information concerning the categorization of all of the 249 accounting policy decisions used as a basis for this study. This information includes the name of the company and the fiscal year of its decision, the company's per share earnings for the prior year, the company's projected per share earnings for the year of the decision (where applicable), the level of per share earnings which would have been reported in the absence of the decision, the per share effect of the decision (parentheses indicating a decreasing effect and no parentheses indicating an increasing effect), the company's reported level of per share earnings including the effect of the decision, the notational category in which the decision was classified (refer to Table 2.3 on page 43), and a code indicating the nature of the financial statement item involved in the decision. This latter code can be interpreted with reference to Table 3.8A and 3.8B on pages 75-77. The first part of this code consists of either the letter "A" or the letter "B," which indicates the corresponding



section of Table 3.8. The second part of this code consists of a number, which refers to the descriptions following the equivalent number in Table 3.8A or 3.8B.

Table A. Source data

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Alpha Portland Cement	1966 0.39	N/A <sup>a</sup>	(0.05)	0.33	0.28	BIBs	A 4
American Saint Gobain	1966 0.97	1.94	1.18	(0.20)	0.98	ADAn	B 9
Beatrice Foods Co.	1966 3.59	N/A <sup>a</sup>	2.43	0.52	2.95	BIAs	A13
Beech-Nut Life Savers	1966 2.65	N/A <sup>a</sup>	2.63	0.10	2.73	BIAs	A 4
J. I. Case Company	1966 2.29	3.91	4.33	(0.64)	3.69	ADAs	B 9
Heywood Wakefield	1966 1.68	N/A <sup>a</sup>	(2.74)	(0.89)	(3.63)	BDBn	B 2
Hoffman Electronics	1966 0.40	N/A <sup>a</sup>	(1.34)	0.73	(0.61)	BIBs	A10

<sup>a</sup>Not Applicable - in these cases a projected earnings figure is not necessary for the categorization (see Table 2.3 and related discussion).

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Joy Manufacturing Co.	1966 2.97	3.74	3.07	0.13	3.20	AIAS	A12
Libby McNeill & Libby	1966 0.42	0.43	0.64	0.08	0.72	AIAAn	A 2
Lily-Tulip Cup	1966 2.10	2.22	2.20	0.24	2.44	AIAAn	A 4
The McKay Machine Co.	1966 4.58	5.06	5.73	0.79	6.52	AIAAn	A 2
National Gypsum	1966 2.49	N/A	2.14	0.20	2.34	BIBS	A12
Rayonier Incorporated	1966 3.26	N/A	3.09	0.23	3.32	BIAS	A 4
Rayonier Incorporated	1966 3.26	3.72	3.27	0.05	3.32	AIAS	A 5
Universal Leaf Tobacco	1966 2.82	N/A	2.82	0.07	2.89	BIAS	A12
Utah-Idaho Sugar Co.	1966 1.38	1.54	1.43	0.17	1.60	AIAS	A 3
Wheeling Steel	1966 (2.94)	N/A	(12.27)	4.18	(8.09)	BIBS	A 1

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Anderson, Clayton & Co.	1965 \$1,486 <sup>b</sup>	1,487	3,505	(594)	2,911	ADAS	B 4
Automatic Canteen	1965 0.76	0.89	0.96	0.20	1.16	AIAn	A 6
Bayuk Cigars, Inc.	1965 0.90	N/A	0.34	0.17	0.51	BIBs	A 3
Beatrice Foods	1965 2.81	2.97	3.13	0.19	3.32	AIAn	Al3
The Boeing Company	1965 5.64	6.53	10.74	(1.18)	9.56	ADAS	B 2
Continental Baking Co.	1965 4.16	N/A	4.04	0.44	4.48	BIAS	Al2
Control Data Corp.	1965 0.87	1.11	0.90	0.16	1.06	AIAs	A 4
Curtiss-Wright Corp.	1965 1.01	N/A	0.86	0.15	1.01	BIBs	A 6

<sup>b</sup>Earnings (000) used in lieu of Per Share Earnings.

