
Ronald James Thacker

Louisiana State University and Agricultural & Mechanical College

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool_disstheses

Recommended Citation
https://digitalcommons.lsu.edu/gradschool_disstheses/682

This Dissertation is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Historical Dissertations and Theses by an authorized administrator of LSU Digital Commons. For more information, please contact gradetd@lsu.edu.
This dissertation has been microfilmed exactly as received

THACKER, Ronald James, 1935–
A STUDY OF INCOME STATEMENT CONCEPTS,

Louisiana State University, Ph.D., 1961
Economics, commerce–business

University Microfilms, Inc., Ann Arbor, Michigan
A STUDY OF INCOME STATEMENT CONCEPTS

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Department of Accounting

by
Ronald James Thacker
B.B.A., University of Houston, 1957
M.B.A., University of Houston, 1958
June, 1961
ACKNOWLEDGMENT

The writer wishes to express appreciation to Dr. Lloyd F. Morrison, Professor of Accounting, for his valuable assistance and guidance in the preparation of the dissertation. Thanks are due also to Dr. P. F. Boyer, Professor of Finance, Dr. Raymond V. Lesikar, Professor of Management and Marketing, Dr. Stanley W. Preston, Professor of Finance, Dr. B. F. Sliger, Associate Professor of Economics, and Dr. R. H. Van Voorhis, Professor of Accounting.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENT</td>
<td>ii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>ix</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>x</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>xi</td>
</tr>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>The Changing Purpose of Income Reporting</td>
<td>2</td>
</tr>
<tr>
<td>Survey of the Study and Statement of the Problem</td>
<td>4</td>
</tr>
<tr>
<td>II. THE THEORETICAL STRUCTURE OF THE INCOME STATEMENT</td>
<td>7</td>
</tr>
<tr>
<td>Single-purpose and Multiple-purpose Reports</td>
<td>7</td>
</tr>
<tr>
<td>Earning, Realization, Recognition, Incurrence and Benefitting</td>
<td>11</td>
</tr>
<tr>
<td>Losses, Gains, Revenues and Costs</td>
<td>16</td>
</tr>
<tr>
<td>Operating, Non-operating, Recurring and Non-recurring Items</td>
<td>17</td>
</tr>
<tr>
<td>Net Income for the Year, Earning-power and Earnings Per Share</td>
<td>19</td>
</tr>
<tr>
<td>Summary of the Theoretical Structure</td>
<td>21</td>
</tr>
<tr>
<td>III. AN EVALUATION OF FIVE BASIC CONCEPTS OF INCOME REPORTING</td>
<td>23</td>
</tr>
<tr>
<td>CHAPTER</td>
<td>PAGE</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>The Historical or All-inclusive Concept</td>
<td>24</td>
</tr>
<tr>
<td>The Current Operating Concept</td>
<td>32</td>
</tr>
<tr>
<td>The Management Control Approach</td>
<td>39</td>
</tr>
<tr>
<td>The Combined Statement of Income and Retained</td>
<td></td>
</tr>
<tr>
<td>Earnings</td>
<td>40</td>
</tr>
<tr>
<td>The Preparation of Revised Income Statements</td>
<td>41</td>
</tr>
<tr>
<td>Current Practice</td>
<td>42</td>
</tr>
<tr>
<td>Support of Organizations</td>
<td>45</td>
</tr>
<tr>
<td>Summary</td>
<td>46</td>
</tr>
<tr>
<td>IV. THE FORM OF THE INCOME STATEMENT</td>
<td>49</td>
</tr>
<tr>
<td>Justification of the Study of Form</td>
<td>49</td>
</tr>
<tr>
<td>Approaches to the Study of Form</td>
<td>50</td>
</tr>
<tr>
<td>The Principles of Ranking of Costs and Revenue</td>
<td>51</td>
</tr>
<tr>
<td>Methods of Classification</td>
<td>59</td>
</tr>
<tr>
<td>Customary classification</td>
<td>61</td>
</tr>
<tr>
<td>Functional classification</td>
<td>62</td>
</tr>
<tr>
<td>Object or natural classification</td>
<td>62</td>
</tr>
<tr>
<td>Management efficiency classification</td>
<td>64</td>
</tr>
<tr>
<td>Evaluation</td>
<td>65</td>
</tr>
<tr>
<td>Summary of methods</td>
<td>68</td>
</tr>
<tr>
<td>Need for Uniform Reporting</td>
<td>70</td>
</tr>
<tr>
<td>A Tentative Conclusion</td>
<td>71</td>
</tr>
<tr>
<td>CHAPTER</td>
<td>AN ANALYSIS OF INCOME REPORTING FROM A UTILITARIAN POINT OF VIEW</td>
</tr>
<tr>
<td>---------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>A Survey of Uses</td>
</tr>
<tr>
<td></td>
<td>The Goal of Prediction for the Investor-Analyst</td>
</tr>
<tr>
<td></td>
<td>Analysis of Changes in Reported Profits</td>
</tr>
<tr>
<td></td>
<td>Marginal and Total Factors</td>
</tr>
<tr>
<td></td>
<td>Greater Meaningfulness of the Price-Earnings</td>
</tr>
<tr>
<td></td>
<td>Ratio</td>
</tr>
<tr>
<td></td>
<td>Certification of Earning Power Figures</td>
</tr>
<tr>
<td></td>
<td>Recommendation of the American Institute of Certified Public Accountants</td>
</tr>
<tr>
<td></td>
<td>Accepted practice</td>
</tr>
<tr>
<td></td>
<td>Summary</td>
</tr>
<tr>
<td>VI.</td>
<td>THE DETERMINATION OF THE CONSISTENCY OF EXISTING ACCOUNTING CONVENTIONS AND DOCTRINES WITH INCOME STATEMENT CONCEPTS</td>
</tr>
<tr>
<td></td>
<td>Purpose of the Chapter</td>
</tr>
<tr>
<td></td>
<td>Definition of Terms</td>
</tr>
<tr>
<td></td>
<td>The Relationship of Accounting Doctrines to Earning Power</td>
</tr>
<tr>
<td></td>
<td>Utilitarianism and the Cost Basis</td>
</tr>
<tr>
<td></td>
<td>The critical event theory</td>
</tr>
</tbody>
</table>
CHAPTER                                        PAGE

The real foundation of the cost basis........... 96
The consistency of the earning power
concept and the cost basis....................... 97
A new cost basis..................................... 97
The development of a new cost basis........... 99
Tentative cost basis recommendation........... 104

Modification of Other Doctrines and Conven-
tions by the Earning Power Concept............. 104
Periodic nature of accounting.................... 104
Stability of the monetary unit................... 105
Continuity of existence......................... 106
Necessary compromise............................. 106

VII. SPECIAL FACTORS.............................. 108

Interperiod Allocation of Income Taxes.......... 108
Recommendations of the AICPA.................... 110
Recommendations of the Securities and
Exchange Commission............................ 111

Relation of allocation to the earning-power
method of computing net income................. 114
Consolidated Statement Preparation............... 116
The controversy of unconsolidated subsidiary
income............................................... 116
<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current practice</td>
<td>117</td>
</tr>
<tr>
<td>Evaluation of cost and equity methods</td>
<td>117</td>
</tr>
<tr>
<td>Return on Investment</td>
<td>120</td>
</tr>
<tr>
<td>The financial statement method</td>
<td>120</td>
</tr>
<tr>
<td>The discounted-cash-flow method</td>
<td>121</td>
</tr>
<tr>
<td>Uses of rate of return computations</td>
<td>124</td>
</tr>
<tr>
<td>Social or Economic Accounting</td>
<td>126</td>
</tr>
<tr>
<td>Definition of social accounting</td>
<td>127</td>
</tr>
<tr>
<td>The major national financial statement</td>
<td>127</td>
</tr>
<tr>
<td>Parallelism between social income accounts and enterprise income accounts</td>
<td>129</td>
</tr>
<tr>
<td>Relationship of social income accounting to earning-power</td>
<td>129</td>
</tr>
<tr>
<td>Tendency of aggregate values to produce average measures</td>
<td>130</td>
</tr>
<tr>
<td>Lack of participation of accountants in national accounting</td>
<td>130</td>
</tr>
<tr>
<td>Problems of Inventories</td>
<td>131</td>
</tr>
<tr>
<td>Natural flow of costs</td>
<td>131</td>
</tr>
<tr>
<td>The rising price-level</td>
<td>131</td>
</tr>
<tr>
<td>Recommendations of organizations</td>
<td>132</td>
</tr>
<tr>
<td>Earning-power and inventory pricing</td>
<td>133</td>
</tr>
</tbody>
</table>
### CHAPTER

<table>
<thead>
<tr>
<th>Summary</th>
<th>133</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIII. SUMMARY AND CONCLUSIONS</td>
<td>136</td>
</tr>
<tr>
<td>Summary of the Problem Area</td>
<td>136</td>
</tr>
<tr>
<td>Analysis Concerning the Theoretical Structure of the Income Statement</td>
<td>137</td>
</tr>
<tr>
<td>Analysis Concerning the Form of the Income Statement</td>
<td>139</td>
</tr>
<tr>
<td>Analysis Concerning the Several Concepts of the Income Statement</td>
<td>140</td>
</tr>
<tr>
<td>Analysis Concerning the Relationships of Special Areas of Accounting Practice to Earning Power</td>
<td>141</td>
</tr>
<tr>
<td>SELECTED BIBLIOGRAPHY</td>
<td>144</td>
</tr>
<tr>
<td>VITA</td>
<td>157</td>
</tr>
</tbody>
</table>
## LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Handling Extraordinary Items (1953–1958)</td>
<td>44</td>
</tr>
<tr>
<td>II. Income Statement Form, Selected Years (1947–1957)</td>
<td>60</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. M Company Illustrative Income Statement</td>
<td>53</td>
</tr>
<tr>
<td>2. Cost-revenue Relationships</td>
<td>55</td>
</tr>
<tr>
<td>3. The Multi-step Corporation Illustrative Income Statement</td>
<td>58</td>
</tr>
<tr>
<td>4. Object Classification of Costs</td>
<td>63</td>
</tr>
<tr>
<td>5. ABC Company Illustrative Income Statement-I</td>
<td>65</td>
</tr>
<tr>
<td>6. Projection of Net Income, ABC Company</td>
<td>69</td>
</tr>
<tr>
<td>7. ABC Company Illustrative Income Statement-II</td>
<td>77</td>
</tr>
<tr>
<td>8. ABC Company Illustrative Income Statement-III</td>
<td>80</td>
</tr>
<tr>
<td>9. Analysis of Changes in Net Income-I</td>
<td>81</td>
</tr>
<tr>
<td>10. Analysis of Changes in Net Income-II</td>
<td>84</td>
</tr>
<tr>
<td>11. Functional Static Analysis of Cost-Efforts</td>
<td>101</td>
</tr>
<tr>
<td>12. Financial Statement Method of Calculating Rate of Return</td>
<td>122</td>
</tr>
<tr>
<td>13. Discounted-cash-flow Method of Calculating Rate of Return</td>
<td>123</td>
</tr>
</tbody>
</table>
ABSTRACT

Among the topics considered highly important to those individuals connected with operating an enterprise is that of the income statement. A main object of the accounting system has not always been that of income determination. The emphasis has gradually shifted to concentration on decision-making through the use of income information.

This gradual shift of emphasis has produced a body of accounting income theory. The purpose of this study is to develop a philosophy of income reporting through delineating and evaluating critically the existing stage of development of income statement theory.

The analysis is based upon a study of the fundamental theory components, concepts and principles, associated with the present income statement practice. The philosophy of the income statement is constructed through six steps:

1. A critique is made of the principles of matching costs and revenues.

2. An evaluation is made of the five basic concepts of the income statement: the historical concept; the current operating or earning-power concept, the managerial control concept, the concept of revising income statements, and the concept of the combined statement of income and retained earnings.

3. An analysis is made of the principles of income statement form.

4. An analysis is made of the primary uses of income information.
(5) The consistency of several accounting conventions and doctrines with the earning-power concept of net income is determined.

(6) The body of theory presented in the study is related critically to several controversial areas of accounting theory: interperiod allocation of income taxes; treatment of unconsolidated subsidiary income; computation of return on investment; social accounting; and special problems of inventory methods.

As a basis for the study, an examination was made of the current thinking as reflected in the leading accounting journals and other publications.

To provide information concerning expected earnings, effort in terms of cost-dollars must be matched against accomplishment in terms of revenue-dollars to produce the residual measurement of productiveness, net income. The concepts of earning, realization, incurrence, and benefitting were determined to be workable guides in the measurement of revenue and cost dollars. The realization postulate is not universally, or even generally, the best conceivable method of allocating the net income residuum to operating periods. It is, however, the only workable postulate developed at the present time.

The historical or all-inclusive concept and the earning-power concept represent the two leading approaches to income determination. Current practice reflects the impact of both approaches, but there is the tendency today for accountants to subscribe to the all-inclusive statement, unless some other position is especially justified. Analysis in the study indicates that the earning-power concept of net income is the
The nature of the economic system in the United States supports the principle that there should be no ranking of costs on the income statement, but that decisions are resultant of cost and revenue classification. The single-step form of the income statement is desirable, therefore, unless special usefulness is created through departure from the single-step form. Useful methods of classification include the functional, object, and management efficiency or economic classifications.

Several controversial problem areas of accounting income determination were studied; special emphasis was placed on finding a solution to each of these problems, a solution which would be consistent with the earning-power concept of net income. It was found in each instance that in order to develop a solution which reflects the net income reasonably, the earning-power method must be followed consistently.
CHAPTER I

INTRODUCTION

Accounting today is an area of study wherein there is a striking dearth of analysis of principles. In this study a principle is used to mean a rule which explains the relationships of recurring phenomena in a body of theory. Conventions, accepted ways of doing things, are normally the outgrowth of a set of principles. Accounting conventions, once converted into agreed use by accountants, tend to become unquestioned rules to be followed without provision for change. Fortunately, throughout the years following the Great Depression, certain revolutions in isolated areas of accounting have formed the pattern for change, but belated change in the majority of cases. This spasmodic development should be supplanted by orderly analysis of conventions from a dynamic utilitarian view. The purpose of accounting statements has changed drastically and undoubtedly will continue to change; accordingly, the governing principles must reflect that change. This study is an analysis of the particular set of principles surrounding income determination, with special emphasis on the current operating performance and the all-inclusive concepts of the income statement.

The remaining part of this chapter further clarifies the problem of surveying the changing purpose of income reporting and the trends in income determination. The effect of this trend on certain established
conventions is a parallel problem. There is presented also a specific statement of the problem and scope and limitations of the study.

The Changing Purpose of Income Reporting

Probably when accounting originated, its only purpose was to aid the owner-manager in a very limited manner in his commercial endeavors. Accounting probably did little more than bring a greater degree of order into commerce. Early accounting rules were constrained by a tremendously differing type of economy from that existing today in the United States. Practically all business was transacted by a sole proprietor in his own behalf; the separation of management and ownership was unthinkable! Far too sophisticated for the late fifteenth century was the concept of periodic scientific measurement of income.

But economic change did take place; accounting changed; the central purpose of accounting has become no longer only owner-manager service, but service to many individuals. The enterprise system wherein the corporation is a governing factor needed a highly developed framework of accounting serving a wide range of individuals. Such a framework had to isolate economic forces and to measure these forces in some quantitative language which was readily communicable. It is evident that in the development of accounting theory there have been two significant and

productive areas of concentration of effort by researchers: one has been the analysis of the financial position of the enterprise, and the other has been the analysis of income of an enterprise. Both of these areas are concerned with isolating and measuring forces within the economy.

It is further recognized that there has been a shift of emphasis from the position statement to the income statement. It is suggested that this shift was a direct result of the Great Depression and the related federal legislation of the thirties. But the fact remains that whatever the catalyst, the form of accounting theory has been shaped with the central theme of income reporting.

There was an awakening to the fact that earning-power is decisive. Such factors as the expansion of the operations of separate business units, the advent of the income tax, the growth of widely held stock ownership, wars and preparations for wars, cyclic influences of inflation and deflation and greater social control of business have further contributed to the growth of income reporting. Since income measurement is of such significance and reported figures of a single corporation greatly affect economic decisions, there is needed a comprehensive body of accounting principles, of which each principle might be described as a basic explanation, yet flexible in nature to provide for change in accounting income reporting.

---

Survey of the Study and Statement of the Problem.

The definition of the problem analyzed in this study begins with one basic assumption: there must be recognition of principles of accounting which are dynamic and utilitarian in foundation. This study is concerned with delineating the existing stage of development in income statement theory and with pointing the way for clarification of existing practices; it is concerned with future development of income reporting theory.

Specifically in this study, the theoretical structure of the income statement is examined. The fundamental postulate of matching costs and revenue is reformulated and is critically related to the purpose of the income statement. The goals (or goal, as the case may be) of the income statement can be derived only through a critical examination of the uses to which an income report has been put. Such uses as:

1. explaining the sources of revenues and costs,
2. judging the adequacy of performance of an enterprise,
3. determining adherence to established policies,
4. forming a base for budgeting,
5. price fixing,
6. buying and selling securities,
7. calculation of national income and gross national product.

form the framework for the evaluation of the income statement of
Likewise, basic to the study is the evaluation of five fundamental concepts of income reporting: (1) the all-inclusive concept, (2) the current operating performance concept, (3) the management control concept, (4) the combined income-retained earnings statement and (5) the preparation of revised income statements. A tentative evaluation is presented at the end of this preliminary analysis as a means of delineating the acceptable concepts present in current literature, and formally rejecting those irrelevant concepts.

The problem of the form and presentation of the income statement is investigated. Form of the statement is approached with the assumption that there is a direct relationship between certain principles of form and any one concept of the statement. The study of form is an analysis of income reporting from the point of view of specific uses to which the statement is put. The fields of security analysis, business management, and credit are probed in this part of the study.

Following the treatment of form is an analysis of income reporting from a utilitarian viewpoint. The uses of the income statement are surveyed, with special attention given to the goal of prediction of the investor-analyst. Pertinent problems surrounding analyzing changes in reported net income and certain investment measures of earning-power net income are presented and discussed. In addition, the problem of

---

certification by public accountants of net income amounts calculated according to the earning-power concept of net income is studied. Too, a critique of current thinking regarding the usefulness of earning-power net income is included.

Next in the study it is determined if the existing accounting conventions are consistent with the theoretically acceptable concepts of the income statement as concluded earlier in the dissertation. Such analysis is begun with a probing of the rules of revenue recognition; then follows a determination of the consistency of the acceptable concepts of net income with the so-called generally accepted (conceptual) principles of accounting.

Specific situations in modern accounting such as interperiod allocation of income taxes, consolidated reporting, return on capital computations, inventory problems and national and social accounting are related to the historical and the earning-power concepts of net income. Finally, a conclusion or proposal is set forth as to unqualified acceptance of the conceptual structure of the income statement, along with corollary proposals for changes in the theory of income determination.
CHAPTER II

THE THEORETICAL STRUCTURE OF THE INCOME STATEMENT

The preceding chapter pointed out the fact that this study is built through a series of steps. The first step is clearly to present, analyze, and delineate the several theoretical approaches to the income statement. The first section of this chapter sets forth the underlying principles of the matching process, and the second section is a refinement of the five basic theoretical approaches previously mentioned.

