THE INDEPENDENT PUBLIC ACCOUNTANT'S RESPONSIBILITY
AND AUDITING PROCEDURES FOR PROJECTED
FINANCIAL STATEMENTS

by

DAN MILLER GUY

A DISSERTATION

Submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy
in the Graduate School of Commerce
and Business Administration
University of Alabama

UNIVERSITY, ALABAMA
1971
ACKNOWLEDGMENTS

I wish to express my appreciation and indebtedness to all of the individuals and organizations which have provided invaluable assistance to this study.

First, I would like to acknowledge Arthur Andersen & Co. for financial assistance provided by their Doctoral Dissertation Fellowship Program. Receipt of this generous fellowship has enabled me to complete the study without the necessity of continued teaching or doing outside work. For this, I am extremely grateful.

To Mr. Michael O. Alexander, partner, Touche Ross & Co. (Montreal, Canada), I convey my sincerest gratitude and appreciation for his significant contributions. Without his assistance, the study would have been devoid of vital practical experiences. Mr. J. Douglas Barrington of Touche Ross & Co. is also due a note of appreciation.

To Mr. Chris King, partner, Arthur Young & Co. (Birmingham, Alabama), I convey my appreciation for his help in the early stages of the study.

I am deeply indebted to my committee, Professors J. Marion Posey (Chairman), Frederick J. Knight, John Mason, and Charles E. Vinson, for their full cooperation. Their criticisms were most constructive and helpful.
My sincere appreciation is extended to Mrs. Marilynn Hughes and Mr. Joe Wood, two of my colleagues, for their editorial comments. For typing rough drafts of the study, I thank Mrs. Rita Beal. Mrs. Martha Holcomb came to my rescue in the eleventh hour to type the final manuscript.

Finally, I wish to express my appreciation to my wife, Patsy, for her understanding, patience, and encouragement, and to my parents, who through years of encouragement, made this all possible.
TABLE OF CONTENTS

Page

ACKNOWLEDGMENTS ........................................ ii
LIST OF FIGURES ........................................ viii

Chapter

I. INTRODUCTION ........................................ 1

Statement of the Problem ................................ 1
Objectives and Limitations of the Study .......... 6
The Research Procedure ................................. 7
Outline of the Chapters ................................ 9

II. PHILOSOPHIES OF SELECTED AUTHORITATIVE
ORGANIZATIONS ON DISCLOSURE OF
FINANCIAL FORECASTS ................................. 12

American Institute of Certified
Public Accountants ........................................ 13
  Introduction ........................................... 13
  Pro Forma Financial Statements .................... 14
  Financial Forecasts ................................ 17
  Committee on Long-Range Objectives ............ 25
  Conclusion ............................................. 28

Securities and Exchange Commission ................. 30
  Introduction ........................................... 30
  Theory of Investment Value ....................... 31
  Anti-Projection Policy .............................. 35
  Disclosure of Future Data ......................... 39
  Conclusion ............................................. 46

American Accounting Association .................... 49

Federal Communications Commission ................. 52

Canadian Institute of Chartered
Accountants ............................................... 53

Institute of Chartered Accountants in
England and Wales ..................................... 56
  Introduction ........................................... 56
  Review of Profit Forecasts in
  Prospectuses ......................................... 57
## Chapter

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review of Profit Forecasts in Merger Circulars</td>
<td>60</td>
</tr>
<tr>
<td>The City Code on Take-overs and Mergers</td>
<td>61</td>
</tr>
<tr>
<td>The Revised City Code</td>
<td>66</td>
</tr>
<tr>
<td>Conclusion</td>
<td>69</td>
</tr>
<tr>
<td>Summary of the Chapter</td>
<td>71</td>
</tr>
</tbody>
</table>

### III. BUDGETING, PROJECTED FINANCIAL STATEMENTS, AND SALES FORECASTING: AN OVERVIEW | 75

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition, History, and Nature of Business Budgeting</td>
<td>76</td>
</tr>
<tr>
<td>Definition of Budgeting</td>
<td>76</td>
</tr>
<tr>
<td>History and Current Status of Business Budgeting</td>
<td>78</td>
</tr>
<tr>
<td>Fixed and Variable Budgets</td>
<td>84</td>
</tr>
<tr>
<td>Relationship between Accounting and Budgeting</td>
<td>85</td>
</tr>
<tr>
<td>Distinctions between Forecasting, Profit Planning, Long-Range Planning and Budgeting</td>
<td>88</td>
</tr>
<tr>
<td>The Usefulness of Projected Financial Statements</td>
<td>89</td>
</tr>
<tr>
<td>Internal Management Users</td>
<td>90</td>
</tr>
<tr>
<td>External Statement Users</td>
<td>93</td>
</tr>
<tr>
<td>Obstacles to External Disclosure of Projected Financial Statements</td>
<td>104</td>
</tr>
<tr>
<td>The Comprehensive Budget, Master Budget, or Profit Plan</td>
<td>112</td>
</tr>
<tr>
<td>Principles of Effective Budgeting</td>
<td>121</td>
</tr>
<tr>
<td>Sales Forecasting and Budgeting</td>
<td>125</td>
</tr>
<tr>
<td>Reasons for Difficulty in Forecasting Sales</td>
<td>126</td>
</tr>
<tr>
<td>Accuracy of Sales Forecasts</td>
<td>127</td>
</tr>
<tr>
<td>Principles of Sales Forecasting</td>
<td>130</td>
</tr>
<tr>
<td>Sales Forecasting Techniques</td>
<td>133</td>
</tr>
<tr>
<td>Judgmental Techniques</td>
<td>134</td>
</tr>
<tr>
<td>Statistical Techniques</td>
<td>139</td>
</tr>
<tr>
<td>Summary of Forecasting Techniques</td>
<td>149</td>
</tr>
<tr>
<td>Summary of the Chapter</td>
<td>150</td>
</tr>
</tbody>
</table>

### IV. A TENTATIVE STATEMENT OF AUDIT RESPONSIBILITY FOR PROJECTED FINANCIAL STATEMENTS | 154

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit Responsibility for Historical Financial Statements</td>
<td>157</td>
</tr>
<tr>
<td>Statements on Auditing Procedures</td>
<td>158</td>
</tr>
<tr>
<td>Generally Accepted Auditing Standards</td>
<td>160</td>
</tr>
<tr>
<td>Chapter</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>------</td>
</tr>
<tr>
<td>Code of Professional Ethics and Related Interpretative Opinions</td>
<td>161</td>
</tr>
<tr>
<td>Judicial Decisions and Securities Legislation</td>
<td>163</td>
</tr>
<tr>
<td>Conclusion</td>
<td>169</td>
</tr>
<tr>
<td>Audit Responsibility for Profit Forecasts in the United Kingdom</td>
<td>171</td>
</tr>
<tr>
<td>Audit Responsibility for Projected Financial Statements in the United States: A Proposal</td>
<td>177</td>
</tr>
<tr>
<td>Modification of English Practice for Adaptation to the American Environment</td>
<td>178</td>
</tr>
<tr>
<td>A Tentative Statement of Audit Responsibility for Projected Financial Statements</td>
<td>185</td>
</tr>
<tr>
<td>Abrogation of Rule 2.04 and Redefinition of Opinion No. 10</td>
<td>205</td>
</tr>
<tr>
<td>Summary of the Chapter</td>
<td>211</td>
</tr>
<tr>
<td>V. AUDITING PROCEDURES FOR PROJECTED FINANCIAL STATEMENTS</td>
<td>214</td>
</tr>
<tr>
<td>Budgetary System and Control Questionnaire</td>
<td>217</td>
</tr>
<tr>
<td>Top Management Review</td>
<td>218</td>
</tr>
<tr>
<td>Central Budget Staff Review</td>
<td>220</td>
</tr>
<tr>
<td>Sales Forecasting Review</td>
<td>223</td>
</tr>
<tr>
<td>Lower Organizational Levels Review</td>
<td>224</td>
</tr>
<tr>
<td>Conclusion</td>
<td>226</td>
</tr>
<tr>
<td>Forecast Audit Program</td>
<td>226</td>
</tr>
<tr>
<td>Initial Review and Analysis of Past Forecasting Performance</td>
<td>228</td>
</tr>
<tr>
<td>Review of Projected Financial Statements and Supporting Working Papers</td>
<td>234</td>
</tr>
<tr>
<td>Review of Underlying Assumptions</td>
<td>237</td>
</tr>
<tr>
<td>Examination of Other Evidence</td>
<td>238</td>
</tr>
<tr>
<td>Final Steps in the Forecast Audit</td>
<td>241</td>
</tr>
<tr>
<td>Summary of the Chapter</td>
<td>241</td>
</tr>
<tr>
<td>VI. IMPACT OF PROJECTED FINANCIAL STATEMENT DISCLOSURE ON PUBLISHED FINANCIAL REPORTS AND AUDIT OPINIONS</td>
<td>244</td>
</tr>
<tr>
<td>Published Financial Reports</td>
<td>244</td>
</tr>
<tr>
<td>Delayed Reporting of Projected Financial Statements</td>
<td>245</td>
</tr>
<tr>
<td>Comparative Historical and Projected Financial Statements</td>
<td>247</td>
</tr>
</tbody>
</table>
Chapter

Interim Reporting of Projected Financial Statements ........................................... 251
Probabilistic Projected Financial Statements .......................................................... 253
Long Form Projected Financial Statements ............................................................ 259
Conclusion .................................................................................................................. 262
Forecast Audit Reports .............................................................................................. 264
The Unqualified Opinion ............................................................................................ 267
The Qualified Opinion ............................................................................................... 269
The Adverse Opinion ................................................................................................. 270
The Disclaimer of Opinion ......................................................................................... 271
The Piecemeal Opinion ............................................................................................. 272
Conclusion .................................................................................................................. 273
Summary of the Chapter ............................................................................................ 274

VII. SUMMARY AND CONCLUSIONS ........................................................................ 276

Restatement of Objectives ......................................................................................... 276
Summary and Conclusions ......................................................................................... 277
Suggestions for Further Research .............................................................................. 288

SOURCES CONSULTED ............................................................................................ 292

APPENDICES ............................................................................................................ 305
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Comprehensive Budget</td>
<td>114</td>
</tr>
<tr>
<td>3</td>
<td>Analysis of Variations from Profit Plan Year Ended December 31, 1965</td>
<td>250</td>
</tr>
<tr>
<td>4</td>
<td>A Conceptual Framework for Disclosure</td>
<td>261</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

Statement of the Problem

In an address delivered at a meeting of the Robert Morris Associates on October 30, 1928, Henry B. Fernald advocated that business firms disclose their budgets for the ensuing six months or year and that these be audited by public accountants.\(^1\) Nineteen years later, Stuart A. Rice in a speech before the Sixtieth Annual Meeting of the American Institute of [Certified Public] Accountants made the following statement:

> In the government it is the custom to publish budgets but not the final results of operations. In private accounting the custom is the reverse. I should like to see business firms undertake to publish their budgets as well as financial statements because (1) it will give valuable information to stockholders and enable them to judge the planning ability of their managers and (2) provide valuable information on business plans and business operations (financial statements) for economists and statisticians.\(^2\)


Even though Fernald and Rice advocated disclosure of budgets years ago, the idea remained dormant until the 1960s. Since then, the concepts of budget publication in financial reports and budget examination by independent public accountants have increasingly appeared in the writings of both accounting academicians and practitioners. For instance, consider the following remarks.

Joseph L. Roth, past chairman of the American Institute of Certified Public Accountants' Committee on Auditing Procedure stated:

The public demand for more accountability by management may lead inevitably but reluctantly . . . to the practice of furnishing profit forecasts for future periods. Certainly this information would be extremely useful to credit grantors, investors, potential investors and other users of financial reports. To a considerable degree any interest these users may have in present and past performance is only to provide a means of guessing at future earnings prospects. Wouldn't it be better to have management's well-considered plans?3

Marvin L. Stone, past president of the American Institute of Certified Public Accountants in an address before the Canadian Institute of Chartered Accountants indicated that forecasting should no longer be considered as "black magic" by the accounting profession, and although the profession has a rule against audits of

---

forecasts, the time has come for a reevaluation of the whole area of forecasting needs.\(^4\)

Howard F. Stettler, professor of accounting at the University of Kansas, writing in the *Journal of Accountancy* remarked: "By the year 2000 it is likely that CPAs will be expressing independent opinions on the fairness, or reasonableness, of projections of cash flow, financial position and operating results for at least the year following the date of accompanying audited financial statements."\(^5\)

Along somewhat similar lines, Sidney Davidson, Dean of the Graduate School of Business at the University of Chicago said: "By the end of the 1970s, we can look forward to financial reports dealing with ... future plans on a complete and formal basis, with some type of attestation by the independent accountant; ..."\(^6\)

From the above comments, it is evident that disclosure of budgets or projected financial statements and the accountant's involvement therein are attracting increasingly more attention. Further evidence of the growing


recognition of the accountant's role in projections is the City Code on Take-overs and Mergers, published in London in March, 1968, and revised in April, 1969. Paragraph 15 of the revised code requires that when profit forecasts are included in merger or take-over circulars, the accounting bases and calculations for them must be examined and reported on by the company's auditors and that the circular must contain the accountant's report.

To furnish guidance to its members concerning their responsibility under the City of London code, the Council of the Institute of Chartered Accountants in England and Wales, in consultation with the Institute of Chartered Accountants of Scotland, has issued two statements which suggest the main points that the reporting accountant should consider in carrying out profit forecasts examinations. Thus, English chartered accountants currently have some audit responsibility for projected financial data. As a result, disclosure of projected financial statements is no longer simply an idea bandied about by academic theoreticians and idealistic practitioners; by

---


English practices, the concept has become operative to a limited extent.

The majority of the literature on projected financial statements reveals that the publication of projections in financial reports would be extremely useful and relevant. However, one of the apparent obstacles to their disclosure is the accounting profession's lack of refinements necessary to audit projected statements. In other words, the profession has not identified the auditor's responsibilities for projected financial statements, nor has the profession developed auditing procedures for these projected statements. In fact, except for Ijiri's work, and the aforementioned pronouncements by the Institute of Chartered Accountants in England and Wales, very little effort has been directed toward gaining insight into the problems of verification. No tentative statements on the auditor's responsibility have been advanced, and auditing procedures for projected financial statements are lacking. Stettler in considering the problem stated:

Forward accounting, even though involving many imponderables, is basically a quantitative problem and can thus be dealt with effectively from an auditing standpoint. The system for developing needed estimates can be reviewed in much the same manner as a system of internal control. Although the figures cannot be checked with reality before they are released, they can

---

be related to commonly held projections of future economic conditions, extrapolation of past experience, anticipation of expected changes in material and labor costs, tax rates, etc., and the reasonableness of the relationships of expected figures.  

**Objectives and Limitations of the Study**

This study has a threefold purpose: (1) to delineate the auditor's responsibility in expressing an opinion on projected financial statements, (2) to determine auditing procedures for the examination of projected financial statements, and (3) to develop suggested audit opinion formats to be used in reporting on projected financial statements.

Projected financial statements are defined herein as the next fiscal period's balance sheet and income statement. Furthermore, it is assumed that the customary forms and bases (i.e., cost principle, revenue realization, matching concept, and going concern) of financial reporting will be continued. Continuation of the contemporary accounting framework should provide for maximum practically in extending audit responsibility to projected income statements and balance sheets.

Instead of referring to "disclosure of projected financial statements" the literature employs the concept of "budgeted financial statements" or "budgetary disclosure." Budgeted and budgetary are used in today's society.

---

to mean many things, and there even appears to be some aversion to the terms. To some the word "budgeted" is associated with paucity and niggardliness, while to others it might convey expenditure limitations imposed by a firm's management for the coming fiscal year. To avoid ambiguities such as these the term "projected financial statements" is employed in this study instead of budgeted financial statements or budgetary disclosure.

The Research Procedure

The delineation of audit responsibility and the development of audit procedures for projected financial statements are based primarily on logical reasoning, employing as a backdrop the American auditor's responsibility for historical financial statements and the English auditor's responsibility for profit forecast audits.

To construct a statement of audit responsibility for projected financial statements, the generally accepted auditing standards as presented in Statements on Auditing Procedures No. 33 were examined in an attempt to determine what additional duties are necessary in order for the present auditing standards to adequately serve as benchmarks for examining projected financial statements. The generally accepted auditing standards take on new meaning when they become guides for the auditor's examination of projected financial statements. For example, to render an opinion on a financial statement dealing with the future,
the general standard on adequate technical training and proficiency must, of necessity, take on different dimensions. Tools and terms rarely used in traditional accounting must become a part of the auditor's working knowledge. This study identifies those areas where the independent accountant's professional competency will have to be expanded.

Auditing procedures for projected financial statements were developed by using the following approach:

1. Investigation of forecasting and budgeting techniques used in projecting income statements and balance sheets.
2. Delineation of the auditor's responsibilities in reporting on projected financial statements.
3. Review of the methodology of auditing historical financial statements.
4. Investigation of contemporary suggestions and practices for auditing projected financial statement data, e.g., Ijiri's writings and profit forecast audit programs used by chartered accountants.
5. Derivation of audit procedures for reviewing projected income statements and balance sheets.

The development of forecast audit procedures should be based on the auditor's review of the client's budgeting
system and budget working papers to determine if the data on which the projected statement items are based are sound, if the methodology used in the projections is reasonable, and if the methodology has been carried out properly. For example, in making this examination the sales forecast constructed by the client is of first importance since it provides the foundation for the projected income statement as well as for the projected balance sheet. Thus, given the importance of the sales forecast, the auditor must determine if it is externally consistent with economic indicators published by reliable sources. In carrying out this review, the auditor should be concerned with prospects for the economy, prospects for the industry, and especially prospects for the specific client which he is examining. Obviously, the auditor must become proficient in handling new kinds of evidence.

In publishing projected financial statements in financial reports, a report format allowing a direct comparison between projections and actual results is needed. Suggestions for such a reporting format are presented in this study. Furthermore, suggested audit opinions for reporting on projected statements are also presented. The forecast audit opinions are based on modifications of historical audit opinions and profit forecast audit reports.

Outline of the Chapters

The development of audit responsibility and auditing procedures for projected financial statements is divided
into seven chapters. In Chapter II, the philosophies of selected authoritative organizations (those exerting influence upon auditors in the United States) toward disclosure of financial forecasts are considered. Among others, the Institute of Chartered Accountants in England and Wales is discussed in detail. The English Institute represents the first accounting body concerned with auditing future data; therefore, it is logical to assume that should an American organization become involved in this area, the experiences of English practice will be drawn upon.

To provide a proper foundation for constructing audit responsibility for projected financial statements, Chapter III sets forth an overview of the comprehensive budgeting process with specific emphasis on the projected income statement and balance sheet. Auditing procedures cannot be applied to methods used for budgeting and forecasting unless the techniques used by management in preparing projected financial statements are known and understood. Also in Chapter III, both internal and external uses of projected financial statements are discussed.

In Chapter IV, a tentative statement of audit responsibility for projected financial statements is constructed. The tentative statement is based on an analysis of the American auditor's responsibility for historical financial statements and the English chartered accountant's responsibility for auditing profit forecasts.
In Chapter V, the audit procedures for projected financial statements are developed and discussed. The audit procedures are divided into (1) a budgetary system and control questionnaire, and (2) a forecast audit program.

The impact of projected financial statement disclosure on financial reports is discussed in Chapter VI, and suggested forecast audit opinions are developed.

In Chapter VII, the findings of the previous chapters are summarized and recommendations for further research are noted.
CHAPTER II

PHILOSOPHIES OF SELECTED AUTHORITATIVE ORGANIZATIONS ON DISCLOSURE OF FINANCIAL FORECASTS

The future of the auditor's role in financial forecasting depends largely on the approach and philosophy of certain organizations toward disclosure of financial information. Some notion of the philosophies of these agencies, institutes, and associations can be gained by examining relevant position statements concerning opinions, audits, or disclosure of financial forecasts. The main emphasis in this chapter is on organizations with influence on auditors in the United States. The most influential organizations with regard to disclosure of forecasts are the following:

1. American Institute of Certified Public Accountants.
5. Canadian Institute of Chartered Accountants.
6. Institute of Chartered Accountants in England and Wales.

The order of discussion flows from organizations with limited responsibility for forecasted data to those
organizations having broader responsibility. In the discussion one organization that is currently concerned with disclosure of financial forecasts is omitted—the Institute of Chartered Accountants in Australia. The Australian Institute has an ethical rule prohibiting a member from reporting on an estimate of future profits or dividends, but the rule has recently been relaxed in certain instances to enable the Australian auditor's responsibility to be brought into line with pronouncements of the Institute of Chartered Accountants of England and Wales.¹ As a result, English audit responsibility and the duty of the Australian auditor are sufficiently similar so that discussion of one is adequate to demonstrate the obligation of the other.

American Institute of Certified Public Accountants

Introduction

The American Institute of Certified Public Accountants (AICPA) divides responsibility for disclosure of future data into two categories: (1) pro forma statements, and (2) forecasts. When a specified set of conditions is met, the Council of the AICPA sanctions the certifying of certain pro forma financial statements. However, AICPA members are prohibited from attaching their name to other

¹Institute of Chartered Accountants in Australia, "The Responsibility of the Auditor or Reporting Accountant in Respect to Estimates of Future Profits," Chartered Accountant in Australia, XL (May, 1970), 36.
types of forecasts if such attachment appears to vouch for the accuracy of the projection. As long as the accountant does not add credibility to the resulting projections, the AICPA does not oppose the management services activities of its members in preparing or assisting in preparation of projected financial statements or forecasts. In essence, the certified public accountant can prepare a financial forecast but cannot express an opinion on it and must disclaim any responsibility for its reliability.2

As to the future, the AICPA Committee on Long-Range Objectives has noted the increasing importance of future data relative to historical data and has acknowledged the possibility of expressing an opinion on the soundness of financial forecasts.3

The AICPA position is detailed and highlighted historically in the following sections on pro forma statements, financial forecasts, and the activities of the Committee on Long-Range Objectives.

Pro Forma Financial Statements

The term pro forma, according to the AICPA promulgations and its acquiescence to certain accounting practices, has two meanings. First, pro forma refers to a balance

2 A less restricted interpretation of the AICPA's prohibition of forecasts is presently evolving. Discussion of this is deferred until Chapter IV.

sheet adjusted to reflect a proposed financial transaction such as a future flotation of common stock. Secondly, in practice pro forma also refers to a historical income statement (earnings summary) adjusted to reflect a merger or a proposed transaction. The pronouncements of the AICPA on pro formas pertain only to balance sheets, but recommendations on pro forma balance sheets have been widely applied to income statements.

Since the early 1900s accountants have rendered opinions on balance sheets with certain items changed to show the effect of future transactions. The first AICPA recommendation on pro forma balance sheets was reported in 1920 when the Special Committee on Procedure suggested that:

Whenever a certificate is given to a pro forma balance sheet, in which, because of proposed financial arrangements, any items of assets or liabilities are changed from the amounts of the actual balance sheet of the same date, the amounts by which such items are changed shall be distinctly shown, so that it may be evident in what manner the actual financial condition will be altered when, as and if the proposed financial arrangements become effective.\(^4\)

Within two years after the above recommendation, the practice of expressing an opinion on pro forma balance sheets had grown to such an extent that it was deemed necessary to reconsider the accountant's responsibility. Consequently, the Special Committee on Cooperation With

Bankers recommended that the accountant certify a pro forma balance sheet only when four conditions were met. These conditions were:

1. 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;

2. If the interval between the date of the statement and the date of the subsequent transaction is reasonably short—not to exceed, say, four months;

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

4. If the character of the transaction to which [sic] 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.5

Not all accountants were in agreement as to whether pro forma balance sheet disclosure produced beneficial results. In fact, an editorial in the September, 1933, Accounting Review concluded that the average pro forma balance sheet was essentially misleading. Therefore, the authors reasoned, accountants should abandon the "giving-effect" balance sheet. "Until the proposed financing has been spent, the accountant is indulging in dangerous and

---

impossible forecasting." Nevertheless, the accounting profession today is still guided by four conditions approved at the AICPA's annual meeting on September 18, 1923.

Financial Forecasts

Other than the narrowly defined pro formas, the AICPA does not permit the expression of an opinion on financial forecasts or projected financial statements. This prohibition comes from the belief that forecasting is mainly an art which cannot be practiced with reliability.