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect Of Decision	Per Share Effect Of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Digitronics	1965 (2.07)	N/A	(2.66)	(0.63)	(3.29)	BDBn	B 7
Endicott Johnson Corp.	1965 1.25	N/A	1.05	0.32	1.37	BIAs	A 4
Eversharp, Inc.	1965 1.86	N/A	1.50	0.16	1.66	BIBs	A 4
General Cigar Company	1965 1.75	N/A	1.44	0.16	1.60	BIBs	A 4
Graniteville Company	1965 2.83	3.33	3.13	0.53	3.66	AIAn	A 1
Great Western Sugar Co.	1965 4.96	N/A	4.40	0.23	4.63	BIBs	Al2
Owens-Illinois	1965 2.73	2.98	2.98	0.40	3.38	AIAn	Al4
Peoples Drug Stores	1965 3.17	N/A	3.13	0.53	3.66	BIAs	Al2
The Rath Packing Co.	1965 4.96	N/A	4.40	0.23	4.63	BIBs	Al1

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Riegel Paper Corp.	1965 1.78	N/A	1.67	0.28	1.95	BIAS	A 4
St. Regis Paper	1965 2.14	2.31	2.45	0.36	2.81	AIAn	A 4
The L. S. Starrett Co.	1965 0.82	0.84	1.85	(0.27)	1.58	ADAs	B10
West Virginia Pulp and Paper	1965 2.59	2.89	3.02	0.69	3.71	AIAn	A 4
Allen Industries, Inc.	1964 3.16	N/A	2.84	0.24	3.08	BIBs	Al2
American Motors, Inc.	1964 2.01	N/A	1.22	0.16	1.38	BIBs	Al2
American Zinc, Lead & Smelting (6 months fiscal period)	1964 1.35	0.68	0.94	0.11	1.05	AIAn	Al2

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Ampco Metal, Inc.	1964 0.82	0.84	1.85	(0.27)	1.58	ADAS	B 4
Anderson, Clayton & Co.	1964 2.40	N/A	2.57	(0.40)	2.17	ADBn	B10
Arvin Industries, Inc.	1964 2.83	3.29	2.93	0.27	3.20	AIAS	A12
Basic Incorporated	1964 0.81	0.82	1.29	0.19	1.48	AIAn	A12
Beatrice Foods Co.	1964 2.54	2.63	2.66	0.15	2.81	AIAn	A13
Blaw Knox	1964 1.64	1.65	1.72	0.13	1.85	AIAn	A12
The Budd Company	1964 1.45	N/A	0.38	0.09	0.47	BIBS	A14
Colonial Stores	1964 1.71	1.91	1.86	0.16	2.02	AIAn	A12
Consolidated Packaging Corp.	1964 0.09	N/A	(1.31)	0.13	(1.18)	BIBS	A 4

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Continental Motors Corp. 1964	0.97	N/A	0.45	0.07	0.52	BIBs	A14
Continental Motors Corp. 1964	0.97	N/A	0.60	(0.08)	0.52	BDBn	B10
Crucible Steel Co. 1964	2.20	N/A	1.96	0.45	2.41	BIAs	A12
Crucible Steel Co. 1964	2.20	2.74	2.69	(0.28)	2.41	ADAn	B10
Dennison Manufacturing 1964	1.87	N/A	1.45	0.28	1.73	BIBs	A12
Detroit Steel Co. 1964	1.20	N/A	0.87	0.44	1.31	BIAs	A12
Fairchild Camera & Instrument 1964	1.05	N/A	0.97	0.04	1.01	BIBs	A12
Houdaille Industries 1964	3.28	3.85	3.40	0.22	3.62	A1As	A12



Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Howe Sound	1964 0.62	0.63	0.67	0.06	0.73	A1A1	A12
Hupp Corporation	1964 0.67	N/A	0.37	0.04	0.41	B1B1	A12
Kelsey-Hayes Company	1964 4.05	N/A	2.75	0.53	3.28	B1B1	A12
Loft Candy	1964 (0.39)	0.01	0.15	0.04	0.19	A1A1	A 4
Macke Vending Company	1964 1.16	1.36	1.19	0.10	1.29	A1A1	A10
Maxson Electronics Corp.	1964 0.41	0.42	0.63	0.07	0.70	A1A1	A12
The McKay Machine Co.	1964 3.56	N/A	2.85	1.09	3.94	B1A1	A12
Mueller Brass Company	1964 4.05	N/A	2.75	0.53	3.28	B1B1	A12
Newport News Ship- building	1964 4.44	N/A	4.19	0.39	4.58	B1A1	A12