Single and Multiple Purpose Reports

The responsibility of the professional accountant is to prepare financial statements which are useful. This is quite a simple idea, but usefulness appears to be consistently overlooked in the process of developing accounting theory. It is agreed that the income statement is relied upon for all kinds of decisions. But the question which accountants and statement users should ponder is as follows:

Is the income statement which is currently in popular use designed in such a manner wherein most of the decisions made from its information are reasonable decisions? Or yet even more basic a question -- Is there one set of income statement principles which might be classified as "generally accepted?"

The primary groups which use the income statement are management, creditors, investors, stockholders, government agencies, and labor organizations. Management is primarily interested in determining
the adequacy of operating results for a stated period.\(^1\) This evaluation by management consists of analyses of net income from operations, net income and return on invested capital. Related to the determination of the adequacy of operating results is an additional use made of the income statement; this is the presentation by the statement of the amounts and sources of revenues and costs recognized during the period. The statement is further used by management to measure the extent to which managerial standards (or even enterprise objectives) were achieved.\(^2\) Corporate dividend policy is a natural result of income statement analysis by management; current earnings is the significant criterion in molding dividend policy in spite of the legal implications of the retained earnings balance. Uses of the statement for price setting, for tax decisions, and as a base for budgeting should not be overlooked in a brief survey of the varied uses of this single statement.

In addition to the use of the income statement by management, decisions to buy and sell securities are for the most part resultant of income statement analysis. Earning power of the enterprise is agreed to be reflected, in part at least, by the statement. Credit grantors today place material emphasis on the expected earning capacity of the enterprise during the credit period. And a final use of the statement is the calculation by governmental agencies of national economic indicators

\(^1\)Ibid., p. 561.
\(^2\)Ibid., p. 561.
such as Gross National Product and National Income.

At this point it is evident that the income statement contributes to the making of innumerable decisions within the economic system of the nation. The accounting profession has the responsibility for guiding the development of principles of the income statement. Yet perhaps the profession has not done everything that it should do in clearly formulating the ends which accounting documents aim at serving. 3

What logical approach should be used by researchers in the profession in a systematic development of income statement theory? Perhaps the following approach should be considered. First, make the assumption that the income statement of a firm will be used for one purpose only, for example, the making of decisions for buying and selling of securities of the firm. In the framework of this single assumed objective, the various alternative courses of action in accounting matters could be evaluated.

The valuation of fixed assets and the reporting of related depreciation is one such area open to analysis in this fashion. For the sole objective of making decisions to buy or sell securities, it could be decided whether the replacement cost or the original cost would be

more useful; or the several depreciation methods could be studied in the light of this one objective. The entire field of accounting theory, thus would be subjected to a critical utilitarian analysis.

Then a second sole objective could be assumed, perhaps, one aimed to aid in decision making in the credit department of a bank; and accounting income theory could be subjected to just as close scrutiny under this assumption. After such a series of analyses were executed, the researcher could isolate regularities, and conclude which principles were applicable to all statement users, and which principles were narrowly applicable to a special segment of the economy.

This study is substantially based on the proposition that all major groups of income statement users are concerned with the earnings of the enterprise in one or more future periods. Management, credit men, investors, labor union officials, and even the governmental agencies in the calculation of economic indicators all want to know what will be the net productiveness, the net income, in the next period. The income statement is used as one of the significant factors in projecting this concept of earnings in some future period.

This illustrates that a single statement of income which will provide such income information can be developed; it is conceded that the concept of future earning power, once determined, can be used for many diverse decisions not directly indicated in the statement. The assumption is made that single-purpose statements are useful as supplementary
devices, but the "regularity" in use of the same information by several
groups leads to multiple-purpose theory development, rather than single-
purpose statements of income. Therefore, the problem remains as to
what type of the income statement is most useful?

Earning, Realization, Recognition, Incurrence and Benefitting

One writer has said:

The matching of costs against revenue is based upon the
presumption that a causal relationship exists between these
two factors in the income equation, that their occurrence
follows a normal and regular pattern and that they are
capable of measurement.  

In the past few years countless volumes have been written about the
matching of costs and revenues. This serves to indicate that net income
for the period is the "center of gravity" of accounting theory. Before the
several concepts of the income statement can be evaluated, the accepted
rules of income recognition and cost determination must be set forth.

Once the periodic nature of the income statement is accepted, the
problem of assigning revenue to periods must be handled. The conceptual
conventions which govern the allocation of revenues and costs in practice
are (1) the period in which the revenue is earned and (2) the period in
which revenue is realized. Before the accountant assigns revenue to a
period, both earning and realization must have taken place. Earning is

4 Morton Backer, "Determination and Measurement of Business
Income by Accountants," Handbook of Modern Accounting Theory, Morton
defined here to mean that act of the enterprise of exerting effort (creating utility) through management to accomplish the profit objective. The act of rendering a service is earning. The act of manufacturing a product and the exertion of effort by the sales force to sell the product is earning. The accumulation of costs, therefore, is associated with the effort-exertion of the earning. But, it can be stated immediately that revenue is not always allocated to the period (recognized) in which it is earned. A second factor must conventionally be present; this is realization, or the occurrence of an exchange transaction, wherein the "cost-exertion" is converted into a new asset, usually of a greater cost basis of transaction price than the amount registered in the original cost accumulation process. Thus, revenue is recognized in the period in which there has been realization, although the earning process took place in some prior period.

For matching of revenues and costs to take place, costs also must be allocated periodically. The governing conceptual conventions associated with cost are period of incurrence and period of benefit. A cost is incurred at the moment of termination of the exchange transaction mentioned above, but it is allocated to that period usually during or after incurrence wherein the benefit is received by the enterprise for exertion of this "cost-effort," i.e., to that period wherein effort produced some kind of accomplishment.

In the case of fixed assets, the cost is incurred at the moment of
the exchange transaction (when the asset is bought); depreciation is then assigned periodically in the proportion to benefits received through the use of the fixed asset. Wage costs and costs for other services follow a similar pattern. When the wage service is received by the business, the cost is incurred, and the liability for incurrence of the service cost comes into existence. Benefit, as related to creation of service costs, is received simultaneously with incurrence of the cost.

The concepts of benefitting and incurrence are presented as part of the study merely as an aid in explaining the doctrine of matching costs and revenues. It is recognized that these definitions are not all-inclusive rules so well established that there are no exceptions. It could be argued that there are costs which do not actually benefit the enterprise. Such an argument does not render the rule of benefitting any less useful; it only suggests a problem of terminology, or perhaps it suggests investigation to broaden the rule.

In probing the intricate relationship between revenue and cost recognition and the rules relating to assigning net income to one period in opposition to another, there are in reality two problems.

The first is the determination through the matching process of the residuum called net income, and the second (after concluding a definition of net income over the life of the enterprise) is the allocation of this residual net income to various periods for decision-making purposes throughout the life of the enterprise. The postulates for assigning revenues and costs to periods have been developed with at least one
constraining factor. This is the realization postulate mentioned above. This has been a hindering factor in theory development, but it has been invaluable in the construction of a workable set of accounts to meet the needs of the times. If it is accepted that the main purpose of the income statement is to report effort and accomplishment during a segment in the life of an enterprise, the idea that the matching process must reflect net income as the residual accomplishment also must be accepted. The realization postulate provides a workable way of approximating the period to which the residuum should be assigned. Following the general rule for allocating net income to a period, which states that revenue and costs should be assigned to the period wherein the exchange transaction occurs (such as when title passes), the whole point, that the income statement should be a measure of performance of the enterprise (of management, perhaps) during a period, is missed. The arbitrary rule of recognition is expedient, but it is far from being completely acceptable in theory.

An example will serve to clarify this proposition. Assume that a corporation has been in operation for twenty-five years. The firm

---


6This postulate is observed to a greater extent in the United States than in Britain. See Mary Murphy, *Accounting, A Social Force* (Carlton, N. 3, Victoria, Australia: Melbourne University Press, 1956), p. 95.
manufactures and sells a type of part for the electrical industry. It is also on the record that the firm has never manufactured an item which it did not sell within a reasonable time, i.e., exceptions to this have been immaterial in relation to the net income for any one year. The firm, according to the realization postulate, recognized revenue and costs in the period wherein the actual sale of parts was made. The income statement is used as an annual measure of performance, as an annual measure of management's effectiveness in accomplishing enterprise objectives, and as an annual measure of earnings to be used as a basic factor in predicting future earnings for stockholders and potential investors. In the light of the uses made of the statement, it is surprising that the income statement figures are not adjusted to correct the distortion brought about by adherence to the realization postulate.\footnote{This is not a recommendation for departure at this time from the realization postulate; it is merely a presentation of a distortion.}

The American Institute of Certified Public Accountants and the Rockefeller Foundation published a study, Changing Concepts of Business Income, in 1952 which approved acceptance of the realization postulate because of "relative certainty, objectivity and convenience." Also it should be noted that the smoothing effect of regularly recurring and overlapping cost and revenue transactions tends to correct some of the distortion brought about by the realization postulate.
**Losses, Gains, Revenues and Costs**

In the preceding section, a rather closely knit framework of "costs which benefit" were matched against "revenue which is earned." But, occasionally in the operation of a business unit, **unusual costs** called **losses** arise, as well as the **unusual** revenues called **gains**.

Paton and Littleton take the position that there are differences between expense and loss and between income and special gain, but that "the similarities are greater than the distinctions." Perhaps, this is true, but this fact in itself does not logically lead to a prohibition of their separation in income determination processes (nor does it indicate the contrary).

It has been established that costs which can be associated with the production process are to be matched against the revenues which they produce. A loss, on the other hand, is a cost "... which cannot logically be identified with any output, either past, present or future, ..."\(^8\)

In this paper, as the concept of the income statement is developed, it will be very important to keep clearly in mind the distinction between revenue-producing costs and losses which do not produce revenue. Revenue-producing costs are not all easily related to the revenue produced.

---


Gains in this discussion may be defined as revenues which arise from something other than planned effort, that is, something other than effort of the management group.

Gains augment the asset total, whether they are derived from planned effort at a cost or from accidental occurrences at no cost; losses diminish the asset total, whether they result from the failure of revenue to cover associated costs or from unpredictable occurrences wholly unassociated with efforts to produce a return.\(^\text{10}\)

In *An Introduction to Corporate Accounting Standards* this is carried to the conclusion that

\[
\ldots \text{losses from whatever source should be reported as deductions from the most recently calculated asset-increments, such as revenue, and that gains from whatever source should be reported in association with the most recently calculated asset-decrements, that is, costs and expenses.}\(^\text{11}\)
\]

This statement is not accepted at this point in the analysis for lack of evidence that such a system for matching is the most useful one.

So far in this chapter, the basic matching principle, the limitation of the realization postulate, and the complication of the concept of net income by unusual gains and losses have been discussed.

**Operating, Non-operating, Recurring and Non-recurring Items**

There is general agreement that there should be a clear distinction on the statements summarizing activities between those charges and credits that are considered normal

\(^{10}\)Paton and Littleton, *op. cit.*, p. 18.

\(^{11}\)Ibid.
and recurring and those that are extraordinary, non-recurring and unpredictable.\textsuperscript{12}

In the preceding section, it was recognized that all items of revenues and costs do not have precisely the same causal interrelationship in the matching process. The classification of revenues and costs into a scheme reflecting the degree of causation of revenue by the accumulation of management-directed costs is accepted to provide a basis for more intelligent decisions. Determinants of net income can be classified into operating, non-operating, recurring and non-recurring items. Operating items are defined as "recurrent features of business operation, more or less normal and dependable in their incidence from year to year."\textsuperscript{13} Non-operating items are those items which are "irregular and unpredictable, more or less fortuitous and incidental."\textsuperscript{14} It is impossible in many cases to state exactly what is unusual, but in the majority of cases a guide to extraordinariness can be developed which gives an intelligent approximation. Extraordinariness may be logically based upon (1) magnitude or amount of money involved, (2) nature of the


\textsuperscript{14} \textit{Ibid.}
item, or (3) both of these factors. There is also the problem of correcting past mistakes in net income determination.

The following types of revenues and costs have been classified and defined: operating, non-operating, recurring and non-recurring. All of these items of revenue and cost are subject to the rules of earning, realization, recognition, incurrence and benefitting as previously presented. Next, the nature of net income is probed.

Net Income for the Year, Earning Power and Earnings Per Share

The figure of net income for the year is the resultant residual measure of the periodic matching process. The single net income figure has been relied upon as a basis for innumerable decisions throughout the economic system, perhaps as a conventional index would be relied upon. Because of this reliance, tremendous significance has become attached to the single figure, net income for the year. A large number of brokers, underwriters, and distributors of investment securities have made use of reported net income figures in their published statistical services for investors. Merrill Lynch, Pierce, Fenner & Smith, Inc., for example, publishes The Stock Record, which lists annual earnings of various corporations on a per share basis. This concept of earnings per share must take into consideration the number of shares of stock outstanding as well as the net income for the period. Specifically, the

---

investor is interested in estimating earnings and dividends in the figure. He wants a measure of net income which will permit him to calculate a capitalization of earnings over a period of years in the future.\(^{16}\) Thus, he needs a measure of net income which fundamentally can be used as an index of earning power\(^ {17}\); this involves forecasting and budgeting.\(^ {18}\) In the usual commercial enterprise rarely does book value or liquidating value play an important role in security analysis.\(^ {19}\) The earning power of the firm, often the deciding factor, may be defined as the expected earnings during a specified period in the future. The earning power concept is necessarily based on the past record of earnings and assumes that the next few periods of operation will not depart materially from the past.

This all points to the basic question in income statement theory. Should accountants approach the statement from a purely historical viewpoint, or should accountants recognize that they are constructing tools

---


\(^{17}\) *Accounting Research Bulletin* No. 49 presents an analysis of problems dealing with the calculation of earnings per share. Also, included in Chapter 4 of this study is a detailed analysis.


which will be used (and should be designed to be used) to predict in part future occurrences in the given set of circumstances? It is accordingly significant to recognize precisely what place in the prediction process the income statement plays. Its place should not be over-emphasized, and too, it should not be underemphasized. This places a real responsibility on the judgment of the accountant.

**Summary of the Theoretical Structure**

Up to this point in the study some of the working rules upon which a sound concept of the income statement must be based have been set forth. The ideal income statement, with which this study is concerned, is based on a number of sound premises. The premises previously developed and accepted in this study are:

1. **Although** many differing groups need income information for decision-making purposes, it is desirable and theoretically sound to prepare a multiple-purpose income statement.

   This multiple-purpose statement is indicated because of the core similarity of information needed by all groups, information concerning expected earnings.

2. To provide this information concerning expected earnings, effort in terms of cost-dollars must be matched against accomplishment in terms of revenue-dollars to produce the residual measurement of productiveness, net income.

3. The concepts of earning, realization, incurrence and benefitting are generally accepted conventions in the analysis of causal relationships between costs and revenues.
(4) The realization postulate is not universally, or even generally, the best conceivable method of allocating the net income residuum to operating periods. It is, however, the only workable postulate developed at this point.

(5) Those costs and revenues which can be manipulated by management in the planning process are basically of the same nature of those "fortuitous and unfortuitous" costs and revenues which are not directly under management's control. The distinction between the two groups, however, has a direct bearing on the decisions made from income statement information.

(6) Net income for the year and earnings per share are the two most significant single figures produced by an accounting system and should be considered so in the development of accounting theory and in the construction of an ideal concept of the income statement.
CHAPTER III

AN EVALUATION OF FIVE BASIC CONCEPTS OF INCOME REPORTING

There has never been a universally acceptable concept of the income statement. Presently there are five noticeable areas of activity on the subject. This section of the study presents a survey of the pertinent theory dealing with each.

Relevant to a discussion of accounting theory of this nature are the objectives of the accounting system. There are at least two possibilities of objectives. The first possibility is that an accounting structure has as a goal to account to the owner or proprietary interest for asset and equity changes. This may be labeled accountability theory of accounting, or perhaps, it is related to proprietary theory. Such a point of view is responsible for much of the development in accounting theory in the past. Consistent with this accountability concept is a definition of income which equates profits with increases in the net assets of the firm (exclusive of additional investments), and which equates losses with decreases in the net assets of the firm.\(^1\)

The second possibility of objectives is labeled the entity concept of an accounting system. This concept is apparently an outgrowth of

\(^1\)Newlove and Garner, op. cit., p. 21.
the sophistication of commerce and the emergence of the corporation as the dominant form of business enterprise. The entity concept is consistent with an accounting system of reporting based upon the premise that the business enterprise is distinct and separate from the ownership interests. The accounting reports, therefore, are directed at reporting to individuals divorced, at least in theory, from the reporting corporation. Profit, or net income, under the entity approach is represented by an increase in capital as it is under the accountability concept, but reporting is concerned with that portion of the net asset increment which affects the decisions of those individuals mentioned above who are divorced from the business entity. Of course, management, investors, and creditors are the significant groups.

**Historical or All-Inclusive Concept**

Out of the line of reasoning of the accountability concept has arisen the historical concept of the income statement. The proprietor of a business is vitally concerned with the assets of his business; he is concerned with all the changes in these assets and with all exchange transactions which produce these changes. A decrease in net assets brought about by paying of salaries to employees is of equal concern to him as is an unusual fire loss of the same amount. Accountability concept income reporting, therefore, includes an analysis of the impact of all exchange transactions applicable to the period in question. Thus, a series of income statements would be a complete historical record of
all changes in net assets over the periods studied.

Substantially all of the studies made of the several concepts of the income statement have tended to point out the advantages of one type of statement, and accordingly delineate the disadvantages of the other. The analysis of the literature on the subject discloses that there have been four focal points in the discussion, i.e., controversial and fruitful avenues of examination.

The first of these is the problem of adequate disclosure. This generally accepted postulate of accounting theory indicates that accounting statements should present all financial facts which are necessary for the statement reader to make an intelligent decision. Financial information should be disclosed in detail up to the point whereupon the statement reader would make a reasonable decision, i.e., he would not make a materially different decision from that which he would make if he had all of the detailed facts surrounding the circumstances. This postulate is the natural outgrowth of the utilitarian nature of accounting. Adequate disclosure has a direct bearing on the acceptance or rejection of the historical concept of the income statement. The two source-classifications of costs and revenues, (1) regularly-recurring operating and non-operating items and (2) extraordinary costs and revenues, are in question. If all items of cost and revenue recognized during the

\(^2\)For an excellent discussion of "full disclosure," see Karrenbrock and Simons, _op. cit._, pp. 44-46.
period are not presented on the single statement of income, there is the possibility of manipulation; there conceivably is a violation of the adequate disclosure principle. For this argument to be consistent, it must be established that readers of financial statements not only emphasize the income statement, but often disregard the statement of retained earnings in the making of decisions. The several groups of statement users could provide the answer to this assertion. What is the position of management in this regard? This answer is clear. Management today is responsible for construction of the reports; the retained earnings statement, without question, is as carefully scrutinized by the management group as is the income statement. If the financial statements were being prepared for management alone, the adequate disclosure discussion as it relates to the concept of the income statement is without basis.

What is the position of the investor? If it is assumed that the financial statements were to be used only for decisions to buy and sell securities, the relationship of adequate disclosure is not as clear. Primarily, it must be recognized that there are many types of investors. Certainly, some investors carefully analyze all three major financial statements as a minimum source of information for their investment decisions. It is questionable, however, if all investors do this, but today every good security analyst "combs" thoroughly the retained
earnings statement as well as the income statement. As the investing public becomes more and more aware of the interrelationships of the variables affecting investment decisions such as dividend policy, market value, book value, earnings per share and net income, the problem of adequate disclosure on the income statement alone will become less of a problem. Today it appears that the problem is over-emphasized.