Historically, it was not until 1929 that the AICPA responded in a positive manner to the problems involved in reporting on projected statements. In that year the practices of a member regarding estimates of future earnings were brought to the attention of the Committee on Professional Ethics. The details and outcome of the case are unknown since the member could not appear before the committee because of illness of his partner. The committee simply observed that the case involved the important question of the accountant's role concerning earnings forecasts.7

In 1931 the question of AICPA members participating in earnings forecasts was answered. The Executive


Committee and the Committee on Cooperation With Bankers concurred with the Committee on Professional Ethics in holding that it was improper for an accountant to certify statements of future earnings. The position of the ethics committee was officially approved by the Council of the AICPA and the following rule was drafted:

No member or associate shall sign or certify an estimate of earnings contingent upon future transactions. This rule shall not be construed to inhibit the proper assistance of clients in the preparation of estimates of future earnings, provided the member or associate concerned does not permit his name to be used in conjunction with such forecasts in any manner which might lead third parties to believe that he had verified their accuracy.8

On April 11, 1932, the Council adopted the above rule as a policy resolution and resolved further that violation of the prohibition against earnings forecasts would be a cause for charges under Article V of the by-laws pertaining to termination of membership.9 On January 6, 1941, when the rules of professional conduct were being revised, the 1931 rule was adopted as the forerunner of Rule 2.04 of the Code of Professional Ethics.10

---


The profession accepted the imposed restraint until 1959 when some doubt developed concerning the rule's compatibility with management service engagements. In order to clarify responsibility in the preparation and presentation of budgets to clients, the Committee on Professional Ethics in November, 1960, issued Opinion No. 10 entitled, "Responsibility of Members for Pro Forma Statements and Forecasts Under Rule 2.04." Opinion No. 10 provided:

In preparing for management any special purpose financial statements anticipating results of future operations, a member must disclose the source of the information used and the major assumptions made, and he must indicate that he does not vouch for the accuracy of the forecast.11

The ethics committee's interpretation of Opinion 10 includes the following major points:

1. Rule 2.04 does not prohibit a member from preparing, or from assisting a client in the preparation of, anticipated financial statements and analyses.

2. When a member associates his name with such statements and analyses, it shall be presumed that such data may be used by parties other than the client.

3. Full disclosure must be made of the sources of information used, and the major assumptions made in preparing the statements.

---

4. The character of the work performed by the member and the degree of responsibility he is taking should be indicated.

5. If a report is attached to the statements, the member must indicate that he does not vouch for the accuracy of the forecast.\footnote{Ibid.}

Effective March 3, 1964, Rule 2.04 of the AICPA's code was modified to read:

A member or associate shall not permit his name to be used in conjunction with any forecast of the results of future transactions in a manner which may lead to the belief that the member or associate vouches for the accuracy of the forecast.\footnote{Ibid., p. 4.}

The new rule is broader and extends the prohibition of opinions to all projected financial statements and forecasted data. The prior rule specifically referred only to earnings forecasts.

Carey and Doherty in explaining the rationale behind Rule 2.04 offered the following:

The reasons for this rule are evident. Opinions of CPAs on financial statements showing current position and the results of past operations, based on adequate examination, are relied upon to an extent which indicates a high degree of public confidence.

The CPA certificate has acquired such prestige that the appearance of the name of a certified public accountant in conjunction with financial data inevitably adds credibility.
Public confidence would be impaired if certified public accountants commonly permitted their names to be used in conjunction with forecasts of the results of future transactions, or other data not susceptible of adequate substantiation. [Emphasis supplied.]

The philosophy of the profession's members, as reflected by the passage of Rule 2.04 and Opinion No. 10, is best described by certain editorial comments in The Journal of Accountancy (hereafter referred to as The Journal). Even before the prohibition against forecasts became part of the code of ethics, opinions on forecasts were regarded as taboo, and the accountant was discouraged from associating with budgets or anything applicable to the future. An editorial in The Journal (July, 1934) entitled, "Prophecy Has No Part in Accountancy," quoted The Accountant (London) May 19, 1934, concerning a prospectus filed by a newly created Irish company. The prospectus contained estimates of revenue, expenses, and profit based on the experience of similar enterprises in Dublin. The estimate of future profit was prepared by directors of the company and reviewed by outside auditors. The auditors reported that, if the anticipated results were realized, dividends on preferred stock would be covered more than 3.5 times and 29.7 per cent would be earned on the common stock. Continuing their report, the auditors added that working capital needs and proposed capital.

expenditures were also reviewed. In passing on the prospectus, the editors of *The Accountant* expressed regret over publication of the report because it covered information outside the competence of chartered accountants.  

The *Journal* supported the English philosophy by commenting on the dangers of predictions.

> . . . the accountant who would attach his name to an estimate would be a fool; . . . even in normal times . . . there is no excuse for dealing in futures. It would be as dangerous for a lawyer to practice medicine as for an accountant to wear the mantle of a prophet.  

A letter taking exception to the above position was discussed in the August, 1934, issue of *The Journal*. The rebuttal showed concern for the important role of the accountant in reviewing and constructing a budget for clients. Pertaining to the statement that prophecy has no part in accountancy, the writer countered: "... is it not time that this outworn dogma be removed from the unwritten laws of accountancy?" Then he proceeded to ask: "Why discredit or call a man a 'fool' if he should use this same ability [the accountant's interpretive ability] to forecast results which may reasonably be expected and make these forecasts available to others?"

---


16 Ibid.


18 Ibid., p. 89.
In a second editorial the editors remarked that the first was published with the notion that it would meet unqualified endorsement--but such was not the case. The editors consequently reemphasized:

The accountant deals with the past. He has nothing whatever to do with the future. . . . As an accountant his value to the community rests upon his ability to analyze facts, and a fact, as everyone knows, is something that will be done. . . . Prophets are rare creatures and most of them are wrong. Far safer is it for the accountant to deal with accounts and let theoretical prognostication fall to some other man.19

In September, 1934, the editors were again criticized for their statements that the accountant deals only with the past and has nothing whatsoever to do with the future. Fernald, in his letter to the editors, disagreed with the validity of the statements that deny the accountant's important part in helping a client prepare budgets. He reasoned that while no accountant should attempt to certify any amount receivable in the future, or any expenditure which might be required to produce a given amount of future revenue, the profession should admit that accountancy relates to the future as well as to the past.20

Immediately following Fernald's letter The Journal replied, "... to include budget making ... as a part

---


of true accountancy is, in our conception, unjustified."21 Perhaps, the editors were not aware of the 1931 definition of "accountancy" as advanced in Accounting Terminology. Accountancy was defined as:

The profession dealing with methods of recording business transactions, with the correct statement of financial affairs, with the guidance of business men in interpreting their accounts, and with the application of sound accounting principles to future development of business, as in the preparation of budgets. [Emphasis supplied.]22

The doctrine that accountants must deal only with historical transactions while their clients deal with the future persisted in the American profession until the release of ethical Opinion No. 10 in 1960. Today this deep-rooted belief has still not seen its complete demise. Robert H. Montgomery best summarized the historical orientation of the profession.

We seek the truth in accounts: That means past transactions. We never have and never will assume to know whether or not the future price level, the future dollar, the future demand for inventories will insure sales or profitable use of facilities beyond or equal to balance-sheet dates.23

References:


Committee on Long-Range Objectives

In 1956 the AICPA's Committee on Long-Range Objectives was created with the charge of determining the shape of the profession's future. During the first five years of the committee's existence, each member prepared research papers on timely topics having future implications. After these resulting papers had gone through a number of drafts, the committee either submitted the manuscripts for publication in The Journal or submitted them to the AICPA as position papers to be implemented as Institute policy.

One of the papers, subsequently published in The Journal, dealt with the certified public accountant's future responsibility for projected financial statements. Bevis, in discussing the future role of the auditors, brought out that one of the excellent avenues for auditing's future is in the area of "prospective accounting." He recommended extending the attest function\(^\text{24}\) to include certification of business planning.\(^\text{25}\) As a result of this publication and a resolution adopted by the Council (to identify those areas where the need for the attest function exists, and to promulgate such information to its members), the AICPA has implicitly acknowledged the

\(^{24}\)The attest function results in the expression of an opinion by an independent expert that a communication of economic data by one party to another is fairly presented.

possibility that Rule 2.04 may not be relevant to society's future needs.\(^{26}\)

The last four years of the planning committee's work was approached somewhat differently from the first five years. The committee invited a number of outstanding authorities from such disciplines as mathematics, sociology, and psychology to act as consultants. Each consultant was asked to submit his thoughts on an assigned question. Thereafter, the consultant spent a day before the committee in discussion. At the end of each of these sessions a member of the committee prepared a paper summarizing the main points emerging from the discussions.

Two of the summary papers contained ideas pertaining to the certified public accountant's future audit domain. Permeating the presentation of Paul F. Lazarsfield, Professor of Sociology at Columbia University, was the serious need for social measurement presently existing on the boundaries of traditional accounting practice. According to Lazarsfield, the need for measurement and attestation in these fringe areas is great. For example:

\[ \ldots \text{budgeting and auditing of scientific research projects is a completely new problem in our society.} \ldots \text{at the present time governments and foundations do not know how to budget research projects and they do not} \]

know how to audit research budgets submitted to them.\textsuperscript{27}

The accountant, to improve his contribution to society, needs to become involved in these new measurement areas because problems of planning future activities, budgeting for them, and attesting to their effectiveness are extremely complicated.\textsuperscript{28}

In another summary paper based on discussions by D. Abraham Charnes and William W. Cooper, professors of mathematics and economics respectively, the need for accountant expertise in the forecasting and projecting field was advanced sharply. \textsuperscript{29}

People are more interested in the future than in the past. As projection techniques become more efficient, the CPA is going to be asked to certify to projections of the future as well as to records of the historical data of the past. If the CPA cannot or will not undertake this type of attestation, some other person will perform this function—perhaps the operations researcher. \textsuperscript{[Emphasis supplied.]}\textsuperscript{29}

Culminating the work of the Committee on Long-Range Objectives was the publication of Carey’s \textit{The CPA Plans}...


\textsuperscript{28}\textit{Ibid.}, pp. 624-625.

for the Future which summarizes the papers and discussions presented before the committee plus certain comments from other relevant books and articles. Carey said:

Most stockholders today are not so much interested in what management has done with their money in the past . . . as they are in the likelihood of increased earnings in the future. They think of themselves for the most part as in-and-out investors, not as permanent owners of the enterprise . . . .

The CPA of the future therefore might well shake off his traditional reluctance to associate his name with data which are not verifiable as arising from past events . . . .

Evaluation of a corporation by investors or other interested parties could be greatly facilitated by data which joined the report on past results and current position to responsible projections, appropriately qualified, of the probabilities of the future.30

Conclusion

The AICPA considers the auditing of financial forecasts a "sinister black art"31 the practice of which would not yield beneficial professional results. No generally accepted methods govern forecasting practices; hence, the accountant has no basis for evaluating the credibility of a projection. To associate the auditor's opinion with a true estimation, according to the AICPA, would serve to lessen the public confidence and trust which presently attaches to the opinion.


31 Marvin L. Stone, "From the President," The CPA, XLVIII (June, 1968), 2.
Certified public accountants are forbidden to grant an opinion on a forecast other than a pro forma financial statement meeting a set of rigorous conditions. However, they are permitted by Opinion No. 10 of the Numbered Opinions of the Committee on Professional Ethics to assist clients in the preparation of budgets and other types of projections. To go further, and render an opinion on a client's forecasted or budgeted financial statement, is prohibited by the current interpretation of ethical Rule 2.04.

According to the Committee on Long-Range Objectives and a past president of the AICPA, the time has come for a critical review of Rule 2.04. The four rules passed by the AICPA in 1923 and Opinion No. 10, along with Rule 2.04, reflect the strong influence on accounting pronouncements of the banking community and the impact of the questionable accounting convention of conservatism. Revised rules with proper disclosure safeguards could, "... open many new areas of service without diminishing the esteem presently afforded the certified public accountant's opinion by users of financial statements."  

The present chairman of the AICPA's Auditing Procedure Committee recently told members of the Council:

In the years ahead, the attest function by independent CPAs may be extended to a number of areas which would be rare, if not unheard

---

32 Ibid., p. 11.
33 Ibid.
of today . . . One such area--opinions on forecasts--may give CPAs a unique opportunity. 34

The most conspicuous sign of change in the AICPA philosophy on forecasts is a project, "Opinions on Forecasts," currently awaiting research. The project was originally scheduled with a final-draft target date of December, 1970. 35 However, the priority was recently revamped deferring the research work until later.

Securities and Exchange Commission

Introduction

The Securities and Exchange Commission (SEC) position on disclosure of future data in registration statements and prospectuses appears to be somewhat inconsistent. In the broadest view the SEC adheres to an anti-projection philosophy. However, there are situations in which it requires, or at least permits, the presentation and disclosure of estimates, projections, or transactions that are expected to take place in the future.

One approach to describing the philosophy of the SEC requires a historical analysis of the theory of investment value (which governs the reporting requirements of the SEC) and the present day anti-projection policy. In addition


to discussion of these two concepts, the Securities Act is reviewed for matters relating to the reporting of future data.

Theory of Investment Value

The main concept underlying SEC reporting requirements is the theory of investment value. The theory in essence means that the intrinsic value of an investment is dependent upon the "future earnings" of the enterprise. Stated more pragmatically, the theory of investment value connotes that the investor's main concern is his ability to predict the earnings of a security he is about to buy, hold, or sell.

SEC practice is rational in employing the future earnings concept since the theory is rooted in both law and economics. In law for instance, since 1893 the Supreme Court has insisted that the capitalized future earnings capacity of the enterprise be the yardstick for the determination of the rights received by new securities resulting from a reorganization. According to Justice Douglas in Consolidated Rock Co. v. DuBois, "Future earnings capacity of the enterprise is the appropriate criterion for the determination of solvency in connection


with reorganization plans . . .; valuations for other purposes are not relevant to the issue, . . .".38

The adherence to the future earnings concept pervades economic literature. The value of a business enterprise determined by its actual and potential earnings capacity finds support in such classic works as Bonbright's Valuation of Property (1940), Graham and Dodd's Security Analysis (1940), Dewing's The Financial Policy of Corporations (1941), and Williams' The Theory of Investment Value.39

In fact, according to one researcher the central theme ingrained in economic income concepts is the importance of expected income or ex ante income as contrasted to reported income results or ex post income.40

The SEC requires financial disclosure in prospectuses in a form apparently designed to allow the potential buyer of a security to project future earnings. Regulation S-X (containing the requirements as to form and content of financial statements) specifies that the income statement


should separately state gross sales; discounts, returns, and allowances; cost of goods sold; operating expenses; selling, general, and administrative expenses; provision for doubtful accounts; and other general expenses.\(^{41}\)

In 1940 the SEC set forth the rationale for the classifications applicable to the income statement.

... one of the essential purposes of the profit-and-loss statement is to furnish the investor or prospective investor with adequate historical data definitive of past earning power, and of prime importance in forecasting future earning power. In order either to judge the past or to forecast intelligently, an investor must have not only a record of past earnings or losses, but also the significant details as to how the particular results were obtained... If there is made available the historical record of sales, cost of sales and the resultant profit margin, the investor is provided an important guide in calculating future costs in relation to future sales. [Emphasis supplied.]\(^{42}\)

Another SEC practice providing the investor a foundation for projecting earnings is the required pro forma income statement that adjusts past period operations to give effect, retroactively, to a transaction that has taken place or is expected to take place. For example, in a merger, companies which previously operated as separate entities are required to combine their income statements for periods prior to the combination. The purpose of this


\(^{42}\)American Sumatra Tobacco Corporation, 7 SEC 1033, 1041-1042 (1939).
is to present the operating results which might have been achieved had the companies merged at the beginning of the earnings summary. The logic of the recasted earnings summary is, of course, to enable the investor to better project the earnings trend of the combined firms.

The SEC concern with predictability is also evident when the past operating results are of no real value in a prospectus because of the entity's product-line change. The SEC requires exclusion of past data from registration statements when a radical change has taken place in the product line of the registrant. In one case a company had devoted its past history to the production of war materials. After the war, the company filed a registration statement to raise funds by sale of common stock in order to engage in production of fractional horsepower motors. The SEC suggested that the past earnings record be omitted from the prospectus since the firm's old business was of little value to any estimate of future earnings.

The rules on product-line disclosure provide a more recent example of the SEC's concern with presenting historical data in the most useful manner for constructing

---

45Ibid.
projections. The breakdown of sales and earnings is necessary if future prospects are to be assessed intelligently.

Given the investment value concept and the SEC's concern in trying to implement it, the question arises, if the determination of future earnings is the prime task confronting the investor, why not require a direct prediction of earnings?

**Anti-Projection Policy**

There are four major reasons why in most cases the SEC does not require or permit projected data of any type. These are:

1. Legal grounds.
2. Past experiences.
3. Reliance placed on AICPA.
4. Philosophical grounds.

**Legal grounds.** The legal reasons for the prohibition of projections are based on common law. Bona fide prognostications are considered in the realm of opinion according to common law; hence, if a projection is not realized, actions will not uphold in fraud or deceit.

---


48 The common law doctrine that false prophecies are not adequate grounds for fraud is currently being tested in a shareholders suit against LTV Electronics, a subsidiary of Ling-Temco-Vought, Inc. The complaint charges that LTV Electronics made misleading earnings projections for 1968, the first quarter of 1969, and all of 1969. See Wall Street Journal, June 26, 1970, p. 26.
The Securities Act is based on a common law interpretation; thus, the liability sections of the Act predicate liability upon misstatement or omission of a fact.\textsuperscript{49} Since a prediction is not a fact, neither the company nor its experts and underwriters can be held liable for a false projection of financial data. Thus the SEC refuses to accept prognostications in registration statements, prospectuses, and proxy statements because to do so would give those making such forecasts the benefit of influencing third parties without placing liability on those responsible.\textsuperscript{50} Significantly, Rule 14a-9 prescribing situations which constitute false and misleading proxy statements, list predictions of future market values, earnings, or dividends as its first example.\textsuperscript{51}

Past experiences. The SEC prohibits forecasted data in the registration statement and the prospectus because material deviations between actuality and estimates frequently occur. Heller presented two cases illustrating the experiences of the SEC. In both cases the projections were not verified by accountants.


\textsuperscript{50}Commission precedents that estimates are no more than informed guesses are: American Kid Company, 1 SEC 694 (1936), and Thomas Bond, Inc., 5 SEC 71 (1939).

Case 1

... in 1955 a prominent engineering firm made an estimate of future earnings of a company engaged in the business of supplying large television antennae to communities which could not otherwise receive television signals. The engineering firm's estimate and the actual earnings for the years 1956-1959 inclusive are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimate of Earnings</th>
<th>Actual Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1956</td>
<td>$1,524,699</td>
<td>$125,289</td>
</tr>
<tr>
<td>1957</td>
<td>3,177,999</td>
<td>166,133</td>
</tr>
<tr>
<td>1958</td>
<td>5,172,285</td>
<td>105,280</td>
</tr>
<tr>
<td>1959</td>
<td>7,919,380</td>
<td>397,655</td>
</tr>
</tbody>
</table>

Case 2

In a registration statement filed by a uranium mining company in 1956 engineering estimates were proposed to be included which predicted a capital outlay per ton of uranium product of $5.17 per ton, and operating costs of $9.42 per ton. On the basis of these predictions it was sought to include an estimate of earnings of the company for the next five years. The Staff of the Commission refused to permit the inclusion of such estimates. The actual capital outlay per ton in 1959 was approximately $7.15 and the actual operating costs in that year were approximately $11.41 per ton. The actual operating and capital costs were thus approximately $3.99 per ton in excess of the engineering estimates.52

Reliance placed on AICPA. Another rationale for the anti-projection policy is the absence of an independent expert who will vouch for a company's forecasts. As stated previously, the SEC prefers to deal with fact as opposed to opinion. Accordingly, the prospectus includes only data that can be verified by some expert. The SEC

maintains that no expert can speak with authority on forecasting since there is no professional training that qualifies anyone as being clairvoyant.\textsuperscript{53}

Solomon felt that the SEC will not allow projections because certified public accountants are unwilling to verify such forecasts. The accountants rely on Rule 2.04 and the practices of the AICPA ethics committee in effectively limiting their responsibility for projected financial statements. In turn, according to Solomon, the SEC prohibits projections because the organized practice of public accounting dangles from a rule that enables it to avoid an increasing responsibility. Completing the circle, the AICPA adheres to Rule 2.04 because the SEC follows an anti-projection policy.\textsuperscript{54}

**Philosophical grounds.** Turning to the philosophical ground used by the SEC in its enjoinment of estimates and forecasts, Heller stated that belief as follows:

\begin{quote}
... the Securities Act ..., is interested exclusively in facts. Conjectures and speculations as to the future are left by the Act to the investor on the theory that he is as competent as anyone to predict the future from the given facts.\textsuperscript{55}
\end{quote}

\textsuperscript{53}\textit{Ibid.,} p. 307.


Barr in pinpointing the philosophical rationale underlying SEC doctrine remarked: "No one in his right mind would put a projection in a prospectus. The problems are just too great."  

Disclosure of Future Data

Although the SEC generally follows the anti-projection policy, there are situations where future information such as plans or projected financial statements are required or allowed. These areas are:

1. Requiring disclosure of a proposed future transaction in a pro forma balance sheet.
2. Permitting disclosure of expected future construction plans in certain prospectuses.
3. Requiring disclosure of estimated quantity and development costs of reserves in prospectuses of extractive industries.
4. Requiring disclosure of a projected income statement in the prospectuses of certain real estate companies.

Before presenting each of the above, the discussion should be clarified by distinguishing between the different gradations in the meaning of pro forma as used by the SEC. The SEC employs the term in a variety of ways. For

Andrew Barr, speech presented at the 21st Annual Southeast Regional Meeting of the American Accounting Association, Biloxi, Mississippi, April 25, 1969.
example, the pro forma balance sheet is used in the prospectus to combine the financial position of two or more business entities contemplating merger or consolidation. The term may also be used to describe estimates of future earnings cast in the form of a projected income statement. More frequently, however, pro forma is a statement in which actual operations of a past period are adjusted to reflect a proposed or a past transaction.\footnote{Securities and Exchange Commission, Accounting Series Releases (Release 1 to 77, inclusive; Washington, D. C.: Government Printing Office, 1956), pp. 140-141.}

Requiring disclosure of a proposed future transaction in a pro forma balance sheet. The pro forma balance sheet gives effect to the receipt of funds from the proposed sale of new securities and the application of those funds toward payment of liabilities or purchase of new assets. The giving-effect balance sheet is controlled by two SEC rules, Rule 170 and Rule 15c1-9. Rule 170 (as revised) under the Securities Act of 1933 states:

Financial statements which purport to give effect to the receipt and application of any part of the proceeds from the sale of securities for cash [emphasis supplied] shall not be used unless such securities are to be offered through underwriters and the underwriting agreements are such that the underwriters are or will be committed to take and pay for all securities, if any are taken, prior to or within a reasonable time after the commencement of the public offering, or if the securities are not so taken to refund to all subscribers the full amount of all subscription payments made for the securities. The caption
shall be in type at least as large as that used generally in the body of the statement. 58

Rule 15c1-9, Securities Act of 1934, represents an extension of Rule 170 by changing the "for cash" clause to the sale "or exchange" of securities.

The SEC has made few rulings on pro forma balance sheets, and these generally pertain to situations where the underwriting agreement is of doubtful enforceability. 59 However, if a pro forma is needed, action is taken to see that it is submitted by the registrant before the prospectus become effective. The SEC regards pro forma balance sheets as being helpful to the investor by permitting him to comprehend an otherwise confusing situation. 60

Permitting disclosure of expected future construction plans in certain prospectuses. The SEC permits disclosure of projections in prospectuses of companies such as motels and nursing development centers. Typically the prospectuses of such concerns present a summary of earnings followed by a description of units under construction along with "plans for future development of new units." For


59 See for example Haddam Distillers Corp., 1 SEC 52 (1934); Continental Distillers and Importers Corp., 1 SEC 78 (1935); Bering Straits Tin Mine, Inc., 2 SEC 497 (1937); Marquette Mines, Inc., 8 SEC 172 (1940); and Leedy, Wheeler & Company, 16 SEC 299 (1944).

60 Rappaport, SEC Accounting Practice and Procedure, ch. 19, p. 2.
example, a prospectus of Four Seasons Nursing Centers of America, Inc., supporting an offering of 360,000 shares of common stock at an aggregate price of $3,960,000, presented a 4 year summary of earnings on pages 6-7, while pages 10-11 contained a discussion of future construction plans. Under "Proposed Locations" the following comments were made:

The Company has taken preliminary steps to develop 11 additional health care facilities, . . . three facilities . . . are expected to be 50% owned by the Company and managed by the Company. The facilities in the remaining locations are to be constructed for others with the Company managing all except two of them.

One or more of such proposed facilities may be delayed indefinitely or abandoned if the Company is unable to conclude arrangements it considers satisfactory for their development. Other possible locations are continuously under consideration for the development and construction of facilities, but the Company has no special plans with regard to locations other than those mentioned above.61

Prospectuses filed by Holiday Inns of America, Inc., and the Ramada Inns, Inc., are other examples of SEC reports that include future construction plans.62

61Prospectus, Four Seasons Nursing Centers of America, Inc., May 9, 1968, p. 11. On file Securities and Exchange Commission, Washington, D.C. In June, 1970, Four Seasons filed a Chapter 10 bankruptcy proceeding. The Company's earnings estimate for the 1970 period was $2.50 per share, but expectations now indicate that the earlier projection should be reduced by $2.00. See Wall Street Journal, June 29, 1970, p. 5.