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
North American Sugar Industries	1964 2.60	N/A	0.42	0.36	0.78	BIBs	A12
Pullman Incorporated	1964 1.55	1.56	2.88	0.34	3.22	A1An	A12
The Pure Oil Company	1964 3.02	N/A	2.79	0.36	3.15	BIAs	A14
Ralston Purina Company	1964 1.53	N/A	1.51	0.10	1.61	BIAs	A12
Scovill Manufacturing	1964 2.68	3.03	2.77	0.54	3.31	A1An	A12
Shattuck (Frank G.) Co.	1964 0.79	0.80	1.01	0.13	1.14	A1An	A12
A. E. Staley Mfg., Co.	1964 2.40	N/A	1.65	0.20	1.85	BIBs	A12
A. E. Staley Mfg., Co.	1964 2.40	N/A	1.61	0.24	1.85	BIBs	A 4

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Standard Screw Company	1964 3.02	3.48	3.53	0.48	4.01	A1A1	A12
The Standard Tube Co.	1964 0.31	0.32	0.44	0.05	0.49	A1A1	A12
Stanray Corporation	1964 1.03	1.35	1.09	0.07	1.16	A1A5	A14
Triangle Conduit & Cable	1964 0.28	0.36	1.34	(0.20)	1.14	ADAS	B 1
Triangle Conduit & Cable	1964 0.28	0.36	0.99	0.15	1.14	A1A1	A12
The United Piece Dye Works	1964 1.58	N/A	1.12	0.23	1.35	B1B5	A12
Vanadium-Alloys Steel Company	1964 3.72	N/A	3.33	0.24	3.57	B1B5	A12
Walworth Company	1964 (2.56)	0.01	(0.61)	0.08	(0.53)	A1A5	A 4

Table A. (Continued)

Company and Year		Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect Of Decision	Per Share Effect Of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Basic Products Corp.	1963	0.86	N/A	0.78	0.03	0.81	BIBs	A 8
Beatrice Foods Company	1963	3.25	N/A	3.13	0.25	3.38	BIAs	A13
Briggs Manufacturing	1963	(1.11)	0.01	0.48	0.16	0.64	A1An	A 2
Briggs Manufacturing	1963	(1.11)	0.01	0.55	0.13	0.64	A1An	A 5
Briggs Manufacturing	1963	(1.11)	0.01	0.51	0.09	0.64	A1An	A14
Brown & Sharp Mfg., Co.	1963	4.65	N/A	4.39	0.83	5.22	BIAs	A 6
Collins Radio	1963	1.20	1.21	1.29	0.36	1.65	A1An	A 4
Colorado Fuel & Iron	1963	(1.87)	N/A	(5.96)	6.79	0.83	BIAs	A14
Douglas Aircraft Company	1963	2.47	N/A	2.17	0.69	2.86	BIAs	A10

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Electric Storage Battery Company	1963 2.71	2.92	2.81	0.10	2.91	A1As	A 8
Elgin National Watch Co.	1963 1.52	N/A	0.76	0.43	1.19	BIBs	A 3
Mohasco Industries	1963 1.15	N/A	0.82	(0.10)	0.72	BDBn	B 6
Pittsburgh Plate Glass Company	1963 4.05	N/A	2.12	2.18	4.30	BIAS	A10
Pittsburgh Plate Glass Company	1963 4.05	4.19	4.46	(0.16)	4.30	ADAS	B10
St. Joseph Lead	1963 0.93	0.94	2.24	1.03	3.27	A1An	A10
Union Tank Car	1963 0.11	0.12	1.93	0.38	2.31	A1An	A 4

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Allis-Chalmers Mfg.	1962 0.66	0.67	0.85	(0.17)	0.68	ADAS	B 6
Allis-Chalmers Mfg.	1962 0.66	N/A	0.48	0.20	0.68	BIAS	A14
Anchor Hocking Glass	1962 2.06	N/A	2.02	0.17	2.19	BIAS	A 5
Automatic Canteen	1962 0.75	N/A	0.20	(0.11)	0.09	BDBn	B 5
Bausch & Lomb, Inc.	1962 1.60	N/A	1.36	0.16	1.52	BIBs	A 4
Beatrice Foods Company	1962 3.14	N/A	3.06	0.19	3.25	BIAS	A13
Bethlehem Steel	1962 2.52	N/A	2.20	(0.40)	1.80	BDBn	B 6
Cherry-Burrell Corp.	1962 0.29	N/A	(3.08)	0.34	(2.74)	BIBs	All
The Colorado Fuel & Iron Corporation	1962 0.04	N/A	(2.85)	0.98	(1.87)	BIBs	A 4