The analysis of the use of financial statements by creditors is parallel to that of investors. There are many classifications of lenders, therefore there are many approaches to statement analysis. The creditor is primarily interested in the debt-paying ability of the debtor in the period in which the obligation matures. The position statement provides much of this information through the working capital approach to asset and liability classification. The earning expectations of the debtor plays an equally significant part in the analysis of the creditor; thus, the creditor makes at least a mental calculation of expected income of the firm in the future. If the creditor is informed to the extent that he can analyze the balance sheet and the net income figure reported

---


4 Apparently, analysts are able to read retained earnings statements, but many of them compute earnings per share by dividing reported net income by the number of shares of stock, regardless of the style of the income statement.
on the income statement, he certainly does not overlook the reconciliation of the retained earnings changes.

It is conceded here, however, that in practice if one of the three basic financial statements, the income statement, the balance sheet, and the retained earnings statement, were to be overlooked or breezed over lightly, it would probably be the statement of retained earnings. ⁵ It also must be recognized that the constructors of financial statements have an obligation to design the statements in such a manner as to lead logically to one decision appropriate in each set of alternative financial conditions.

In the case of labor unions, it is sufficient to say that information used for bargaining must be complete and logically presented before it will stand the test given it on the bargaining table. The facet of adequate disclosure in question is not a substantial argument for the historical concept as it applies to labor union use.

The second of these avenues of examination is the proposition that a series of income statements should provide a historical record of all profits and losses of the enterprise. Several authors give this argument as support for acceptance of the all-inclusive concept. ⁶ There


has been a tendency for statement users to regard the income statement as the sole historical record of the income transactions of the firm.\(^7\) This situation, however, indicates nothing more than during the past few years there has been a tendency for acceptance of the historical concept. There must be some historical record of income transactions in every enterprise, but there is no point of theory which leads to the conclusion that the income statement necessarily is that logical record. It is recognized here that if the historical concept of the income statement becomes firmly embedded in the minds of statement users, this attitude and custom must be considered in the development of an ideal statement.

The third area of discussion is the proposition that when items of profit or loss are not included on the income statement, there is a tendency to normalize or smooth income rather than to measure it. The use of the income statement as a measure of earning power has led to the employment of accruals, estimates, and budgetary provisions as a basis of assigning revenue and costs to periods.\(^8\) The use of the last-in-first-out method for inventory cost determination, the application of


price-level adjustments to statements, and the use of replacement price depreciation are all techniques used on the statement of income which tend to produce a "normal" earnings for a period. If a series of income statements is to be used to determine the long-term earning power, these techniques are especially indicated. In the measurement of income, fluctuation in periodic net income is the normal case and is to be expected. Stability is certainly not normal. But, the precise difference between fluctuations affecting earning power resulting from recurring profits and losses and those resulting from non-recurring items must be established. Earning power has previously been defined as the expected earnings during a specified period in the future. Net income for a series of periods, it was further stated, is the most important factor in the determination of expected earnings. Following this to its end, one would conclude that non-recurring items of profit and loss should not be included in the measure of net income, because these do not affect future earnings, except only in the most indirect manner.

But, it must not be accepted without qualification that there is a clear distinction between non-recurring and recurring items. Is it not possible that all items of profit and loss are recurring? One leading authority states that a study of business history supports the view that


over a period of years, extraneous losses do recur and

... that retained earnings charges tend to exceed the retained earnings credits, with the result that income statements for a series of years give an exaggerated impression of a company's earning power. ¹¹

The heart of this whole discussion is that accountants have not yet developed the tools to draw accurately and reliably the line between those items affecting future earnings and those items having no direct relationship to future earnings, and allocating the residuum to the periods. The criticism should be directed at the lack of precision in judgment rather than at the concept of the income statement. Reduction in the variation of judgment is the primary goal in solving the problem.

The fourth area of discussion is the necessity of judgment in deciding which items should not be used in the computation of net income. If the all-inclusive concept is consistently followed there will be no variations in judgment, it is argued. This, perhaps, is true, but the argument is not one of elimination of judgment, for throughout the accounting process judgment serves to clarify and refine relationships. If it can be determined that there is a more valuable concept of net income than the all-inclusive concept, it is highly probable that the related problem of variation in judgment eventually can be solved, and will not be a lasting argument against the development of some other concept.

¹¹Finney and Miller, op. cit., p. 74.
The four focal points of discussion of income statement concepts are (1) adequate disclosure, (2) historical record argument, (3) normalizing income and (4) the necessity of judgment. Each of these concepts has been used as points of theory pertinent to the adoption of the all-inclusive concept; it is suggested at this point that none of these provides a conclusive argument supporting complete rejection of the other income concepts.

The Current Operating Concept

The business entity theory of accounting has been responsible partially for the development of the current operating concept of the income statement. Entity theory accounting reports are directed to individuals and corporations divorced, at least in theory, from the reporting corporation, so that these individuals may make decisions related to the future operations of the corporation. The current operating concept is designed as a measure of net income which is useful as an indication of the earning power of the enterprise under conditions prevailing during a specified period. The true earning-power concept would reflect all factors affecting earning capacity in a period, which would include those transactions related to management's performance, as well as those transactions wholly beyond the control of management.12 Throughout

---

the life of the firm there are items of profit and loss which are of a recurring nature and there are items which are non-recurring, or whose recurrence is irregular and seldom. The categories reflect the degree of directness the transaction applies to the earning-power concept.

The concept of forecasting or prediction is dependent upon the related body of theory. Theory is an explanation of related groups of regularly recurring phenomena.\(^\text{13}\) Explanations are merely interpretations of "regularities" observable within an area of knowledge.\(^\text{14}\) This leads to the point that theory is built upon laws and principles, which are statements describing specific regularities, the validity of which has been substantiated through practice and observations. In the construction of a concept of net income to be used in part as a basis for estimating future happenings, one finds that regularly recurring transactions can be described and isolated, i.e., theory can be developed and rules designed to the extent of reasonable reliability, if the environment of the transaction is held constant. But, when there is seldom a recurrence of a type of transaction, especially in the same environment, theory (the explanation) cannot be developed as readily. This is the basic problem confronting the sophistication of the current

\(^{13}\text{The term "regularly recurring" is not necessarily to mean recurring within inflexible time periods.}\)

\(^{14}\text{See Stephen Toulmin, }\textbf{The Philosophy of Science} (London: Cambridge University Press, 1955) for a useful interpretation of the nature of theory.}\)
operating concept of the income statement. The exact relationship of the so-called non-recurring items of profit and loss to the pure measure of net income for a period cannot be determined in many cases with the existing knowledge and within the existing theory.

Among the types of transactions involving these unusual gains and losses are

1. tax refunds and additional assessments,
2. Casualty losses,
3. sale or retirement of major property items,
4. governmental seizure of property,
5. embezzlement or misappropriation,
6. write-downs or write-ups of property,
7. settlement of interest or dividend arrears,
8. retirement of senior securities at more or less than book value.

All items of costs and revenue can fall into one of the following classifications:

Type I - Those transactions consciously effected by management in the light of stable (or slowly changing) and predictable environmental factors,

Type II - Those transactions consciously effected by management in the light of the occurrence of an unpredictable environmental factor,

Type III - Those transactions directly produced by the occurrence of an unpredictable environmental factor.

An understanding of these classifications is necessary in the development of the earning power concept. All three of these types of

---

items of profit and loss, it is agreed, influence the long-run profitability of the enterprise. The earning power concept of an income statement, however, accepts income statements prepared for two or three years as a base for estimation, along with a number of other factors, such as market trends, product developments, political events and labor relationships.\(^\text{16}\) The shorter the period of the income measurement, the more approximation is necessary in assigning revenue and costs to periods.\(^\text{17}\) So it is fully recognized that there can be no entirely accurate computation of net income until the enterprise has terminated all of its operations.

Net income under the earning power concept can be defined as:

\[
Y = (R_1 + \frac{R_2}{x} + \frac{R_3}{y}) - (C_1 + \frac{C_2}{a} + \frac{C_3}{b})
\]

where

\(Y\) = net income indicating earning power in a given environment,
\(R_1\) = revenue item Type I under control of management, environment predictable,
\(R_2\) = revenue item Type II under control of management, environment unpredictable,
\(R_3\) = revenue item Type III not under control of management, environment unpredictable,
\(x\) = factor used to compute portion of revenue item applicable to this period's earning ability (maximum value = infinity),


\(^{17}\)George O. May and Others, op. cit., p. 113.
\[ y = \text{factor used to compute portion of revenue item applicable to this period's earning ability (maximum value = infinity)},^* \]
\[ a = \text{factor used to compute portion of cost item applicable to this period's earning ability (maximum value = infinity)},^* \]
\[ b = \text{factor used to compute portion of cost item applicable to this period's earning ability (maximum value = infinity)},^* \]
\[ C_1 = \text{cost item Type I under control of management, environment predictable,} \]
\[ C_2 = \text{cost item Type II under control of management, environment unpredictable,} \]
\[ C_3 = \text{cost item Type III not under control of management, environment unpredictable.} \]

It is needless to mention that the unknowns, \( x, y, a, \) and \( b \) are not easily defined, but accountants attempt to do so in preparing a measure of net income (\( Y \)) which subscribes to the earning power concept. Upon establishing a reasonable approximation of \( Y \), the prediction can be made as to earnings in the future in a like set of circumstances, i.e., no environmental changes. But, investors, managers, and creditors fully realize that the economic forces surrounding the enterprise are dynamic. The relationship, \( Y(m) = Y_2 \), exists. If the measure of net income ideally set up for a period (\( Y \)) is determined, and environmental changes expected in the next period can be isolated, the modifying factor (\( m \)), which is the quantified resultant impact of all environmental changes, can be multiplied by net income in period 1 to arrive at an estimate of productivity of some

---

*Note that usually under the popular current operating concept today the \( x, y, a, \) and \( b \) factors are assumed to be infinity; this assumption is probably based on the continuity of existence postulate. This is the case especially when the item is considered material in relation to the net income for the period.*
The businessman actually does this when he accepts the net income figure as a partial indicator of earning power. He inspects net income on the income statement for the current period; then he takes a look at the unusual items of profit and loss from all sources; he estimates the lasting significance of these unusual items; he mentally makes a forecast of environmental factor changes such as product demand, labor relationships, and political events. On this basis he is able to derive an estimate of the capabilities of the firm in the succeeding period.

Earlier in this chapter were set forth four active areas of discussion of the historical concept of the income statement. Likewise, there are active areas of discussion of the earning power concept which are parallel in many respects to the historical analysis. These areas are (1) relation of earning power concept to the historical, (2) adequate disclosure and (3) special significance attached to the income statement.

The earning power concept and the historical concept are not completely contradictory; much of the difference may be attributed to emphasis. The definition of earning power net income necessarily accepts historical earnings as its base. Therefore, the profession has

---

18 The value in the analysis is the determination of the conceptual relationships; it is obvious that existing business techniques do not provide for precise quantification of the concepts.
rejected without question an earning power concept which is completely divorced from the historical.\textsuperscript{19}

The problem of adequate disclosure was discussed in connection with the all-inclusive statement. It was tentatively concluded that the all-inclusive income statement was not necessarily determined to be the only acceptable type of statement indicated for reasons of adequate disclosure. Then, it is consistent that the current operating statement can be studied and developed without fear of the adequate disclosure postulate negating any advancement.

Today the users of corporate financial statements attach a special significance to the income statement. And, an argument often discussed in this connection is that the need for a sharp determination of corporate net income for a period is so great that it overrides advantages the historical income statement might possess, by having all items which are "bookkept" during the year shown on one statement.\textsuperscript{20} In addition it is contended that it would be easier for the accountant to place all gains and losses in one statement and let the reader of the statement decide how each item affects earning power, but that it is not more useful to do this. The interests of the investor require an income

\textsuperscript{19}American Institute of Certified Public Accountants, \textit{Termination and Taxes}, \textit{op. cit.}, p. 146.

statement which provides him the best possible measure of current operating performance. The historical approach is said to destroy the comparability of earnings over a period of years.

**The Management Control Approach**

Possibly the income statement should indicate management's effectiveness in handling the available resources of the enterprise. The presentation of net income for a period should be such that a stockholder can judge how well the steward group has performed. This idea leads to a special type of income statement. One authority states that the all-inclusive statement gives a complete picture of the success or lack of success achieved by management in the employment of all corporate capital. But, this is not the only conclusion one can reach. For example, management definitely does not have control over items of profit and loss produced by the so-called "Acts of God" occurring in commerce. A review of the classifications of items of profit and loss as presented on page 34 will be helpful. Type I transactions would appear on an income statement showing management control. Type III probably would not, since management cannot control the incurrence of such losses

---


or gains. Type II items would appear in part only, because management has limited control over the transaction. The judgment of the accountant would come into play here. The accountant would decide to what degree each item of profit and loss should be related to the performance of management in a specified period. Management and independent auditors are in a good position to use such judgment, it is agreed.

On the other hand, it is far from established that the central purpose of an income report is to provide a measure of the efficiency and effectiveness of management. This appears to be one of the strongest arguments against development of the management control oriented statement.

The Combined Statement of Income and Retained Earnings

To emphasize the non-absolute character of the net income figure, a statement showing both net income and changes in retained earnings has been advocated. Such a statement has the advantage of disclosing regular operating items as well as extraordinary gains and losses on the same statement. The net income figure normally appears somewhere within the body of the statement, rather than as the final figure. Either the earning power or the historical concept may be utilized in the determination of net income, therefore the use of a combined statement does not provide an excuse for less care in the
calculation of the item labeled as net income.24

The adoption of the combined statement of income and retained earnings, thus, is a matter of form as it relates to adequate disclosure, rather than a concept of net income.25 It can be said at this point in the analysis that the combined statement has the tendency in many cases to confuse the reader who is not well educated in the terminology of accounting.26

The Preparation of Revised Income Statements

Income determination is based on judgment; and the use of judgment is very likely to produce variation and mistakes in the calculation of net income. A sound theory of the income statement must handle this reality. If there is one most useful concept of net income (and it must be accepted that there is) then theoretically the net income of the years affected by the error in judgment should be corrected. This, surely, is difficult to implement in practice. Among the methods of handling material errors are (1) to include the correction in the current period's income statement, (2) to include the correction in the statement of retained earnings and (3) to revise past income statements and


25The form of the income statement is treated in Chapter IV.

26Morton Backer, op. cit., p. 246.
balance sheets.

Adherence to the historical idea would lead to the inclusion of the corrections on the income statement of the current period, and adherence to the earning-power idea would require omission of such items in the computation of net income. In the computation of a trend of earnings of a corporation, it would be desirable to correct all of the income statements to be used in the computation. Revision of prior statements has been adopted especially by firms involved in renegotiation of war contracts.27 Statements do not need to be revised to the extent that past statements are not used, i.e., when the primary use is made of the income statement in the few succeeding months after its preparation.

Current Practice

Current accounting practice is the resulting mixture of the acceptance of the several sometimes conflicting ideas of the income statement. There is quite strikingly a lack of complete uniformity in practice which is explained well by the following discussion:

When . . . the income statement is required to serve a variety of purposes, and particularly when those purposes include any attempt to measure earning capacity as a step toward determination of capital value, uniformity becomes impossible if only for the simple reason that the relative importance as well as the character of the charge or credit involved must affect its proper treatment.28

---

27 Newlove and Garner, op. cit., p. 437.

28 George O. May and others, op. cit., p. 23.
Earning power is a comparative matter, therefore some uniformity is necessary if comparisons are going to be made. The degree of uniformity is the problem today, rather than complete uniformity or the lack thereof.

*Accounting Trends and Techniques*, an annual publication of the American Institute of Certified Public Accountants, is the best available source of information regarding the treatment of unusual items in the corporate financial reports. Among the major classes of items which are designated as extraordinary by the study are:

1. disposal or sale of fixed assets,
2. disposal or sale of investments or securities,
3. disposal or sale of subsidiary, affiliate or division,
4. disposal or sale of other assets,
5. changes in valuation bases,
6. expenses, losses and gains from catastrophe, foreign exchange adjustments, government contracts, non-recurring plant expenses, various other gains and losses and prior year adjustments.

Table I gives an indication of how these items have been handled the past few years. Without a doubt most of these items have been handled directly on the income statement of the year in which they were recognized, rather than as an adjustment to retained earnings. Table I includes only those extraordinary items listed on the preceding pages in six categories. The percentage relationships reveal that the all-inclusive income statement is firmly entrenched in American accounting practice, but concurrently there is acceptance of the earning power concept. This lack of uniformity has been influenced by the pronouncements of the leading accounting organizations.
## TABLE I

**HANDLING OF EXTRAORDINARY ITEMS**  
(1953–1958)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Extraordinary Items Shown on Income Statement</th>
<th>Shown on Retained Earnings Statement</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1958</td>
<td>254</td>
<td>34</td>
<td>288</td>
</tr>
<tr>
<td>1957</td>
<td>214</td>
<td>18</td>
<td>232</td>
</tr>
<tr>
<td>1956</td>
<td>234</td>
<td>24</td>
<td>258</td>
</tr>
<tr>
<td>1955</td>
<td>294</td>
<td>68</td>
<td>362</td>
</tr>
<tr>
<td>1954</td>
<td>243</td>
<td>40</td>
<td>283</td>
</tr>
<tr>
<td>1953</td>
<td>289</td>
<td>36</td>
<td>325</td>
</tr>
</tbody>
</table>

Support of Accounting Organizations

The Committee on Accounting Procedure of the American Institute of Certified Public Accountants has stated:

... it is the opinion of the committee that there should be a general presumption that all items of profit and loss recognized during the period are to be used in determining the figure reported as net income. The only possible exception to this presumption relates to items which in the aggregate are material in relation to the company's net income and are clearly not identifiable with or do not result from the usual or typical business operations of the period. 29

The Committee in the statement is actually yielding to both forces in its suggestion of this compromise. It appears to have been a realistic and commendable position for the Committee to have taken at the time, for there are definite disadvantages for uncompromising adherence to the historical concept, and at the same time, the earning power concept has not been developed to such an extent as to warrant its unqualified applicability.

The American Accounting Association in 1948 indicated acceptance of the historical concept of the income statement:

The income of an accounting period should be reported in a statement providing an exhibit of all revenue and expense (including losses) given accounting recognition during that period. This practice assures that income statements for a

period of years will disclose completely the entire income history of the period.\textsuperscript{30}

The Securities and Exchange Commission is concerned primarily with the problem of adequate disclosure. Taking the position that the use of the earning power concept could mislead some statement readers, the Commission joins the American Accounting Association in recommending the historical income statement. The Commission, however, in 1951 reconciled its views with the American Institute. Regulation S-X as amended provides that "... all items of profit and loss given recognition in the accounts during the period ..." must be included in the determination of net income except certain "special items" which may be shown in a separate section of the income statement after the item \textit{net income}.

\textbf{Summary}

This chapter and the preceding one have presented a digest of the current thinking pertaining to income statement concepts. The existing theoretical structure of the income statement was examined. Early in the analysis the assumption was made that single-purpose statements are useful as supplementary devices, but the regularity in use of the same information by several groups leads to multiple-purpose statement theory development.

Earning, realization, recognition, incurrence and benefitting are all generally accepted concepts present in income determination theory. The realization postulate is recognized to be useful and indispensable at the present time, but it must also be recognized that there are certain definite inconsistencies connected with the postulate which occasionally tend to distort net income. Losses, revenues, gains and costs were defined and related to the structure of the measurement of income. Further classifications of operating, non-operating, recurring and non-recurring items of profit and loss were discussed as a basic part of the existing theory.