62The disclosure of future construction plans should not be confused with prospectus requirements compelling the registrant to explain what he plans to do with the proceeds of an offering. The prospectus sections on proposed locations have nothing to do with obtaining funds for present needs.
Requiring disclosure of estimated quantity and development costs of reserves in prospectuses of extractive industries. The third area where the SEC accepts some type of future-oriented information covers registration statements of mining corporations and companies having oil and gas interests. The SEC has ruled that extractive industry prospectuses should include the physical quantity of unextracted reserves. These estimates are indispensable to the investor in reviewing the investment merits of such a company. For oil and gas firms, "... this means a statement of reserves appropriately broken down to indicate respectively the quantity of developed and undeveloped reserves, the quantity of heavy cheaper oils, and the estimated costs [emphasis supplied] of future development of undeveloped proven reserves." 63

To permit an independent review of these physical and estimated cost projections the SEC requires informal presentation of data used by the registrant in arriving at the approximations. This supporting data is not part of the firm's registration statement, and according to Rule 485, it is not available to the public. 64

Requiring disclosure of a projected income statement in the prospectuses of certain real estate companies. The


fourth area represents a departure from what writers generally assert. For example, in 1963 Rappaport stated:

The SEC does not permit the inclusion of anything resembling a forecast in prospectuses filed with it under the Securities Act. If such information material is intentionally or through oversight included in a registration statement as originally filed, the SEC staff will insist that it be removed when the registration is amended.65

To the contrary, Solomon noted that the SEC has regularly allowed projected financial statements in prospectuses accompanying the initial offering of real estate investment trusts.66 He cited five prospectuses in support of his point, three of which became effective in 1962.67

The SEC's rule dealing with projected statements in real estate trusts appears in Form S-11, Item 6(b) (2). The rule prescribed:

... there shall be furnished a statement showing the estimated taxable operating results of the registrant based on the most recent twelve month period including such adjustments

65Rappaport, SEC Accounting Practice and Procedure, ch. 26, p. 25.

66Solomon, "Pro Forma Statements, Projections and the S.E.C.," p. 390. Real estate investment trusts are entities that are organized similar to mutual funds, but instead of investing in stocks and bonds their portfolios consist of real property. The trust attempts to comply with Sections 856 and 858 of the Internal Revenue Code in order to escape taxation by distributing most of its earnings to shareholders.

as can be factually supported. If the property is to be acquired subject to a net lease the estimated taxable operating results shall be based on the rent to be paid for the first year of the lease. In either case the estimated amount of cash to be made available by operations shall be known. There shall be stated in an introductory paragraph the principal assumptions which have been made in preparing the statements of estimated taxable operating results and cash to be made available by operations.68

In order to include a projection in a prospectus, a real estate trust must meet three requirements: (1) the offering must be an initial offering, (2) the trust must be organized to hold for investment one specific property or groups of properties, and (3) the investment property must be subject to a net lease.69

In instances where the SEC requires the inclusion of a projected income statement in the real estate trust prospectus, the assumptions underlying the statements are normally expressly stated. Notes such as the following are attached to the statement:

Since this summary is based on an estimate of operations in the future, no assurance can be given that the results as indicated will actually occur. The ability of . . . [the lessee] to pay the required rental under the Net Lease is dependent upon, among other things, the general and local economy and real estate


69 A net lease is a contract requiring the tenant to pay all expenses in connection with the leased property and its operations.
conditions, competitive factors, the rental market, and changes in expenses operating the property. All of these factors are subject to change and are not predictable at this time. 70

Solomon alleged that the combination of the fixed level of rental income based on lease commitments, and the ability of the trust to avoid taxation form the basis for the SEC's exception in permitting disclosure of projected statements. 71 According to Barr, however, Item 6(b)(2), "... does not call for projection of future operation results but instead calls for information based on historical data that are particularly described in the item." 72

Conclusion

The SEC's goal with respect to financial disclosure is to provide investors with the best set of data for making informed decisions about investment value. However, it is questionable whether this goal can be attained by providing investors mainly with historical data. Parties external to the business generally do not perform as well as internal decision makers in constructing sales forecasts, cost estimates, and asset projections. 73

---


71 Ibid.


more data is available to use in forecasting, more time is devoted to making projections, and more money is spent on forecasting. Management also usually has better tools and more qualified personnel to prepare forecast information. If, in fact, management does have the potential to produce the most relevant forecast, the SEC should reexamine their anti-projection policy.

The anti-projection policy is inconsistent with the requirement placed on extractive industries to forecast costs and physical reserve quantities. If these industries can estimate the cost of development of a given reserve, physical reserve estimates could be translated into a dollar revenue and the cost and reserve estimate could be assigned to a time period thereby producing a projected income statement.

Another inconsistency in the anti-projection policy is the SEC's insistence that projected statements appear in the prospectuses of real estate investment trusts but not in other commercial enterprises. Some industries may

74Financial analysts will probably not approve of any contention that they do not forecast as well as management. However, one of the few research studies (if not the only study) concluded that analysts tend to overestimate earnings and that the overall quality of their predictions tends to be poor. The study was made by the Continental Illinois Bank and Trust Company of Chicago (1963). The bank collected a sample of earnings estimates one year in advance from three investment firms. See The Reliability of Earnings Forecasts, mimeographed study, quoted in J. G. Cragg and Burton G. Malkiel, "The Consensus and Accuracy of Some Predictions of the Growth of Corporate Earnings," Journal of Finance, XXIII (March, 1968), 67.
be able to forecast the level of product sales, the associated cost of producing sales, and the asset structure necessary to service such sales, as well as the real estate trust.

Credence is given the SEC doctrine by past experiences and the deviations that sometimes occur between a forecast and actual results. However, these iniquitous experiences might be substantially lessened if estimates and projected statements required independent expert review.

Removing the legal support from the anti-projection policy requires that a firm, its experts and underwriters, assume civil and penal liability. The SEC could also rely upon one of its less remembered decisions, Federal Trade Commission v. Howard et al., which ruled that a prophecy known to be untrue as of the time it is made is to be regarded as an untrue statement of fact since it misstates the mind of the person making it. 75

According to recent signs, the SEC may be further relaxing its stand on the anti-projection policy. In Accountancy Series Release No. 115 pertaining to situations where the auditor qualifies his opinion because of doubts as to whether the client will continue as a going concern, the SEC ruled that such qualified opinions cannot

meet the requirements of Rule 2-02(a) of Regulation S-X and Accounting Series Release No. 90. In these situations, the SEC does not expect the auditor to express an opinion on the future earnings of the client, but the auditor must ascertain the ability of the client to continue as a going concern. 76

Without a doubt the SEC's concentration on the dangers inherent in a misleading forecast have probably saved many investors from substantial losses. It has also had the less publicized result of preventing a much greater number of investors from getting data they need.

American Accounting Association

The first and only committee report of the American Accounting Association (AAA) dealing with projected financial statements is the 1966 publication entitled A Statement of Basic Accounting Theory. In this report the Committee to Prepare a Statement of Basic Accounting Theory defined accounting as, "... the process of identifying, measuring, and communicating economic information to permit informed judgments and decisions by users of the information." 77 In setting up criteria to be used in deciding what economic information should be disclosed externally,


the committee developed four standards and five guidelines. The standards were:

1. Relevance.
2. Verifiability.
3. Freedom from bias.
4. Quantifiability.

In support of these standards, five guidelines for communication of accounting information were constructed. They were: (1) appropriateness to expected use, (2) disclosure of significant information, (3) inclusion of environmental information, (4) uniformity of practice within and among entities, (5) consistency of practices through time.78

In recommending the above standards and guidelines the committee provided a framework for deciding what economic data should be communicated externally and what data should not be communicated. The question begging at this point is: How well do projected financial statements dovetail with the AAA framework?

A Statement of Basic Accounting Theory recognized that publication of budgets in the form of projected statements is indeed relevant to users' needs. However, the accountant must at times sacrifice relevancy in order to adequately meet the standard of verifiability. The committee reasoned:

78Ibid., p. 7.
Accountants generally refrain from reporting on budgets relating to future periods to external users, on the ground that the information is not sufficiently verifiable, although it might be highly relevant to the external user's [sic] needs. Failure to observe the standard of verifiability to a minimum degree would place the accountant, in some cases, in the role of forecaster and would reduce the confidence of the user and thereby diminish the usefulness of accounting reports.  

For internal managerial purposes, the committee felt that subjective data such as budgets and forecasts are useful because of their high degree of relevance to the planning function in spite of their very low degree of verifiability.  However, it should be emphasized that the report did not rule out the possibility of future external reporting of managerial budgets and plans. In fact the committee stated that financial accounting is coming more and more under the influence of the growing body of knowledge about management. Thus, accounting for external use is no longer based solely upon concepts of income and wealth but instead is beginning to draw from accounting developments in internal managerial use. "The committee believes that as this theory [internal managerial theory] continues to develop, external reporting will be expanded to encompass more measurements of managerial actions, structure and perhaps even plans."  

---

79 Ibid., p. 27.  
80 Ibid., p. 11.  
81 Ibid., p. 2.
The committee continued to add that although accounting has been thought of as essentially historical in nature changes are taking place and more emphasis is being directed to accounting techniques dealing with future plans and expectations. Moreover, the trend is expected to continue.\(^\text{82}\)

In summary, *A Statement of Basic Accounting Theory* as it pertains to financial forecasts contains a major shortcoming. The committee is opposed to disclosure of projected financial statements to external users because such statements are not sufficiently verifiable. This conclusion is made without benefit of a study to determine if generally accepted projection techniques exist. If projection techniques do exist, and if auditing procedures can be applied to such techniques, then projected statements are verifiable. As a minimum, rather than compromise the standard of relevance the committee could have adopted a more positive approach and considered the audit problems associated with publication of budgets.\(^\text{83}\)

**Federal Communications Commission**

Although the Federal Communications Commission (FCC) is not generally considered a leader in establishment of

\(^{82}\)Ibid., p. 5.

\(^{83}\)According to Schattke, even considering numerous obstacles surrounding disclosure of projected data, auditors should not, in the interest of adequate disclosure, let verifiability prevent them from carefully considering this potentially vital area of reportable data. See Schattke, "Expected Income--A Reporting Challenge," p. 676.
innovative disclosure practices, it merits discussion because it is the first American regulatory body to request that companies disclose their financial forecasts.

On August 19, 1969, the FCC requested American Telephone and Telegraph Co. to submit: (1) a summary of forecasted interstate and total system operations by major service classifications, and (2) forecasted investment by major types of facilities for the years 1970, 1971, and 1972. The FCC in pressing for disclosure of future-oriented data reasoned that rate-making decisions based on backward-looking information are simply inadequate.

"... rate decisions based on past data rarely have the desired impact because they're outdate [sic] before they become effective."\(^{84}\)

American Telephone & Telegraph Co. refused to comply with the FCC's petition contending that, although it does make internal estimates of this sort, serious problems and liabilities could result from disclosure of forecasts, especially if investors relied on such data. For the time being, the FCC has deferred a final decision on the matter, indicating however that the issue is by no means closed.\(^{85}\)

**Canadian Institute of Chartered Accountants**

The Canadian chartered accountant's responsibility for forecasts is somewhat analogous to that of AICPA


\(^{85}\)Ibid.
members. The Handbook of the Canadian Institute states: "Reporting accountants should not express an opinion with respect to any forecast earnings figures which might be contained in a prospectus."\textsuperscript{86}

Currently, this rule limiting audit responsibility for projective data is undergoing a reexamination. Task Force 2000, organized in May, 1969, to recommend a strategy for the profession's next thirty years, noted that with the evolution of new principles of reporting, auditing can be expected to expand beyond its traditional boundaries. The Task Force acknowledged that the idea of disclosure of projected financial statements is somewhat less than revolutionary. Since governments publish projected budgets as a matter of course, ", . . . why should important 'private' enterprises not do the same?"\textsuperscript{87} If disclosure of future statements becomes a requirement, demand for independent, objective review logically will follow. The accountant then, along with other financial experts, could very likely lend credibility to a financial forecast by commenting on the assumptions of the projection.\textsuperscript{88}

\textsuperscript{86}Michael O. Alexander, "Financial Forecasting--A Part of the Accountant's Professional Work," Canadian Chartered Accountant, XCV (October, 1969), 261.


\textsuperscript{88}Ibid., p. 323.
There are some indications that the Canadian accountant's responsibility will be extended into the forecasting area. Underlying the need for extension of responsibility is the subsidiary relationship of many Canadian firms with major British companies. These subsidiaries will find it necessary at certain times to provide shareholders with profit forecasts. Consequently, chartered accountants in Canada, similarly to English accountants, will have a forecast review obligation imposed upon them.

In recognizing the probability of the accountant's involvement in forecasting, one international accounting firm has recently organized a team to develop audit reports for financial projections. According to a member of their auditing and accounting research staff, they believe that, "... the subject [auditing projected financial statements] will be standard practice within the next few years and we, ... would very much like to be ahead of the game. ...".

---

89 Personal letter from Michael O. Alexander, Partner, Touche Ross & Co., Montreal, Canada, September 2, 1970. The same could be said of the need for extension in the United States, since there are many American firms that are British subsidiaries.

90 See Rule 15 of The City Code on Take-overs and Mergers on page 68.

Introduction

The chartered accountant of England and Wales has a unique responsibility for forecasted financial data. Today, and in the past, the English chartered accountant has an audit review obligation, but not a public reporting duty, for profit forecasts presented in prospectuses. Moreover, profit forecasts in circulars sent to shareholders in support of a merger involving a quoted (traded on an English stock exchange) and an unquoted company have also been a part of the chartered accountant's audit responsibility. Since publication of The City Code on Take-overs and Mergers (hereafter referred to as The City Code) the audit obligation of the English accountant for financial projections has been extended to virtually all mergers and take-overs. In addition, the chartered accountant must now not only audit financial projections in take-overs but must also report his findings to the investing public. This last requirement is quite innovative since it represents the first time a professional

92 A take-over has been defined by the Institute of Chartered Accountants of England and Wales as a general offer to acquire shares or other securities of a particular class or classes, usually with a view to obtaining a controlling interest in the equity capital of the company and involving both a time-limit for acceptance of the offer and a minimum volume of acceptances.
accountant has assumed, or been forced to assume, a public reporting responsibility for forecasts.

The following sections present the English chartered accountant's duty for profit forecasts in prospectuses, and his duty when reporting on merger circulars prior to The City Code, after The City Code, and after the revised edition.

Review of Profit Forecasts in Prospectuses

In the United Kingdom (England, Wales, and Scotland) investors are not expected to make a decision without benefit of the company directors' statement concerning future prospects of the entity. The practice was established by the publication of The Memoranda of Guidance and Requirements of the Federation of Stock Exchanges in Great Britain and Ireland. This publication, most often referred to as the Yellow Book, stated that any prospectus or similar document must contain "... a statement as to the financial and trading prospects [emphasis supplied] of the Company or Group..." Consequently, the typical

93 There is little in the disclosure requirements of the Companies Act which yields information about future prospects. Schedule 2 of the 1967 Act does require a balance sheet note on future capital expenditures. This disclosure of capital expenditures requires estimation of: (1) amounts contracted for but not reserved, and (2) amounts authorized by the directors.

English prospectus will include a number of paragraphs (not generally contained in an American prospectus) pertaining to a forecast of expected profitability. The forecast relates to the current year or to the next accounting year depending on how much of the current period has expired. Normally, the paragraphs on expectations indicate that the profit expected will not be less than a certain amount. Estimated taxes on the forecasted profit are also presented, as well as the projected dividend payment dates and amounts, followed by the forecasted dividend yield.\textsuperscript{95}

The reporting accountant has no legal requirement to review or audit the profit forecast in the English prospectus. However, the prospectus usually includes a forecast of expected profits, and the accountant must give consent to publication of the audit report in the prospectus. Thus, it is, and has been, a generally accepted practice for the accountant to determine the reasonableness of the profit forecast.\textsuperscript{96}

In the review of a profit forecast, the reporting accountant also examines working capital


\textsuperscript{96}Ibid., p. 48. See also American Institute of Certified Public Accountants, \textit{Professional Accounting in 25 Countries} (New York: American Institute of Certified Public Accountants, 1964), ch. 19, p. 28.
requirements of the company. The purpose of this examination is to determine whether anticipated profits appear reasonable in relation to the working capital resources available.

The chartered accountants' review of profit forecasts and working capital requirements in the prospectus also serves the demands of the merchant banker (investment banker). Merchant bankers request the reporting accountant to furnish a comfort letter regarding certain statements included in the prospectus. The provisions of the comfort letter are similar to the one used in the United States except that it is extended to include pertinent comments about the company's future profit projection. The comfort letter normally includes: (1) assumptions and basis of the profit forecast, (2) a statement that the forecast has been prepared by company officials and has been discussed with these officials (who are identified), (3) sources relied on for information and extent to which verified, (4) a statement that inquiries have been made as to the basis on which the figures in the profit forecast have been compiled, and (5) a statement concerning the adequacy or inadequacy of working capital.

97 Working capital, according to English chartered accountants, includes cash, bank overdraft facilities available to the company, other loan facilities, retained profits and depreciation. These are required to cover all normal items of revenue expenditure, taxation, distributions, loan repayments, purchases of fixed assets, exceptional outgoings, and increased investment in current assets such as stock plus a margin for contingencies.
As between the accountant and merchant banker, the comfort letter is considered private and not available to investors.\textsuperscript{98}

\textbf{Review of Profit Forecasts in Merger Circulars}\textsuperscript{99}

Before publication of the first edition of \textit{The City Code}, the English chartered accountant in certain merger situations rendered a service similar to that encountered in reporting on financial data in the prospectus. When a quoted company acquired an unquoted company having assets or profit fifteen per cent or more of the acquiring company, a circular was required to be issued to shareholders of the quoted company. The circular, among other things, disclosed the details of the proposed take-over and often contained a profit projection of the unquoted company.\textsuperscript{100}

The chartered accountant reviewed the profit forecast and working capital requirements since he had to consent to the inclusion of his audit report, relating to past

\textsuperscript{98} John P. Grenside, letter to Joe R. Fritzemeyer of the American Institute of Certified Public Accountants, dated September 16, 1969.

\textsuperscript{99} Profit forecasts are not absolutely required in merger circulars. Rule 14 of \textit{The City Code} which governs disclosure in take-overs stated: "Shareholders must be put into possession of all the facts necessary for the formation of an informed judgment as to the merits or demerits of an offer. Such facts must be accurately and fairly presented and be available to the shareholder early enough to enable him to make a decision in good time."

\textsuperscript{100} Grenside, "Accountants' Reports on Profit Forecasts in the U.K.,” p. 48.
profits and the historical balance sheet, in the circular. On the other hand, when a merger or take-over involved only quoted companies, the accountant had no reporting or reviewing obligation whatsoever for historical data or profit forecasts.

The City Code on Take-overs and Mergers

Prior to publication of The City Code, chartered accountants had a limited obligation for review of profit forecasts in mergers and take-overs. However, in July, 1967, following much public criticism of certain take-over transactions, the Chairman of The Stock Exchange (London) in consultation with the Governor of the Bank of England requested that the City Working Party\(^\text{101}\) reconvene to strengthen the rules governing conduct of parties in a merger or take-over transaction.\(^\text{102}\) In an effort to correct a number of abuses prevalent in take-overs, The City Working Party is a voluntary association of financial organizations originally created in 1959 to cope with merger and take-over problems. On it are now represented the Issuing Houses Association, the Accepting Houses Committee, the Association of Investment Trust Companies, the British Insurance Association, the Committee of London Clearing Bankers, the Confederation of British Industry, the National Association of Pension Funds, and The Stock Exchange, London. The working party adheres to the belief that a system of voluntary self-discipline based on a code and administered by a panel possesses a degree of flexibility and speed in action which would be difficult to achieve by legalistic procedures imposed by statute.

Working Party produced The City Code on Take-Overs and Mergers which substantially increased the accountant's responsibility in reporting on merger circulars. The City Code included a set of principles and rules as guidelines for conduct for both the offeror and the offeree in a bid (merger or take-over) situation.

The City Working Party was reconvened primarily because of the inequities being perpetrated against investors by presentation of over-optimistic forecasts in bid circulars. Excess optimism frequently occurred in take-overs when an offeror's bid encountered stiff resistance. The company trying to avoid the proposed take-over would usually issue a circular to shareholders stating its position. At this stage the pressures on officers of the offeree company would be considerable because a statement concerning future profits must normally be included in the circular, and a reply to the offer must be presented within a few weeks. Thus, in those cases where the forecast of future profits was hastily prepared and when the bid was perhaps unwelcomed in the first place, there was an inclination for company officers to make an extremely optimistic forecast. These facts coupled with an offeror's bid containing critical remarks about the offeree's management produced a profit projection even more roseate. The outcome placed the shareholder in the difficult position

of deciding whether to retain his security or accept the
terms of the offeror. To help prevent shareholder con-
fusion the City Working Party published The City Code and
the Governor of the Bank of England created the Panel on
Take-overs and Mergers to administer it. 104

Of particular significance to the accountant is Rule
15 of The City Code. Rule 15, pertaining to bid circulars
which contain profit forecasts stated in part:

Profit forecasts must be compiled by the
Directors with the greatest possible care; the
calculations and the bases for the forecasts
must be examined and reported on by the audi-
tors or consultant accountants. The forecasts
and the assumptions on which they rest must be
corroborated, as far as possible, and reported
on by the company's merchant bank or other
advisers. The reports by the auditors or con-
sultant accountants and by the advisers shall
be made in writing to the Directors. [Reports
must also be lodged with the panel.] The assump-
tions on which the profit forecasts are based
must be stated in the circular. [Emphasis
supplied.] 105

As discussed previously, the customary review of a
profit forecast in a prospectus is not prescribed by law
or regulations of any stock exchange. Rule 15 represents
the first time that accountants are required to examine
and report on a forecast included in a document circulated
to shareholders.

For the guidance of its members, the Council of the
Institute of Chartered Accountants in England and Wales

104 Grenside, "Accountants' Reports on Profit Forecasts
in the U. K." p. 49.

105 City Working Party, The City Code on Take-overs and
Mergers, p. 8.
issued a statement suggesting main points the reporting accountant should keep in mind when reviewing and reporting on profit forecasts. The principles set out in the Council's statement, "Accountants' Reports on Profit Forecasts," were prepared with particular reference to The City Code but apply equally to any independent accountant's review of a profit projection. The principal points of the statement are summarized as follows:

1. Profit forecasts depend on subjective judgments. They are not capable of verification by reporting accountants in the same way as financial statements presenting actual results. There is no question of a profit forecast being audited.\(^\text{106}\)

2. The reporting accountants should take care to avoid giving any impression, in their letter to directors, that they are in any way confirming, underwriting, guaranteeing, or otherwise accepting responsibility for the ultimate accuracy and realization of forecasts.

3. A critical and objective review of the assumptions on which profit forecasts are based can be undertaken by reporting

\(^{106}\)Although the Council's statement indicates that profit forecasts are not audited, English auditors do, even within the most limited definition, perform an audit. That is, credibility is added to the profit forecast by an independent party, with the result being an increase of the usefulness of the forecast to external parties.
accountants. They can verify that the forecasts have been properly computed, on a basis consistent with the company's previous accounting principles, from the underlying assumptions and data.

4. Profit forecasts are the full responsibility of company directors. The reporting accountants should not permit their names to be directly associated with profit forecasts. However, if reporting accountants have material reservations as to the bases or calculations of the forecast, they should request that their reservations be published in the bid circular.

5. If the reporting accountants' review is exceptionally restricted by lack of time, their report should say so.

6. A profit forecast should not be reviewed for more than the current year and, provided a significant part of the current year has elapsed, the next following year.  

107 Adapted from Institute of Chartered Accountants in England and Wales, "Accountants' Reports on Profit Forecasts," Accountancy, LXXIX (September, 1968), 667-669. (This pronouncement is referred to as Statement S.12 by the English Institute.)
The limiting factor of the requirements of Rule 15 and the Council's statement should be emphasized. The report of the accountant was to be addressed to the directors and lodged with the Panel. It was not suitable nor intended for publication.108 "This attitude was based primarily on anxiety that the association of a well-known name, however indirectly, with a forecast might give it an undue aura of credibility in the eyes of the general public, many of whom do not as yet fully appreciate the uncertainties inherent in forecasting."109

The Revised City Code

From its first appearance (March, 1968) until the release of a revision, The City Code was plagued with problems. Increasing pressure was placed on accountants to publish their report on profit forecasts. The strongest demand for publication came from merchant bankers who claimed that leading auditors were employed to report on forecasts; hence, they (merchant bankers) should be able to identify the auditors.110 Other pressures came from the investing public who feared that a qualified report to a merchant banker might not be adequately reflected in the bid circular. Demands for disclosure of the

110 Ibid.
accountant's report became so vehement that in the summer of 1968 a circular relating to an agreed merger between George Kent Limited and Cambridge Instruments Company Limited, one of which was attempting to avoid being taken over by a major conglomerate, contained an endorsement of the profit forecast by the auditors of the two firms.

To satisfy the additional demands placed on the English chartered accountant, the Institute of Chartered Accountants requested that Rule 15 of the code be revised. Accordingly, the City Working Party, in striving to make The City Code more workable, issued an amended set of principles and rules on take-overs and mergers.

The major change implemented by the City Working Party was the reorganization and strengthening of the Panel on Take-overs and Mergers. Currently if there is a breach of the code, the Panel has recourse to private or public censure, and in more flagrant cases to deprive the offending advisor temporarily or permanently of his right to practice in the field of mergers and take-overs. 111 Before the reorganization the Panel's main power was the moral suasion it could bring to bear on the parties involved in a take-over transaction. 112

Although the code was modified in only a limited number of ways, Rule 15 represents a most substantial revision. The transformed rule reads in part:

When profit forecasts appear in any document addressed to shareholders in connection with an offer, the assumptions, including the commercial assumptions, upon which the Directors have based their profit forecasts, must be stated in the document.