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Falstaff Brewing Corp.	1962 2.60	N/A	2.48	0.24	2.72	BIAs	A 4
The Glidden Company	1962 2.78	N/A	2.65	0.07	2.72	BIBs	A 9
The Griess-Pfleger Tanning Company	1962 (1.76)	0.01	1.67	(0.27)	1.40	ADAs	B 6
Langendorf United Bakeries	1962 1.43	N/A	0.02	0.25	0.27	BIBs	A10
Leslie Salt Company	1962 2.78	N/A	2.20	0.45	2.65	BIBs	A 8
R. G. LeTourneau, Inc.	1962 2.89	N/A	(5.74)	1.35	(4.39)	BIBs	A14
The National Sugar Refining Company	1962 0.16	0.17	0.76	0.13	0.89	A1An	A 3
Paramount Pictures	1962 4.23	N/A	(3.63)	(0.53)	(4.16)	BDBn	B 7

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Rheem Manufacturing	1962 (1.98)	0.01	0.44	0.08	0.52	AIAn	A 4
Richfield Oil Corp.	1962 3.11	3.12	4.11	(0.33)	3.78	ADAs	B 7
Sonotone Corporation	1962 (0.10)	0.01	0.18	0.05	0.23	AIAn	A 4
The L. S. Starrett Co.	1962 1.49	N/A	1.43	0.35	1.78	BIAs	AlO
U. S. Industries, Inc.	1962 1.19	N/A	0.60	0.37	0.97	BIBs	A 3
Wheeling Steel	1962 1.72	1.73	2.26	0.28	2.54	AIAn	A 4
ACF Industires, Inc.	1961 2.77	N/A	1.88	0.41	2.29	BIBs	A 4





Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Continental Oil Corp.	1961 2.96/2.91 <sup>c</sup>	N/A	2.82	0.20	3.02	BIAS	A14
Endicott Johnson	1961 (2.53)	N/A	(17.10)	1.68	(15.42)	BIBS	A11
Fairbanks Whitney & Co.	1961 0.02	N/A	(0.15)	0.06	(0.09)	BIBS	A10
Houdaille Industries	1961 1.62	1.63	1.63	0.22	1.85	A1AN	A 4
The International Silver Company	1961 1.71/1.56 <sup>c</sup>		2.02	0.11	2.13	A1AN	A 9
Lear, Incorporated	1961 1.03	1.16	1.07	0.09	1.16	A1AS	A 4

<sup>c</sup>The first figure is the originally reported earnings per share; the second is revised earnings per share after restatement resulting from the accounting policy decision.

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Mack Trucks, Inc.	1961 4.10	N/A	0.42	0.42	0.84	BIBs	A14
McCall Corporation	1961 1.33	N/A	1.03	0.20	1.23	BIBs	A 4
Nautec Corporation	1961 3.10/2.95 <sup>C</sup>	N/A	1.56	0.15	1.71	BIBs	A14
Otis Elevator	1961 2.95	N/A	2.43	0.22	2.65	BIBs	A14
Pacific American Fisheries	1961 2.48	N/A	2.51	(0.32)	2.19	ADBn	B10
Jacob Ruppert	1961 (5.29)	0.01	0.99	0.12	1.11	A1An	A 5
Smith-Corona-Marchant	1961 (0.24)	0.01	0.12	0.04	0.16	A1An	A 3

<sup>C</sup> See Note to Continental Oil on Page 174.

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Standard Packaging	1961 0.97	N/A	0.76	0.20	0.96	BIBs	A10
Triangle Conduit & Cable	1961 0.23	N/A	0.20	0.11	0.31	BIAs	A 4
Twentieth Century-Fox Film	1961 (1.17)	N/A	(7.54)	(1.49)	(9.03)	BDBn	B 2
Universal Leaf Tobacco	1961 2.50	N/A	2.48	0.95	3.43	BIAs	A 9
Veeder-Root, Inc.	1961 4.06	4.07	4.10	(0.04)	4.06	ADAs	B 1
Basic Products Corp.	1960 1.45	N/A	1.38	0.43	1.81	BIAs	A 1
The Budd Company	1960 2.38	N/A	0.80	0.16	0.96	BIBs	A10