Net income for the year and earnings per share are the two most significant single figures produced by an accounting system and should be considered so in the development of accounting theory.

The historical or all-inclusive concept and the earning power concept represent two philosophies of the income statement. The pertinent arguments for each were presented and critically analyzed. The management control approach to the income statement has some support, but its general usefulness is questioned. The combined statement of income and retained earnings is an attempt to reconcile the differences in the historical and earning power concepts. A critique of the validity of this statement was presented along with an analysis of the preparation of revised income statements.

Current practice reflects the impact of both philosophies of the
statement. There is the tendency today for accountants to subscribe to the all-inclusive statement unless they justify some other position. The positions of the several accounting bodies offer no uniform solution to the problem.
CHAPTER IV

THE FORM OF THE INCOME STATEMENT

The recent development surrounding income statement theory has indicated a trend toward a single-step form of presenting current income and cost data. ¹ This development, of course, is significant within itself, but in addition it has served to focus attention on the much broader problem of isolating principles of income statement form. The purpose of this chapter is to discuss critically some of the current problems of form. From this analysis principles are isolated and tentative conclusions made. The interrelationships between the concepts of the income statement (earning power and historical) and the principles of form are probed as a conclusion to the chapter.

Justification of the Study of Form

Detailed financial information is provided by the income statement. For the information to achieve maximum usefulness, its method of presentation must be such as to facilitate correct interpretation. Precisely how a technical item of financial information is presented can affect its interpretation by the reader of the statement. In recent years the income statement has been used by interests other than

¹Mary Murphy, Accounting, A Social Force, op. cit., p. 111.
management to a greater extent than before; the use of the statement by these other interests, who often have a limited understanding of business activities and accounting reports, calls for special attention to form and presentation.

**Approaches to the Study of Principles of Form**

Of the approaches to solving problems of financial statement form, three tend to stand out as having special merit. The first of these is the *status quo* approach, which is founded on the assumption that the existing form of financial statements is the most desirable one. Problems of form, thus, are solved by educating the presently uninformed users of technical financial reports. The *status quo* approach is considered unacceptable for purposes of this analysis; it is assumed in the study that accounting principles of form are dynamic in nature as is general accounting theory. Both the conventions and current usage must be examined before the problem can be solved. Accounting must meet the changing needs of business.

The second approach suggested by Moyer is the *revolutionary* approach, which emphasizes the magnitude of present form problems. Sweeping changes are advocated, current usages are considered to be

---


3 Ibid.
of such limited value that an entirely new system of presentation and form must be developed. It is reasonable, of course, that there are numerous quite useful and workable rules which should not be discarded, but retained and expanded.

This leads to the third, the *evolutionary* approach, which is the systematic determination of principles. Workable rules are retained, and gradually new concepts are introduced into the system. This chapter is constructed with the assumption that principles of form are dependent upon (1) the effective combination of purposes for which the statement is used and (2) the degree of diversity in education and interpretive ability between the technician and the layman who both make use of the statements.

**The Principles of Ranking and Classification of Costs and Revenue**

Once the problem of measuring net income has been solved, the problem of arrangement of the various items of revenue and costs on the income statement must be handled. A leading proponent of the current trend in income presentation is W. A. Paton, the author of several leading accounting publications. It is his contention that a significant principle of form relates to the showing of intermediate balances on the income statement, i.e., deducting certain cost items from revenue and showing sub-totals throughout the statement.  

---

position taken in regard to showing intermediate balances is:

By this procedure some kinds of charges are justifiably elevated to a position of superiority of primacy over other deductions, and differences are disclosed which have little or no significance and may be downright misleading.\(^5\)

Paton is apparently directing his criticism of current practice toward the calculation of gross profit on sales in the income statement.

A model condensed income statement is presented in Figure 1 to illustrate the method recommended by Paton. The single-step statement, a form of the income statement which matches all revenues against all costs simultaneously arriving at only one residual balance (net income) is based on the proposition that there are no "preferred costs." All costs incurred by the enterprise are of equal importance in the production of revenue. Thus, product costs reflected in the cost of goods sold computation have no prior claim on revenue than do any other costs such as selling expenses.

It is necessary in the analysis to probe the economic foundations of the single-step proposition in order to establish its validity. In the conventional business enterprise, prices are set by the forces of industry—demand for the product or service and by the cost (supply) relationship to this revenue-producing demand. In the short-run operating period of a firm, the level of output is expanded profitably to the point of operations where marginal costs are equal to marginal

\(^5\) Ibid.
M COMPANY
Income Statement
For the Year Ended December 31, 19--

Revenue
Sales of product (or other appropriate description for main type of revenue, with reference to schedule for major subdivisions) $xxx
Less adjustments for returns, discounts, and estimated uncollectibles $xxx
Other revenues and gains (interest earned, rent, gain on disposition of property, etc. -- with reference to supporting schedule where details are needed) $xxx
Total revenues $xxx

Revenues Deductions
Expenses (subdivided and explained as fully as desired here or in supporting schedules) $xxx
Losses (explained as desired here or in supporting schedules) $xxx
Taxes (principal subdivisions shown here or in schedule) $xxx
Total revenue deductions $xxx
Net income $xxx
Interest charges $xxx
Preferred dividends $xxx
EARNINGS APPLICABLE TO COMMON STOCK $xxx
Dividends on common stock $xxx
Earnings retained in business $xxx

marginal revenues. This means that a firm produces goods and expands production as long as the revenue brought in by the expanded level of operations covers the costs added by the expansion. Since net income is the basic consideration of the firm, any addition of net income warrants expanded or continued operation.

The income statement is the document which reports the net results of this process. An examination of the profit motive concept indicates that net income (ultimately in the form of dividends) is the primary goal of investors; the specific method of producing that revenue is really of no concern to the investor, granting certain social limitations, as long as profit is produced. The method of producing revenue, which is reflected by the classification of costs and revenues, becomes a consideration of analysis only when such classification can aid in reduction of costs or addition to revenue. Therefore, to this extent classification appears to be primarily the concern of management.

To illustrate, assume that the cost and revenue structure of a firm for a period is known to be that shown in Figure 2. If the firm is operating at production level A, with a selling price per unit of product of $1, the income statement of the firm will reflect a profit, for total revenue (area appearing under the marginal revenue curve up to point A of production) exceeds total cost (area appearing under the marginal cost curve up to

---

Figure 2

Cost-Revenue Relationships

[Graph showing the relationship between marginal costs, average revenue, and production. The graph includes a line for marginal costs, a curve for demand, and a line for average revenue.]
point A). To produce this amount of profit all classifications of costs were necessary and vital to operations; all types of cost-effort peculiar to the industry were necessary. And if in another period the firm produced at point F, and the cost and revenue conditions were the same, then the income statement would show a greater amount of profit (greater by the area BCDE). But, the proportionate relationships of the various classifications of costs would be changed, as can be seen by the tendency of additional costs to increase in the short-run as additional revenues decreased in expanding from A to F.

Economic theory analysis, therefore, gives the accountant insight into precisely what the income statement should present. It should present a basis for analysis of these proportionate relationships of the classifications of costs and revenues, so that the cost and revenue structures can be modified in the future for the production of more net income. It is therefore entirely inconsistent to consider that there is value in the ranking of costs on a revenue-producing basis, for one cost does not produce revenue without the aid of all other costs in the venture. There is, however, a primary value in the classification of costs; and the job of the income statement is to present (1) a single total revenue figure, (2) a single total cost figure and (3) the net income for the period. Next, to provide some explanation of how the net income was produced, through a logical classification of costs and revenues, is the task of the income statement. It is accepted at point that
there is little or no value in the procedure of ranking costs and revenues as to their ability to produce revenue, but that there must be developed within the body of accounting theory certain principles relating to classification of costs and revenues.

The multiple-step income statement has been very popular in the United States and Great Britain for a number of years. In fact, it dominates in current practice. This dominance can be explained by the fact that management began to analyze the relationship between Cost of Goods Sold and Net Sales before many of the other cost-revenue relationships were analyzed and before other ratios were commonly calculated. Usage naturally called for "spotlighting" the Cost of Goods Sold. This certainly was done in deducting Cost of Goods Sold from the Net Sales immediately at the beginning of the statement. Figure 3 illustrates a multiple-step income statement.

Such intermediate balances as Gross Profit on Sales and Net Income from Operations actually contribute nothing to the analysis of the composition of total costs as revenue-producing factors. Figure 3 shows a version of the multiple-step form with the several sub-totals underlined for emphasis. The Accountants' Handbook gives the explanation of popularity of the multiple-step form of the income statement as follows:

---

Figure 3

THE MULTI-STEP CORPORATION
Income Statement
For the Year Ending December 31, 19—

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$100,000</td>
</tr>
<tr>
<td>Less:</td>
<td></td>
</tr>
<tr>
<td>Sales Discounts</td>
<td>$4,000</td>
</tr>
<tr>
<td>Net Sales</td>
<td>$96,000</td>
</tr>
<tr>
<td>Deduct Cost of Goods Sold:</td>
<td></td>
</tr>
<tr>
<td>Beginning Inventory</td>
<td>$10,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>50,000</td>
</tr>
<tr>
<td>Freight-in</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td>$61,000</td>
</tr>
<tr>
<td>Less Ending Inventory</td>
<td>11,000</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>50,000</td>
</tr>
<tr>
<td>Gross Profit on Sales</td>
<td>$46,000</td>
</tr>
<tr>
<td>Deduct:</td>
<td></td>
</tr>
<tr>
<td>Selling Expenses</td>
<td>$18,000</td>
</tr>
<tr>
<td>Administrative Expenses</td>
<td>12,000</td>
</tr>
<tr>
<td></td>
<td>30,000</td>
</tr>
<tr>
<td>Net Operating Income</td>
<td>$16,000</td>
</tr>
<tr>
<td>Add Other Income:</td>
<td></td>
</tr>
<tr>
<td>Interest Revenue</td>
<td>4,000</td>
</tr>
<tr>
<td>Net Operating Income Plus Other Income</td>
<td>$20,000</td>
</tr>
<tr>
<td>Other Deductions:</td>
<td></td>
</tr>
<tr>
<td>Interest Charges</td>
<td>1,000</td>
</tr>
<tr>
<td>Net Income Adjusted for Other Items</td>
<td>$19,000</td>
</tr>
<tr>
<td>Adjustments of Prior Periods:</td>
<td></td>
</tr>
<tr>
<td>Adjustments for Taxes</td>
<td>11,000</td>
</tr>
<tr>
<td>Net Income Before Federal Income Tax</td>
<td>$8,000</td>
</tr>
<tr>
<td>Federal Income Tax</td>
<td>5,000</td>
</tr>
<tr>
<td>Net Income</td>
<td>$3,000</td>
</tr>
</tbody>
</table>

SOURCE: Adapted from Harold Bierman, Jr., Managerial Accounting
Proponents of this form believe that intermediate balances such as "Net sales," "Gross profit on sales," "Profit from operations," "Net income before income taxes," and "Net income for the year" indicate significant classifications and relationships which assist management, stockholders, and others in interpreting the results of operations. 8

Table II shows the trend in practice in the United States for selected years. The one outstanding fact indicated by this information is that there has been an increasing tendency to present income data according to the single-step form. The single-step or a modification of this form was used by 20.8% of the 600 companies studied in 1946; in 1957 the proportion had increased to 48.7%. The next few years, based on this, should reflect a majority of corporations subscribing to the single-step form of presentation.

Methods of Classification

Littleton, in his Structure of Accounting Theory, discusses in detail the accounting system for classification of costs and revenues. The method of classification presented in this work is concerned with classification for determination of periodic net income, rather than for analysis of cost and revenue components of that net income. Littleton states:

Yet a brief look at the way system elements grew up will help to give emphasis to the thought being developed here, namely, that accounting systems are essentially statistical in function, and throughout a long history have

8Ibid.
### TABLE II

**Income Statement Form**

**Selected Years**

1946-1957

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multiple-step form</strong></td>
<td>235</td>
<td>247</td>
<td>258</td>
<td>258</td>
<td>250</td>
<td>302</td>
<td>263</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td><strong>Multiple-step form with a separate last section presenting:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonrecurring tax items</td>
<td>11</td>
<td>16</td>
<td>25</td>
<td>33</td>
<td>47</td>
<td>41</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Nonrecurring tax and non-tax items</td>
<td>22</td>
<td>16</td>
<td>25</td>
<td>31</td>
<td>29</td>
<td>10</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Nonrecurring non-tax items</td>
<td>37</td>
<td>41</td>
<td>23</td>
<td>23</td>
<td>26</td>
<td>31</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>305</td>
<td>320</td>
<td>331</td>
<td>345</td>
<td>352</td>
<td>384</td>
<td>468</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td><strong>Single-step form</strong></td>
<td>251</td>
<td>239</td>
<td>218</td>
<td>205</td>
<td>203</td>
<td>177</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td><strong>Single-step form with a separate last section presenting:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonrecurring tax items</td>
<td>17</td>
<td>11</td>
<td>22</td>
<td>20</td>
<td>18</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Nonrecurring tax and non-tax items</td>
<td>9</td>
<td>6</td>
<td>8</td>
<td>12</td>
<td>9</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Nonrecurring non-tax items</td>
<td>15</td>
<td>22</td>
<td>19</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>292</td>
<td>278</td>
<td>267</td>
<td>252</td>
<td>245</td>
<td>212</td>
<td>125</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td><strong>No income statement presented</strong></td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
</tbody>
</table>

been held closely to the basic objective of compressing a mass of data by means of classification.  

Hence, the problem of classification on the income statement is to derive a system of classification of costs and revenues which will facilitate the making of correct profit-seeking decisions in business.

**Customary classification.** Although the classifications presently used in an industry are not uniform even when prepared by professional accountants, certain principles tend to explain practice. One such rule might be stated "Transactions of profit and loss not directly a part of the central or regular operations of the business should be classified separately."  

Often it is desirable to determine the relationship between total profit or loss resulting from the major type of operation and some minor or ancillary type of operation. Customarily the income statements have included separate classification and presentation of these subordinate activities. Through this procedure the investor is informed as to the degree of diversification of the enterprise, as well as being informed of significant changes in the relationships of major and minor activities of the business.

The management group through classification is able to determine more readily the structure of the total cost and total revenue amounts.

---


over a period of time longer than the fiscal period being studied.

Functional classification. The functional approach to classification of income statement items is one in which costs and revenues have been classified in accordance with their contribution to the ultimate product or to a final operating function. For example, the costs of an enterprise may be classified as

(1) costs directly associated with the production process,
(2) costs directly associated with selling the product,
(3) costs directly associated with administration.

Such classification has been customary for many years, but recently another basis for classification has been developed.

Object or natural classification. This is the object or natural classification of profit and loss amounts. An object income statement is one which classifies costs and revenues according to the "immediate type of expenditure or revenue item." From the consolidated statement of income of the U. S. Steel Corporation, the excerpt presented in Figure 4 illustrates cost classifications on an object basis. It is suggested by Paton that this means more to the shareholder and other layman readers than a managerially-slanted classification such as the functional type. A compromise would be to present the object classification on

---


## Figure 4

**Object Classification of Costs**

<table>
<thead>
<tr>
<th>COSTS</th>
<th>19X2</th>
<th>19X1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment costs:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wages and salaries</td>
<td>$xxx</td>
<td>$xxx</td>
</tr>
<tr>
<td>Pensions, social security taxes, insurance</td>
<td>$xxx</td>
<td>$xxx</td>
</tr>
<tr>
<td>and other employee benefits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Products and services bought</td>
<td>$xxx</td>
<td>$xxx</td>
</tr>
<tr>
<td>Wear and exhaustion of facilities</td>
<td>$xxx</td>
<td>$xxx</td>
</tr>
<tr>
<td>War costs included herein provided for in prior years, less associated federal income tax adjustments</td>
<td>$xxx</td>
<td>$xxx</td>
</tr>
<tr>
<td>Interest and other costs on long-term debt</td>
<td>$xxx</td>
<td>$xxx</td>
</tr>
<tr>
<td>State, local, and miscellaneous taxes</td>
<td>$xxx</td>
<td>$xxx</td>
</tr>
<tr>
<td>Estimated federal taxes on income</td>
<td>$xxx</td>
<td>$xxx</td>
</tr>
<tr>
<td>Total</td>
<td>$xxx</td>
<td>$xxx</td>
</tr>
</tbody>
</table>

the income statement, with a functional classification attached as a supplementary schedule.

*Management efficiency classification.* In the United States today the majority of shareholders in large corporations have no voice in the management of the corporation. The shareholder, therefore, must choose the management which he believes will produce a maximum profit and return on his investment. Published financial statements, perhaps more than any other single item, form the basis for the decision to invest.

Since this is probably the case it is the responsibility of the accounting profession to encourage the development of an income statement which will serve the investor in this connection. A statement involving classifications of fixed and variable costs might be desirable. Figure 5 is an example of the management efficiency approach. From this kind of statement the investor can evaluate management through comparison of the *marginal income ratio* (45%) to that of the industry as a whole. The investor knows from this that for every dollar of sales the company produced in 19X1, 45 cents remained to cover the fixed investment costs and to accumulate a net income. Or, to avoid indicating "cost-preferences," 55 cents were used for variable costs, 20 cents were used for fixed costs, and 25 cents remained as net income.

In the industry, only 40 cents remained, indicating that the management of the ABC Company is more efficient than the industry in general.
**Figure 5**

**ABC COMPANY**

Condensed Income Statement*

For the Year Ended December 31, 19X1

<table>
<thead>
<tr>
<th>Description</th>
<th>ABC</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Sales</td>
<td>$100,000</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Variable Costs to Operate</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materials, direct labor and factory expenses</td>
<td>$40,000</td>
<td>40%</td>
</tr>
<tr>
<td>Selling Expenses</td>
<td>10,000</td>
<td>10%</td>
</tr>
<tr>
<td>General and Administrative Expenses</td>
<td>5,000</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>55,000</td>
<td>55%</td>
</tr>
<tr>
<td>Net advantage from operating during the year instead of not operating</td>
<td>$45,000</td>
<td>45%</td>
</tr>
<tr>
<td><strong>Fixed Costs Incurred</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factory Expenses</td>
<td>$10,000</td>
<td></td>
</tr>
<tr>
<td>Selling Expenses</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>General and Administrative Expenses</td>
<td>9,000</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>20,000</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Net Income From Operations</strong></td>
<td>$25,000</td>
<td>25%</td>
</tr>
</tbody>
</table>

---

*Costs are primarily classified according to fixed and variable classifications; secondarily within each of these two groups, a functional classification is used.*
However, it is not practicable at present to include industry data on published financial statements of a corporation. In addition, from the statement showing the fixed-variable classification the investor can ascertain information about the relationship of fixed costs to sales produced in a period. This relationship is vital to the determination of a concept of earning-power.

Very rare, indeed, is it to find a corporation whose financial statements include a classification such as described above. If the statements of a few companies were to do so, the usefulness would be limited chiefly because of the absence of comparative data on an industry-wide basis. The most desirable aspect of this method of classification is the presentation of the marginal income ratio as an index of the effectiveness of management. Also, the criticism of an income statement which presents an intermediate type of profit can be levied against the management effectiveness approach. And finally, a disadvantage is that conventional accounting systems do not lend themselves to the precise segregation of fixed expenses from variable expenses.