The accounting bases and calculations for the forecasts must be examined and reported on by the auditors or consultant accountants. Any Merchant Bank or other adviser mentioned in the document must also report on the forecasts. The accountant's report and, if there is an adviser, his report, must be contained in such document and be accompanied by a statement that the accountant and where relevant, the adviser, have given and not withdrawn their consent to publication. [Emphasis supplied.]

This revision represents the first time an accountant has been required to report publicly on a financial projection. It is also significant that both the prior code and the revised version require that assumptions, upon which the profit forecast is dependent, be disclosed in the document circulated to shareholders.

Simultaneously with the release of the revised code, the Council of the Institute of Chartered Accountants issued a new statement on profit forecasts. The statement repeated previous warnings about the inherent difficulties involved in forecasting and restated that the forecast is the responsibility of the directors. The major modification is that the accountants' report must be disclosed in the bid circular. The Council went further to add that

the assumptions underlying the forecast are the responsibility of the company's merchant banker or other advisers. Also, it is fundamental that the reporting accountant should state whether or not the forecast is consistent with the given economic, marketing and underlying financial assumptions. The Council reiterated that there is no question of the forecast being audited in the traditional sense.\footnote{Institute of Chartered Accountants in England and Wales, "Accountants' Reports on Profit Forecasts," Accountancy, LXXX (June, 1969), 467-468. (This pronouncement is referred to as Statement S.15 by the English Institute.)} The Council's statement concluded with a specimen report (see Appendix I).

Conclusion

As a result of the new City Code the accountant's involvement in reviewing profit forecasts has been expanded. The role of the English accountant in assuming greater responsibility for forecast review has been publicized as an example professional accountants in other countries should emulate.

In bid circulars, supporting or resisting a take-over offer, the English chartered accountant is entrusted with the responsibility of reviewing accounting bases and calculations of profit forecasts. The English accountant must also determine if the resultant calculations are consistent with the assumptions upon which the forecasts are founded, and in practice he even assumes some duty for auditing the assumptions of the forecast. (Audit programs...
for profit forecasts customarily include an examination to determine if the assumptions are fair and reasonable.)

After the chartered accountant has completed the review of the profit forecast, if such is included in a bid circular, the results of the examination are then reported to shareholders.

Although the English accountant is required to review and report on profit forecasts and working capital requirements in a take-over or merger circular and to review but not report on profit forecasts and working capital resources included in the prospectuses, it should not be assumed that there is anything resembling an understanding or acceptance of that responsibility. A few members of the English profession maintain that reporting on any profit forecasts or projections should be abandoned or so many caveats should be written into the accountant's report that the opinion will cease to be useful. These members believe that auditors should stop gazing into clients' crystal balls since auditing can add nothing of real substance to a forecast but the screen of a reputable name. They cite, in supporting this contention, that forecasts are inaccurate and dependent upon probabilities and chance. Reference is often made to the atypical document of Associated Electrical Industries which was circulated in a take-over struggle against General Electric Company (London). The circular sent to Associated's shareholders included a projected profit of £10 million.
Subsequent results, however, yielded an actual loss of £4.5 million. The major part of the £14.5 million deviation (£10 million projected profit versus £4.5 million actual loss) came about because of changes in accounting principles, not because of an erroneous profit forecast.\footnote{Editorial, "Fulminating on Forecasts," The Accountant, CLIX (August 10, 1968), 167-168; see also Idris Hicks and E. C. Johnson, "Expansion of Company Reporting," The Accountant, CLXI (November 15, 1969), 639-642.}

The Institute of Chartered Accountants in England and Wales is to be applauded for publication of the two statements on profit forecasts. The statements must be viewed with caution, however, since they are not based on adequate research. Nevertheless, English accountants have at least recognized that auditors are capable of reviewing data in statements about future prospects. This is indeed a significant first step toward the goal of providing more useful information.

**Summary of the Chapter**

Organizational developments in the accounting profession indicate that the American auditor's responsibility is advancing into the forecasting sphere. This conclusion is based upon an analysis of six organizations that influence American auditors. The analysis was conducted to establish two things: (1) the evolving rules and recommendations pertaining to disclosure of projected data, and (2) the philosophical basis for such pronouncements.
The AICPA rules for pro forma financial statements were introduced in 1923, and in 1931 the prohibition of opinions on financial forecasts was released. Both of these pronouncements still express the AICPA policy on the auditor's responsibility for financial projections. However, there are indications that the AICPA philosophy will soon undergo a formal reexamination.

The SEC has a policy limiting projected financial statements in prospectuses. The logic of the SEC's doctrine is founded upon legal grounds, past experiences, reliance on the AICPA's no-forecast policy, and philosophical beliefs. There are certain cases, however, in which the SEC accepts or requires disclosure of future data. These are: (1) pro forma balance sheets, (2) proposed construction plans, (3) cost and physical reserve estimates for mining properties, and (4) projected income statements in real estate investment trust prospectuses.

Unlike the AICPA and the SEC, the AAA has not been overly concerned with disclosure of forecasted data. The only committee report, indirectly relating to the subject, stated that projected financial statements are relevant to external party needs but should not be disclosed as they cannot be adequately verified.

In general the AICPA, SEC, and AAA subscribe to the theory that organizations should restrict audited data to substantiated facts, and projected statements are not factual. Therefore, corporate reporting should be based
on what has happened and not what might happen. Contrary to this view, the FCC has indicated that reports based on what might happen possibly could be more relevant than historical data. The FCC is the first American organization to request disclosure of financial forecasts.

Many Canadian chartered accountants are examining their professional rule prohibiting opinions on forecasts. At times, the Canadian Institute seems to utilize a blend of the best American and English practices. Consequently, it is expected that they will soon become involved in reporting on future-oriented data.

In England and Wales, chartered accountants are required by The City Code on Take-overs and Mergers to review and publicly report on profit forecasts included in certain merger documents circulated to shareholders. The English accountant has also participated in examining forecasts presented in prospectuses. This responsibility for expectations represents a first for accountants.

From the investigation of the six organizations, it appears that auditors have a natural reluctance to extend their audit responsibility--especially to verification of projected financial statements. The important issue, however, is not limitation of duty but the extension of service.

Disclosure of future plans and expectations is needed. In fact, widespread use of forecasted data in the
United Kingdom should force those who assert otherwise to restudy their basic tenets.

The belief that auditors are extending their attest function to future expectations is grounded in the past and present philosophies of the aforementioned organizations. The task of the American accounting profession is to develop methods of verification that will permit expression of opinion as to the reasonableness of financial projections.

To establish a foundation for the examination of projected financial statements, Chapter III reviews the extensive literature on budgeting to set forth an overview of the relationship between a firm's budgetary process and the firm's projected financial statements.
CHAPTER III
BUDGETING, PROJECTED FINANCIAL STATEMENTS,
AND SALES FORECASTING: AN OVERVIEW

A voluminous study would be required to adequately present and explain the many techniques employed in building a comprehensive budget or in constructing projected financial statements. However, only a general survey of budgetary principles and practices is necessary to provide a background setting for the auditing of projected income statements and balance sheets.

Since the practical aspects of budgeting and forecasting are mainly emphasized in this chapter, the techniques discussed are limited to those which have been successfully applied in practice. Highly theoretical excursions into areas of contention and budgetary concepts pertaining to human behavior are generally omitted.¹

The following sections explain the construction and importance of projected financial statements and show their relation to the budgetary process of a business firm:

2. The Usefulness of Projected Financial Statements.
3. The Comprehensive Budget, Master Budget, or Profit Plan.
5. Sales Forecasting and Budgeting.
6. Sales Forecasting Techniques.

Definition, History, and Nature of Business Budgeting

A general description and history of budgeting is set forth in this section. Specifically, the term "budget" is defined and placed in proper context. This is followed by brief history, and afterwards, to develop the nature of budgeting, three areas of budgetary analysis are examined: (1) the theory of fixed and variable budgets, (2) the relationship of budgeting and accounting, and (3) the distinctions between forecasting, profit planning, long-range planning, and budgeting.

Definition of Budgeting

Although familiar to almost everyone, the word "budget" means different things to different people. Within a business organization some members of management view the budget as a planning and control tool to aid the firm in meeting various objectives. Further down the
organizational hierarchy, others might consider budgets as a pressuring device applied by management to exploit the work force. Still others in the organization look upon budgets as a game to be played once each year.²

A conceptually stronger meaning, and certainly less biased, is one advanced in a recent National Industrial Conference Board research study. The study suggested the following:

Budgeting . . . involves the preparation and adoption of a detailed operating plan, expressed in financial terms, for an organization for a definite future period. It also includes comparison of the results of actual operations with those set forth in the plan and analyses of the reasons for deviations from planned performance.³

In accordance with the above definition, budgets can be classified (and often are in practice) into two divisions: operating budgets and financial budgets. This classification is primarily an accounting one. If the budgeted item relates to the income statement (i.e., sales, expenses, production, etc.) it is designated an operating budget. Likewise, if the budgeted item pertains to the balance sheet (i.e., cash, working capital, accounts receivable, etc.) it is designated a financial budget.⁴

---

⁴ Ibid., p. 6.
Of importance also in a definition of budgeting is that, ideally, budgets should be comprehensive and not partial. Comprehensive budgets, or plans, encompass all areas of activity of an organization. The comprehensive budget, master budget, or profit plan (terms often used interchangeably) includes both operating and financial budgets. The following shows the elements included in a comprehensive budget:

<table>
<thead>
<tr>
<th>Operating Budget</th>
<th>Financial Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected income statement</td>
<td>Cash budget</td>
</tr>
<tr>
<td>Sales budget</td>
<td>Receipts</td>
</tr>
<tr>
<td>Production budget</td>
<td>Disbursements</td>
</tr>
<tr>
<td>Materials budget</td>
<td>Projected balance sheet</td>
</tr>
<tr>
<td>Direct labor budget</td>
<td>Inventory levels</td>
</tr>
<tr>
<td>Factory overhead budget</td>
<td>Budgeted statement of source and application</td>
</tr>
<tr>
<td>Cost of goods sold budget</td>
<td>of funds</td>
</tr>
<tr>
<td>Selling expense budget</td>
<td></td>
</tr>
<tr>
<td>Administrative expense budget</td>
<td></td>
</tr>
</tbody>
</table>

Budgets typically are prepared to cover a twelve-month period. In fact, the annual profit plan concept is rather firmly entrenched. A year is short enough to permit fairly dependable projections of future events, yet long enough so that problems may be viewed in a reasonably broad context.

History and Current Status of Business Budgeting

The business budget is largely a twentieth century phenomenon. Early business budgets were borrowed from governments and were usually of an appropriation type (concerned with expenditure control) imposed by top
management. Its appearance in the business firm was, at first, limited to production departments.\(^5\)

Actual birth of business budgeting, as opposed to governmental budgeting, can properly be dated from 1922 with the publication of *Budgetary Control* by James O. McKinsey.\(^6\) Widespread applications in business firms were delayed, however, until the late 1920s and early 1930s. In fact, it was not until 1930 that imposed budgets, dictated by management, were recognized as causes of poor morale and weak initiative. Subsequently, participation was introduced as a budgeting principle.

In 1931 the first empirical study on the use of budgeting in business was conducted.\(^7\) Since then, and especially with the rapid acceptance of budgeting after World War II, the techniques of budgeting have become a major part of the scientific management process.

The present level of maturity in business budgeting is analogous to the status of accounting in the United States from 1906 to 1922. The literature in budgeting, similar to the literature in accounting before 1922, is


engrossed with mechanics.\textsuperscript{8} Textbooks display a standard form of presentation and development. McKinsey’s work (1922) is about as advanced in its presentation as writings by Knight and Weinwurm, Welsch, and Vatter.\textsuperscript{9}

Another similarity between the present level of budgeting and early twentieth century accounting is the lack of applied budgeting research. There is a paucity of information that can serve as a basis for generalizations. Consequently, theoretical works are almost completely lacking with perhaps only two possible exceptions: Gordon B. Davis’ "An Inquiry into the Theory of Budgeting" and Andrew C. Stedry’s \textit{Budget Control and Cost Behavior}.\textsuperscript{10}

The present limitations inherent in budgeting literature may be summarized as follows:

1. There is an overemphasis on techniques and use of illustrative tables.


2. Very little attention is given to service and not-for-profit institutions.

3. The difference between planning and control is not clearly acknowledged in much of the literature. Planning should be viewed as the process of deciding on organizational objectives and deciding on the resources to be employed in attaining the objectives. Control, on the other hand, is the process by which management assures that resources are obtained and used efficiently in accomplishment of the organizational objectives.

4. Specific solutions to specific problems are often discussed without indicating the environmental nature of the firm in which the solutions are applied.

5. The relationship between optimization of resource usage in a department and overall resource optimization of the firm is not adequately explored. Textbook budgeting techniques approach the problem of resource allocation within the firm but do not derive optimal solutions.

These limitations naturally will hinder the auditor in developing a fundamental knowledge of budgeting as a preliminary to the audit of projected financial statements.
As for the future, presently evolving budgeting techniques such as planning-programming-budgeting systems, simulation budgeting, and behavioral budgeting possess the potential to revolutionize business planning. In fact, organizational structures will probably be altered because of these developments. Large-scale, complex corporations, having difficult resource allocation problems and strategic planning problems, especially stand to benefit by the application of planning-programming-budgeting systems and simulation budgeting.

Although budgetary practices and techniques are more diverse than accounting practices, budgeting has reached a practical level of maturity. Empirically, and from the historical insights presented above, it is evident that budgeting has an important place in modern business management. The accelerating importance of budgeting and planning has occurred mainly because of drastic changes in industrial technology. At present, a manager's ability to budget and plan is paramount in the success of a firm and its ability to generate increased earnings. The necessity of planning and budgeting today, as opposed to earlier times, was vividly demonstrated in The New Industrial State. Drawing from the tremendous technological advances of Ford Motor Company, Galbraith explained the exigency for planning:

In the early days of Ford, the future was very near at hand. Only days elapsed between the commitment of machinery and materials to
production and their appearance as a car. If the future is near at hand, it can be assumed that it will be very much like the present. If the car did not meet the approval of the customers, it could quickly be changed. The briefness of the time in process allowed this; so did the unspecialized character of manpower, materials and machinery.

Changes were needed. The earliest cars, as they came on the market, did not meet with complete customer approval: there were complaints that the cooling system did not cool, the brakes did not brake, the carburetor did not feed fuel to the engine, and a Los Angeles dealer reported the disconcerting discovery that, when steered, "Front wheels turn wrong." These defects were promptly remedied. They did the reputation of the car no lasting harm.

Such shortcomings in the Mustang would have been unpleasant. And they would have been subject to no such quick simple and inexpensive remedy. The machinery, materials, manpower and components of the original Ford, being all unspecialized, could be quickly procured on the open market. Accordingly, there was no need to anticipate possible shortage of these requirements and take steps to prevent them. For the more highly specialized requirements of the Mustang, foresight and associated action were indispensable. In Detroit, when the first Ford was projected, anything on wheels that was connected with a motor was assured of acceptance. Acceptance of the Mustang could not be so assumed. The prospect had to be carefully appraised. And customers had to be carefully conditioned to want this blessing. Thus the need for planning.11

A firm faces two alternatives concerning budgeting and planning: (1) it may choose to partially regulate its own future by setting desired goals and planning for their achievement, or (2) it may elect, by failure to

plan, to permit chance to determine its future. Executives of large, complex organizations are, however, beginning to realize, given the present economic structure, crisis management based on spot decisions and so-called intuitive judgment is not enough to prosper. For these organizations the question no longer is whether to plan but primarily how to plan.

Fixed and Variable Budgets

Theoretically, a single budget cannot serve both the planning and control functions when the volume, sales or activity, departs from original budgeted expectations. Consequently, it is becoming more popular in practice for a firm to use one budget for planning and another budget for control. The planning function is served by a fixed or static budget while the control function employs a variable or flexible budget.

Variable budgeting involves preparing a series of budgets at various levels of operations for a given department. More often, however, the variable budget is expressed as a simple formula composed of two elements:

---


13 According to Stedry in Budget Control and Cost Behavior, one budget cannot serve both as a planning and control tool even if original budgeted expectations and actual volume are the same. Controls must be variable according to the characteristics and aspirations of the person being controlled.
fixed costs that remain constant for a given period, and variable costs that fluctuate in accordance with some measure of activity.

While variable budgets are used to control day-to-day and month-to-month operations, the fixed budget should form the basis for the annual profit plan and should not change once that plan is adopted.\(^{14}\) Fixed budgets are best used to control yearly operations and to permit an organization to move toward achievement of one year in its long-range profit plan.

Relationship Between Accounting and Budgeting

Accounting, in its traditional form, reports quantifiable data on past events and completed transactions. In contrast, budgeting reflects the expected and anticipated transactions. Accounting also attempts to be precise and objective while budgeting sometimes provides for only 80 per cent to 90 per cent accuracy. Sinclair explained the traditional divergency in viewpoint between accounting and budgeting as follows:

```
The viewpoint of budgeting is forward looking. Budgeting seeks to lock the stable door before
```

\(^{14}\)Walter R. Bunge, "Budgeting," in Handbook of Modern Accounting, ed. by Sidney Davidson (New York: McGraw-Hill Book Company, 1970), ch. 37, p. 24. Forecasts of sales and of operating conditions will probably be updated from time to time during the year. These changes should not affect the original profit plan (or fixed budget), which remains as the continuing base or standard from which the effect of changes in conditions are measured.
the horse has been stolen, while accounts report, after event has taken place, whether or not the horse was stolen.\textsuperscript{15}

Contrary to this belief, accounting is not completely concerned with the past. Anticipations do play an important part in historical-cost-oriented accounting. For instance, asset existence and recognition is dependent primarily on the future--before an item can be carried forward as an asset it must be expected to benefit a future period. Anticipations also are important in measuring value declines in inventories and marketable securities (e.g., the lower-of-cost-or-market rule). Likewise, in fixed asset accounting, depreciation is dependent upon estimated future usage of the asset's service potential, and salvage value is contingent upon future estimation.\textsuperscript{16}

Three other areas where historical accounting and budgeting overlap are as follows: (1) standard costs, (2) cost accounting, and (3) comparison of expected with actual costs.

Although standard costs and budgets were developed independently of each other, the two are presently found to be complementary, and, to an extent, are combined.


Standard costs are frequently used as input data in budgets, plans, and forecasts.

In cost accounting, the accountant employs a predetermined factory overhead rate for applying factory burden to departments and products. This predetermined overhead rate is computed from data generated by the budgetary process. The relation between cost accounting and budgeting is depicted by the following formula:\textsuperscript{17}

\[
\text{Annual predetermined overhead rate} = \frac{\text{Budgeted department overhead (annual)} + \text{Plus service department allocations}}{\text{Departmental output budget (annual)}}
\]

Finally, budgeting and historical accounting unite in the control sphere. Expectations are compared with actual results, and material deviations (favorable or unfavorable) are investigated to explain their causes—management by exception. This investigation is designed to insure that actions needed to achieve goals and objectives are being taken.

Looking at a more contemporary meaning, accounting may be defined as the measurement and communication of data, both financial and nonfinancial, pertaining to the use and allocation of economic resources. Under this broader meaning, accounting includes reports relating to what has happened and reports relating to what is expected.

\textsuperscript{17} Welsch, \textit{Budgeting: Profit Planning and Control}, p. 173.
to happen. Thus, budgeting may be considered as a subset of modern accounting.

Distinctions Between Forecasting, Profit Planning, Long-range Planning and Budgeting

Forecasting and budgeting are carefully distinguished in budgeting literature, and to some extent in practice. Accordingly, a forecast is defined as a prediction of likely future events and their probable financial consequences, and a budget is defined as a plan for achieving results based on a forecast. The sales planning activity serves to clarify this distinction. The sales forecasting process will generally employ a number of different techniques to estimate expected sales volume and price for a future period. The outputs of the different sales forecasting approaches are reconciled and combined with the firm's marketing strategy to form the sales budget. Hence, the sales budget is created from, and evolves out of, the sales forecasting process.

Budgeting and profit planning are used synonymously by a number of firms. However, some writers make a distinction between the two. Bunge defined profit plan as: "... the financial expression of the operating program for the year as it is agreed to at the outset of the year." According to Bunge, the profit plan (or planning budget) remains unchanged as the year progresses while

---

18Bunge, "Budgeting," ch. 37, p. 5.
control budgets and forecasts will be updated from time to time as the need arises. The updated budget, however, will not affect the original profit plan. This gives credence to the increasing acceptance of the viewpoint that planning and control are not always convergent.

Budgeting as compared to long-range planning is more specific and detailed and also embraces all phases of an organization. In contrast, the long-range plan focuses on the more crucial elements of the organizations such as sales, capital expenditures, and expansion plans. The long-range plan is usually prepared for a five or ten year period while the budget is almost invariably prepared no more than one year ahead. The annual profit plan is related to the long-range plan as the latter provides the general direction for the former.

Having briefly discussed the nature of budgeting and certain of its fundamental concepts, attention is now turned to the projected income statement and projected balance sheet, two vital outputs of the budgeting process.

The Usefulness of Projected Financial Statements

Two classes of users stand to benefit from disclosure of projected financial statements: (1) internal management users, and (2) external statement users (shareholders, creditors, employees, etc.). Internally, the benefits to be derived from construction and distribution of projected

\[19\] Ibid., ch. 37, p. 6.
income statements and balance sheets are being partially realized. However, external users are usually not privileged recipients of the projected statements generated by the comprehensive budgetary system.

The following sections present the needs of internal management and external parties for projected financial statements and the obstacles to their external disclosure.

Internal Management Users

Firms utilizing a formal comprehensive budgeting system almost always, as a matter-of-course, construct a projected income statement. In fact, the 1958 Sord and Welsch survey of budgeting practices indicated extensive use of the projected income statement, finding 98 per cent of 344 firms preparing one.\(^{20}\) In contrast, a 1931 National Industrial Conference Board study reported only 50 per cent of 78 firms projecting net income.\(^{21}\) Apparently, the generally accepted practice today is to prepare such a statement as a part of the budgeting process.

Within the firm the projected income statement serves as a final test of the adequacy of the operations for the

\(^{20}\)Burnard H. Sord and Glen A. Welsch, Business Budgeting (New York: Controllership Foundation, Inc., 1958), p. 276. The respondents in the Sord and Welsch study should not be considered as representative of the budgetary practices of the average business firm. Although companies were selected in both Canada and the United States, those surveyed are representative of firms doing a better-than-average job of planning, budgeting, and controlling operations.

\(^{21}\)National Industrial Conference Board, Budgetary Control in Manufacturing Industry, p. 129.
coming year. It functions to reveal weaknesses in operating areas which might not otherwise be apparent and permits a determination of the adequacy of earnings. If the estimated statement fails to present a satisfactory revenue, expense, and profit picture, the individual supporting budgets may be passed back to the originators for further review and revision. The objective is to develop the best plan consistent with the expected environmental constraints and the firm's long-run desires.

Contrary to the above, many firms having budgeting programs do not construct a projected balance sheet. Sord and Welsch indicated only 56 per cent of 320 firms responding construct a projected balance sheet.\(^{22}\) According to many of these nonusers, a projected balance sheet is not necessary if an income and a cash budget are available. However, the fact is, until recently, many firms simply have not been overly concerned with asset or resource management. Other firms, while very much concerned with asset management, do not prepare a projected balance sheet, but do make extensive use of cash budgets, capital budgets, inventory budgets, and other segmented or sub-budgets.

Similar to the lack of widespread practical usage, the projected balance sheet receives little detailed attention in budgeting literature with one exception—every

\(^{22}\)Sord and Welsch, Business Budgeting, p. 281.
writer recommends construction of one. Generally, the budgeting literature has concentrated on revenue and expenses, neglecting an adequate treatment of the advantages of projected balance sheets. However, according to Knight and Weinwurm, balance sheet budgeting is essential in: (1) estimating return on investment, and (2) in planning the liquidity and solvency of a sound organization.23

The projected balance sheet is a highly valuable tool for internal managerial planning and control, and as discussed later, it can present useful decision-making data to external users. If a reasonably developed budgetary system is in use, the additional effort involved in constructing a balance sheet budget is usually slight since most of the needed data is found in already existing sub-budgets. Internal uses of the projected balance sheet are identified as follows:

1. To note the flow of reinvested profits into current and fixed assets.
2. To aid in adapting operations to seasonal variations [projections for 2 or 3 months].
3. To determine financing requirements and desirable methods of financing, particularly as between short-term borrowing, bond sales, stock flotations, and reinvested earnings.
4. To check on the accuracy of operating budgets.
5. To aid in planning capital expansion.
6. To forecast cash balances and requirements.
7. To facilitate profit planning designed to secure an adequate return on the investment in the enterprise.

23 Knight and Weinwurm, Managerial Budgeting, p. 192.
8. To determine the effects of financial policies [dividend payout and earnings retention].