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Chemetron Corporation	1960 1.50/1.61 <sup>c</sup>	N/A	1.26	0.45	1.71	BIAs	A 8
The Cuneo Press, Inc.	1960 1.20	N/A	0.65	0.30	0.95	BIBs	A 5
Douglas Aircraft	1960 (8.86)	0.01	(3.45)	(1.64)	(5.09)	ADAn	B 3
Emerson Electric Mfg., Company	1960 2.29	2.64	2.35	0.45	2.80	AIAs	A13
Fairchild Engine & Airplane	1960 0.50	N/A	(1.77)	(0.20)	(1.97)	BDBn	B 3
M. H. Fishman Co., Inc.	1960 1.56	N/A	0.71	0.19	0.90	BIBs	A 4

<sup>c</sup> See Note to Continental Oil on Page 174.

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Haloid Xerox, Inc.	1960 0.60	0.67	0.74	(0.07)	0.67	ADAs	B10
Hercules Motors Corp.	1960 0.25	N/A	(2.07)	0.37	(1.70)	BIBs	A 1
Motor Products Corp.	1960 1.50	2.15	2.52	0.58	3.10	AIAn	A 7
National Company, Inc.	1960 0.47	N/A	0.36	0.04	0.40	BIBs	A10
Pittsburgh Brewing Co.	1960 0.60/0.62 <sup>c</sup>	N/A	0.57	0.07	0.64	BIAs	A14
Plymouth Oil Company	1960 0.84	N/A	(1.09)	0.17	(0.92)	BIBs	A10
H. K. Porter Co., Inc.	1960 5.09	N/A	2.21	0.36	2.57	BIBs	A 7

<sup>c</sup>See Note To Continental Oil on Page 174.

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Schenley Industries 1960	3.07	N/A	0.85	(0.35)	0.50	BDBn	B10
Swift & Company 1960	3.20	N/A	2.96	0.13	3.09	BIBs	A14
Thompson Ramo Wooldridge 1960	3.02	N/A	2.82	0.31	3.13	BIAs	A 3
United Fruit Company 1960	1.39	N/A	0.15	0.10	0.25	BIBs	A14
United Merchants & Mfgs. 1960	2.09	2.15	2.23	0.18	2.41	AIA n	A 9
Universal Match Corp. 1960	1.20	N/A	1.03	0.17	1.20	BIAs	A10
F. W. Woolworth Company 1960	4.03/4.98 <sup>C</sup>	N/A	3.64	1.20	4.84	BIBs	A 8

<sup>C</sup> See Note to Continental Oil on Page 174.

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Acme Steel Company	1959 1.89	N/A	0.98	0.19	1.17	BIBs	A 4
Addresseograph- Multigraph	1959 3.14	3.46	3.15	0.07	3.22	AIAS	A 9
Associated Dry Goods Corporation	1959 3.92	4.13	3.96	0.19	4.15	AIAS	A 8
Atlas Powder Company	1959 3.80	3.81	5.81	(0.66)	5.15	ADAS	B 9
Beatrice Foods Co.	1959 3.52	3.74	3.84	(0.19)	3.65	ADAS	B 8
Burroughs Corporation	1959 0.97	0.98	1.89	(0.27)	1.62	ADAS	B 7
Canada Dry Corporation	1959 1.41	1.42	1.76	(0.15)	1.61	ADAS	B 8
The Colorado Fuel & Iron Company	1959 0.47	0.48	1.17	(0.13)	1.04	ADAS	B 1



Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
The Curtis Publishing Company	1959 0.22	0.23	0.52	0.13	0.65	AIAAn	A10
Ex-Cell-O Corporation	1959 2.89	N/A	1.81	0.35	2.16	BIBs	A 7
Gimbel Brothers	1959 3.69	N/A	3.69	0.16	3.85	BIAs	All
Hygrade Food Products	1959 3.36	3.38	3.69	0.81	4.50	AIAAn	A 7
Kennecott Copper	1959 5.44	N/A	5.52	(0.33)	5.19	ADBn	B 9
National Dairy Products	1959 3.27	3.38	3.36	0.15	3.51	AIAAn	A 9
Reliance Manufacturing	1959 (2.28)	0.01	2.76	0.33	3.09	AIAAn	A 3
St. Croix Paper Co.	1959 1.87	N/A	1.72	0.51	2.23	BIAs	A 4