Evaluation. A comparison of the accounts appearing on the income statement of a company and those accounts used by management in making decisions proves valuable. Within the accounting system of a firm the

---

accounts used are designed to accumulate data for financial statements. Any managerial use of these accounts is really a by-product of a system designed primarily to summarize general information relating to operations. There are exceptions to this statement such as developments related to standard cost accounting, but in the great majority of cases special accounts are not designed for management use.

In the future quite possibly final accounts appearing on the income statement will be by-products of accounts which have been designed for the use by management, instead of the reverse which is true today. A reversal of the current status would improve reporting to the shareholder.

In deciding which of the methods of classification is most useful, the impact of the form on interpretation of information must be probed. Assuming the reader of the financial statement wants to know something about earning-power of the enterprise, he must determine how much of the net income was earned from the main line of business, and how much was earned through secondary activities. Therefore, a classification of costs and revenues according to major and minor activities is desirable. This point is handled well in practice; rent income, for example, when it is a minor source of income is usually classified separately. But, in practice, unfortunately, expenses applicable to the ancillary income are not always classified separately. Also connected with this is the classification of costs and revenues (or net income) from new lines of business. Since classification has a bearing on calculation of earning
power, any new source of income for the business or the discontinuance of a source should be disclosed in the classification scheme in comparing the operations of several periods.

Earning power or "normal" profit is affected too by unusual and non-recurring items. As a means of disclosure any item which has an unconventional impact on earning power could very well be set up separately on the statement.

Summary of methods. The functional form of classification is the most popular form used in the United States today. A number of authors have mentioned that the traditional cost of sales—selling expense—general and administrative expense classification is superficial in nature, and that its usefulness is somewhat limited from the point of view of the investor.

Customary classifications which do contribute to a complete and accurate analysis of earning-power should be retained. Among these are (1) depreciation and amortization charges, (2) income taxes, (3) bonus and pension payments and (4) non-recurring and extraordinary items of profit and loss. The object or natural classification is gaining popularity. An objective income statement facilitates comparisons; the investor can more readily determine trends and shifts of costs and revenues among the various interests.  

14 The object classification if adopted widely would aid in calculating national economic indicators. Types of private spending could be more readily isolated.
The management efficiency classification illustrated in Figure 5 would improve without question the position of the investor to determine expected profit, since he does not ordinarily have access to fixed and variable cost data. Through conventional break-even analysis the investor could learn much more about the firm.

For example, assume that there is expected depression of the industry market for the ABC Company (Figure 5) during the next year, 19X2. And in addition, it was known that firms in the industry have in the past been able to keep a relatively stable cost-sales relationship as production was contracted and expanded. Then using the managerial efficiency form of classification, profit could be crudely projected (after adjusting for extraordinary items) as follows:

\[
\begin{align*}
\text{Sales for 19X2 (75% x $100,000)} & : \$75,000 \\
\text{Less fixed costs (20% x $100,000)} & : \$20,000 \\
\text{Less variable costs (55% x $75,000)} & : \$41,250 \\
\text{Net income estimate for ABC in 19X2} & : \$14,000
\end{align*}
\]

The net income under the same conditions next year for an "average" firm in the industry, assuming a comparable level of sales, could be computed by the same technique:

\[
\begin{align*}
\text{Sales for 19X2 (75% x $100,000)} & : \$75,000 \\
\text{Less fixed costs (16% x $100,000)} & : \$16,000 \\
\text{Less variable costs (60% x $75,000)} & : \$45,000 \\
\text{Net income estimate for industry company} & : \$14,000
\end{align*}
\]

The interested investor through this analysis is in a better position to evaluate the company performance.
Need for Uniform Reporting

One solution to the problem of form is the development of a uniform system of classification and presentation of income statement accounts. Uniformity, perhaps, would improve accounting practices and eliminate misunderstanding. But, complete uniformity is not desirable because of the basic differences existing among industries.

Further, it may be concluded that uniformity as a principle should be advocated to the extent (1) that the statements which achieve some degree of uniformity are of the same industry and (2) that the purposes of the statements are similar. Many large corporations today are unique in that their operations do not correspond very closely to those of any other corporation. In such a case, the principle of uniformity would not be utilitarian and should not be a deciding force in the preparation of financial statements. Uniformity, however, does facilitate analysis, even if there are no outside comparisons.

Uniform systems of accounts and uniform presentations have been established in specialized industries; these have proved satisfactory for comparative purposes. There also is usually a prescribed form for statements which are to be presented to governmental agencies. The banking and insurance industries both normally follow uniform systems of accounts.

A Tentative Conclusion

The preceding discussion of form of the income statement has set forth some of the working rules upon which a sound income statement can be based. The rules developed which appear to be tenable are:

(1) Problems of form should be solved through a continuing analytical approach. Existing conventions, accepted ways of doing things, should be analyzed and changed, where current goals are not being attained.

(2) The basic nature of the economic system in the United States supports the principle that there should be no ranking of costs, but that decisions are resultant of cost and revenue classification. The single-step form is desirable, therefore, unless special usefulness is created through departure from the single-step form.

(3) Useful methods of classification include (a) functional classification, (b) object classification and (c) management efficiency or economic classification. The most common of these is the functional classification, but other forms should be studied to determine the special applicability in certain industries. Accountants should justify use of the functional classification by other means than the fact that it is traditional.

(4) Accounts should be designed to facilitate conduct of future and current affairs of the business. Financial statement information should be incidental to the construction of accounts rather than the sole purpose of account construction.

(5) Uniform reporting should be encouraged for statements prepared for similar purposes within similar industries to aid in comparisons.
CHAPTER V

AN ANALYSIS OF INCOME REPORTING FROM A

UTILITARIAN POINT OF VIEW

The central object of this part of the study is to determine precisely the type of income information which the investor, the credit grantor, and the manager needs. As previously developed in the study, a fundamental assumption upon which this chapter is based in part is:

Although many differing groups need income information for decision-making purposes, it is desirable and theoretically sound to prepare a multiple-purpose income statement. The multiple-purpose statement is indicated because of the core similarity of information needed by all groups, information concerning expected earnings.

A Survey of Uses

The typical creditor in lending money to an enterprise is interested in determining the debt-paying ability of the firm. A utilitarian analysis of this type, therefore, must include an investigation of the income statement from the approach of its providing valuable information regarding the ability of the firm to meet its obligations. A particular form and content of the statement can be justified for credit use only if it contributes materially to this end.

The investor, on the other hand, is interested in two factors, (1) safety of principal invested and (2) an adequate return on his
investment. Accordingly, the income statement must be examined as to its contribution of information relating to these types of decisions. The security analyst and the investor wish to determine the extent to which (1) management and (2) uncontrollable economic conditions are each responsible for results attained.

The needs of management are much more inclusive than those of the creditor and investor. The manager is in a position which permits him to seek out detailed information which cannot be shown practicably on the income statement. The manager is involved with both financial management and income-producing operations. Hence, there is a close interrelationship of information used by creditors, managers, and investors.

The Goal of Prediction for the Investor-Analyst

In making an intelligent decision to invest, the investor must acquire information which indicates what will happen in the future with regard to the maintenance of the principal invested and with regard to earnings on the investment. The investor, thus, cannot escape the fact that he must in some way predict the future. Past operations of a


firm are of no concern except to the extent that these historical happenings affect (or perhaps, form the basis of, predicting) the future.

A basis for accurate prediction must be founded upon an understanding of

(1) peculiarities of the economic system,
(2) peculiarities of the industry,
(3) peculiarities of the firm.

This part of the study is concerned only with the contribution of the income statement to explaining these three factors. The field of macroeconomics involves the explanation of forces affecting the economic setting of the investment. The income statement, on the other hand, contributes only most indirectly to an explanation of the economic setting.

But, the statement does contribute to firm and industry study. For the investor-analyst some measure of net income is needed, which will enable the investor to determine earning power of the firm in the light of industry environment. Net income under the earning power concept was defined as:

\[ Y = (R_1 + \frac{R_2}{x} + \frac{R_3}{y}) - (C_1 + \frac{C_2}{a} + \frac{C_3}{b}) \]

And, it was suggested that upon establishing a reasonable approximation of net income (Y) for a period, a prediction can be made as to earnings in the future in a like set of circumstances. As a basis for decision, although the environment of a firm is dynamic rather than static as the

---

3See page 35 for the development of this concept.
formula assumes, the investor is in a better position to use the earning power or current operating concept of net income than any other available.

This net income figure, no matter how refined, is not sufficient alone for an intelligent investment decision. The investor, after thoroughly familiarizing himself with general economic conditions and with peculiarities of the industry, can use the earning-power net income as a point of departure. How the income was produced should be disclosed to the analyst through a properly classified and presented income statement. Of the forms of the statements presented in the previous chapter, the management efficiency approach, the economic approach, would be valuable in the study made by the analyst. A combination of fixed-variable-object classifications would provide adequate information for analysis in changes of reported profits.

The investor is desirous of acquiring information leading to a decision regarding safety of principal and return on investment. This goal must not be overlooked in his detailed analysis. From the firm view (which supplements economic system and industry data), the income statement properly presented will enable the investor to estimate what can be expected in the future in terms of net income. The following section of the study develops a dynamic analysis of net income

---

based on the current operating concept.

**Analysis of Changes in Reported Profits**

The example which follows illustrates the usefulness of the income statement which combines the following concepts:

1. earning power concept of income,
2. fixed and variable classification of costs,
3. object classification of costs within the basic fixed-variable classification.

The environment or surrounding conditions of the enterprise is assumed to be stable for the entire period, the year 1959. Revenue is recognized and costs are assigned to this revenue according to the current operating concept; those items which are judged by the accountant and management to be non-recurring or unusual and corrections of past periods are assigned to the income statement of 1959 only to the extent that they are deemed to affect earning power. Net income, therefore, is only a crude approximation of any theoretically correct figure. The results of operations for the ABC Company for 1959 are presented in Figure 7.
Figure 7

ABC COMPANY
Income Statement
For the year ended December 31, 1959

Net sales .................................................. $500,000

Variable costs to operate

Employment costs:
   Wages and salaries ......................... $122,000
   Pensions, other benefits ............... 5,000
   $127,000

Products and services bought .............. 80,000
Wear and exhaustion of facilities ........ 10,000
Interest and other costs ................. 1,000
State, local and miscellaneous taxes .... 500
Federal income taxes ....................... 1,000
Miscellaneous ................................. 500
Total ............................................... 220,000

Management efficiency index (56.0%) ......................................... $280,000

Fixed costs incurred

Employment costs:
   Wages and salaries ......................... $ 1,000
   Pensions, other benefits ............... 50
   1,050

Products and services bought .............. 2,000
Wear and tear of facilities ............... 75,000
Interest and other costs ................... 4,000
State, local and miscellaneous taxes .... 200
Miscellaneous ................................. 600
Total ............................................... 82,850

Net income ........................................... $197,150
In this hypothetical income statement variable costs are defined as follows:

Variable costs are all of those expired costs of the enterprise relating to the period (1) which would not have been incurred if the sales and production of the firm had been zero for the period or (2) which would have been reduced materially if the level of production and sales were reduced materially.\(^5\)

Another approach to useful economic classification would be to segregate expired costs according to controllable and uncontrollable categories.\(^6\) Revenues less controllable expired costs (i.e., those costs directly under the control of the management group) would yield a management efficiency index similar to the one illustrated in Figure 7.

Against this method as well as against the fixed and variable method could be given the argument of the inability to distinguish accurately between the categories. But, the prime supporting argument is that accountants and managers are in the best position possible to use the judgment required.

To continue the example, the investor is evaluating the most

\(^5\)The exact definition used for fixed and variable costs is not as important as is consistency and some degree of uniformity within the industry. Materiality as a concept in accounting also has not been refined to the extent of uniform conventions. See Theodore Lang, Walter B. McFarland, and Michael Schiff, *Cost Accounting* (New York: The Ronald Press Company, 1953), p. 88 and W. B. Lawrence and John W. Ruswinckel (rev.), *Cost Accounting* (fourth edition; New York: Prentice-Hall, Inc., 1954) for discussions of fixed and variable costs.

\(^6\)This is not to be confused with the management control method of calculating net income for the period, discussed in a previous chapter.
current income statement of the ABC Company. This is presented in the same fashion in Figure 8. In any one annual report or other source of information for the investor-analyst, several years of income information are usually available. This example makes use of only two income periods for the analysis; of course, it should be recognized that the competent analyst takes advantage of several years of information. From these two income statements a measure of earning power is sought.

A method of analysis to determine the significance of changes in net income reported is illustrated in Figure 9. Four factors needed to make a complete analysis are:

1. changes in selling prices,
2. changes in volume of sales,
3. changes in variable cost prices in the economy,
4. changes in fixed cost prices in the economy.

The investor, unfortunately, does not always have this information at his disposal. Often, however, annual reports include an indication of quantities of products sold as well as the total net sales.

Through the analysis in Figure 9 changes in earning-power net income are attributed to one or more of the four factors mentioned above. With additional information, factors (3) and (4) can be further analyzed. Changes in variable costs reported on the income statement are represented either by increases or decreases in prices paid for the variable-type services and products or by increases or decreases in the volume amounts of these services and products used in the production of
Figure 8

ABC COMPANY
Income Statement
For the year ended December 31, 1960

Net sales ................................................................. $540,000

Variable costs to operate

Employment costs:
  Wages and salaries .................. $154,000
  Pensions, other benefits .......... 6,000
  $160,000

  Products and services bought........ 100,000
  Wear and exhaustion of facilities..... 12,000
  Interest and other costs .......... 1,100
  State, local and miscellaneous taxes.. 610
  Federal income taxes ............ 1,700
  Miscellaneous .................. 430
  Total ............................................................ 275,840

Management efficiency index .................. $264,160

Fixed costs incurred

Employment costs:
  Wages and salaries .................. $ 1,050
  Pensions, other costs ............. 50
  Total ............................................................ $ 1,100

  Products and services bought........ 1,700
  Wear and exhaustion of facilities..... 73,000
  Interest and other costs .......... 3,600
  State, local and miscellaneous taxes.. 160
  Miscellaneous .................. 700
  Total ............................................................ 80,260

Net income ........................................................ $163,900
### Figure 9

#### Analysis of Changes in Net Income

<table>
<thead>
<tr>
<th>Income Statement</th>
<th>20% Increase in Sales Volume</th>
<th>10% Increase in Selling Prices</th>
<th>Changes in Prices paid for Variable Costs</th>
<th>Changes in Costs Classified as Fixed</th>
<th>Income Statement 1960</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ %</td>
<td>$ %</td>
<td>$ %</td>
<td>$ %</td>
<td>$ %</td>
</tr>
<tr>
<td><strong>Net sales</strong></td>
<td>$500,000 100.0</td>
<td>$600,000 100.0</td>
<td>$540,000 100.0</td>
<td>$540,000 100.0</td>
<td>$540,000 100.0</td>
</tr>
<tr>
<td><strong>Variable costs to operate:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment costs</td>
<td>127,000 25.4</td>
<td>152,400 25.4</td>
<td>152,400 28.2</td>
<td>160,000 29.6</td>
<td>160,000 29.6</td>
</tr>
<tr>
<td>Products and services bought</td>
<td>80,000 16.0</td>
<td>96,000 16.0</td>
<td>96,000 17.8</td>
<td>100,000 18.5</td>
<td>100,000 18.5</td>
</tr>
<tr>
<td>Wear and exhaustion of facilities</td>
<td>10,000 2.0</td>
<td>12,000 2.0</td>
<td>12,000 2.2</td>
<td>12,000 2.2</td>
<td>12,000 2.2</td>
</tr>
<tr>
<td>Interest and other costs</td>
<td>1,000 .2</td>
<td>1,200 .2</td>
<td>1,200 .2</td>
<td>1,100 .2</td>
<td>1,100 .2</td>
</tr>
<tr>
<td>State and local taxes</td>
<td>500 .1</td>
<td>600 .1</td>
<td>600 .1</td>
<td>610 .1</td>
<td>610 .1</td>
</tr>
<tr>
<td>Federal income taxes</td>
<td>1,000 .2</td>
<td>1,200 .2</td>
<td>1,200 .2</td>
<td>1,700 .3</td>
<td>1,700 .3</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>500 .1</td>
<td>600 .1</td>
<td>600 .1</td>
<td>430 .1</td>
<td>430 .1</td>
</tr>
<tr>
<td><strong>Management efficiency index</strong></td>
<td>280,000 56.0</td>
<td>336,000 56.0</td>
<td>276,000 51.2</td>
<td>264,160 49.0</td>
<td>264,160 49.0</td>
</tr>
</tbody>
</table>

(Continued)
Figure 9 (Continued)

<table>
<thead>
<tr>
<th>Income Statement</th>
<th>20% Increase in Sales Volume</th>
<th>10% Increase in Selling Prices</th>
<th>Changes in Prices paid for Variable Costs</th>
<th>Changes in Costs Classified as Fixed</th>
<th>Income Statement 1960</th>
</tr>
</thead>
<tbody>
<tr>
<td>1959</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Fixed Costs incurred:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment costs</td>
<td>1,050 .2</td>
<td>1,050 .2</td>
<td>1,050 .2</td>
<td>1,100 .2</td>
<td>1,100 .2</td>
</tr>
<tr>
<td>Products and services bought</td>
<td>2,000 .4</td>
<td>2,000 .3</td>
<td>2,000 .4</td>
<td>1,700 .3</td>
<td>1,700 .3</td>
</tr>
<tr>
<td>Wear and exhaustion facilities</td>
<td>75,000 15.0</td>
<td>75,000 12.5</td>
<td>75,000 13.9</td>
<td>73,000 13.5</td>
<td>73,000 13.5</td>
</tr>
<tr>
<td>Interest and other costs</td>
<td>4,000 .8</td>
<td>4,000 .7</td>
<td>4,000 .7</td>
<td>3,600 .6</td>
<td>3,600 .6</td>
</tr>
<tr>
<td>State and local taxes</td>
<td>200 .0</td>
<td>200 .0</td>
<td>200 .0</td>
<td>160 .6</td>
<td>160 .6</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>600 .1</td>
<td>600 .1</td>
<td>600 .1</td>
<td>700 .1</td>
<td>700 .1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>82,850 16.5</strong></td>
<td><strong>82,850 13.8</strong></td>
<td><strong>82,850 15.3</strong></td>
<td><strong>80,260 14.7</strong></td>
<td><strong>80,260 14.7</strong></td>
</tr>
<tr>
<td>Net income</td>
<td><strong>197,150 39.5</strong></td>
<td><strong>253,150 42.2</strong></td>
<td><strong>193,150 35.9</strong></td>
<td><strong>181,310 33.7</strong></td>
<td><strong>183,900 34.3</strong></td>
</tr>
</tbody>
</table>
income. A similar fixed cost study can be made to provide additional information.

Figure 10, the analysis of changes in net income, provides in part the basis for an evaluation of the earning-power of the ABC Company. The revenue analysis section of Figure 10 is the starting point for elasticity of demand studies, while the cost analysis section presents the base for estimating earning potential for 1961. The percent change figures in the last two columns of Figure 10 are especially valuable. Since extraneous items of revenue and costs are omitted from the calculation of net income, the changes become more significant. The manager or investor can relate these changes in profits to changes experienced in the economic setting and in the industry. For example, employment costs of a variable nature of $7,600 were added (1.5% of sales and 3.9% of net income). The increase can be related to an average industry figure.

The trend and amount of net income and revenue-cost relationships as reflected in a series of such reports consistently prepared are dependable facts on which managers and investors can confidently rely.