9. To maintain the ratio of current assets to liabilities, and other financial ratios, at a desirable level. 24

The above advantages, combined with the increasing importance of return-on-investment analysis in investment performance appraisal and the necessity to maintain liquidity and solvency, makes construction of the projected balance sheet beneficial. In the return-on-investment formula (ROI equals net income before taxes on income divided by the average value of assets employed), the numerator has been subjected to relatively sophisticated planning and control. On the other hand, the denominator has enjoyed much less attention and is just beginning to receive adequate scrutiny. 25 Hence, the percentage of projected balance sheets constructed by firms doing an effective job in budgeting has probably increased substantially since the Sord and Welsch study, but it probably still lags behind projected income statement construction.

External Statement Users

Situations in the United States in which firms publicly disclose projected financial statements via the


annual report are rare. However, some corporations do disclose sales and/or earnings projections in an informal and unpredictable fashion to the financial press. From a 1966 survey of 559 corporations the following percentages of firms indicated disclosure of sales and/or earnings projections:

<table>
<thead>
<tr>
<th></th>
<th>Listed on New York Stock Exchange</th>
<th>Listed on American Stock Exchange</th>
<th>Traded Over-the-Counter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales forecasts</td>
<td>36.4%</td>
<td>46.0%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Earnings forecasts</td>
<td>25.9%</td>
<td>34.1%</td>
<td>35.6%</td>
</tr>
</tbody>
</table>

More recently, an experienced financial relations counselor estimated that 50 per cent of American public corporations release expected earnings data for the coming year. However, there are vast differences as to when these earnings forecasts are released, how they are released, and to whom they are released. For example,

26To date one company in its annual report has disclosed sales and profit projections for three years in advance. The projections were presented by product line and in total, and for each item and year optimistic, median, and pessimistic amounts were presented. See Micro-Tol Engineering Corporation, Annual Report, Fiscal year 1967-68, reproduced in Appendix II.

Another company, the Citizens and Southern National Bank of Atlanta, Georgia, presented in its 1961 annual report a forecast of 1962 operating results. See Appendix III.


the forecast may be disseminated through press releases, talks at analysts' meetings, annual shareholder meetings, or less commonly by inclusion in annual reports. Of course, the reliability of publicly disclosed earnings forecasts is difficult to gauge, and whether they are related to the managerial budget of the firm is not known.

In another survey, Backer found that 33 per cent of 70 large industrial corporations interviewed publicly disclose earnings projections. Plus an additional 40 per cent of the 70 companies will indicate whether an analyst's forecast is reasonable but will not directly publicize earnings projections.\textsuperscript{29}

In general there is a growing belief that traditional financial statements and annual reports, as they are typically presented, do not communicate adequate and relevant information to external parties. Financial statements, "... communicate only the results of management decisions, without any information about what the decisions were or what was expected to be the results of the decision."\textsuperscript{30}

The principle that budgeted performance is a better index of a company's current achievement than past performance is a fundamental management concept. Operating


and financial results lack meaning without comparison with plans. Since inefficiencies may be buried in past operating results, profits being $10,000 greater than last year is by no means conclusive to management. Management is well aware of impediments surrounding historical data and its use in performance evaluation. If this is true for management, similar reasoning should be applied to external statement users. Shareholders, creditors, etc., need to be informed of managerial plans so they can adequately and realistically evaluate management. Goal attainment is the major framework for judging a firm's performance internally: the same should hold for external evaluation.

Budgets compel planning and give impetus to internal communication and coordination. Consequently, external parties should be informed of firms doing a poor job in budgeting and planning. By providing information necessary to appraise management, publication of projected financial statements would benefit investors, creditors, financial analysts, employees, and the general public.

**Investors.** The major part of a shareholder's decision depends upon future earnings and the effect of these earnings on dividends and market value. According to Wilkerson and Doney, disclosure of projected financial statements would therefore:

... enable investors to make better investment decisions, through improving their ability to evaluate management's plans for the future
and through the comparisons of management's past plans with achievements. This added information would give the investor a greater insight into management's expectations for the future earnings and dividends as well as an improved basis for making computations of capitalization and the value of the capital stock of the firm. 31

The investor's need for financial projections is evidenced by the increasing number of projections being prepared by analysts for shareholders. Of importance also, are the growing number of reports containing projections being published by financial public relation concerns. According to the Wall Street Journal, the reports prepared by financial public relation concerns sometimes lack reasonableness. 32

Shareholder interest in projected data was evidenced in the 1969 Standard Oil Co. (New Jersey) annual meeting. One shareholder asked the chairman of Standard Oil to estimate dividend possibilities for the coming year. The response was, "... dividends are subject to earnings, and our policy is not to forecast earnings." 33 The Wall Street Journal thought it significant enough to make reference to this negative attitude in headlines which read, "Jersey Standard Session Lightly Attended; Head Blames Pickets; No Forecast of Net." 34

---

34 Ibid.
Creditors. Extensive disclosure of projected financial statements would better enable creditors to evaluate the ability of a firm to meet its short-run obligations as well as permit a better determination of the firm's future credit needs. It has long been a common practice for bankers to formally request budgetary information and to use it in connection with the granting of credit. When this request is made and the information furnished, the banker (or creditor) generally gives more or at least equal weight to future prospects relative to historical information. Traditionally, the banker has made decisions to loan money on the basis of personal knowledge of the customer and on the customer's historical financial statements, but today increasing use is being made of projected statements as a vital part of the credit decision. The usage of these statements for credit purposes, however, is not yet widespread and their distribution is somewhat restricted.

Financial analysts. Cash flow, profit, and dividend projections are often prepared by financial analysts for distribution to their clients. Although these projections

are not thought to be completely inaccurate, the only available research study indicates they are at least questionable. Consequently, it appears logical to infer that financial analysts would benefit substantially by disclosure of internally prepared and externally audited projected financial statements. Management's projections are based on more reliable data since analysts are precluded from matching the internal planning procedure of a company, partly because published income statements do not segregate costs into variable and fixed elements. Financial analysts cannot accurately project profits since they cannot adequately gauge cost changes when the level of activity changes.

Given that financial analysts could perform a more useful service by utilizing internally prepared projected financial statements, what information do analysts actually desire? Two symposiums, a National Association of Accountants research study, and two publications by the Committee on Corporate Information of the Financial Analysts Federation have dealt in part with this question.

Disclosure of future expectations is a most needed development, according to some (perhaps a majority) of

---

38 See n. 74, p. 47.


"Outsiders cannot be sufficiently familiar with a company to make other than a superficial appraisal." Backer, Financial Reporting for Security Investment and Credit Decisions, p. 199.
the nineteen financial analysts participating in the Seaview Symposium (one of the two symposiums mentioned).  

Although there was certainly no consensus, several analysts (without being specific as to what data is desired) suggested corporations should report their future plans. The investor, they remarked, is interested mainly in the future, and historical data is useful only as a means for predicting future income and growth. Moreover, management is more sophisticated than external users in applying forecasting techniques and has more knowledge concerning economic factors impinging upon the firm. It appears logical to assert managerial forecasts are more accurate than those prepared by outsiders. In addition, a firm should experience little cost increase in disclosing future plans, as forecasts have already been prepared as a part of the budget function.

40 The Seaview Symposium (held November 7 and 8, 1968) represented the first event concerned with financial reporting jointly sponsored by the American Institute of Certified Public Accountants, the Financial Analysts Federation, the Financial Executive Institute, and the Robert Morris Associates.


The financial officers, representing the Financial Executive Institute, participating in the Seaview Symposium were united in opposition to the disclosure of future expectations. A representative comment made by a participating financial executive was: "I am petrified at what I have heard here about making public forecasts."

The representatives of the American Institute of Certified Public Accountants and of the Robert Morris Associates indicated that the accountant should become more involved in budgeting and forecasting on either the preparation or the attestation level.
Contrary to the wishes of analysts in the Seaview discussions, two widely known analysts participating in an Ohio State University symposium seemed definitely opposed to disclosure of projected financial statements. According to them, management's function is to present historical data on which projections can be made; using historical data, the analyst then makes estimates of future profits, dividends, and market price.\(^{42}\)

Opposed also to disclosure of projected financial statements were 70 per cent of 72 analysts interviewed by the National Association of Accountants. Contentions such as the following were advanced in support of nondisclosure: (1) Responsibility for explaining deviations between their expectations and a company's published projections would be forced upon analysts. (2) Analysts might become overly dependent on managerial forecasts. (3) Fluctuations in a firm's stock price would be increased by disclosure of projected financial statements. (4) Published projections could reveal strategies to competitors.\(^{45}\)

\(^{42}\)See comments by Richard R. Jeffrey and Frank J. Hoeffmeyer in *The Use of Accounting in Decision Making*, ed. by Thomas J. Burns (Columbus, Ohio: College of Commerce and Administration, The Ohio State University, 1967), pp. 51-52.


Essentially the same negative response was noted by W. K. Rutledge in his doctoral dissertation. In surveying 27 financial analysts, 63 per cent disagreed with having budgeted data presented in interim reports. Almost the exact same reasons for nondisclosure of budgeted data as recorded by Backer were mentioned by analysts in Rutledge's study. See "Objectives of and Criteria for Interim Financial Disclosure" (unpublished Ph.D. dissertation, University of Alabama, 1970), p. 47.
The Committee on Corporate Information of the Financial Analysts Federation, which was established to publicize the informational needs of analysts, has twice indicated the desirability of disclosure of certain projected data. In 1954 Savage reported on certain conclusions reached by the committee. One of ten suggested annual report improvements was disclosure of a company's policies and objectives (i.e., expansion plans, new product development, and capital requirements).44 Afterwards, in 1962, the committee's first comprehensive report was published. Of twelve improvements suggested, three dealt with budgetary items. These were: (1) disclosure of the outlook for the coming year, (2) disclosure of marketing and advertising plans, and (3) disclosure of capital expenditure plans.45

In spite of the somewhat varying attitudes of financial analysts toward disclosure of budgetary data, disclosure of projected financial statements should serve to enhance their performance. Furthermore, even if security analysts and major institutional investors could form a general idea of a company's forecasted earnings, small shareholders are unable to do so and the accounting profession has an obligation to protect their interests.

Employes. Disclosure of projected financial statements should give impetus to more rational solutions to labor-management disputes. Since management's ability to pay can be more readily determined by projections than historical statements, collective bargaining on this basis would be less likely to result in strikes.46

General Public. If projected financial statements were disclosed, governments (federal, state, and local) could more accurately estimate future needs of the private and public sector. In discussing governmental uses of projections, one writer stated:

At present, projections of sales, purchases, capital investments, employment and other collective corporate activities are made by government, industry, and private groups to become the source data for government decisions. The availability of forecasted results prepared on a consistent, continuous basis would improve the decision data, with consequent national benefit.47

With projected data available on a continuous basis..., governments would then be able to react more quickly and appropriately in its attempt to stimulate the economy if this should appear necessary, or, conversely, to dampen economic activity if inflationary trends are indicated.48 Governments would also be able to estimate

tax revenues more accurately and adjust rates of taxation more intelligently.

Obstacles to External Disclosure of Projected Financial Statements

While investors, creditors, financial analysts, employees, and the general public stand to gain from more informative disclosure, several arguments are advanced against disclosure of projected financial statements. However, each of these is subject to counterargument. Seven such arguments and their respective counterarguments to disclosing any type of budgetary data are:

1. The inability to forecast the future with certainty makes discrepancies between planned and actual performance highly probable. Hence, the philosophy prevailing is that the user should be left to make his own projection. Having constructed the projection, the user will then appreciate the inherent limitations of it.

Counterargument

Deviations of performance and plans reveal (to an extent) managerial ability to cope with uncertainty. Knowledge concerning

this ability provides useful information to external parties in attempting to evaluate management. External users have a need for projections, and management can in many instances provide more accurate estimates than outsiders.

2. Projected financial statements published in advance of the actual financial statements would provide data detrimental to competition. A firm's competitors would be able to determine company strategies and hence plan to counteract them.

**Counterargument**
A reciprocal advantage will accrue to all competitors since knowledge of the goals and plans of one's competition should enable a firm to formulate and plan its own goals better. The damage by disclosure objection is raised each time additional disclosure is proposed, but the contention is not supported by research. A firm's real competitive advantage is dependent upon the nature of its facilities, technical know-how, managerial skill, and ability of the work force. Such details cannot be abstracted from projected
financial statements any more than from historical statements.  

3. Inadequate budgeting and forecasting principles and methods prohibit construction of reliable projections.

Counterargument

Reliability is a relative term and a projection prepared internally is potentially more reliable than one constructed externally. Furthermore, many firms are able to construct reliable projections. Daily, in studying eighteen firms (including textile, bank, and fabricated metal firms) concerning the reliability of the projected income statement concluded: (1) It is feasible for large diversified textile companies and large commercial banks to project income statements accurately enough for their external disclosure. (2) Companies in fabricated

50 Summers opted for a rather unique alternative in avoiding the competitive disclosure argument. It is possible to avoid competitive harm by presenting to external parties only budgets and financial statements for the same year. In other words, a projected statement would be disclosed only after the year to which it pertained passed. This alternative would permit assessment of managerial planning ability by analyzing variances between goals and actual results, and at the same time, avoid competitive harm. See Summers, "Opportunity Costs for Planning, Control, and Financial Reporting," p. 8. This concept is discussed further in Chapter VI under "Delayed Disclosure of Projected Financial Statements."
metals encountered difficulty in accurately projecting expenses and net income, but it is possible for these firms to disclose projected sales.51

4. Disclosure of projected financial statements increases the possibility of management-manipulated data.

Counterargument
There are built-in safeguards working against false or manipulated forecasts. For instance, management temptation to be conservative (in order to make the next comparison of goals with actual results look favorable) is balanced by the inability of conservative data to attract new security holders and prevent depression of the market value of old shares. Likewise, management temptation to be overly optimistic is partially conditioned by the ultimate comparison between goals and actual results that will eventually have to be reported and explained. Management manipulation can also be substantially lessened by subjecting projected financial statements

to a review by an independent public accountant. In any event, should management fail to provide nonbiased data, there is always the possibility of SEC intervention to regulate the form and content of projected financial statements.

5. The cost of disclosing projected financial statements exceeds benefits to external statement users.

**Counterargument**
Benefits to external users are substantial while incremental costs are probably much less. Most likely, the incremental costs of disclosing projected statements will be the additional audit fees and not additional preparation costs since many firms already utilize a comprehensive budget. In addition, firms lacking an adequate budgeting system will not be forced to disclose projected statements.

6. If projected financial statements were disclosed, the financial community, including accountants, would have to be massively educated to prepare, understand, and use the new financial statements.

**Counterargument**
This obstacle appears to have real merit. Offsetting it in part, however, is the fact
that external users are somewhat accustomed to using future-oriented data since many forecasts are already distributed in the financial press and in reports prepared by financial analysts.

7. Projected financial statements are not capable of being verified by independent experts.

Counterargument
Preparation of a comprehensive budget in a typical firm takes from three to five months, and upon completion it is used to guide the firm for the coming year. Such a document serving as ". . . a basis of corporate action and planning can be subjected to useful verification and confirmed or negated by more or less convincing evidence. . . . the auditor [already] deals in probabilities. To invade this new area of service, he need but extend his probabilities a little further."\(^5\)\(^2\) Moreover, since English chartered accountants are already examining profit forecasts, those holding that projected financial statements cannot be audited (to at least some degree) are forced to ignore reality.

In addition to the above obstacles to external disclosure of projected data another most important consideration is management's attitude. In attempting to ascertain this, Daily's interview of 18 firms produced the following:

1. Two firms felt that their management personnel would not object to the reporting of forecasted data.

2. One firm indicated that they would accept budgetary disclosure if all other firms in the industry would do likewise.

3. Fifteen firms were definitely opposed to disclosure of forecasted data for one of the following reasons: (1) projected statements would not be understood by shareholders, (2) projected statements would be beneficial to competitors, and (3) projected statements are not needed by shareholders since they already receive an adequate quantity of data.  

Backer assessed management's attitude toward disclosure of projected earnings data. In interviews of 109 senior corporate executives representing 70 firms, he asked the following question:

What is your attitude toward releasing to the public expected earnings per share for the coming year in a range [emphasis supplied] and accompanied by the major assumptions on which

---

this is based? In quarterly reports, or sooner if unexpected events occurred, the forecast for the remainder of the year could be revised and the reasons for the revision explained.\textsuperscript{54}

In response, approximately 50 per cent of the executives voiced approval of the proposal.\textsuperscript{55}

In summary, many beneficial results should emanate from external disclosure of projected financial statements. Some of these are:

1. Decision making is likely to improve since external users will have more informative and relevant data from which to evaluate alternatives.

2. External users will have less difficulty in judging the quality of management.

3. Market values of securities will likely become more realistic.

4. Firms characterized by improper budgeting and planning will be motivated to undertake corrective action.

5. Firms are likely to be able to plan better because they will have access to forecasts made by other firms in the industry.


\textsuperscript{55} Ibid. It could be hypothesized that the difference between the responses in Daily's study and Backer's study is that Backer's question specifically provides for interval data disclosure.
6. Out-of-pocket costs and opportunity costs associated with capital flotations should decrease for firms having above average planning ability.56

Shareholders and other external statement users must grapple with uncertainty, either with or without disclosure of projected financial statements. The point is, however, that users can deal more effectively with uncertainty by having access to projected statements.

The Comprehensive Budget, Master Budget, or Profit Plan

Projected financial statements depend upon a logical budgetary process for their reasonableness and completeness, and the independent auditor in attesting to projected financial statements must thoroughly understand this process. Accordingly, this section illustrates the comprehensive budget (master budget or profit plan) for a hypothetical manufacturing firm.

The comprehensive budget consists of an interrelated series of sub-budgets beginning with a sales budget and concluding with a projected balance sheet. The purpose of preparing a comprehensive plan is to coordinate the

diverse activities of an organization and direct the different functions toward common goals.

The various sub-budgets constituting a comprehensive budget are presented in Figure 1. The general relationship and dependency of one sub-budget on another is also partially shown in Figure 1.

In preparing a comprehensive budget for a manufacturing firm the basic steps are as follows: 57

1. The sales budget is prepared and tentatively approved by the budget committee before work begins on other budgets. Once approved, the sales budget establishes the level of activity on which all other budgets are based. Concurrently with preparation of the sales budget, the sub-budgets for product development, research, and advertising (appropriation budgets in Figure 1) are constructed. Appropriation budgets are nonvariable, being dependent on budgeted sales and production only in a general way, and are set by management decision. However, they are an integral part of the sales budget. In preparing the sales budget resource input constraints must be considered along with

---

57 Adapted in part from Horngren, Cost Accounting: A Managerial Emphasis, pp. 127-128.
FIGURE 1
THE COMPREHENSIVE BUDGET

Income Objective

Sales Budget (in quantities and dollars by district, product, and time period)

Other Income Budgets
Interest Income
Royalty Income

Cost and Expense Objective

Production Budget (units to be produced)
Distribution Expense Budget by District
Administrative Expense Budget by Department
Appropriation Budget
Advertising Research Development
Other Expense Budget
Interest Expense

Sales, costs, and expenses are finally reflected in

A Projected Income Statement

Plus

Financial Objectives

A Projected Balance Sheet
Assets, Liabilities, Stockholders' Equity

Supporting Sub-Budgets:
Cash Budget
Inventory Budget
Capital Additions Budget

the interrelationships of price, market demand, and production costs.

2. After sales are budgeted, the production budget is prepared. In doing so, the units of budgeted production of finished goods must be predetermined. This unit calculation may be expressed: Units to be produced equals desired ending inventory of finished goods plus planned sales minus beginning inventory of finished goods. Desired ending inventory is a function of raw material acquisition lead time, production time, and safety stock. Hence, construction of the production budget necessitates specification of a finished goods inventory policy by management.

3. Having determined the level of production activity, the following budget schedules are constructed:

A. Direct material usage and purchase.

Material usage depends upon the level of production activity determined in Step 2 above. Purchases are determined as follows: Purchases in units equals desired ending material quantities plus usage minus beginning inventory quantities. Desired ending
material quantities are functions of order quantities and safety stock requirements, with the latter being, in turn, a function of lead time and usage reliability. The direct material budget can be based on a material specification report. The purchasing department is usually responsible for estimating necessary units and expected price.

B. Direct labor costs. These depend upon the type of products produced and the labor rates and methods which must be used to obtain desired production. In a process cost system the direct labor budget can be computed from standard hours per finished product times average wage rate expected plus expected variations from standard.

C. Factory overhead costs. These depend upon the behavior of costs of the individual overhead items in relation to the anticipated level of production. Responsibility for preparation of factory overhead budgets usually lies with the factory divisional executives.
4. Cost of goods sold. This budget depends upon the information gathered in Step 3. It is usually prepared by the budget director.

5. Budgeted distribution, administration, and other expense.

6. PROJECTED INCOME STATEMENT. This budget is prepared from information obtained in Steps 1 through 5. Responsibility for its preparation lies with the budget director.

7. Cash budget. This budget estimates the effect on cash position of the above level of operations. The cash budget is ordinarily supported by the following schedules:

A. Cash receipts. These depend on collections of receivables and other sources of cash such as the sale of bonds and fixed assets. Collection experience and average lag between sales and collections are key factors that also should be considered. Determining the timing of accounts receivable collections may be regarded as an extension of the aging process. It differs from the aging process mainly in its emphasis on the expected time of payment rather than merely on the proportion of the
outstanding balances which will ultimately prove collectible. The credit manager should play an important part in forecasting the volume of accounts receivable collections.

B. Cash disbursements. These depend on the following:

(1) Material purchases--depend on the credit terms extended by suppliers and the bill-paying habits of buyers.

(2) Direct labor and other wages (indirect labor)--depend on payroll dates and payroll tax liability dates.

(3) Other costs and expenses--depend on timing and credit terms.

(4) Other disbursements--depend on purchases of fixed assets and long-term investments from the capital budget.

C. Cash increase or decrease can be determined by subtracting B from A.

D. Financing requirements are determined giving consideration to computed cash excess or deficiency and any minimum desired cash balances.
8. Inventory levels. These are desired inventory levels as determined above. The inventory levels budget consist of desired raw materials, work-in-progress, and finished goods inventories.

9. Budgeted capital additions. Responsibility for preparing the capital budget usually rests with a financial executive, such as the company controller or the budget director. However, capital project estimates are generally prepared by the individual project sponsors.

10. PROJECTED BALANCE SHEET. Each item is projected in light of the details of the business plan as expressed in Steps 1 through 9. The budget director usually has responsibility for preparing the projected balance sheet.

Besides sub-budgets and supporting schedules, a comprehensive budget should also include a brief narrative outlining the year ahead, the major programs, objectives, problems, and anticipated economic assumptions on which the total budget is based. The narrative should also touch on the firm's long-range plan and the way in which the budgeted year fits in with long-range objectives.  

---

58 Bunge, "Budgeting," ch. 37, pp. 24-25.
Research on comprehensive budgeting practices is disconcertingly meager. On the 424 companies surveyed in the Sord and Welsch study the findings were:

<table>
<thead>
<tr>
<th>Type of Budget</th>
<th>Percentage Using</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Budget</td>
<td>97%</td>
</tr>
<tr>
<td>Production Budget</td>
<td>79</td>
</tr>
<tr>
<td>Raw Materials Purchase Budget</td>
<td>48</td>
</tr>
<tr>
<td>Expense Budget</td>
<td>87</td>
</tr>
<tr>
<td>Advertising Budget</td>
<td>93</td>
</tr>
<tr>
<td>Research Budget</td>
<td>75</td>
</tr>
<tr>
<td>Cash Budget</td>
<td>86</td>
</tr>
<tr>
<td>Credit and Collections Budget</td>
<td>42</td>
</tr>
<tr>
<td>Capital Budget</td>
<td>97</td>
</tr>
</tbody>
</table>

The Sord and Welsch study does, however, support the generally accepted belief that the overall plan of operations in sophisticated firms is supported by detailed sub-budgets in major areas of responsibility.

More recent studies made by the National Industrial Conference Board present limited data concerning comprehensive budgeting practices. One study revealed 373 firms out of 433, or close to 90 per cent, prepare a sales budget, and another study found slightly over 75 per cent of more than 100 firms prepare a capital budget.

Having briefly discussed the logical components of a comprehensive budget and the procedures generally followed

---

59 Sord and Welsch, Business Budgeting, p. 91.
60 Bacon, Managing the Budget Function, p. 8.
by a typical manufacturing firm in constructing such a budget, consideration is next given to principles necessary for effective budgeting.

Principles of Effective Budgeting

Budgeting techniques must meet the needs of the business organization for which they are designed. Since no two firms are alike, no two budgeting approaches will be exactly the same. However, no matter how specialized a particular business may be, certain basic fundamentals must be applied in order to achieve an effective budgeting program. These fundamentals or conditions necessary for effective budgeting are defined herein as principles of budgeting. From a review of the literature twelve such principles come to light. These are:

1. Budgets should be carefully tailored to the organizational characteristics, needs, and philosophy of the individual firm. A budget system that works effectively in one firm will not necessarily do so in another.