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code	
The L. S. Starrett Co.	1959	1.45	N/A	1.28	0.13	1.41	BIBs	All
Textron, Inc.	1959	2.51	2.90	4.51	(0.90)	3.61	ADAs	B 1
Twentieth Century Fox Film Corporation	1959	3.30	N/A	2.28	0.50	1.78	BDBn	B 4
ACF Industries, Inc.	1958	6.37	N/A	4.78	0.76	5.54	BIBs	All
Armour and Company	1958	0.56	0.57	1.47	(0.23)	1.19	ADAs	B 8
Artloom Carpet Co., Inc.	1958	(0.98)	0.01	(0.94)	0.47	(0.47)	AiAs	A 1
The Atlantic Refining Company	1958	3.82	N/A	3.06	0.55	3.61	BIBs	A 5



Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
The Borden Company	1958 4.94	5.12	5.21	(0.15)	5.06	ADAs	B 8
Bucyrus-Erie Company	1958 2.77	N/A	(1.11)	0.21	(0.90)	BIBs	A 4
City Stores	1958 1.38	N/A	1.43	(0.12)	1.31	ADBn	B 8
Fairchild Engine & Airplane	1958 0.17	N/A	(2.61)	(3.13)	(5.74)	BDBn	B 3
Hygrade Food Products Corporation	1958 2.37	2.38	2.50	(0.11)	2.39	ADAs	B 8
Pfaunder Permutit Inc.	1958 2.91/3.28 <sup>c</sup>	N/A	2.00	0.72	2.72	BIBs	A 8

<sup>c</sup>See Note to Continental Oil on Page 174.

Table A. (Continued)

Company and Year		Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
United Carbon Company	1958	5.22	N/A	3.86	0.68	4.54	BIBs	A10
U. S. Smelting, Refining and Mining	1958	(1.58)	N/A	(4.96)	1.55	(3.41)	BIBs	A14
United States Steel Corporation	1958	7.33	N/A	4.26	0.87	5.13	BIBs	A11
Wesson Oil & Snowdrift Company	1958	1.76	N/A	1.74	0.20	1.94	BIAs	A 3
Alan Wood Steel Company	1957	4.04	N/A	2.20	0.40	2.60	BIBs	A 4
Alpha Portland Cement	1957	3.45	N/A	2.48	0.42	2.90	BIBs	A14
J. I. Case Company	1957	(0.72)	0.01	(0.04)	0.14	0.10	A1As	A10

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings		Decision Year's Projected Per Share Earnings		Decision Year's Per Share Earnings Not Including Effect of Decision		Per Share Effect of Decision		Decision Year's Reported Per Share Earnings		Notational Category	Item Code
City Stores Company	1957	2.49	N/A	1.86	0.39	2.25	BIBs	A14				
Endicott Johnson	1957	3.06	N/A	3.24	(0.27)	2.97	ADBn	B 5				
Food Machinery and Chemical	1957	4.72	N/A	4.52	0.08	4.60	BIBs	A 5				
W. T. Grant Company	1957	3.72	N/A	3.14	0.24	3.38	BIBs	A 1				
Kuner-Empson Company	1957	0.52	N/A	(0.02)	(0.22)	(0.24)	BDBn	B 2				
Loew's Incorporated	1957	0.88	N/A	0.13	(0.22)	(0.09)	BDBn	B10				
The W. L. Maxson Corp.	1957	(0.97)	0.01	0.11	0.25	0.36	A1An	A14				
McCall Corporation	1957	1.16	1.17	1.90	(0.31)	1.59	ADAs	B10				

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Outboard Marine Corp.	1957 1.55	N/A	1.54	0.13	1.67	BIAS	A10
Rexall Drug Company	1957 1.35	1.50	1.40	0.05	1.45	AIAS	A 9
Reynolds Metals Co.	1957 3.60	N/A	3.07	0.21	3.28	BIBS	A 4
R. J. Reynolds Tobacco Company	1957 5.91	6.75	7.48	(1.23)	6.15	ADAS	B 1
Sears, Roebuck & Co.	1957 2.15	2.36	2.16	0.04	2.20	AIAS	A 5
Sun Chemical Corp.	1957 1.35	N/A	0.81	0.09	0.90	BIBS	A 9
Admiral Corporation	1956 0.97	N/A	0.21	0.23	0.44	BIBS	A 5
Chesapeake Industries	1956 0.54	N/A	(0.09)	0.32	0.23	BIBS	A10