**Marginal and Total Factors**

The preceding illustration is indicative of possible developments in the future dealing with the analysis of net income. The theme of the discussion is the additional value of utilizing marginal cost and revenue elements as well as total amounts for management and investment purposes.
Figure 10

Analysis of Changes in Net Income
1959-60

<table>
<thead>
<tr>
<th>Change in Net Income</th>
<th>Per Cent Change from 1959 Sales*</th>
<th>Per Cent Change from 1959 Profits*</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC COMPANY</td>
<td></td>
<td>(Favorable, +; Unfavorable, -)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue Analysis:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in revenue due to larger volume</td>
<td>$56,000</td>
<td>+11.2</td>
</tr>
<tr>
<td>Decrease in revenue due to selling price reduction</td>
<td>$60,000</td>
<td>-12.0</td>
</tr>
<tr>
<td>Loss due to revenue changes</td>
<td>$ 4,000</td>
<td>-.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost Analysis:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable costs added:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment costs added</td>
<td>$ 7,600</td>
<td>-1.5</td>
</tr>
<tr>
<td>Products and services costs added</td>
<td>$4,000</td>
<td>- .8</td>
</tr>
<tr>
<td>State, local and miscellaneous taxes added</td>
<td>10</td>
<td>-.0</td>
</tr>
<tr>
<td>Federal income taxes added</td>
<td>$ 500</td>
<td>-.1</td>
</tr>
<tr>
<td>Variable costs added</td>
<td>$12,110</td>
<td>-2.4</td>
</tr>
<tr>
<td>Variable costs reduced:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest, and other costs reduced</td>
<td>$ 100</td>
<td>+ .0</td>
</tr>
<tr>
<td>Miscellaneous costs reduced</td>
<td>$ 170</td>
<td>+ .0</td>
</tr>
<tr>
<td>Variable costs reduced</td>
<td>$270</td>
<td>+ .0</td>
</tr>
<tr>
<td>Net increase in variable costs</td>
<td>$11,840</td>
<td>- 2.4</td>
</tr>
<tr>
<td>Fixed Costs Reduced (Net)</td>
<td>$2,590</td>
<td>+ .5</td>
</tr>
<tr>
<td>Drop in net income 1959 to 1960</td>
<td>$13,250</td>
<td>- 2.7</td>
</tr>
</tbody>
</table>

*1959 Sales: $500,000
1959 Net Income: $197,150
The traditional income statement reflects total cost and revenue accumulations for a selected period. But, a projection of profits cannot be complete if it is based only on total figures. As the level of operations of an enterprise expands or contracts (as it most certainly does from period to period), the proportionate relationships of the various classifications of costs necessarily change. A knowledge of the magnitude of change of each of the classifications is highly desirable in evaluating the operations of a firm.

Income statements as customarily prepared include in one total not only changes in magnitude of costs within a classification, but also a provision for the "fixed" costs of the classification. This heterogeneous combination of costs (total cost) has limited meaning in analysis, since the fixed portion of the cost classification is incurred irrespective of the efforts of management or noticeable changes in the economic setting.

Another important point which supports using variable classifications is:

When conditions are not stable and prices, rates of wages, occupation or other factors make it necessary to alter costs to reflect altered facts:

Total Costs are clumsy of adjustment.
Marginal Costs are simple and easy to adjust.  

---

In addition, the entire budgetary process is simplified by segregation of the elements of costs between variable and fixed. If wider use of marginal analysis in the income statement were promoted and a workable system were developed, credit grantors, managers, and security analysts would benefit greatly.

**Greater Meaningfulness of the Price-earnings Ratio**

An often used measure of earning power by the analyst is the price-earnings ratio, which is calculated as follows:

\[
\frac{\text{Market price per share of stock}}{\text{Earnings per share of stock}}.
\]

The ratio actually is the number of times the earnings of a share of stock is reflected in its current market price. For this to be a meaningful measure of expected earnings, the net income amount used in the calculation must be computed by utilizing the earning power concept of net income. As is the fixed-variable classification argument, this is another reason for support of some measure of net income which considers the future as well as the past.

**Certification of Earning Power Figures**

Even if it were immediately and finally decided that managers, investors, and creditors do find the current operating concept of net income.

---

income the most useful one, and even if the majority of firms adopted the practice of calculating net income under some earning power idea, the problem of "certification" of income statements by independent auditors would still exist. There is today a considerable divergence of opinion as to the phraseology which should be employed in the auditor's certificate to protect adequately the public, the client, and the auditor.

The problem experienced in this connection is similar to the one regarding certification of pro-forma financial statements. An examination of the attitudes prevailing relating to certification of pro-forma income statements and balance sheets will clarify the earning-power certification problem.

Recommendation of the American Institute of Certified Public Accountants. The Special Committee on Procedure of the American Institute of Certified Public Accountants in September, 1920, made one of the first important recommendations on the subject of certification of amounts which were not purely of an historical nature. The Committee made the following recommendations:

I. The accountant may certify a statement of a company giving effect as at the date thereof to transactions entered into subsequently only under the following conditions, viz.:

---

(a) If the subsequent transactions are the subject of a definite (preferably written) contract or agreement between the company and bankers (or parties) who the accountant is satisfied are responsible and able to carry out their engagement;

(b) If the interval between the dates of the statement and the date of the subsequent transactions is reasonably short - not to exceed say, four months;

(c) If the accountant, after due inquiry, or preferably after actual investigation, has no reason to suppose that other transactions or developments have in the interval materially affected adversely the position of the company; and

(d) If the character of the transaction to which effect is given is clearly disclosed, i.e., either at the heading of the statement or somewhere in the statement there shall be stated clearly the purpose for which the statement is issued.⁴⁰

The Committee further recommended that the accountant not certify a statement

... giving effect to transactions contemplated but not actually entered into at the date of the certificate, with the sole exception that he may give effect to the proposed application of the proceeds of new financing where the application is clearly disclosed on the face of the statement or in the certificate and the accountant is satisfied that the funds can and will be applied in the manner indicated.

Since this original set of pronouncements in 1920, the attitude of accountants as to certification of projected figures has not changed materially.

**Accepted practice.** In practice the certification of figures implying prediction of the future earnings is a similar problem. Variations from the certification of the historical earnings statement include:

1. elimination of non-recurring, unusual extraneous items of profit and loss,
2. disclosing effect of internal changes such as adjustment of certain fixed cost items,
3. showing the effect of adding or discontinuing certain earning activities within the enterprise,
4. disclosing the effect of environmental changes.

To indicate to stockholders and prospective investors what the earnings of a corporation probably will be for some period in the near future, historical net income can be adjusted to the extent of elimination of non-recurring, unusual extraneous items of revenue and costs. This means, of course, that the income statement can be prepared and certified according to the recommendation of the American Institute of Certified Public Accountants, i.e., excluding items which in the aggregate are unusual and material in relation to the net income for the period. The adoption of the earning power concept of calculating net income as illustrated earlier in this study provides a deviation from existing "generally accepted principles of accounting" in that a somewhat different set of standards is used in the exclusion of certain items from the income statement.

The standards which would be used are founded upon the particular impact of the item on earning power rather than upon the working rules of
(1) distortion of net income and (2) materiality. This is not to imply that these rules are not useful, however.

Generally, pro-forma and actual income statements may be certified by public accountants under the rules of the various states. However, the pro-forma nature of the statement clearly must be set forth in the certificate. Preparation of the income statement according to the current operating concept is acceptable for statement certification.

Summary

From the income statement of a single period a limited number of significant calculations can be made. Among these measures is the expression of income statement items as a percent of net sales. Investment analysts often calculate the number of times interest charges have been earned, and still more often, the price-earnings ratio. The earning power concept of net income proves most valuable for such measures.

Investigation of the potential and current uses of the income statement reveals that the "center of gravity" of the matching process is earning power. It is concluded from this part of the study that there is a close interrelationship between the uses made of the income statement by creditors, managers, and investors. These relationships all are brought about from the similarity of information desired by the three groups, information concerning the earnings of the enterprise in the several immediate operating periods.
In this regard, for the income statement adequately to serve the groups, three propositions must be recognized. These are as follows:

(1) Predicting the net income for a future period involves an analysis of changes in reported profits of several periods preceding the period to be predicted,

(2) Analysis of changes in reported profits involves marginal cost-revenue relationships,

(3) Current income reporting practice makes no provision for analysis of marginal factors.
CHAPTER VI

THE DETERMINATION OF THE CONSISTENCY OF EXISTING
ACCOUNTING CONVENTIONS AND DOCTRINES WITH
INCOME STATEMENT CONCEPTS

This study has as its object the formulation of a philosophy of
the income statement. The process of periodically comparing expired
costs with revenues produced is basic to an income statement, there­
fore the idea of periodic matching was developed early in the study.
Related to this, several ideas of the income statement were examined,
including the current operating and the historical. The form by which
income information is presented was recognized to be of material signi­
ficance for decision-making, and accordingly a study of form was made.
Several of the potential uses of the statement by creditors, managers,
and investors were explained.

Purpose of the Chapter

All of these related areas of investigation are bound together in
practice through conventions and doctrines of accounting. This chapter,
thus, has as its aim to present some of the more important conventions
and doctrines associated with the cost basis of the income statement,
and to examine these in the light of the conclusions indicated previously
in the study, conclusions for the most part favoring adoption of the
The earning-power concept of net income.

Definition of Terms

The term convention is one which is used very often in discussions of accounting theory. A convention is a "custom approved by general agreement" or a "rule based on common consent."¹ Likewise in accounting a convention is a generally accepted practice. Conventions in accounting, as in other fields, grow slowly and change periodically according to the needs of business and society.²

The concept of a doctrine also is a fundamental facet of accounting theory. Accounting doctrines, on the other hand, are not resultant of gradual growth in the same sense as are conventions. Doctrines are ideals set forth by leaders of accounting thought,³ and consequently have the tendency to precede the appearance of accounting conventions.

The Relationship of Accounting Doctrines and Conventions to Earning-power

Current literature of accountancy includes a number of practices and ideas which have attained the level of usage to be considered conventions or doctrines. Among the most important of these are:


³Ibid., p. 76.
A full development of the theory surrounding the earning power concept of net income must relate these conventions to that theory. It is not the purpose of this part of the study to define in detail each of these doctrines and conventions, but only to set forth some of the more important relationships of these to a concept of net income.

**Utilitarianism and the Cost Basis**

The first Accounting Research Bulletin which was issued by the Committee on Accounting Procedure of the American Institute of Certified Public Accountants in September, 1939 included the following statement:

The committee regards corporation accounting as one phase of the working of the corporate organization of business, which in turn it views as a machinery created by the people in the belief that broadly speaking it will serve a useful social purpose. The test of the corporate system and of the special phase of it represented by corporated accounting ultimately lies in the results which are produced. These results must be judged from the standpoint of society as a whole -- not from that of any one group of interested parties.

The uses to which the corporate system is put and the controls to which it is subject change from time to time, and all parts of the machinery must be adapted to meet such changes as they occur . . .
In 1953, Accounting Research Bulletin No. 43 restated this same idea of the utilitarian nature of accounting.

The accounting profession is faced with two forces in dealing with matching costs and revenues, first, the desire to conform to existing conventions and principles, and second, with delineating the exceptions to these principles. When a body of exceptions has been established, some broader or more fundamental principle is sought to embrace both the existing principle and the exceptions. This transitory situation describes the accounting theory related to the cost basis of the accounting process.

The critical event theory. During the past few decades in the United States, the matching costs and revenue principle has become firmly established. In practically every industry, the technique for postponing or accelerating either cost or revenue, as the situation indicates, so that all elements of a single transaction may be placed in the same period has been developed. This has been accomplished in spite of the problems of price-level fluctuations and requirements of regulatory bodies. There has definitely been success in refining the determination of net income, but the problem of timing of net income still exists. The crude rule of realization is still in widespread use. This

---


rule, as discussed in Chapter II, was first made an official concept in 1932 in correspondence between the Special Committee on Cooperation with Stock Exchanges of the American Institute of Certified Public Accountants and the Stock List Committee of the New York Stock Exchange.

The Committee stated:

Unrealized profit should not be credited to income account of the corporation, either directly or indirectly, through the medium of charging against such unrealized profits amounts which would ordinarily fall to be charged against income account. Profit is deemed to be realized when a sale in the ordinary course of business is effected, unless the circumstances are such that the collection of the sale price is not reasonably assured.

The real foundation of the cost basis. This realization convention is the real foundation for the use of historical cost in the preparation of the income statement and the balance sheet. Only that net income which is realized is reflected in the financial statements. For example, a parcel of land was purchased by a company several years ago. Further, assume that, without question, the land is worth much more today than its original cost. The increase in value is not recognized in the accounts of the firm although permanence of increase in value is assured. Realization is the governing rule in this decision, as it is in numerous decisions each operating period. It is consistent to conclude that the cost basis and the realization convention are so closely related that if one is modified in principle, the other is affected.
The consistency of the earning-power concept and the cost basis.
The earning-power concept of net income is based upon the doctrine of
equating effort with accomplishment to determine a measure of per­
formance or productiveness during a stated period. Revenue, thus,
is produced when cost-effort is exerted. It is not at all clear that
"postponing or accelerating" costs and revenues so that all elements
of a single transaction may be placed in the same period is theoretically
desirable.

This, in effect, questions the universal soundness of the realiza­
tion convention. Realization, however, is accepted today to be an
expedient workable rule of practice. If the realization concept cannot
be accepted as a doctrine, then can the cost basis be justified? The
answer to this question appears to be that the existing idea of the cost
basis cannot be accepted as a doctrine, but a cost basis modified and
perfected is in order.

A new cost basis. Costs are said by Paton and Littleton in An
Introduction to Corporate Accounting Standards to be "price aggregates."
The resultant free-bargaining transaction price of an exchanged good or
service becomes historical cost as used in the accounting structure.
These price aggregates are matched against other price aggregates from
a revenue point of view to determine net income. Cost on the expense
side, however, is established through price aggregates (1) to exist and
(2) to be of an objective amount by the free-bargaining price of the
transaction. This part of the cost basis is a logical part of accounting theory and is quite acceptable as a doctrine as well as a convention. A number of workable techniques such as the allocation of depreciation have been developed in order to time the charging of the costs to periods.

From the revenue side of the equation, however, a significant problem still exists. Realization has been used as a guide for determining to which period revenue is allocated. Too, the free-bargaining transaction produces the price aggregate objective valuation indicating the magnitude of the revenue. But under the cost basis-realization conventions, the period in which the cost-effort actually produced the accomplishment or revenue appears to be immaterial! It is reasonable to state that a person interested in the earning-power of an enterprise truly is interested in precise timing of revenue recognition rather than in a rule which assumes this precise timing not to be material.

A new cost basis to be valid in principle and to be consistent with the earning-power concept of net income must make provision for the following propositions:

1. The dollar amount or magnitude of the cost and revenue valuation must be objectively determined through the customary price aggregate system.

2. Since accomplishment (revenue) is a result of effort (management-manipulated costs) exerted, then it is consistent that the matching process must take place in the period in which productive effort is exerted, and that the income statement should reflect this.
(3) Accountants must establish a system of objective verifiable evidence which will lead to reasonable judgments in estimating the productiveness of cost-efforts when they are exerted, i.e., there must be a system designed which will predict with reasonable certainty and within reasonable limits the effect of a management action on the net income of a period in which the effort is exerted.

(4) The income statement should not be a forecast in the ordinary sense; it should only forecast the details concerning termination of a transaction which has already been initiated. The income statement should report historical earning power.

The development of a new cost basis. It is evident that business accounting and forecasting techniques must be developed jointly with the new cost concept before a workable system can be instituted. At the present time very little research is being undertaken to improve upon old realization-cost concepts.

The causal relationships of costs and revenues at every level must be probed in order to illuminate the problem. Even forecasting studies not directly related to the accounting process for special industries would be a starting point. If something other than the "critical event" method of matching could be introduced in just one industry, the much-needed research and development probably would be forthcoming.

Before the realization part of the cost concept can be modified or discarded, much more must be known about the relative importance of the several classifications of cost-efforts in the production of net income, i.e., there must be a determination of the cost functions of an enterprise.
Functional analysis of an enterprise or industry must be based on the following assumptions:

(1) Two groups of variables, costs and revenues, are present in the production of income,

(2) The objectives of functional analysis are

(a) to determine just what are the operating variables which condition the magnitude of costs,

(b) to determine the relative influence of these factors,

(c) to set up standards based on the analysis so that management can control cost-revenue relationships, and so that revenue can be recognized on the income statement accordingly.  

The nucleus of such a system of recognizing revenues would begin with empirical studies of selected firms and industries. Regularities existing at various levels of production within a short period could be explained. Traditional static functional analysis as illustrated in Figure 11 can make use of simple trend lines and statistical correlation techniques, and can give a minimum description of a "possible" relationship.

But, the system which must be developed before the realization convention can be replaced must include dynamic adjustments. Gross revenues of an enterprise are dependent upon two sets of variables.  

---

6 For a detailed presentation of some of the work which has been done in related statistical analysis, see R. Parker Eastwood, Sales Control by Quantitative Methods (New York: Columbia University Press, 1940), p. 68.

7 Ibid., p. 78.
Figure 11

FUNCTIONAL STATIC ANALYSIS

OF COST-EFFORTS

R: revenues produced
These are (1) internal forces of the enterprise and (2) external conditions affecting the enterprise. For revenue to be predicted with reasonable certainty as it is "earned," forecasts must be made of external conditions, and the effects of these changing external conditions have to be related to the cost-effort relationships established within the enterprise.

With the profit objective existing, management seeks to maximize net income. Revenues, therefore, form the upper limit for cost-efforts in terms of dollars for the firm to continue to operate. It is recognized, then, that those factors which limit sales and revenues also form the upper limit of costs of the enterprise. The principle developed in economic theory, that of diminishing returns, provides insight into what the earning power income statement is trying to accomplish.

The economic principle might be distorted as follows:

(1) As additional cost-effort of any specific classification is added (assuming simultaneous alternatives), accomplishment, or revenue, is produced in decreasing amounts,

(2) Or, from the converse approach, a constant increase in accomplishment or revenue is brought forth only through the exertion of greater and greater cost-effort in an operating period.

(3) Each classification of cost-effort reaches the point of negligible returns at a different volume of costs in a set of circumstances, and each approaches this point directed by a different set of forces.

This really means to the accountant that, for an ideal income statement to be prepared, which consistently follows the concept of
earning-power, there must be disclosed the effect of selected items of cost on revenue for the period. Straight-line relationships, of course, are not adequate explanations in the majority of cases. This effect must be estimated and reflected on the income statement of the period, even before the price-aggregate system has determined the exact magnitude of the revenue.

As a subsidiary problem it has been suggested that cost often is not a measure of earning. For example, in a manufacturing operation, many costs are incurred early in the process because of inventory input, yet earnings could not be based on labor input or factory service input alone. This statement that cost is not a measure of earning does not necessarily follow. The problem to be resolved must be examined from the view of the profit motive. The firm operates for the primary purpose of making a profit. Since profit is defined as the excess of revenues over costs in an operating period, then from a rational standpoint, the enterprise will not knowingly incur costs unless these costs are necessary (directly or indirectly) for the continued production of net income.

It is certain that analytical techniques at the present time have not become sophisticated to the extent to permit preparation of income statements under the concepts just presented. Such a system when developed, however, will provide the users of the income statement with information concerning the earning ability of the firm and industry in
such a manner as to make prediction of earnings much simpler than the statements of today.