2. Budgets should be based on and be in accordance with broad corporate objectives

62 Strategies, essentials, fundamentals, and conditions are used interchangeably with principles in the literature.

63 The twelve principles are taken primarily from the following sources: Bacon, Managing the Budget Function, pp. 4-6; Bunge, "Budgeting," Ch. 37, pp. 26-27; Lewis, "An Industry View of Budgeting," p. 32; L. Paden Neeley, "Trends in Budgeting and Budgeting Techniques," Budgeting, XIII (March, 1965), 1-2; and Welsch, Budgeting: Profit Planning and Control, pp. 25-39.
(long-range plans), and as many as possible of these broad objectives (e.g., desired earnings per share, desired return on investment, and desired per cent increase in net income) should be quantified. Unless corporate goals are decided first, the budget suffers.

3. Budgets should be based on a sound organizational structure having clearcut lines of authority and responsibility.

4. Budgets should be based on an adequate accounting system which generates sufficient and timely data in a form that is compatible with the budget system.

5. Budgets should have adequate support of top management. In fact, genuine support of all levels of management is essential.

6. Budgets should seek to maximize participation. That is, those responsible for carrying out the budget plan should participate in its preparation.

7. Budgets should contain realistically attainable goals and objectives. The budget should express management's best estimate as to what is most likely to occur during the forthcoming period, barring unforeseen
circumstances or events beyond managerial control. 64

8. Budgets should not run the business: There must be enough flexibility to allow an organization to take advantage of unforeseen opportunities. Preferably, the budgets used for control should be revised as activity levels change while the annual profit plan (fixed budget) should remain unchanged during the budget period.

9. Budgets should be supported by a reporting system which incorporates a comparison of actual with expected performance. Variences should be isolated, and, if material, explained. 65

10. Budgets (comprehensive in nature) should be approved by management at a high level. The approval responsibility should be shared with a committee or members of the

64 Stedry, of course, would advocate that only the profit plan be based on attainable goals and objectives while the day-to-day control budgets be attainable or tight depending upon the particular person being controlled.

65 From the National Industrial Conference Board survey 89.5 per cent of 200 companies commenting compare operating performance figures with budget figures monthly. Thus, monthly comparison is almost the universal practice. For explanation of variances, the most commonly found procedure is to make explanation mandatory for any variance that equals or exceeds a certain level, say ±5 to ±10 per cent. See Bacon, Managing the Budget Function, pp. 34 and 40-41.
board of directors. Besides approving the budget, the budget committee should also offer advice during budget preparation, reconcile divergent views, and oversee budgetary activities.

11. Budgets, their objectives and construction, should be specified in a budget manual. The responsibilities and authority of all executives and employees concerned with budgetary procedure should be defined and budgetary reporting procedures should be documented in the budget manual.

12. Budgets should be supported by a qualitative or quantitative description of the activities required for their realization. "For example, it is unlikely that an increase of 15% in a sales budget will be achieved unless those who prepare the budget identify and describe the activities necessary to obtain that additional business."  

In reviewing projected financial statements, the independent auditor obviously must be aware of the aforementioned budgeting principles. The projected statements are inherently dependent upon successful implementation of sound budgetary practices and principles by management.

Sales Forecasting and Budgeting

The starting point for budgeting and the most critical element upon which the projected financial statements depend is the sales forecast. "Sales forecasting may be defined as the estimation of the expected-to-be-achieved sales of a given firm under a specified set of marketing policies for the purpose of preparing a sales budget." 67

Since the sales forecast affords a foundation for the sales budget, it in turn provides a basis for production planning, inventory control, cash flow management, and capital budget planning. Consequently, the sales forecast represents a most critical step in the construction of a comprehensive budget and forms the bedrock of any formal planning program.

If company plans are to be oriented to expected sales, 68 the sales forecast must be carefully made. Welsch, in emphasizing the significance of sales forecasting stated:

In order for a comprehensive budgetary program to be realistic, there must be a realistic sales or revenue forecast. The seriousness with which sales and expense budgeting is viewed determines to a large degree the success or failure of a budget program. Unless a realistic sales budget is developed, the plan

68 Sales are in most cases the foundation for plans. However, in situations where limited production capacity, raw material supply, labor availability, or financing problems are constraints, these may become the important planning factors.
relating to other responsibilities will not be sound. . . .69

In support of Welsch, Vatter said: "We ought to take special pains to see that the whole [budget] program is not warped and jeopardized by an inadequate and untrustworthy sales forecast."70

Before discussion of individual forecasting techniques, a general overview of sales forecasting is presented. The overview includes: (1) reasons for difficulty in forecasting sales, (2) accuracy of sales forecasts, and (3) principles of sales forecasting.

Reasons for Difficulty in Forecasting Sales

For a long time the major obstacle in the budgetary process was the sales forecast, and today this is still mentioned as the most difficult task. According to the Sord and Welsch research study one of the three principal limitations of budgeting is, "The inherent difficulties involved in forecasting volume with reasonable accuracy and confidence."71 More recently, a National Industrial Conference Board study on budgeting practices echoed a similar belief: "A number of companies find that forecasting ranks among the chief difficulties in budgeting

69 Welsch, Budgeting: Profit Planning and Control, p. 81.
70 Vatter, Operating Budgets, p. 35.
71 Sord and Welsch, Business Budgeting, p. 41.
and several companies say it is their only critical budgeting problem.\textsuperscript{72}

Two reasons cited by one writer for the difficulty of estimating sales were:

1. The nature of the present socio-economic environment characterized by a strong and continuing element of change and innovation precludes a precise determination of the future.

2. Many businessmen are doing an inadequate job in estimating sales because they are unaware of the advancements in the field.\textsuperscript{73}

Another reason for the difficulty in preparing sales forecasts is that sales are less directly under company control than other items such as selling expense, capital expenditures, and production plans.

Accuracy of Sales Forecasts

In spite of the impediments, sales forecasting has attained a reasonable degree of reliability. Research on reliability of sales forecasts is scanty, but does tend to show four things:

1. The larger the company, the more likely its forecasts will approach actual results.\textsuperscript{74}

\textsuperscript{72}Bacon, \textit{Managing the Budget Function}, p. 12.

\textsuperscript{73}Adapted from Copeland, "Sales Forecasting," pp. 4-5.

\textsuperscript{74}"Sales Forecasting: Is 5% Error Good Enough?" \textit{Sales Management}, XCIX (December 15, 1967), 41.
In a large firm the difference between actual amounts can be reduced by the company's ability to transfer resources from one activity or product line to another. Smaller firms lack this flexibility because they commit their resources to a lesser number of activities.

2. Deviations between forecasted and actual aggregate sales average approximately three to eight per cent.75

A survey of 182 companies by Sales Management revealed that dollar deviations between forecasted and actual sales volume averaged 5.3 per cent. Company size and deviation were broken down as follows:

<table>
<thead>
<tr>
<th>Sales Volume</th>
<th>Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $10 million</td>
<td>6.9%</td>
</tr>
<tr>
<td>$10-$99 million</td>
<td>5.7%</td>
</tr>
<tr>
<td>$100 million plus</td>
<td>3.9%</td>
</tr>
</tbody>
</table>

See "Sales Forecasting: Is 5% Error Good Enough?" p. 42.


A recent survey of 145 companies (sales ranged from under $100 million to over $500 million) conducted by the National Industrial Conference Board reported a median dollar deviation between actual sales and forecasted sales of 4 per cent. Interval ranges were reported as follows:

<table>
<thead>
<tr>
<th>Deviation</th>
<th>Per Cent of Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1% to 1.5%</td>
<td>16%</td>
</tr>
<tr>
<td>1.6 to 4.5</td>
<td>36%</td>
</tr>
<tr>
<td>4.6 to 10.0</td>
<td>41%</td>
</tr>
<tr>
<td>10.1 to 20.0</td>
<td>5%</td>
</tr>
<tr>
<td>Over 20.0</td>
<td>2%</td>
</tr>
</tbody>
</table>

3. Inaccuracies in sales forecasting generally result from a company's failure to apply what could be considered sound principles and techniques of forecasting.  

4. Major difficulty in predicting sales revenue does not concern total sales revenue, but rather the inability to accurately estimate the sales of specific products or specific sales areas.

Since the 1920s when sales forecasting and budgeting were first applied, tremendous strides have been made. Although precise sales forecasting will probably always be beyond the realm of reality, certain principles and techniques are capable of being employed to substantially increase reliability. Tools of sales forecasting show promise of becoming considerably better, and techniques

76 Alexander, personal letter dated September 2, 1970. See also Monroe Murphy Bird, Jr., "An Analysis of the Utilization of Sales Forecasting by the Western Arkansas Furniture Industry" (unpublished Ph.D. dissertation, University of Arkansas, 1968). Bird illustrated faults in sales forecasts resulting from two causes: (1) failure to apply sound forecasting principles and techniques, and (2) inadequate managerial awareness of tools available for forecasting.


used in estimating sales are achieving a significant degree of accuracy. According to Welsch, "... many concerns operating in extremely complex situations have been able to attain an accuracy of 98 per cent."\(^7\)

**Principles of Sales Forecasting**

Effective sales forecasting appears to possess certain traits which could be called principles, although they are not labeled as such in the literature. Here principles are defined as practices necessary to yield reasonable and realistic forecasts. From an extensive review of the literature seven such principles appear to exist:

1. The sales forecast should be preceded by and based on both an economic forecast and an industry forecast.\(^7\) This assures uniformity in definitions of sales forecasting. A distinction is made, however, in this chapter because the different forecasts are constructed by different units within an organization often using different techniques.

Economic forecasting is defined as the prediction of gross national product items, production series (e.g., steel, automobiles), capital expenditure data, prices, employment and wages, leading series (e.g., new orders, index of stock prices, corporate profits after taxes), coinciding series (e.g., unemployment rate, personal income, sales of retail stores), and lagging series (e.g., interest rates, manufacturer's inventories, capital expenditures).

Industry forecasting is defined as the prediction of total sales volume of a given homogeneous group of products.

A number of factors should be analyzed before forecasting sales. There are: general business environment, political stability, trends in population, income and productivity, total industry demand, consumer characteristics, company's competitors, sources of material availability, and capital availability. See Alexander, "Financial Forecasting -- A Part of the Accountant's Professional Work," p. 260.
in basic assumptions and thinking for all personnel involved in forecasting sales.

2. Sales forecasts should be developed by a variety of different methods. As a minimum, at least one statistical technique and one judgmental technique should be used.  

3. The different estimates produced by the multiple-method approach should be investigated and reconciled into a sales budget on a judgment basis. The reconciliation stage is one of the most crucial steps in budgeting. "The critical examination of differences between two or more independent forecasts sharpens executive judgment and tends to make the final forecast more reliable."  

4. Sales forecasts should be carefully reviewed and approved by top management before any

---

80 Horngren, Cost Accounting: A Managerial Emphasis, p. 135; and National Industrial Conference Board, Forecasting Sales, p. 11.

From a survey of more than 300 firms—most of the top 100 companies, plus a sample from medium-sized and relatively small firms—90 per cent of more than 125 respondents indicated that they use some combination of the statistical and subjective approach to sales forecasting. See Robert Reichard, "What's New in Sales Forecasting: Survey of Current Company Practices," Management Review, LIV (September, 1965), p. 37.

81 National Industrial Conference Board, Forecasting Sales, p. 11.
further steps are taken in the budget procedure.\textsuperscript{82}

5. "The choice of a sales forecasting system and its adaption to a particular company's needs is a highly individualized matter".\textsuperscript{83} Sales forecasting accuracy improves with experience, and a technique that produces accurate results in one company may produce erroneous results in another.

6. A sales forecast should be supported by a qualitative or quantitative plan for achievement. "There is a strong relationship between the reliability of a forecast and the existence of a realistic plan in the minds of those who will meet that forecast."\textsuperscript{84}

7. A sales forecast must consider resource constraints, such as production delivery and the ability of the company to produce the number of units to be sold.

Here as with the principles of budgeting, the independent auditor must be cognizant of sound principles of sales forecasting.

\footnotesize{
\textsuperscript{82}Bacon, Managing the Budget Function, p. 15; and Copeland, "Sales Forecasting," p. 68.

\textsuperscript{83}National Industrial Conference Board, Forecasting Sales, p. 100.

\textsuperscript{84}Alexander, personal letter dated March 12, 1971.}
Sales Forecasting Techniques

Sales forecasting techniques range from simple approaches to complex mathematical models of analysis and prediction. The inputs to these models, both simple and mathematical, "... are facts, rumors, conjectures, statistical techniques, and above all else, common sense." Two essential ingredients of any forecast are fact and judgment. "... all modern-day techniques are designed either to limit the area in which judgment must be exercised, or to improve the quality of judgment reinforcing it with facts." 85

There are numerous ways to classify sales forecasting techniques, but the one best in accordance with the principles of sales forecasting is the two-system classification: (1) judgmental techniques, and (2) statistical techniques. The distinction between the two lies in the manner in which past data is used to project future sales. In the purely judgmental models the relationships between past and future sales are derived in the mental process of the forecaster, while in the statistical models, the relationships involved in analyzing past results and projecting future sales are derived and applied explicitly. The judgmental models may involve some statistical techniques and the statistical approaches will certainly involve judgment.

85 National Industrial Conference Board, Forecasting Sales, p. 4.
86 Ibid.
"But there is a different mix of mental assessment versus numerical calculation, and the ultimate jump from past data to putting down forecast figures is internal for judgmental forecasts and external for statistical models."87

... Using the twofold system of classification, the following widely used techniques are presented:

Judgmental Techniques
1. Jury of executive opinion.
2. Sales force composite.

Statistical Techniques
1. Naive serial correlation.
2. Time series decomposition.
3. Regression or correlation analysis.

Judgmental Techniques

Jury of executive opinion. The jury of executive opinion technique consists of obtaining and combining the views of top management concerning their sales expectations for a future period. To work effectively, the views sought should represent a broad coverage of experience and opinion. Thus, executives from sales, production, finance, purchasing, and administrations should make up the jury.

In implementing the jury method, three variations are encountered: (1) The jury may function as a reviewing committee which receives a tentative sales forecast from various segments of the firm and then acts to alter and approve the sales forecast. (2) The jury may function as an originating committee which prepares the initial forecast as well as revises the final forecast. (3) The jury may function as a presidential survey with each member furnishing an individual written forecast to an executive officer. This officer coordinates the individual estimates into a final sales forecast. Under this variation, participating executives do not meet together in a body.\textsuperscript{88}

The jury method is used by almost every firm attempting to develop an effective sales budget. In lieu of the apparent trend toward more mathematical models of forecasting, it affords a useful manner by which subjective data can be introduced into the forecasting process. According to the Sord and Welsch survey, 45 per cent of the 389 respondents used the jury of executive opinion in sales forecasting.\textsuperscript{89} Differing significantly, a recent National Industrial Conference Board survey indicated that of 161 reporting companies, 80 per cent are heavy or moderate users of the jury method.\textsuperscript{90}

\textsuperscript{88}Copeland, "Sales Forecasting," pp. 77-78.

\textsuperscript{89}Sord and Welsch, Business Budgeting, p. 138. (The remaining references in this chapter to the Sord and Welsch survey are to page 138.)

\textsuperscript{90}Pokempner and Bailey, Sales Forecasting Practices: An Appraisal, p. 10. (The remaining references in this chapter to this National Industrial Conference Board survey are to page 10.)
Sales force composite. The sales force composite technique consists of obtaining the views of salesmen, sales management, or both as to the firm's future sales volume. Frequently, it is referred to as the grass-roots approach since the process assimilates data from those who are closest to the market.

There are three variations of the sales force composite: (1) Meetings are held at each hierarchial marketing level beginning with the sales force and concluding with the chief marketing executive. The sales force of a given area or product presents estimates of sales to a field manager in charge of the area or product. In turn, the field managers of different areas present their estimates to a division manager. Finally, the division managers report a combined forecast to the chief marketing executive. (2) The chief marketing executive prepares the total sales forecast directly from individual salesmen estimates. Individual estimates bypass the formal chain-of-command and go directly to the chief marketing executive. (3) Salesmen are surveyed for relevant data pertaining to sales expectations. They do not make a forecast but supply a central staff with data used in constructing the forecast.91

One of the major obstacles in utilization of the sales force composite technique is the unawareness on behalf of the sales force of economic patterns. Firms are

91 Copeland, "Sales Forecasting," p. 86.
attempting to overcome this by giving salesmen records of past sales and official economic projections to use in making their forecast. In addition, some firms require construction of estimates by sales management since they tend to have a keen appreciation of the importance of a realistic sales forecast.

Concerning actual practices, a Sales Management profile of sales forecasting indicated 70 per cent of 182 surveyed firms employed some variation of the sales force composite technique.\textsuperscript{92} Similarly, the Sord and Welsch study of 389 firms revealed 81 per cent usage, and the National Industrial Conference Board survey of 161 firms reported 75 per cent usage.

Customer survey. Many firms in forecasting sales ask their customers for information concerning expected consumption or purchases. This approach is generally employed only if a firm's customers comprise a small number. Accordingly, it is more applicable to industrial firms than to firms selling to the final consumer.

In carrying out the customer survey, firms use various interrogational devices such as mail, telephone, and personal interviews. To increase accuracy in responses, different levels of the purchaser organization are often questioned.\textsuperscript{93}

\textsuperscript{92}"Sales Forecasting: Is 5% Error Good Enough?" p. 43. (The remaining references in this chapter to this Sales Management survey are to page 43.)

\textsuperscript{93}National Industrial Conference Board, Forecasting Sales, p. 30.
The customer survey technique is not widely used, because limitations, mainly excessive cost in time and manpower, have proved so extensive. However, available research indicates that the closer a knowledgeable person is to a final consumer market, the more accurately the future can be predicted. A European research organization discovered:

. . . the forecasts of shoe retailers have generally been more accurate than the forecasts of shoe wholesalers, and in turn have usually been more accurate than the forecast of shoe manufacturers, which in turn have generally been more accurate than the forecasts of leather traders, tanneries, and traders of hides.94

The Sales Management profile of sales forecasting practices showed 43 per cent of the 182 firms used customer surveys. By industrial classifications, the percentages ranged from 17 per cent for consumer product industries to 46 per cent for machinery and electrical equipment producers. The profile also indicated a tendency for small firms to use customer surveys as opposed to firms with sales volume of $10 million or more. Differing slightly from the Sales Management study, Sord and Welsch found 54 per cent of the 389 companies using the customer survey, and the National Industrial Conference Board survey reported 48 per cent of 161 companies using the customer survey.

Statistical Techniques

Naive serial correlation. The simplest of the statistical techniques are the models which imply an ignorance on the part of the forecaster regarding causal factors and their future changes. In other words, the sales forecast is based on the premise that what has happened in the past will continue to happen in the future.

Various types of naive serial correlation models, ranging from persistence models to equal-per-cent change models are found in practice. The persistence models assume sales will be the same as the period before while the equal-per-cent change models express change as a percentage adjustment applied to last period's sales. Equal-per-cent change models are commonly expressed as:

\[ Y_{+1} = Y_0 \times \frac{Y_0}{Y_{-1}} \]

where:

- \( Y_{+1} \) = next year's sales,
- \( Y_0 \) = this year's sales, and
- \( Y_{-1} \) = last year's sales.

A naive model slightly more refined than persistence or equal-change models is the moving average technique. The moving average approximates the trend of sales by using a series of averages with high and low values cancelled out. Different types of averages are used to smooth the data (remove extreme variations). For example,
all data inputs may be given equal weight in calculating the averages, or the more recent data may be given more weight relative to sales further in the past. The latter is frequently referred to as an exponentially weighted average. The moving average model can be written in general form as follows:

\[
X_i = \frac{X_i + X_{i-1} + X_{i-2} + \cdots + X_{i-n+1}}{n},
\]

where:

- \(i\) = the number of the last (most recent) term,
- \(X_i\) = the estimate of the next term, and
- \(n\) = number of terms in the moving average.

Despite their shortcomings, naive models do have a place in the forecaster's repertoire. They are somewhat successful if conditions are fairly stable or are changing in a uniform manner. They also find frequent use as yardsticks for the evaluation of more elaborate forecasting methods.

The Sales Management profile did not provide data directly on the extent of usage of naive models but did disclose the following: Of the 182 firms, 78 per cent employed some method of trend projection and 31 per cent of these methods were time-series analyses. Consequently, it can be deduced that 47 per cent employed some type of naive model. However, this conclusion is highly tentative
because research shows some forecasters use the naive technique without being aware of it. The Sord and Welsch study and the National Industrial Conference Board survey did not provide data on utilization of naive models.

Time series decomposition. The time series technique is applied by decomposing historical sales data into four distinct elements and then projecting estimates for each of the elements for the coming forecast period. Then, the elements are reunited in multiplicative form to obtain the estimate of sales.  

In illustrating the four distinct elements, the generally accepted model is:

\[
Y = T \cdot S \cdot C \cdot I, \text{ where:}
\]

\[
Y = \text{company, product, or territory sales volume,}
\]

\[
T = \text{secular trend,}
\]

\[
S = \text{seasonal movement,}
\]

\[
C = \text{cyclical movement, and}
\]

\[
I = \text{irregular variation.}
\]

Analyzing each element individually, secular trend may be defined as the tendency for a time series to increase or decrease over a period of twelve or more years (time necessary to remove cyclical influences). The secular trend is projected by fitting a line, via graphic or

\[95\text{The model may also be expressed in additive form (}\ Y = T + S + C + I\text{) depending on how estimates are originally computed.}\]
mathematical techniques, to historical sales data. Graphically, the line is extended through historical sales data so exactly one-half of the original values are on either side. Mathematically, it is fitted by minimizing some objective criterion about the equation of the line. The criterion minimized may be the standard error of estimate, the chi-square variation, or the summed absolute deviations. In fitting the trend line, it should begin and end at comparable points in the business cycle. Moreover, the simple linear trend is not always appropriate in order to minimize the objective criterion. Lines frequently encountered are: (1) an arithmetic trend, which is a straight line and assumes a constant absolute change each period, (2) a semilog trend, which assumes a constant percentage change each period, and (3) a logistic trend, which assumes a constant involving increasing increments from an initial low value and then a gradual slowing down, or vice versa.96

The second element, seasonal movement, can be defined as a change occurring in annual sales data due to changes in weather or the calendar, or a combination of the two. Two widely used methods employed in isolating seasonal movement are the crude specifics and the ratio of twelve-month moving average.

---

Seasonal movements are isolated by the crude specific technique as follows:

\[
\text{Index of Month's Sales} = \frac{\text{Monthly Sales} \times \text{Normal Year Sales}}{0.08333}
\]

The twelve-month moving average technique is somewhat more refined than crude specifics since the twelve-month average is based on several years of data rather than a "normal" year. The basic principle underlying this technique is that an average of the twelve months of a year cannot be affected by seasonal influences, since each of the twelve months was included in the model.

Turning to the third element, cyclical movement may be defined by its three major characteristics: (1) it is of longer duration than one year, (2) it does not exhibit regular periodicity, and (3) it usually reverses directions within three to six years.

To isolate cyclical movement the most commonly used method is the residual technique. That is, given secular trend and seasonal movement and assuming irregular variation to cancel out, cyclical movement can be calculated as follows:

---

97 Copeland, "Sales Forecasting," pp. 123-124. Division by .08333 is necessary to convert a percentage to an index number (.08333 is one-twelfth of 100 per cent).

\[ Y = T \cdot S \cdot C \cdot I, \text{ transposing:} \]
\[ C \cdot I = \frac{Y}{T \cdot S} \]

Calculation of cyclical movement represents the most difficult part of time series decomposition. In fact, the residual method is criticized because it may induce an oscillation in a series when a real cycle is nonexistent (Slutsky-Yule Effect).\(^99\) This criticism has caused many firms to use subjective adjustments to introduce cyclical movement into the forecasting model. The subjective adjustment is guided in part by leading indicators of the overall economy.

The final element of time series decomposition, irregular variation, is characterized by random occurrence, and inability to predict mathematically.\(^{100}\) Hence, in order to introduce irregular variation into the forecasting model, a judgmental adjustment derived from either the jury of executive opinion, the sales force composite, or


\(^{100}\) Richmond defines irregular variation as encompassing all forces or effects not included within trend, seasonal, or cyclical movements. Hence, irregular variation includes not only the small random or chance variations, but also the irregular, usually non-recurring variations, such as those attributed to strikes, accidents, unusual weather phenomena, etc. These variations, being irregular, are not susceptible to mathematical analysis. Thus, where it is possible to forecast these eventualities, it is necessary to analyze the specific factors at work and to marshal all available information in such a way as to make it possible to anticipate their effect. See Samuel B. Richmond, Statistical Analysis (2nd ed.; New York: The Ronald Press Company, 1964), p. 419.
the customer survey method must be employed. However, the past variability of the irregular component does provide a means of setting a range above and below the sales forecast within which actual sales may be expected to fall.

Given certain inherent limitations (inability to forecast turning points, high operating costs, sizable input data demands, etc.) of time series decomposition, Sales Management reported only 31 per cent of the 182 firms use it. However a marked difference was shown in usage by firms with sales under $10 million and firms with sales of $100 million or more. The smaller volume group indicated only 16 per cent usage while the larger one reported 48 per cent usage. The complexity of time series decomposition apparently prohibits use by other than large sophisticated firms.

The National Industrial Conference Board survey reported that 57 per cent of 161 reporting companies employed time series decomposition with heavy or moderate reliance. The Sord and Welsch study did not provide data on the usage of time series decomposition.