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Corn Products Refining 1956	2.29	2.53	2.33	0.35	2.68	AIAS	A 3
Daystrom, Inc. 1956	2.61	N/A	1.71	0.30	2.01	BIBS	A 5
Dixie Cup Company 1956	4.39	4.73	5.18	(0.27)	4.91	ADAS	B 5
Eastern Stainless Steel 1956	4.21	N/A	5.46	(1.71)	3.75	ADBN	B 1
Fruehauf Trailer Company 1956	2.11	N/A	0.68	0.35	1.03	BIBS	A 8
Houdaille Industries 1956	1.79	1.80	2.28	(0.26)	2.02	ADAS	B 5
National Sugar Refining 1956	3.25	N/A	3.17	0.69	3.86	BIAS	A 3
Schenley Industries 1956	1.40	1.41	1.71	0.22	1.93	AIAN	A14
Union Carbide & Carbon 1956	4.83	5.40	4.90	(0.04)	4.86	ADAN	B 5



Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Ward Backing Company	1956 1.53	N/A	0.89	0.33	1.22	BIBs	A10
Westinghouse Electric	1956 2.46	N/A	0.82	(0.72)	0.10	BDBn	B 1
Adams-Millis Corp.	1955 1.99	2.00	2.16	(0.11)	2.05	ADAs	B 5
Avco Manufacturing Corp.	1955 0.37	N/A	(0.04)	0.09	0.05	BIBs	A 5
The Borden Company	1955 4.82	N/A	4.97	(0.36)	4.61	ADBn	B 7
Bridgeport Brass	1955 1.79	1.80	2.28	(0.26)	2.02	ADAs	B 5
Burroughs Corporation	1955 1.56/1.83 <sup>C</sup>		1.64	0.55	2.19	A1An	A 9

<sup>C</sup> See Note to Continental Oil on Page 174.

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings		Decision Year's Projected Per Share Earnings		Decision Year's Per Share Earnings Not Including Effect of Decision		Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Cannon Mills	1955	4.39	4.40	4.55	0.31	4.86	A1An	A 4		
Chesapeake Industries	1955	0.35	0.36	0.47	0.07	0.54	A1An	A10		
Chicago Pnuematic Tool Company	1955	4.78	4.79	5.82	0.75	6.57	A1An	A 9		
The Colorado Fuel & Iron	1955	2.46	2.47	3.20	0.59	3.79	A1An	A 5		
Hathaway Bakeries	1955	(0.54)	N/A	(0.95)	0.51	(0.44)	BIAS	A14		
Hershey Chocolate	1955	2.75	2.76	4.74	(0.51)	4.23	ADAS	B 1		
Heyden Chemical	1955	0.20	0.21	0.89	0.12	1.01	A1An	A 5		
Howell Electric Motors Company	1955	0.67	N/A	0.04	0.06	0.10	BIBS	A 4		

Table A. (Continued)

Company and Year	Prior Year's Reported Per Share Earnings	Decision Year's Projected Per Share Earnings	Decision Year's Per Share Earnings Not Including Effect of Decision	Per Share Effect of Decision	Decision Year's Reported Per Share Earnings	Notational Category	Item Code
Indian Head Mills	1955 (2.37)	0.01	1.39	0.41	1.80	A1An	A 1
Lerner Stores Corp.	1955 1.95	N/A	1.95	(0.14)	1.81	ADbn	B10
Lukens Steel Company	1955 6.33	N/A	3.30	2.14	5.44	BIBs	A 4
The Maytag Company	1955 3.68	N/A	3.63	(0.12)	3.51	BDBn	B 4
Motor Products Corp.	1955 (2.41)	N/A	(4.34)	0.61	(3.73)	BIBs	A14
Munsingwear, Inc.	1955 1.40	1.41	1.80	0.28	2.08	A1An	A14
Peoples Drug Stores	1955 3.44	N/A	3.33	0.18	3.51	BIAs	A14
Pittsburgh Screw & Bolt	1955 0.39	0.40	0.63	0.07	0.70	A1An	A11
The Scranton Lace Co.	1955 (1.04)	0.01	(0.07)	0.36	0.29	A1As	A 3
Union Tank Car Company	1955 2.39	2.55	2.75	(0.15)	2.60	ADAs	B 5

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