**Tentative cost basis recommendation.** Based on the preceding analysis, it is recommended here that as a **doctrine** the realization convention be investigated and perhaps even rejected; and in its place should be placed a new cost basis designed to match cost with revenue in an effort-accomplishment approach. As a workable convention, the realization postulate must be retained until mechanics and theory surrounding the new cost system have been developed adequately.

The preceding discussion of the cost basis postulate in the construction of financial statements has served to illustrate the great degree of interdependence and occasional conflict of the several doctrines and conventions in the accounting system. Acceptance of the earning-power doctrine of matching costs and revenues, it was shown, necessitates modification of certain of the conventions.

**Modification of Other Doctrines and Conventions by the Earning Power-concept**

There are a number of conventions and doctrines which would be affected only very slightly, however, by complete subscription to the earning-power idea.

**Periodic nature of accounting.** Fundamental to the matching process is the use of finite periods of time, often one year, as a basis for the development of a net income figure. The idea of periodicity is
basic to almost any method of calculating net income, but the length of
the period should be considered very carefully before adopting a speci-
fic method, especially the earning-power method. The problem concerns
the use of fixed-variable classification of costs.

In the relatively long-run period all costs of an enterprise (say,
twenty or thirty years) tend to be of a variable nature, or at least of
a semi-variable nature. Therefore, the shorter the accounting period
which is used, the greater portion of the total costs tend to be fixed.
In the analysis of the causal relationships of costs and revenues, this
fact is significant. In the conventional annual period the problem of
classification is greater than over a longer period, and interim state-
ments pose even a more complex problem of cost-classification.

Stability of the monetary unit. Financial statements are prepared
so that happenings in the past can be reported and used as a guide for
future actions. Money as a base, then, must be used as a measure of
performance as a stop-watch is used in evaluating the performance of an
athlete. Unfortunately, the dollar is not stable in value to the extent
as is a stop-watch accurate. Both are subject to variability, as tools
of measurement, but the value of the dollar changes proportionately much
more than does the variation of results produced by the watch.

The earning-power concept of net income is designed to be an
extra-sensitive device for measuring firm performance. This goal of
extra-sensitivity focuses attention on the unsolved problem of changing
monetary values. For the earning-power measure to be of continuing
value, general price-level adjustments must be reflected in the decisions based on earning power net income.

**Continuity of existence.** The going concern concept has been called the indispensable condition of accounting valuations. The idea refers to the values at which the various accounts are stated when viewed from the standpoint of indefinite operation of a firm. The concept as a rule in accounting is justified on two grounds:¹⁸

1. the real value of an asset is its value in use or exchange to a firm, and
2. the going concern is the normal case in business.

The value of an asset is determined by the utility of the asset to the firm.

The earning-power computations of net income are entirely consistent with the continuity of existence doctrine. In addition, for earning-power methods to be applied consistently to the matching process, the going concern doctrine serves to bridge the theoretical gap between the utility value of an item and the statement value of an item.

**Necessary compromise.** The other doctrines and conventions mentioned earlier in this chapter would not be materially modified upon developing the earning-power income statement to its conclusion.

The ability of compromise permeates the entire area of accounting theory; the equating of one ideal against another to acquire the best from each without losing utilitarian value is the essence of theory development. It is very possible to develop and seek out the good points in a new cost basis of accounting without sacrificing the progress already attained in related areas.
Reconciling accounting theory with business practice has long been a real problem to accountants. In this chapter the current-operating performance income statement, as developed previously in the study, is related to several of the more important fields of accounting thought and practice. The problem fields to which the earning power concept is introduced are (1) interperiod allocation of income taxes, (2) consolidated statement preparation, (3) return on investment computations, (4) national and social accounting, and (5) selected inventory problems.

These fields were chosen as a part of the study for two reasons: first, each field clearly is distinct from each of the other fields, so that the earning power concept can be applied to more than one general area; and second, each field represents a current unsolved problem in accounting.

**Interperiod Allocation of Income Taxes**

The net income of a company, no matter under which method it is calculated, is practically never the same dollar amount as is the taxable income of the firm. It is well known that the federal income tax laws
conflict in innumerable cases with generally accepted principles of accounting.

The difference in net income and taxable income may result from any of the following situations:

Items affecting taxes may be shown on the statement of retained earnings instead of in the income statement.
   For example, an extraneous gain of a material amount may be shown in the statement of retained earnings instead of in the income statement.

Accounting rules regarding revenue and expense do not agree in all instances with income tax rules.
   For example, provisions for losses under product guaranty agreements are not deductible for income tax purposes; only payments arising from such obligations are deductible. However, it is considered acceptable accounting to make an expense provision for such losses in the year that the product is sold.

A corporation may adopt one accounting method for income tax purpose and another method in its books and financial statements.
   For example, a corporation may adopt the completed-contract method for income tax purposes and use the percentage-of-completion method for accounting purposes.¹

The problem to be resolved. For purposes of the income statement and the reporting of net income for the period, there is a dual aspect to the problem. First, must be decided the amount of the provision for income taxes to be matched against the revenue periodically,

and second, it must be decided whether this amount shown on the income report for the period should be the same figure as the income tax computed as a liability for the period. The purpose of this discussion is to present logical reasoning leading to the solution to the general controversy of income tax allocation in the light of an earning-power approach.

Recommendations of the AICPA. The American Institute of Certified Public Accountants officially recognized the problem in its Accounting Research Bulletin No. 43, which states:

Financial statements are based on allocations of receipts, payments, accruals, and various other items. Many of the allocations are necessarily based on assumptions, but no one suggests that allocations based on imperfect criteria should be abandoned in respect of expenses other than income taxes, or even that the method of allocation should always be indicated. Income taxes are an expense that should be allocated, when necessary and practicable, to income and other accounts, as other expenses are allocated. What the income statement should reflect under this head, as under any other head, is the expense properly allocable to the income included in the income statement for the year.²

The bulletin further states:

The cases that are likely to call for allocation are those in which transactions affecting the income tax in a manner which would have a distorting effect on net income are included in (a) surplus accounts, (b) deferred-charge accounts, or (c) estimated liability and similar accounts.³

³Ibid., p. 89.
The preceding statements of the Committee on Accounting procedure of the American Institute clearly express the view that tax allocation methods depend upon the principle of matching costs and revenues. That method should be chosen which adequately presents the net income for the period in terms of operating results of the firm.

Accounting Research Bulletin No. 44 (Revised) further expands the original idea of allocation to encompass allocation of taxes paid or foregone as a result of adoption of accelerated methods of depreciation of plant and equipment items.

Recommendations of the Securities and Exchange Commission.

A contrary view from that taken by the Institute was indicated by the Securities and Exchange Commission in 1945. Series Release 53 is in part as follows:

For some time there has been growing up a practice, tolerated by some accountants and sincerely advocated by others, pursuant to which the current income account is charged under the heading of income taxes or charges in lieu of income taxes, not only with the income taxes expected to be paid by the company but also with an additional sum equivalent to the reduction in taxes brought about by unusual circumstances of a particular year. 4

The Securities and Exchange Commission made eight conclusions in this series release which present a substantial case against the allocation of taxes for income statement purposes. The reasoning of the

authorities who oppose the allocation of income taxes in the matching process is clearly reflected in these conclusions, therefore they are presented in original form below.

1. The amount as provision for taxes should reflect only actual taxes believed to be payable under the applicable tax laws.

2. It may be appropriate, and under some circumstances such as a cash refunding operation it is ordinarily necessary, to accelerate the amortization of deferred items by charges against income when such items have been treated as deductions for tax purposes.

3. The use of the caption "Charges or provisions in lieu of taxes" is not acceptable.

4. If it is determined in view of the tax effect now attributable to certain transactions, to accelerate the amortization of deferred charges or to write off losses by means of charges to the income account, the charge made should be so captioned as to indicate clearly the expenses or losses being written off.

5. The location within the income statement of any such special charge should depend on the nature of the item being written off. In the case of a public utility, for example, a special amortization of bond discount and expense should not be shown as an operating expense but should be classified as a special item along with other interest and debt service charges in the "other deductions" section.

6. It is appropriate to call attention to the existence of the special charge by the use of appropriate explanatory language in connection with intermediate balances and totals.

7. In the preparation of statements reflecting estimates of future earnings, it is ordinarily permissible to reflect as income taxes the amount which it is expected will be payable if such earnings are realized provided, of course, the assumptions as to the tax rates are disclosed.
8. In the preparation of statements which are designed to "give effect" to specified transactions, and provision for taxes may, depending on all the facts and circumstances, properly represent either (a) the actual taxes paid during the period adjusted to give effect to the specified transactions, or (b) an estimate of the taxes that it is expected will be payable should an income of future years be equal in amount to the adjusted income shown in the statement. The statement should, of course, clearly show what the provision for taxes purports to represent.

The fundamental argument presented in this series of conclusions is that income taxes cannot be allocated in the same manner as other expenses and costs are allocated. The Commission argues that the allocations recommended by the American Institute of Certified Public Accountants are different in principle from those allocations of expenses and cost which are generally accepted practice and theory. Allocation of income taxes has even been called by the Commission "normalizing" net income.

An example will help to clarify the position of the Securities and Exchange Commission. Assume that a company adopts an accelerated method of depreciation for tax purposes and adopts the straight-line method for financial statement purposes. The Commission, in effect, proposes that it is a simple matter for the accountant to explain to the reader of the income statement any difference in net

---

5Ibid., pp. 128-129.

6It is interesting to note here that even the opponents of allocation recognize that non-acceptance implies improper matching of costs and revenues.
income which might be material, and which is occasioned by the
difference in use of methods. But, going as far as recognizing a
liability which is not a legal liability (and perhaps never will be one!) is not called for.

Relationship of allocation to the earning-power method of computing net income. The earning-power method of computing net income is a system which has as its primary goal the accurate and reliable matching of costs against revenues to determine the productiveness of the enterprise in a stated period. In this connection, before a consistent relationship of income taxes to net income can be established, it must be determined if income taxes are deductible in computing periodic net income, i.e., are income taxes actual costs, or are they distributions of profits? Today accountants generally agree, and logically so, that income taxes are regular and recurring items of cost which should be matched against periodic revenue. The fact that income taxes are paid to a governmental unit for the support of government does not, within itself, deny that taxes are not costs according to the usual definition.

Since income tax is accepted to be a conventional cost, then it is also consistent to accept that this type of cost should be measured on the accrual basis, as all other costs customarily are

---

measured. For earning-power of a corporation to be reflected in a net income computation, the accrual basis must be followed in every practicable instance.

The income tax for a period is determined by applying the prevailing tax rate to the net income (before taxes) after adjustments have been made for any permanent differences between net income before taxes and taxable net income. This means that adjustments are made for costs or revenues included in the computations of net income, but excluded in the computation of taxable income; also, adjustments are made for reductions allowed for tax purposes, but not included in the computation of net income.

During the life of a business enterprise it is likely that periodically there will be differences between current tax expense properly allocated and the recognition of costs and revenues. Therefore, according to the rules of matching costs and revenues under the accrual system such differences should be accrued as assets or liabilities.

If income taxes were not allocated as other costs, then the precise matching process would be circumvented. Non-allocation is certainly easier for the accountant to accomplish, but such an argument

---


is hardly a substantial one. The all-inclusive or historical income statement concept might lend some support to non-allocation, for on the all-inclusive income statement emphasis is placed on immediate reporting of all costs and revenues when they are objectively determined.

The conclusion reached from this brief appraisal of the literature concerning interperiod allocation of income taxes is, that for the earning-power concept of net income to be pursued consistently in accounting applications, the principle of allocation of all costs (including income taxes) on the accrual basis must be accepted.

Consolidation Statement Preparation

Consolidation statement theory is an exceedingly broad area of accounting. It is not within the scope of this study to examine all segments of the theory of consolidated statements, but only to examine one isolated area (a current problem area, however) and to determine what contribution the earning-power concept of the income statement can make in solving the existing problems.

The controversy of unconsolidated subsidiary income. The two methods currently in use for the treatment of unconsolidated subsidiaries in consolidated statements are as follows:

(1) Equity method - This involves adjusting the investment in subsidiary each period through an income account to reflect the portion of the net income or loss of the unconsolidated subsidiary owned by the controlling corporation.
(2) Cost method - This involves reflecting the investment in the subsidiary at original cost and recognizing income of the subsidiary only when dividends are received.

In 1959, the American Institute recommended the equity method as being preferable over the cost method.  

Current practice. Although the Institute has recommended the equity method, there is still substantial opposition to reflecting proportionate earnings of unconsolidated subsidiaries in the consolidated income report. The cost basis (recognizing unconsolidated subsidiary income only when dividends are received) is still the most popular in corporate accounting today.

Evaluation of cost and equity methods. An examination of the nature of consolidated statements is helpful in evaluating these two methods. A consolidated statement is nothing more than an accounting device (actually based on a legal fiction) giving data of two or more corporations. To justify such devices there must be recognition of a single administrative and homogeneous operation.

---


A consolidated income statement, thus, is designed to report net income of the economic unit; this net income, according to the current status of accounting theory, is computed through application of the same rules of matching as are applied in the conventional corporate income report. Just exactly how these rules should be interpreted and applied is the problem associated with handling of income from unconsolidated subsidiaries.

For a corporation to be classified as a subsidiary, there is usually presumed to be a controlling interest by a parent corporation. An unconsolidated subsidiary, therefore, is substantially related to the parent corporation, but possibly not to the degree usually presumed before the subsidiary would be consolidated for statement purposes.

The significant point to determine is when to recognize revenue for the economic unit from the unconsolidated subsidiary. As discussed in the previous chapter, the postulate of realization is a basic aspect of the cost principle of accounting. For statements of a consolidated economic entity, revenue from outside the group should be recognized upon declaration of dividends by the unconsolidated subsidiary; this, perhaps, is carrying the realization idea to an extreme illogical conclusion. At the event of creation of a dividends receivable account on the books of one of the corporations in the economic unit, realization has taken place. Clearly, this line of reasoning indicates use of the cost basis. To accept the cost basis in this instance, it must be assumed that the unconsolidated subsidiary compares in nature
to any corporation in which a parent has invested, but does not and
cannot assert control. In most cases of unconsolidated subsidiaries,
such an assumption would not be reasonable.

The assumption just mentioned is not accepted by adherents to
the equity theory. The equity theory proposes that the activities of
an unconsolidated subsidiary are a part of the total productiveness of
the economic unit; therefore, income of the subsidiary accrues to the
parent corporation immediately upon earning. This idea of immediate
accrual is a part of the earning-power concept of measuring net income,
and it would appear that the equity theory is consistent with the earning-
power method of matching.

Accordingly, if there were assumed to be a close enough rela-
tionship for recognition of revenue, then it would appear that there
should be a close enough relationship also to include the assets and
liabilities of the subsidiary in the consolidated balance sheet. In
effect, except for the problem of disclosure, using the equity method
of handling unconsolidated subsidiary income accomplishes the same
as consolidation of assets and liabilities in net effect, but of course,
component elements of the statements will not be merged.

The purpose of consolidated statements is to present an overall
view, and to prevent manipulation of statements through intercompany
transactions. If a company is a subsidiary, it is part of the group,
and manipulation can take place unless the same consolidation steps
are taken for each subsidiary.
Accounting Research Bulletin No. 51 does not merely recommend the equity method; it also calls for elimination of intercompany profits in such items as inventories, receivables, and payables. This system has the effect of complete consolidation, except that one figure is reported on the balance sheet, instead of a complete enumeration of assets, liabilities, and capital items.

Return on Investment

In accounting literature recently there has been a noticeable number of articles dealing with the return on invested capital. In comparing alternative courses of action, management must make use of all the tools available in reaching a decision. Return on investment, usually expressed in terms of a rate, has provided management with a quantitative approach to the evaluation of projects about to be undertaken.

The accountant is concerned with return on investment to the extent that it is the job of the accountant to provide pertinent historical information to management. Return on investment is another way of looking at earning-power; consequently, in this section of the study the two primary methods of calculating return on investment, usually for capital budgeting purposes, are briefly presented and evaluated in the light of the earning-power concept of net income.

The financial statement method. According to the financial statement method, one of the two systems in use today, return on the
investment is the ratio of the net income as determined on the income statement of the firm to the investment as presented on the balance sheet. Figure 12 illustrates application of the financial statement method to a simplified example.

The discounted-cash-flow method. The second, and also the less popular method, may be described by the following formula:

\[ C = \frac{R_1}{1+i} + \frac{R_2}{(1+i)^2} + \frac{R_3}{(1+i)^3} + \ldots + \frac{R_n}{(1+i)^n} \]

where

- \( C \) = original cost of the asset investment,
- \( R_1 \) = cash inflow from the investment in the first year,
- \( R_2 \) = cash inflow from the investment in the second year,
- \( R_n \) = cash inflow from the investment in the nth year,
- \( i \) = rate of return on investment.

The discounted cash flow method is based on the philosophy of investment which emphasizes that a dollar invested at the present time will be paid off in dollars of some future date, and that the investment required today to repay one dollar in the future is substantially less than one dollar today, depending upon the length of time and the rate of interest. Figure 13 illustrates application of the discounted-cash-flow method

---


14 Ibid., p. 6.

Figure 12

FINANCIAL STATEMENT METHOD OF CALCULATING RATE OF RETURN

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income before depreciation</td>
<td>$576.19</td>
<td>$576.19</td>
</tr>
<tr>
<td>Depreciation</td>
<td>$500.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>Net income</td>
<td>$76.19</td>
<td>$76.19</td>
</tr>
<tr>
<td>Investment</td>
<td>$1,000.00</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Return on investment</td>
<td>7.6%</td>
<td>7.6%</td>
</tr>
</tbody>
</table>

Assumption:

(1) Company buys a depreciable asset with an expected useful life of two years and a cost of $1,000.

(2) All sales are for cash, and all expenses except depreciation require an outlay of cash in the same period as expenses are recognized.

SOURCE: Adapted from John W. Coughlan, *op. cit.*, p. 5.
Figure 13

DISCOUNTED-CASH FLOW METHOD OF CALCULATING

RATE OF RETURN

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount 1</th>
<th>Amount 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment at beginning of year</td>
<td>$1,000.00</td>
<td>$523.81</td>
</tr>
<tr>
<td>Interest earned during year (10%)</td>
<td>100.00</td>
<td>52.38</td>
</tr>
<tr>
<td>Investment and interest</td>
<td>$1,100.00</td>
<td>$576.19</td>
</tr>
<tr>
<td>Net cash inflow</td>
<td>576.19</td>
<td>576.19</td>
</tr>
<tr>
<td></td>
<td>523.81</td>
<td>-0-</td>
</tr>
</tbody>
</table>

Assumptions:

(1) Company buys a depreciable asset with an expected useful life of two years and a cost of $1,000.

(2) All sales are for cash, and all expenses except depreciation require an outlay of cash in the same period as expenses are recognized.

SOURCE: Adapted from Coughlan, op. cit., p. 6.
Uses of rate of return computations. There are two primary uses of rate of return computations. The first of these involves the measurement of periodic net income performance in the light of predetermined objectives. Net income, therefore, to serve this purpose, is expressed in terms of a percent of capital employed.

And secondly, a use of rate of return computations involves predicting the future, that is, measuring expected rate of return on a specified project such as a new plant. In producing future earnings, the earning-power concept of net income is a reasonable base, much more so than the all-inclusive income calculation. The net income amount indicating earning-power in a future period can be related to the corresponding capital employed in operations (not total capital available or total capital employed).