Firms employing time series analysis usually apply it as a framework to guide general thinking. For example, when the sales forecast is prepared by one of the judgmental techniques, a staff forecaster is likely to use a time series projection to determine if the judgmental model is reasonable.101

101 Ibid., p. 126.
Regression or correlation analysis. The regression or correlation technique seeks to relate a particular firm's or industry's sales to economic movements that are believed to influence sales. The relationship between the firm's sales (dependent variable) and the influencing factors (independent variables) is often expressed as a mathematical equation or formula such as the following:

\[ Y = a + bX + cZ, \]
where:

- \( Y \) = dependent variable (sales),
- \( X \) & \( Z \) = independent variables (given or forecasted), and
- \( a, b, \) & \( c \) = regression coefficients.

A firm using correlation or regression analysis has to determine whether to use a regression equation with one independent variable (simple correlation) or with more than one independent variable (multiple correlation). In general, the more independent variables included, the more accurate the resulting estimate of sales, but to avoid unnecessary costs management must weigh increased accuracy of a sophisticated model against increased costs.\(^{102}\)

The Sales Management profile of sales forecasting practices indicated that 68 per cent of the 182 firms surveyed used correlation analysis. Similarly, Sord and Welsch found 61 per cent of the 389 firms correlated sales with general economic indicators while 34 per cent

correlated sales with some industry economic indicator. The National Industrial Conference Board included correlation analysis as a mathematical model forecasting method. Of the 161 companies, 34 per cent indicated usage of mathematical models.

Although very little is known concerning the accuracy of correlation analysis as compared to other techniques, it appears to be superior to judgmental and mechanical extrapolations since many firms are adopting it. One user, Eli Lilly and Company, reported more success using correlation analysis, with some recent years' forecasts being within two per cent of actual sales.\textsuperscript{103}

\textbf{Market-share analysis.} A two-stage model is employed in market-share analysis. Stage one consists of construction of a model for determining total industry sales of a given product, and stage two consists of construction of a model for determining the firm's market share of industry sales. The analysis is usually carried out by the following procedures:

1. The products of a firm are classified into homogeneous groupings for which total industry sales figures are available.

2. A quantitative relationship between a firm's sales and industry sales is determined.

\textsuperscript{103}Ibid., p. 44.
3. A forecast is made for each industry for the firm's forecast period.

4. By applying the firm's market share to each industry forecast, a sales forecast by industry is obtained.

5. The total sales forecast for the company is derived by summing the sales forecasts for the various product groups.\footnote{Adapted from Copeland, "Sales Forecasting," pp. 151-152.}

The two-stage market-share model is typified by the following:

\[ E_i = S_i \cdot I_i, \text{ where:} \]
\[ E_i = \text{the estimated sales for product group } "i," \]
\[ S_i = \text{the market share of the firm for product } "i," \text{ and} \]
\[ I_i = \text{the estimated sales of } "i" \text{ for the industry.} \footnote{Ibid., p. 153.} \]

According to Sord and Welsch, of the 389 firms surveyed, approximately 50 per cent indicated utilization of market-share analysis. The Sales Management profile showed that 78 per cent of the 182 firms surveyed used "market factors."

In essence, market-share analysis appears to be advantageous in those situations where industry data is
readily available and a firm's market share is not subject to wide variation.

Summary of Forecasting Techniques

The empirical findings of the Sord and Welsch survey, the Sales Management profile, and the National Industrial Conference Board Survey may be condensed as follows:

<table>
<thead>
<tr>
<th>Sales Forecasting Technique Used</th>
<th>1958 Sord and Welsch Survey of 389 Firms</th>
<th>1967 Sales Management Survey of 182 Firms</th>
<th>1970 NICB Survey of 161 Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jury of executive opinion</td>
<td>45%</td>
<td>--</td>
<td>80%</td>
</tr>
<tr>
<td>Sales force composite</td>
<td>81</td>
<td>70%</td>
<td>75</td>
</tr>
<tr>
<td>Customer survey</td>
<td>54</td>
<td>43</td>
<td>48</td>
</tr>
<tr>
<td>Naive serial correlation</td>
<td>--</td>
<td>47†</td>
<td>--</td>
</tr>
<tr>
<td>Time series decomposition</td>
<td>--</td>
<td>31</td>
<td>57</td>
</tr>
<tr>
<td>Regression analysis</td>
<td>61*</td>
<td>68</td>
<td>34</td>
</tr>
<tr>
<td>Market-share analysis</td>
<td>50</td>
<td>78</td>
<td>--</td>
</tr>
</tbody>
</table>

† Estimated 
* Economic Indicators
** Industry Indicators
Summary of the Chapter

Budgeting has reached a practical level of maturity comparable to the development of accounting before the 1930s. From a review of budgeting literature pertaining to techniques and applications covering the period from 1922 to the present, twelve principles which seem to be vital factors in any successful short-run planning system were established.

To illustrate the comprehensive budgeting process, steps that should be employed by a typical manufacturing firm in constructing a budget were enumerated and briefly discussed. Also, the importance of sales forecasting to the building of a comprehensive budget was emphasized. Seven sales forecasting principles were established and defined as conditions necessary for attainment of reasonable, realistic forecasts. Also presented were widely-used sales forecasting techniques, classified as judgmental or statistical. Throughout the discussion results of empirical studies bearing on budgeting and sales forecasting were brought out.

Projected income statements and balance sheets—two important parts of a comprehensive budgeting system—have the potential to benefit both internal and external users. This potential is being partially realized by internal users (with the exception of many firms not realizing the importance of projecting a balance sheet), but disclosure of projected financial statements to external users is
almost nonexistent in the United States. Considering the substantial benefits that could accrue to nonmanagerial users, impediments to disclosure of budgetary data to external users along with their corresponding counterarguments were delineated.

It appears that many firms have the ability to disclose a projected income statement and a projected balance sheet. Of special importance concerning this capability are the questions: (1) Are projected financial statements prepared as a part of the usual budgeting procedure of a firm? (2) Are the projected financial statements, if prepared, accurate enough to provide reasonable reliability to external users?

In answering the first question, reliance was placed on the Sord and Welsch survey of budgeting practices. According to their study, 98 per cent of 344 firms prepared a projected income statement, but only 56 per cent prepared a projected balance sheet. However, the additional effort required to project a balance sheet is not great since the needed data are usually available in sub-budgets supporting the comprehensive budget. In addition, it is believed that since publication of the Sord and Welsch survey (1958) many firms have realized the benefits of carrying the comprehensive budget to its completion—the projected balance sheet. Thus, it appears reasonable to hold that in many firms projected financial statements are available.
As for the second question on the accuracy of projections, very little data is available. In fact, conclusive studies on the accuracy of the budgetary process are not available at all. A few empirical studies on the accuracy of sales forecasting have been conducted, and since the comprehensive budget depends heavily on the sales forecast, it seems logical to reason that one controlling factor in budgetary accuracy is the accuracy of the sales forecast. These empirical studies on sales forecasting conclude that some firms budgeting effectively are able to project sales within plus or minus three to eight per cent.

In addition to the studies on sales forecasting accuracy, one empirical investigation has been undertaken to determine whether firms can forecast the income statement (the balance sheet was not included) with sufficient accuracy to justify its inclusion in published reports. The study, based mainly on textile, banking, and fabricated metal firms (18 firms in all) concluded that at present some doubt exists regarding the ability of some firms to forecast with acceptable accuracy. The point is, however, many firms can forecast with sufficient accuracy to justify disclosure of their projected financial statements.

---

106 A given variation in sales is likely to produce a larger variation in projected net income. The ability to forecast sales is crucial, however, because deviations between actual and projected sales will most likely be amplified in net income deviations. Daily's study confirms this. Of eleven firms providing data, the percentage variation in sales ranged from 1.86 to 8.35 while for net income the percentage variation ranged from 4.49 to 33.15.
More and more external users are going to sources other than the annual report for data pertaining to the future. In the annual report, they find that the last paragraph of the president's letter often contains remarks on the future, but the external user usually discovers these remarks come to a common denominator, such as: "We face the future with confidence." "We anticipate a year of growth as well as increased sales." "We look with assurance to future growth in the years ahead." Unable to find any more than succinct optimism in the annual report, external users resort to calculations made by financial analysts and public relation firms. However, many external users are unable to afford sophisticated financial projections, and many who can, find that occasionally investment service projections lack reasonableness. In brief, external parties are forced to look to sources, of varying degrees of credibility, other than the conventional published reports.

In Chapter IV attention is directed to the American auditor's responsibility for historical financial statements and the responsibility of the English chartered accountant for profit forecasts. Based on these, the most likely nature of the American auditor's responsibility for projected financial statements is presented, assuming: (1) disclosure of projected financial statements becomes an American practice, and (2) the need for verification of these statements develops.
CHAPTER IV

A TENTATIVE STATEMENT OF AUDIT RESPONSIBILITY FOR PROJECTED FINANCIAL STATEMENTS

Responsibility, according to Webster, is "moral, legal, or mental accountability." Implicit in this definition is the existence of a relationship between at least two parties with one party being answerable or accountable to the other for something. In essence, responsibility comes into being when an individual owes a duty or assumes a burden for another. For responsibility to be reasonable, the duty or burden assumed must be limited to objects within the power of the responsible person.

Placing the definition of responsibility in the context of auditing requires expansion along lines such as the following: Audit responsibility is moral, ethical, and legal accountability owed to clients and to various external parties by an independent auditor. It is dependent upon and conditioned by the nature of the relationships between the auditor, client, and external parties. The auditor's main function, excluding the performance of tax and management services, is to intervene between management and statement users to add credibility to financial data—historical or projected. As the
relationship between enterprise management and external statement users changes, then so must the nature and composition of the auditor's duty. Hence, any statement of audit responsibility for either historical or projected financial statements must of necessity be somewhat tentative.

The evolving nature of auditing is drastically demonstrated by contrasting the modern corporation with Alfred Marshall's "representative firm" or Adam Smith's "purely competitive firm." "The accounting profession now operates in more of a public sphere, and old rules based on more or less private relationships between the auditor and his clients no longer have much significance."¹ Widespread public interest in today's modern corporation requires reliable, relevant, and understandable financial information, and in turn, this calls for increasing audit responsibility. Today's auditor has a demanding public duty which is remarkably different from that shouldered by predecessors.

One of the primary difficulties inherent in identifying audit responsibility is to know to whom and for what that duty is owed. In other words, until the basic objectives of financial statements are determined in an authoritative fashion, uncertainty will continue to obscure the audit function.

The nature of audit responsibility will probably never be defined within definite bounds. Reasons mitigating against establishment of an exact delineation are as follows:

1. The important role of judgment in professional accounting practice,
2. The continuing necessity for the profession to adapt to a constantly changing social environment,
3. The difficulty which laymen have in understanding the meaning of an audit, and
4. The negative manner in which practitioners approach definition of responsibility.²

To develop a tentative statement of audit responsibility for projected financial statements, logically, the first step is to examine the American auditor's duty with regard to historical financial statements. In addition, since American practice in auditing financial projections will most likely be conditioned by English audit practice, a concise restatement of the English auditor's responsibility for profit forecasts is necessary. Accordingly, the following sections pertain to:

1. Audit Responsibility for Historical Financial Statements.

2. Audit Responsibility for Profit Forecasts in the United Kingdom.


The sketches of responsibility for historical financial statements in the United States and for profit forecasts in the United Kingdom describe the situation as it now exists. On the other hand, the tentative statement of audit responsibility for projected financial statements in the United States is presented in a normative manner. The tentative statement is a clear and forthright proposal which the auditor can and should accept. Throughout the discussion, attention is directed principally to the auditor's duty to external parties rather than his contractual duty to management.

---

**Audit Responsibility for Historical Financial Statements**

The extent of responsibility accepted by the American accounting profession for historical financial statements is found mainly in the following sources:

1. Statements on Auditing Procedures.
2. Generally Accepted Auditing Standards.  

---

3The generally accepted auditing standards are included in American Institute of Certified Public Accountants, "Auditing Standards and Procedures," Statements on Accounting Procedure No. 33 (New York: American Institute of Certified Public Accountants; 1963). However, the standards are conceptually different from the remaining contents of Statements on Auditing Procedure No. 33 to justify separate treatment.

Statements on Auditing Procedures

The most comprehensive statement of audit responsibility for historical financial statements appears in Statements on Auditing Procedure No. 33. The main points of responsibility of the independent auditor as outlined therein are:

1. **Primary audit objective.** The major objective of the ordinary examination of financial statements by the independent auditor is the expression of an opinion on the fairness with which they present financial position and results of operations.

2. **Distinction between responsibility of auditor and management.** The primary responsibility for representations in financial statements rests upon the management of the firm whose affairs the statements purport to reflect. The independent auditor is responsible for the opinion expressed in his report upon the fairness of the financial statements.

---

4Statements on Auditing Procedures No. 33, pp. 9-12.
3. **Professional qualifications of the auditor.**
The independent auditor must possess adequate education and experience. His qualifications do not include those of a person trained to engage in another profession or occupation, such as an appraiser or an attorney.

4. **Detection of fraud.** In making the ordinary examination, the independent auditor should be aware of the possibility that fraud may exist. However, the ordinary examination directed to an expression of an opinion on financial statements is not primarily designed and cannot be relied upon to detect fraud. The responsibility of the independent auditor for detection of fraud arises only when such failure clearly results from noncompliance with generally accepted auditing standards. The independent auditor is not an insurer or guarantor, and a subsequent discovery that fraud existed during the period covered by the auditor's examination does not of itself indicate negligence.

5. **Responsibility to the profession.** The independent auditor has a responsibility
to the profession to comply with standards accepted by fellow practitioners.

Generally Accepted Auditing Standards

The generally accepted auditing standards provide a broad framework for the evaluation of professional performance by indicating to external parties the quality and extent of performance to be expected from the independent auditor. The standards may be regarded as the underlying principles of auditing which control the professional competence of the auditor and the nature and extent of evidence to be obtained by means of auditing procedures.5

The generally accepted auditing standards are as follows:6

General Standards
1. The examination is to be performed by a person or persons having adequate technical training and proficiency as an auditor.
2. In all matters relating to the assignment an independence in mental attitude is to be maintained by the auditor or auditors.
3. Due professional care is to be exercised in the performance of the examination and the preparation of the report.

Standards of Field Work
1. The work is to be adequately planned and assistants, if any, are to be properly supervised.


6Statements on Auditing Procedures No. 33, pp. 15-16.
2. There is to be a proper study and evaluation of the existing internal control as a basis for reliance thereon and for the determination of the resultant extent of the tests to which auditing procedures are to be restricted.

3. Sufficient competent evidential matter is to be obtained through inspection, observation, inquiries and confirmations to afford a reasonable basis for an opinion regarding the financial statements under examination.

Standards of Reporting

1. The report shall state whether the financial statements are presented in accordance with generally accepted principles of accounting.

2. The report shall state whether such principles have been consistently observed in the current period in relation to the preceding period.

3. Informative disclosures in the financial statements are to be regarded as reasonably adequate unless otherwise stated in the report.

4. The report shall either contain an expression of opinion regarding the financial statements, taken as a whole, or an assertion to the effect that an opinion cannot be expressed. When an over-all opinion cannot be expressed, the reasons therefor should be stated. In all cases where an auditor's name is associated with financial statements the report should contain a clear-cut indication of the character of the auditor's examination, if any, and the degree of responsibility he is taking.

Code of Professional Ethics and Related Interpretative Opinions

To support the auditing standards and to provide an effective means for their enforcement, the AICPA
membership adopted a Code of Professional Ethics. In addition, the AICPA formed a Division of Professional Ethics with responsibility for drafting, approving, and releasing opinions concerned with interpreting the code of ethics.

The overall objective of the Code of Professional Ethics is to promote high standards of technical competence, morality, and integrity. Accordingly, a member or associate of the AICPA "... shall at all times maintain independence of thought and action, hold the affairs of his client in strict confidence, strive continuously to improve his professional skills, observe generally accepted auditing standards, promote sound and informative financial reporting, uphold the dignity and honor of the accounting profession and maintain high standards of personal conduct."  

In one significant regard the code goes a bit further than the auditing standards by requiring that the auditor in rendering his opinion on financial statements shall express an unqualified opinion, a qualified opinion, an unqualified opinion, or a modified opinion.


8 Ibid., p. 9.

9 Ibid.
adverse opinion, or disclaimer of opinion. Of course, the objective of this code requirement and the fourth reporting auditing standard is to prevent misunderstanding of the degree of responsibility the auditor is assuming for the fairness of financial statements.

The code of ethics contains the most forceful statement of requirement for professional practice. A number of professional behavior rules are established which a member must not breach. Since it is impossible to cover every possible situation which might confront the auditor, the code also contains an admonition that the rules do not preclude the existence of other standards of conduct which are not specifically mentioned.11

Judicial Decisions and Securities Legislation

In one of the earliest decisions involving audit responsibility, Lord Justice Lindley in the London and General Bank case stated the duties of the auditor are: (1) to be honest, (2) to exercise reasonable care and skill--that is, the auditor must not attest to what he does not believe to be true, and (3) to exercise all

10 The Code of Professional Ethics: As Amended December 30, 1969, also provides for a piecemeal opinion which may be used in conjunction with an adverse or disclaimed opinion.

reasonable care and skill in ascertainment of the truth.\textsuperscript{12} In defining the duties of the auditor, however, Justice Lindley did not specifically define to whom these duties are owed.

Traditionally, in a legal sense the auditor has owed one duty to his client and another to external parties. To his client, the auditor could be held liable for negligence, gross negligence (constructive fraud), or fraud.\textsuperscript{13} To external parties the auditor's legal duty, in absence of contract between the auditor and the external party (privity of contract), extended only to cases involving fraud.

This traditional posture left a significant gap between legal responsibility and professional responsibility. That is, the auditor's legal responsibility implied two sets of standards, one to clients and a lesser set to external parties, while professional responsibility appeared to endorse only one set of standards.

In 1931 the divergency between legal responsibility and professional responsibility was partially eroded by the \textit{Ultramares Corp. v. Touche, Niven \& Co.} decision\textsuperscript{14} in


\textsuperscript{13}Gross negligence exists when the auditor expresses an opinion when actually there is no basis for an opinion, or if the basis is so flimsy as to lead to the conclusion that the auditor had no real belief in his opinion. On the other hand, fraud is an intentional misrepresentation of the truth for the purpose of deceiving another person.

\textsuperscript{14}\textit{Ultramares Corp. v. Touche, Niven \& Co.}, 174 N.E. 441 (1931).
which it was held that an auditor could be held liable to external parties if his conduct was fraudulent or so grossly negligent as to amount to fraud. As a result of Ultramares, the legal responsibility of the auditor was elevated to encompass liability to external parties for both fraud and gross negligence.

The auditor's legal liability was extended further by passage of the Securities Act of 1933. Particularly, Section 11(a) imposed: 15

1. Any person acquiring securities described in a registration statement may sue the accountant, regardless of the fact that he is not the client of the accountant.

2. The claim may be based on an alleged false statement or misleading omission which constitutes a prima facie case.

3. The plaintiff does not have to prove that he relied upon the statement or that loss was the proximate result of the false statement.

4. The accountant has the burden of establishing his freedom from negligence and fraud by proving that he had, after reasonable investigation, reasonable grounds to believe and did believe that the

statements were true as of the date of the statements and the date registration became effective.

5. The accountant has the burden of establishing that plaintiff's loss resulted from causes other than false or misleading omissions in the financial statements.

The Securities Act of 1934, similar to the 1933 act, modified the common law liability of accountants as set forth in Ultramares. Under the 1934 act (which concerns the filing of annual reports with the SEC) the plaintiff must prove reliance upon the auditor's opinion and damages suffered— that is, the plaintiff or external party is permitted to reach the auditor, but the plaintiff assumes the burden of proof.

For more than three decades, unless action was instigated by an external party under a particular section of the Securities Act, Ultramares served as precedent for the accounting profession. Ultramares prevented external users from reaching the auditor in situations involving simple negligence. Hence, from a legal standpoint the profession still adhered to two sets of standards. However, the validity of Ultramares and the common law doctrine of privity was subsequently tested in the 1963 Hedley Byrne & Co. Ltd. v. Heller & Partners Ltd.
decision. The effect of the Hedley Byrne decision on professional practice, according to a statement released by the Council of the Institute of Chartered Accountants in England and Wales is: "... someone possessed of a special skill may, quite irrespective of contract [emphasis supplied], be considered to have undertaken to apply that skill for the assistance of another person and thereby to have accepted a duty of care to that person."¹⁷

Other cases, especially more recent ones such as BarChris, Continental Vending, Westec, and Yale Express,¹⁸ indicate further that the prospects for a successful attack against auditors by external parties not in privity are better than in the past.¹⁹ Indicative of this change are certain observations made by the SEC in a decision promulgated in 1957 (subsequently quoted in Yale Express):

> The responsibility of a public accountant is not only to the client who pays his fee, but also to investors, creditors and others who may rely on financial statements which he certifies.

¹⁶ Council of The Institute of Chartered Accountants in England and Wales, "Accountant's Liability to Third Parties--The Hedley Byrne Decision," Journal of Accountancy, CXX (October, 1965), 66-67. Although Hedley Byrne is not an American case, the American courts will certainly be influenced by it since English decisions have frequently been cited in American cases.

¹⁷ Ibid., p. 66.

¹⁸ For an excellent summary of these cases see Henry B. Reiling and Russell A. Taussig, "Recent Liability Cases--Implications for Accountants," Journal of Accountancy, CXXX (September, 1970), 47-51.

¹⁹ Ibid., p. 40.
The public accountant must report fairly on the facts as he finds them whether favorable or unfavorable to his client. His duty is to safeguard the public interest, not that of his client. [Footnotes omitted.]

In a number of respects legal responsibility still lags behind professional responsibility, but this is not always true. Several instances are available where courts have established auditing standards and procedures beyond those called for in professional practice. For example, the noted McKesson & Robbins case added, among other things, the observation of inventories and confirmation of accounts receivable to audit responsibility. The direct impingement of McKesson & Robbins on audit responsibility can be seen by examining Statement on Auditing Procedure No. 1--"Extensions of Auditing Procedure." In


addition, another current illustration of a court imposing standards higher than those recognized by the profession is evidenced by the BarChris decision which substantially expanded the scope of the auditor's S-1 review. According to BarChris, the auditor must examine evidence more reliable than testimonial data in conducting a proper S-1 review.

Auditing standards created and imposed by judicial decision or legislative action are believed by some to be a most undesirable development. Typically, these decisions or enactments deal with unusual circumstances which should not be employed as guides in formulating general purpose standards. Auditing standards and audit responsibility should be generalized from the experiences of normal, going concerns operated by ethical managers, not unusual companies facing rare problems and managed by wrongdoers.

Conclusion

A general misunderstanding by external users and management remains concerning the nature and extent of the auditor's responsibility when he expresses an opinion on historical financial statements. Users apparently do

---

24. The S-1 review covers the period of time between the date of the auditor's opinion and date the registration statement becomes effective.

25. Reiling and Taussig, "Recent Liability Cases--Implications for Accountants," p. 46.
not understand that the auditor's opinion represents a reasoned belief, rather than absolute certainty.

The auditor neither insures nor guarantees that financial statements show a firm's true financial position. Instead, he is bound only to exercise reasonable care and skill in making inquiries and investigations, and to state in his report whether in his opinion the historical financial statements are fairly presented.

Considering the extent of audit responsibility, it should be borne in mind that historical financial statements are not absolute statements of fact. A number of significant statement items (e.g., bad debts, depreciation, product warranties) are estimates rather than reflections of absolute fact. Moreover, even if historical financial statements contained absolute facts, the auditor could still only express an opinion since he bases his examination on the quality of the system of internal control as opposed to performing a detailed examination. Even if, however, the auditor were to perform a detailed examination of all transactions, he could still not attain certainty since the quality of the most reliable audit evidence is limited.
Audit Responsibility for Profit Forecasts in the United Kingdom

As previously discussed, the English chartered accountant has accepted not only a responsibility for historical financial statements comparable to that of the American auditor but an obligation to review profit forecasts as well. In The City Code (1968 version), directors were required to obtain a report from an independent auditor on profit forecasts included in merger or take-over documents. In 1969, this requirement was expanded to require the auditor's report covering the profit forecast to be published in the bid circular. No such public reporting requirement pertains to the English prospectuses, but if a prospectus includes a forecast, the English auditor typically examines it as an amenity to merchant bankers.

Although the requirements of The City Code on profit forecasts do not bear directly on prospectuses, the clarification of audit responsibility and auditing procedures initiated as a result of The City Code has undoubtedly upgraded the work done on forecasting in general and increased the responsibility of the English auditor. Before publication of The City Code and the related

---

26 A detailed discussion of the English auditor's responsibility for profit forecasts along with its evolutionary development is presented on pages 56 to 71.

English Institute releases, the type of examination, review, audit, or inspection, to which profit forecasts were subjected varied considerably. To remedy this, the Institute of Chartered Accountants in England and Wales in consultation with the Council of the Institute of Chartered Accountants of Scotland outlined the auditor's present responsibility for forecasts in Statement S.15, "Accountants' Reports on Profit Forecasts" (1969).