Evaluation of discounted-cash-flow and financial statement methods. In 1959, the National Association of Accountants released Research Report No. 35, which presented the current thinking concerning return on capital. It was concluded in this report that discounted-cash-flow is the most valuable method of choosing between alternative

---


17 Ibid., p. 34.
courses of investment. A reason given for this conclusion is that the discounted-cash-flow method determines rate of return from flow of cash data directly related to the net income being evaluated, while the financial statement method uses concepts of capital employed and net income calculated for a different purpose.

The preceding statement touches the real controversy. Accounting and management authorities in the past have criticized the financial statement method and have tended to advocate the discounted-cash-flow method. This criticism is justified, for rate of return based on financial statements has been used indiscriminately to solve problems the solutions of which were not dependent upon application of financial statement principles.18

The discounted-cash-flow idea introduces the concept of time into the special calculations, for timing of cash flows directly affects the rate of return. The period required to recover the original investment is of primary importance to management in making a decision to invest. If the rate of return has been accurately computed, it may be assumed that the useful life of the investment is equal to the time required to recover the investment. Rate of return computations should be recognized as what they are: special calculations, partially based on information used in income statements and balance sheets, and

partially based on other types of information. The over-all rate of return of a company is valuable in evaluating the overall performance of that company, but such a rate is not necessarily applicable to all evaluations of performance of special projects.

The earning-power concept of net income is designed as an aid in evaluating performance of an enterprise for a period. A rate computed from this net income amount represents a weighted average of periodic costs and revenues related to total capital employed. The percent figure computed under the discounted-cash-flow method should be compared to this figure as a further evaluation of the anticipated product.

Therefore, it can be concluded that the concept of rate of return on capital employed is concerned with return (profits) in terms of earning-power net income, not with historical or all-inclusive net income, to be of most value to management. Return on capital employed, instead of return on all capital, forms the center of analysis. As return on capital techniques are further developed, the earning-power idea will be relied upon, more than for any other reason, to gain insight into the expected contribution to net income of the special capital outlays contemplated.

Social or Economic Accounting

A brief analysis of the nature of economic accounting and its relationship to financial accounting and the earning-power concept is
Definition of social accounting. Social accounting is the application of accounts to the community as a whole, in contrast to private or financial accounting, which is concerned only with the individual business unit. Financial accounting has as a primary goal the measurement of enterprise income, while social accounting is concerned with measurement of national income, the final product of economic activity. Since many of the rules and principles governing measurement of national income also govern measurement of enterprise income, it is useful to determine the interrelationships between the two systems. Social accounting theory has not been developed as far as has financial accounting.

The major national financial statement. During the past few years national financial statements have become increasingly important in the formulation of policies by businessmen and public officials. The most widely used financial statement is the national income and product account, which is published quarterly by the United States


22 Ibid., p. 240.
Department of Commerce. This statement is a report of receipts and expenditures of the major sectors of the economy.

The statement consists of two basic parts. The first of these is a reporting of gross national product for the period. Gross national product is the market value of production within the nation during any given calendar year.\textsuperscript{23} Production, in this definition, means domestic sales of goods and services to natural persons, and to government, plus the excess of exports over imports. Gross national product is a measure of output; it is the consolidated sales of the nation, adjusted for change in business inventories.\textsuperscript{24}

On the report of national income and product (the national income statement), gross national product is subdivided into the following categories:

1. personal consumption expenditures,
2. gross private domestic investment,
3. net foreign investment,
4. government purchases of goods and services.

In the other part of the statement is included the breakdown of costs incurred in the production of gross national product of the economy. These costs consist of the following:

1. earnings of the factors of production,
2. income of unincorporated enterprises,
3. undistributed corporate profits.


\textsuperscript{24}Friend, \textit{op. cit.}, p. 240.
Parallelism between social income accounts and enterprise income accounts. The two sections of the national income and product report closely parallel the business income statement. On the revenue side of the statement in national accounting is the analysis of consolidated sales, and on the cost side is the analysis of costs. Sales are classified according to types of purchasers and commodity groups.

Relationship of social income accounting to earning-power.
From a national viewpoint, the object of social income determination is to establish a measure of the total production of goods and services for the economy within a specified interval of time. On the other hand, from an enterprise viewpoint, the object of income determination, according to the earning-power concept, is to establish a measure of total production for the firm within a specified interval of time. Only those factors which influence effort and accomplishment related to the special period are considered in the calculation. Therefore, the earning-power concept is consistent with the reporting of national productivity.

The all-inclusive income statement, which reports all objective transactions giving rise to profit or loss in the period, is not consistent in principle with national income accounting. For reporting all items of national production (i.e., without regard to the exact period) would

---

ignore the periodic nature of income measurement; it would ignore the value of attaining a measure relating to the earning power of a particular period.

**Tendency of aggregate values to produce average measures.** The national income statement reports the sum of activity of the many income-producing units within the economy in a period. The aggregating procedure, perhaps, tends to "smooth" the income for the economy. Happenings which are classified as **extraordinary** for any one firm are normally expected to occur somewhere within the economy in every period in many cases. This situation indicates that the use of an all-inclusive approach on the national scale would not have as distorting an effect on income as such a system would have on the individual business unit.

**Lack of participation of accountants in national accounting.** The social income accounting system in the United States has been developed primarily by persons not highly trained in accounting. This is unfortunate, because participation of accountants would have tended to accelerate development of the system. Purely economic concepts were followed in the construction of social accounts; this is desirable, but the knowledge in the field of accounting theory would have contributed to the providing of economic information in such a form as to facilitate the making of decisions.

---

26 Cooper, op. cit., p. 234.
Problems of Inventories

For years accountants have debated the problem of valuing inventories on the balance sheet and of reflecting cost of goods sold on the income statement. Specifically, a controversy centers around the use of the first-in-first-out and the last-in-first-out methods of inventory cost determination. Since this study involves income determination, emphasis is placed on the effects of the two methods on net income.

**Natural flow of costs.** The first-in-first-out method is consistent with the usual flow of goods through an enterprise, therefore, for many years this method was considered to be one of the few methods to be followed. Last-in-first-out became popular not only because the method is permitted for tax purposes, but also because of the tendency of last-in-first-out to reflect a matching of current price-level cost dollars against current price-level revenue dollars.

**The rising price-level.** Recently, the Consumer Price Index has increased from year to year; inflation has become the usual case instead of the exception. When there is a changing price level, the first-in-first-out method of inventory cost calculation does not provide for removal of inventory profits brought about by the changing price-level. If the last-in-first-out method is applied to the accounts, some of the distortion produced by inventory profits is eliminated. To this extent, the last-in-first-out method is desirable. It also reasonably matches costs against revenues.
If the price-level distortions were eliminated throughout all the accounts by the use of a general price index, then the major argument supporting the last-in-first-out method would be meaningless. The argument, of course, is that the last-in-first-out method removes price-level distortions in inventories.

Recommendations of organizations. The American Institute of Certified Public Accountants stresses uniformity and consistency in application of methods, instead of advocating any specific method.

The Committee on Accounting Procedure states the following:

The primary basis of accounting for inventories is cost, which has been defined generally as the price paid or consideration given to acquire an asset. As applied to inventories, cost means in principle the sum of the applicable expenditures and charges directly or indirectly incurred in bringing an article to its existing condition.27

The Committee further states:

Cost for inventory purposes may be determined under any one of several assumptions as to the flow of cost factors (such as the first-in-first-out, average, and last-in first-out); the major objective in selecting a method should be to choose the one which, under the circumstances, most clearly reflects periodic income.28

The Securities and Exchange Commission is concerned more with adequate disclosure of the methods of inventory pricing used than with the exact method, as long as the method is generally accepted to

27 American Institute of Certified Public Accountants, Accounting Research Bulletin No. 43, op. cit., p. 28.
28 Ibid., p. 29.
reasonably match costs against revenue.

**Earning-power and inventory pricing.** If the price-level fluctuates from year to year, and if the earning power concept of net income is utilized, then the accounts must be adjusted to remove profit distortions caused by the changing price level. This adjustment can probably most consistently be made through the application to the accounts of conversion factors derived from the Consumer Price Index.

If the price-level problems are solved, the last-in-first-out method contributes little to the matching process, and in some circumstances distorts the periodic net income. Since the earning-power net income figure reflects the productiveness of the enterprise in a stated period, special care should be taken to select the inventory pricing method which does not shift profits produced in one period to a succeeding period. Therefore, the last-in-first-out method is satisfactory as a compromise method; the natural flow of costs is ignored to partially correct the accounts for price-level changes. First-in-first-out is the reasonable method when the accounts are adjusted for inflationary or deflationary movements.

**Summary**

This part of the study has included a brief analysis of five current problem areas in accounting: (1) interperiod allocation of income taxes, (2) reporting of unconsolidated subsidiary income, (3) return on investment computations, (4) national or social accounting, and (5) selected
inventory problems.

It was found that the principle of interperiod allocation of income taxes is consistent with the earning-power concept of net income. In fact, in many instances, such allocation is necessary for reasonable matching costs and revenues.

In the treatment of unconsolidated subsidiary income, the equity method appears to be in line with the earning-power concept. Further, the equity method aids in the effective presentation of an overall view of the productiveness of the economic group.

Of the several methods of calculating rate of return to be used for management decision-making purposes, the discounted-cash-flow method most accurately reflects earning-power of the firm. The concept of rate of return on capital employed is concerned with return (profits) in terms of earning-power net income, not with historical or all-inclusive net income, to be of most value to management.

Social income accounts, reporting gross national product for the nation in a period, are constructed along the lines of the earning-power idea of net income. Use of an all-inclusive approach would not distort, however, the productivity measure extremely, because of the averaging effect of extraordinary items, produced by the aggregate accounts.

The study of inventory pricing methods indicates that if problems concerning the changing price-level are solved, the last-in-first-out method contributes little or nothing to the matching process. First-in-first-out theoretically appears to be a more reasonable method when
price-level problems are solved. Special care should be taken to select the inventory pricing method which does not shift net income produced in one period to a succeeding period.
CHAPTER VIII

SUMMARY AND CONCLUSIONS

Summary of the Problem Area

Practically every business enterprise has some kind of an accounting system, but the accounting systems in use today are drastically different from those systems used several decades ago. This change in accounting and in the financial statements produced has been occasioned by the economic change which has taken place the past few years. Significant developments in accounting have resulted, for the most part, from increased activity within the economy of the nation.

Developments in two areas in accounting, income statement theory and balance sheet theory, have tended to stand out as significant. Recently there has been an increase of interest in the income statement. There was a shift of emphasis from the balance sheet to the income statement. Part of the shift was brought about by the realization on the part of businessmen, that earning-power of an enterprise is, perhaps, the one most important factor influencing business decisions. Earning-power information is valuable to creditors, managers, and stockholder-investors alike.

Emphasis on the income information points out the need for a reasonable philosophy of the income statement. In this philosophy of the income statement, the concept of earning-power must be recognized to be
a vital part. This study includes a development of such a philosophy.

**Analysis Concerning the Theoretical Structure of the Income Statement**

Although many differing groups need income information for decision-making purposes, it is desirable and theoretically sound to prepare a *multiple-purpose* income statement. This multiple-purpose statement is indicated because of the core similarity of information needed by all groups, information concerning expected earnings.

To provide information concerning expected earnings, effort in terms of cost-dollars must be matched against accomplishment in terms of revenue-dollars to produce the residual measurement of productiveness, net income.

The concepts of *earning* and *realization* are workable guides in the measurement of revenue-dollars. The realization postulate is not universally, or even generally, the best conceivable method of allocating the net income residuum to operating periods. It is, however, the only workable postulate developed at the present time. It is recommended that realization not be accepted at this point as an accounting *doctrine*, but only as a workable convention. Further study is needed to determine a theoretically consistent method of measuring revenue-dollars. The dollar amount of the revenue valuation must be objectively determined through the customary price aggregate system. Since accomplishment (revenue) is a result of effort (which in most cases can be expressed in terms of management directed costs exerted), then it is consistent
that the matching process must take place in the period in which productive effort is exerted.

Accountants must establish a system of objective verifiable evidence which will lead to reasonable judgment in estimating the productiveness of cost-efforts when they are exerted. There must be a system designed which will predict with reasonable certainty and within reasonable limits the effect of a management action on the net income of a period in which the effort is exerted. The income statement should not be a forecast in the ordinary sense, but it should forecast only the details concerning termination of a transaction which already has been initiated. Thus, the income statement should indicate earning-power based on historical reporting.

The concepts of incurrence and benefitting are workable guides in the measurement of cost-dollars, and should be continued in use in the measurement of net income. During the life of an enterprise, all costs are incurred (with the exception of losses such as "Acts of God") with the intent of eventually producing revenue; therefore, the rule of benefitting does not imply that all costs directly produce revenue in any one period.

Those costs and revenues which can be directed by management in the planning process are basically of the same nature as those "fortuitous and unfortuitous" costs and revenues which are not directly under the control of management. The distinction between the two groups,
however, has a direct bearing on the decisions made from income statement information.

Net income for the year is probably the one most significant figure produced by an accounting system. Earnings per share is another important amount. The usefulness of these two figures should be taken into consideration in the development of accounting income theory.

**Analysis Concerning the Form of the Income Statement**

Problems of form should be solved through a continuing analytical approach. Existing conventions, accepted ways of doing things, should be analyzed and changed where current goals are not being attained.

The nature of the economic system in the United States supports the principle that there should be no ranking of costs, but that decisions are resultant of costs and revenue classification. The single-step form of the income statement is desirable, therefore, unless special usefulness is created through departure from the single-step form.

Useful methods of classification include (1) functional classification, (2) object classification, and (3) management efficiency of economic classification. The most commonly used of these methods is the functional classification, wherein costs and revenues are classified according to their contribution to the ultimate product or to a final operating function.

The object or natural classification presents costs and revenues
according to the type of expenditure or revenue item such as payments to employees and products and services bought. The economic or management efficiency classification presents costs according to fixed and variable categories. Such a classification provides information to investors regarding the efficiency of management. From this kind of statement the investor can evaluate management through comparison of the marginal income ratio to past measures and to the industry. All of these methods of classification should be studied to determine the special applicability in certain industries. For published statements, accountants should justify use of the functional classification by other means than it is traditional.

Accounts should be designed to facilitate conduct of future and current affairs of the business. Financial statement information should be incidental to the construction of accounts, rather than the sole purpose of account construction. Uniform reporting should be encouraged for statements prepared for similar purposes within similar industries to aid in making comparisons.

**Analysis Concerning the Several Concepts of the Income Statement**

In the course of the study several concepts of the income statement were investigated. Among these were (1) the historical or all-inclusive, (2) the current operating or earning-power, (3) the management control approach, (4) the preparation of revised income statements, and (5) the combined statement of income and retained earnings.
The historical or all-inclusive concept and the earning power concept represent the two leading philosophies of the income statement. The pertinent arguments for each were presented and critically analyzed. Current practice reflects the impact of both philosophies, but there is the tendency today for accountants to subscribe to the all-inclusive statement unless some other position is especially justified. Unfortunately, the positions of the American Institute of Certified Public Accountants, the American Accounting Association, and the Securities and Exchange Commission offer no uniform solution to the problem.

Analysis in this study indicates that the earning power concept of net income is the most useful, therefore it is suggested that further study be made of the nature of earning power income. Predicting the net income for a future period involves an analysis of changes in reported profits of several periods preceding the period to be predicted. Analysis of changes in reported profits, in turn, involves marginal cost-revenue relationships. Current income reporting practice makes little or no provision for analysis of marginal factors. Clearly, further study is needed in the area of making managerial decisions through marginal analysis of revenues and costs.

Analysis Concerning the Relationships of Special Areas of Accounting Practice to Earning Power

The study of earning power included a brief analysis of five current problem areas in accounting: (1) interperiod allocation of income taxes,
(2) consolidated statement preparation, (3) return on investment computations, (4) national and social accounting, and (5) selected inventory problems. The purpose of this section of the study was to reconcile accounting theory (earning power aspects) with selected areas of business practice.

It was found that the principle of interperiod allocation of income taxes is consistent with the earning power concept of net income. In fact, in many instances, such allocation is necessary for reasonable matching costs and revenues.

In the treatment of unconsolidated subsidiary income, the equity method appears to be in line with the earning power concept. Further, the equity method aids in the effective presentation of an overall view of the productiveness of the economic group.

Of the several methods of calculating rate of return to be used for management decision-making purposes, the discounted-cash-flow method most accurately reflects earning power of the firm. The concept of rate of return on capital employed is concerned with return (profits) in terms of earning power net income, not with historical or all-inclusive net income, to be of most value to management.

Social income accounts, reporting Gross National Product for the nation in a period are constructed along the lines of the earning power idea of net income. Use of an all-inclusive approach would not distort, however, the productivity measure extremely, because of the averaging effect of extraordinary items produced by the aggregate accounts.
The study of inventory pricing methods indicates that if problems concerning the changing price level are solved, the last-in-first-out method contributes little or nothing to the matching process. First-in-first-out theoretically appears to be a more reasonable method when price level problems are solved. Special care should be taken to select the inventory-pricing method which does not shift net income produced in one period to a succeeding period.
SELECTED BIBLIOGRAPHY

A. BOOKS


**B. PERIODICALS**


___________. "Generally Accepted Accounting Principles." *The Canadian Chartered Accountant*, LXXV (July, 1959), 52-56.


Hoxsey, J. M. B. "Accounting for Investors." *Journal of Accountancy*, L (October, 1930), 251-84.


C. PUBLICATIONS OF PROFESSIONAL ORGANIZATIONS


D. ESSAYS AND ARTICLES IN COLLECTIONS


E. PUBLICATIONS OF THE GOVERNMENT


F. UNPUBLISHED MATERIALS


G. PRINTED SPEECHES


Lee, Ralph E., Jr. "Are We Accounting for Facts or Fables?" An Address before the Accounting Association of LaSalle College Evening Division, Philadelphia, Pennsylvania, October 28, 1959, printed by Arthur Andersen & Company.

Spacek, Leonard. "Accounting Has Failed to Prevent Major Misrepre-
sentations." An Address before Chicago Control, Controllers
Institute of America, April 19, 1956, printed by Arthur Andersen
& Company.

_______. "Phantom Profits as Seen by An Accountant." An Address
before Tax Institute Symposium, Princeton, New Jersey, November 20,
1958, printed by Arthur Andersen & Company.
VITA

Ronald James Thacker, the son of Reagan James and Aurelia Thacker, was born December 17, 1935, in Houston, Texas. He was graduated from Austin High School in June, 1953, and the following September entered the University of Houston. During the four years of undergraduate work, he was employed as an accountant for an industrial firm in Houston. In 1957, he received the Bachelor of Business Administration degree from the University of Houston; and in 1958, he received the Master of Business Administration degree from the same institution. During the academic year 1957-1958, he was a part-time instructor at the University of Houston, and also during that year he was employed as a junior accountant in a public accounting firm in Houston.

In May, 1958, he passed the Uniform CPA Examination and was granted a CPA certificate from the State of Texas. In September, 1958, he entered the graduate school of Louisiana State University. During the time he was a graduate student, he also taught in the Department of Accounting. He is currently a candidate for the Degree of Doctor of Philosophy.
EXAMINATION AND THESIS REPORT

Candidate: Ronald James Thacker

Major Field: Accounting

Title of Thesis: A Study of Income Statement Concepts

Approved:

[Signature]
Major Professor and Chairman

[Signature]
Dean of the Graduate School

EXAMINING COMMITTEE:

[Signature]

[Signature]

[Signature]

Date of Examination:

April 18, 1961