According to Statement S.15, the responsibility for review of profit forecasts in bid circulars is a "shared" responsibility. That is, the reporting accountant (or auditor) assumes certain audit duties while the merchant banker also assumes part of the audit responsibility. The reporting accountant has a responsibility for the following:

1. Examination of the accounting bases and calculations,
2. Determination of the consistency of the accounting bases and calculations with the assumptions underlying the forecast, and
3. Determination of the consistency of the accounting principles employed in building the profit forecast with historical

---

statement accounting principles and principles employed in prior forecasts.

In addition to these duties, the reporting accountant should critically and objectively review the assumptions underlying the profit forecast. However, the merchant banker has the responsibility for reporting on the assumptions. Hence, comes the "shared responsibility concept"—the merchant banker for the assumptions and the reporting accountant for the remaining aspects of the forecast.29 (Appendix IV illustrates a profit forecast included in a bid circular together with underlying assumptions and reports by both the accountant and the merchant banker.)

The responsibility for profit forecasts assumed by merchant bankers and independent accountants, analogous to the duty of the American and English auditor for historical financial statements, is a secondary duty. According to Rule 15 of The City Code and Statement S.15, the primary responsibility for profit forecasts lies solely with a company's directors. This is signified in Statement S.15 which requires the directors to formally adopt the profit forecast and to include a statement indicating such adoption in bid circulars.30 To afford further


30 Ibid.
protection to auditors and merchant bankers and to permit directors to protect themselves (concerning unforeseen future happenings), Rule 15 of The City Code requires publication of economic, commercial, marketing, and financial assumptions underlying the forecast.\(^{31}\)

The objectives behind the English chartered accountant's review of a profit forecast are: (1) to examine the client's profit forecast, (2) to form an opinion based on that examination, and (3) to frame a report to the directors of the client for disclosure to shareholders. These are, of course, similar to the audit objectives applied to historical financial statements. However, there are many unique problems surrounding the audit of, or review of, profit forecasts included in merger or take-over circulars. Before discussing these unique problems, it should be emphasized that there is a significant difference between profit forecasts presented in merger or take-over circulars (bid circulars) and those presented in prospectuses. Forecasts presented in prospectuses are almost always achieved, while those included in bid circulars are sometimes extremely optimistic. It is the latter which are causing English auditors some difficulty. Thus, the problems discussed below pertain primarily to profit forecasts in bid circulars. It is not possible to discuss audit problems associated with prospectus profit forecasts.

\(^{31}\)Rule 15 is reproduced in part on page 68.
since the Institute of Chartered Accountants in England and Wales has not issued pronouncements applicable to them, nor do chartered accountants publicly report on them.

A major problem presently facing the English accountant concerns the possibility of future prohibition of profit forecast disclosure in bid circulars because of large deviations between projected and actual results. In the view of the Panel on Take-overs and Mergers, a prohibition of this sort (by the City Working Party) would certainly be a backward step since a company's best estimate of immediate future profitability is most useful to shareholders.\(^\text{32}\) The Panel is presently keeping records on projected versus actual results and in some cases is inviting detailed explanation of profit forecasts characterized by large deviations.\(^\text{33}\)

Another major problem peculiar to reviewing profit forecasts pertains to the tight time schedule under which the auditor typically must work. In the traditional audit the reporting accountant is usually pressed for time, but in expressing an opinion on a bid circular profit forecast, time pressures are greatly intensified. In many situations the profit forecast review will have to be

\(^{32}\)Ball, "What Does the Merchant Banker Expect from the Accountant?--III," p. 304.

\(^{33}\)Sometime during 1971 the Panel on Take-overs and Mergers expects to release a report on deviations between projected and actual data.
completed in perhaps two weeks. The problem is especially compounded if the reporting accountant is not the company's normal auditor. To overcome the tight schedule, a company should prepare profit projections as a normal routine, and the auditor should maintain current knowledge of the firm and the industry of which it is a part. In those cases where time is severely restricted, according to the Institute of Chartered Accountants in England and Wales, the auditor should state in his report that it was impossible to obtain sufficient evidential matter to enable expression of an opinion.

That the English accountant was prepared to accept increased audit responsibility for profit forecasts may be surprising, "but no doubt it was thought better and in the interest of shareholders generally that a genuine attempt [to review profit forecasts] should be made rather than to run away from the problem."

At present, the degree of credibility added to bid circular profit forecasts by reporting accountants is highly questionable. After interviewing various people in London concerning profit forecasting, Zeff commented:

34 Ball, "What Does the Merchant Banker Expect from the Accountant?--III," p. 304.


36 Ball, "What Does the Merchant Banker Expect from the Accountant?--III," p. 303.
... Rule 15 was added to diminish the likelihood of extremely wild forecasts. I doubt that anyone seriously believes that the public attestation by a 'reporting accountant' ... will assure their validity, even in broad terms. ... remember that the accountant has only a week or two to complete his investigation. The document [profit forecast] probably was hammered out in the 11th hour. 37

Audit Responsibility for Projected Financial Statements in the United States: A Proposal

Based on noticeable trends in certain authoritative organizations, the increasing number of advocates in professional journals, and obvious external user need for disclosure of projected data, the assertion that the American accountant will soon find himself involved in auditing projections seems reasonable. Before the demand for forecast audits becomes operative, the profession must consider what duties should be assumed by the independent auditor in this new sphere of responsibility. Moreover, the audit responsibility for forecasts should be stated in a more positive and less confusing manner than is the responsibility for historical financial statements. At least, the major objective in stating the American auditor's responsibility for forecasts should not be the minimization of legal liability.

37 Personal letter from Stephen A. Zeff, Professor of Accounting, Tulane University, March 9, 1971. This perhaps explains why the English Institute in Statement S.15 prefers to state that profit forecasts are not audited in the same way as historical financial statements.
In the following development of a tentative statement of audit responsibility for projected financial statements, the duties of the American auditor for historical financial statements and the English auditor for profit forecasts are utilized as a backdrop. Consideration is given first to the modification of English practice to fit the American environment. Second, a tentative statement of audit responsibility for forecasts is presented. The tentative statement parallels the ten generally accepted auditing standards, and in most instances represents only an extension of their present interpretation. Finally, attention is directed to the inherent deficiencies of Rule 2.04 and Opinion No. 10 of the Code of Professional Ethics.

Modification of English Practice for Adaptation to the American Environment

By auditing profit forecasts the English chartered accountant has undeniably taken a major step forward in attempting to provide shareholders and others more relevant and credible decision-making data. Nevertheless, English practice still has much room for progress. Three major shortcomings in English practice are: (1) The auditor provides inadequate assurance to external parties concerning the reasonableness of assumptions underlying profit forecasts. (2) Although the English financial community obviously recognizes the value of disclosure of
future prospects, the English auditor does not publicly assume any responsibility for forecasts presented in prospectuses, annual reports, or reports other than merger or bid circulars. (3) Profit forecasts, even when disclosed to external users and reported on by chartered accountants, are not usually accompanied by projected balance sheets. Each of these apparent deficiencies is discussed in detail below.

Responsibility for reasonableness of assumptions.
The 1969 "Accountants' Reports on Profit Forecasts" clearly stated that the auditor's responsibility for reporting under The City Code does not extend to the assumptions upon which the directors have based their forecasts. Contrary to this, audit programs for reviewing profit forecasts customarily include steps pertaining to the examination of assumptions to determine whether they are fair and reasonable. However, the main audit responsibility for assumptions and the reports on them lies with merchant bankers.

A crucial question facing the American accounting profession (as well as the Canadian profession) is:
Should the auditor report on the validity of assumptions or merely that the projected financial statements are in conformity with the stated assumptions? Since investment bankers in the United States are unlikely to consent

to a reporting obligation similar to that of English merchant bankers, the acceptance of audit responsibility for assumptions underlying projections by American auditors seems imperative. The acceptance of this responsibility by the American auditor appears reasonable in light of the following:

1. Auditors are more proficient in handling evidence and testing assertions than investment bankers.

2. Auditors are independent while investment bankers are not.

3. Assumptions, with perhaps the exception of economic assumptions, are generally of such a nature that the auditor should be knowledgeable concerning their reasonableness (e.g., volume of turnover, gross profit percentage, accounts receivable turnover, etc., are all assumptions the auditor should understand).

4. Auditors doubtless would not be able to escape liability or public defacement in the event certain stated assumptions were

---

39 There is no counterpart to the English merchant banker in American financial circles. The merchant banker takes deposits, lends money, raises funds for companies, finances import and export trade, and manages pension and trust funds. With respect to take-overs and mergers, the merchant banker does, however, perform services similar to investment bankers so that drawing an analogy between the two is not entirely erroneous.
discovered to be without reasonable basis. In other words, the auditor should not accept responsibility for the accounting bases and calculations of projections without assuming responsibility for the reasonableness of assumptions. In any case, unreliable forecasts result from false assumptions; hence, to avoid tarnishment of the auditor's opinion, a thorough review of management's assumptions underlying projected statements is a necessity.

A unique solution for the "assumptions responsibility dilemma" was recently advocated by an English writer. Tomkins suggested the verification of projected financial statements be divided into two parts: (1) an examination of forecasting procedures and underlying assumptions, and (2) cross-checking to determine if the budgets from which the projected financial statements are derived are internally consistent and coordinated.  

In reviewing the assumptions and forecasting procedures, the auditor should rely on opinions of company officials since forecasting ability depends upon both a knowledge of techniques and an intimate acquaintance with particular markets and industries. Regarding cross-checking, the auditor, according to Tomkins, must verify

the budgeted quantities of such items as materials, labor, and overhead by reference to standard costing records and input-output ratios.\textsuperscript{41}

Given this separation, the auditor does not assume any verification obligation for forecasting procedures or underlying assumptions, and the problem of making the accountant legally liable for assumptions does not arise. However, in advocating that the auditor not assume responsibility for assumptions, Tomkins suggested another alternative. He recommended the creation of a "Government Research Agency" to monitor projections submitted by different companies. The agency upon receiving a firm's projection would examine the underlying assumptions to decide whether they were consistent and reasonable in comparison with intra-industry data. If the company's estimates for sales, raw material prices, labor rates, etc., were felt to be in need of revision the agency would inform the firm accordingly.\textsuperscript{42}

With the Government Research Agency concept being interesting but rather unrealistic, the American auditor seems to have no alternative but to assume a duty for adequately reviewing the reasonableness of assumptions underlying forecasts. The American auditor is not, however, expected to be a prophet or a seer and is not expected to

\textsuperscript{41} Ibid.
\textsuperscript{42} Ibid.
know with certainty what the future holds in store. Instead, he is expected to examine for their reasonableness a set of specifically stated assumptions, concerning not what will happen but what is expected to happen. Of course, the primary responsibility for the relevance and reasonableness of the assumptions should rest with management.

No public assumption of responsibility for profit forecasts presented in reports other than merger circulars. A second major shortcoming in English profit forecast auditing is that the auditor does not publicly assume any responsibility for forecasts included in prospectuses or annual reports. This occurs in spite of acknowledgment by English accountants and directors of the value of disclosing future prospects. In other words, the major problem is that profit forecasts presented in merger circulars are audited and reported on by the merchant bankers and chartered accountants while those presented in prospectuses and other documents intended for external parties are audited (to some undeterminable extent) but not publicly reported on by either merchant bankers or accountants.

Paragraph 2 of the English Institute's statement on "Accountants' Reports on Profit Forecasts" (1969) stated:

Profit forecasts are normally prepared solely for internal use by the management of companies but there may be occasions when, for
special reasons [emphasis supplied], they are disclosed to outsiders.\textsuperscript{43}

It is not correct to say that profit forecasts are only relevant on certain occasions; they seem always to be relevant to users' needs. Information needed by shareholders concerning future prospects in merger circulars should be no different from data requirements of prospectuses and annual reports. To remedy this discrepancy, American auditors should assume audit responsibility, including the rendering of an opinion, for projections disclosed in all financial reports meant for external consumption.

Profit forecasts are not accompanied by other projected financial statements. A third major shortcoming of English practice is that projected balance sheets are not usually disclosed along with the audited profit forecast. The City Code and the statements by the Institute of Chartered Accountants in England and Wales are silent on inclusion of other forecasted statements in merger circulars. To adequately determine the impact of a profit forecast on a business firm, the projected profit must be related to a projected balance sheet. One projection is inadequate without the other. Suppose a profit forecast represents a sizeable increase over current net income; can this justify a shareholder's retention of a given

security? Clearly, such a question cannot be answered unless something is known about the increase in assets anticipated. An increase in profits might conceivably mean a decline in anticipated return-on-investment. Therefore, to properly evaluate an investment alternative, as a minimum, a projected income statement and a projected balance sheet should both be employed. Logically then, American auditors should assume audit responsibility for both projections.

A Tentative Statement of Audit Responsibility for Projected Financial Statements

Conceptually, the audit approach to verification of projected financial statements should be to examine the evidence available at the time projected statements are constructed and to decide whether the budgetary plan and procedures underlying them are reasonable. The auditor naturally will inspect working papers and such other documents employed in construction of the statements. In addition, he should form a view of the thoroughness with which they have been prepared.

In carrying out an examination, the auditor should be guided, as in an audit of historical financial statements, by generally accepted auditing standards. A major difference, however, is that the auditing standards will take on extended meaning. Their application will be to outline audit responsibility for future-oriented data
as opposed to historical-oriented data. The unique meaning of the ten generally accepted auditing standards as applied to the audit of projected financial statements is presented below. Of necessity, the first and second standards of reporting are altered in wording as well as in meaning. Consequently, it is appropriate to label the following standards—"A Tentative Statement of Forecast Auditing Standards." For the most part the standards are essentially the same as those applied to ordinary audits.

First General Standard: The examination is to be performed by a person or persons having adequate technical training and proficiency as an auditor.

In the forecasting environment, the first general standard requires the auditor to have additional training in methods and techniques of budgeting and forecasting. His knowledge must extend to mathematics, computers, and statistics, especially to the studies of trend and the significance of relationships. Additional training is necessary in macro-economics and its relationship to the theory of the firm. Specifically, the auditor must be cognizant of economic indicators since the firm's budgeting model is likely to be linked to them.

There is little specific, highly technical knowledge among accountants of the principles of projected financial statements, and the procedures required for their preparation. Therefore, auditors will be compelled to return to cost accounting and budgeting textbooks to reinforce their knowledge of forecasting. "Although cost
accounting and budgeting are major areas of accounting study, the auditor is generally not sufficiently acquainted with them to perform forecast examinations.44 In addition, since budgeting and other accounting textbooks are deficient in forecasting techniques, principles, and methods, the AICPA should develop case studies, textual materials, and professional development seminars to increase the level of competency regarding budgeting and forecasting.

Second General Standard: In all matters relating to the assignment an independence in mental attitude is to be maintained by the auditor or auditors.

Independence, according to a narrow interpretation of the second general standard, is a mental attitude which insures freedom from control or undue influence. Practically however, independence consists of more than a mental attitude. Extension accorded the standard by the SEC and the Code of Professional Ethics, implies both a mental attitude (independence in fact) and an appearance of freedom from control or influence (independence in appearance).45


45Mautz and Sharaf distinguished the two concepts of independence by referring to the "mental attitude" as practitioner independence and the "apparent independence" as professional independence. See The Philosophy of Auditing, p. 205.
The same philosophy applies to the examination of projected financial statements. The auditor must be capable of making his own decisions, and he should not rely on the client's budgeting staff to carry out any of the forecast audit investigation.

In some situations it is reasonable to expect the client to look to the auditor for considerable assistance in preparing projected statements. To maintain the requisite independence, however, the auditor must not participate in setting up the underlying assumptions, preparation of the sales forecast, or prediction of expected wage rates. In short, the auditor cannot and should not be involved in any aspect of projected financial statement construction or in any aspect of the budgetary system upon which they are based. If he becomes involved in the budgetary function of management, the auditor loses the objectivity essential to any audit examination.46

One of the troublesome issues relating to contemporary audit independence concerns the auditor performing management services and also conducting the independent audit for the same client. Heretofore, reasoning has concluded independence is not impaired since the management advisory services division within an accounting firm is usually separate from the audit division. In other words,

the personnel performing the management service work are not the same as the personnel examining the financial statements. Auditing of projected financial statements is likely to make this argument--separation of management services and auditing--less viable. The audit team examining projected statements will not be composed solely of accountants but will include professional personnel with backgrounds in economics, marketing, operations research, and the like. These individuals are most likely to be provided by the management services division. Conceivably, the necessary composition of the audit team of the future could cause management services and auditing to fuse.

Third General Standard: Due professional care is to be exercised in the performance of the examination and the preparation of the report.

The third general standard is applicable to what the prudent auditor does and how well he does it. In regard to audits of projected financial statements, due care requires the auditor to devote such attention and effort to his examination that the ordinary prudent auditor would employ under the given set of circumstances. The due care concept permeates the auditor's examination, and it makes imperative the keeping abreast of developments in budgeting and forecasting.

Due professional care cannot be expected to yield exacting answers to questions of audit responsibility. Because it is dependent upon the prudent man doctrine, the
concept must necessarily evolve as mores, relationships, and institutions change. Nevertheless, if the auditor has performed his examination in accordance with the forecast auditing standards as applied in contemporary practice by the prudent auditor, he should not be held responsible for deviations between projected financial statement data and actual outcomes.

To comply with the Code of Professional Ethics, due care demands review of the assumptions underlying projected financial statements to ascertain whether or not they are reasonable, relevant, and realistic. Professional ethics requires a member or associate not to permit his name to be used with false or misleading statements.47 Hence, to adhere to ethical intent and due professional care, the auditor must review not only forecasting methods, accounting bases and calculations, and underlying budgetary systems, but also the underlying assumptions. Failure to review the assumptions could conceivably result in the auditor's being associated with false financial statements.

First Standard of Field Work: The work is to be adequately planned and assistants, if any, are to be properly supervised.

The auditor, in reviewing either historical or projected financial statements, should plan the examination so it may be performed expeditiously and so he can

47 American Institute of Certified Public Accountants, Code of Professional Ethics: As Amended December 30, 1969, Opinion No. 8, p. 16.
determine the extent to which audit procedures can be carried out before the balance-sheet date. The latter is of special significance in examining projected financial statements. The budgetary preparation process commonly consumes a period of three to four months in the typical firm and is usually completed before the beginning of the new accounting year. The auditor should be present during the budget construction process in order to realistically determine the problems expected within the industry and within the firm, the thoroughness with which the projected financial statements are prepared, and the reasonableness of assumptions. A large part of the projected statement audit procedures can be completed before the balance-sheet date, and the auditor can be sure those participating in the budget process are employing adequate documentation and nonbiased data.

Second Standard of Field Work: There is to be a proper study and evaluation of the existing internal control as a basis for reliance thereon and for the determination of the resultant extent of the tests to which auditing procedures are to be restricted.

The fairness of projected financial statements is contingent upon the underlying budgetary system and controls built into the budget process. Just as the reliability of historical financial statements is dependent upon the underlying system of internal control, the reliability of projected statements is dependent upon the quality and effectiveness of budgetary control.
The budgetary system, as part of the financial information system, has certain control aspects, e.g., budget manual, variance reporting system, budget personnel whose abilities are commensurate with their duties, and sound budgeting practices. Budgetary controls are designed:
(1) to check the accuracy and reliability of budgetary data, (2) to promote future operational efficiency, and (3) to encourage adherence to prescribed managerial policies.

To determine the extent of audit tests to be applied to projected financial statements, the auditor should first review the budget control devices including, for example, the budget manual and duties and responsibilities of the budget executive. Consideration should also be given to the degree of management support for realistic and attainable budgets, the degree of personnel participation in budget formation, and the soundness of forecasting principles employed.

According to Statements on Auditing Procedure No. 33 the auditor's review of internal control "might" include an examination of budgetary controls. However, in expressing an opinion on historical financial statements, auditors usually do not review budget manuals, variance reporting systems, or budget personnel.

... the audit of historical financial statements touches on a firm's budgetary organization in only a remote and indirect manner, and in most cases not at all! Consequently, to adequately review budgeted financial statements
will necessitate a most comprehensive review of a firm's "budgetary internal controls."
The auditor's present review of internal controls underlying historical financial statements is inadequate to support the reliability of budgeted statements. There are certain accepted fundamentals which an effective budgeting system should be based upon. Before reviewing assumptions (i.e., economic and industry forecasts), accounting bases, and calculations supporting budgeted financial statements, it should be first required that the underlying budgetary organization and controls be examined so as to properly determine the extent of the audit test.\textsuperscript{48}

Third Standard of Field Work: Sufficient competent evidential matter is to be obtained through inspection, observation, inquiries and confirmations to afford a reasonable basis for an opinion regarding the financial statements under examination.

Projected financial statements, like historical statements, may be viewed as a series of assertions. Similarly, audit evidence may be viewed as any factual matter which an auditor employs in proving or disproving assertions made in financial statements. In testing assertions, whether historical or projected, the auditor should adopt neither the view of right unless proved wrong nor wrong unless proved right. Rather his attitude in the examination is best described as questionable until tested and found reasonable.\textsuperscript{49}


The auditor in expressing an opinion on projected financial statements is confronted with essentially the same problems encountered in an examination of historical data. That is, he is concerned with both the amount and the competency of evidence brought to bear on an assertion. In examining projected assertions, the auditor also will not generally be convinced beyond all reasonable doubt. Usually, audit evidence will not be absolutely convincing, whether it pertains to historical or projected data.

In an examination of projected financial statements the auditor must gather evidence from budgetary data and budget working papers in order to establish the propriety and reasonableness of various assertions. In addition, corroborating information, such as calculations, comparisons and ratios, and testimonial evidence must be employed in the examination. In fact, a large part of the investigation will draw on evidence originating within the client's organization. To evaluate the competency of internally generated evidence, the auditor should place strong emphasis on the soundness and effectiveness of the client's budgetary organization. Authoritative evidence from external sources should also be secured, especially in testing the validity, reasonableness, and relevancy of assumptions underlying the projected statements. Moreover, trends calculated from prior audited historical
financial statements should be useful as a check on the reasonableness of inferences.

Concerning the relationship between evidence obtained in historical audits and forecast audits, Ijiri made the following contribution:

In the ordinary audits, the principle [sic] activities of an auditor may be characterized by a simple word, "inference." An auditor gathers evidence and infers from them the existence or non-existence of certain factors in the operations of the firm during the past period or in the state of the firm at the end of the period. . . . the main point that is to be analyzed here is what constitutes satisfactory evidence (E) for inferring a factor (F)?

According to Hume . . . , the only convincing explanation is that such an inference E → F has been successful in the past . . .

(Thus,) no matter how detailed his audit may be the auditor can never be 100% certain as to the correctness of his inference.50

Ijiri added that the budget officer is doing essentially the same thing as the auditor, meaning that he examines evidence and makes predictions, or he infers a certain factor in the future based on the available evidence at present and in the past.

As in the case of auditors, the only basis that the budget officer has in making such an inference is that the inference has been successful many times in the past. For example, the budget officer considers the current conditions of the market before forecasting sales

for the coming period. He then refers the conditions to the relations in the past between such conditions of the market and subsequent sales volume and applies the inference to the particular case with which he is faced.51

In the case of a new product sales forecast, the budget officer is unable to use past or present records of the firm as reference points. However, in such cases he would still apply rules of inference by referring to: (1) results of a test market, (2) cases where competitors have introduced a similar product, and/or (3) his past experience with new products.52

Based on the above analysis of the nature of budget evidence, Ijiri concluded: "... the essence of budget audits lies in checking whether the inferences that the budget officer applied are... acceptable."53

First Standard of Reporting: The report shall state whether the financial statements are presented in accordance with generally accepted principles of accounting.

For projected financial statements to present fairly expected financial position and operating results, it is not enough for such statements to be presented in accordance with generally accepted accounting principles. They must, in addition, be based upon reasonable and realistic assumptions, and they must employ sound principles of forecasting. Obviously, then the first standard of reporting

51 Ibid., p. 8.
52 Ibid.
53 Ibid., p. 9.
is not adequate for governing the essential prerequisites upon which projected financial statements must be based. A proposed revision of this standard of reporting is:

The report shall state whether the projected financial statements are presented in accordance with generally accepted principles of accounting, and if the projected statements are based on reasonable assumptions and sound principles of forecasting.

To adequately meet this standard the auditor must know what constitutes sound forecasting practices and techniques. This requires that an adequate examination be made of the short-run planning function of the client firm, and the resultant findings must be compared with the auditor's knowledge of budgeting and forecasting principles and procedures used by companies which forecast effectively. The auditor should ascertain, for example, if the client's sales forecasting system employs economic and industry forecasts, and if the client uses statistical forecasting techniques in combination with judgmental techniques.

Second Standard of Reporting: The report shall state whether such principles have been consistently observed in the current period in relation to the preceding period.

The objective of the consistency standard is twofold: (1) to give assurance that the comparability of financial statements between periods has not been materially affected by changes in accounting principles, and (2) if comparability has been affected by such a change, to
to require disclosure of the change and their effects on the historical financial statements.\textsuperscript{54}

The consistency standard \textit{per se} cannot be applied to projected financial statements, because the value of projected statements is not to compare one year's forecast with a prior year's. Instead, the consistency of accounting principles employed is important in comparing projected statements with actual results for the same year and in comparing projected statements with current (latest historical) data. Thus, the projected statements should employ the same accounting principles as do the actual financial statements.

An important value of projected statements disclosure lies in giving the shareholder and other interested external parties \textit{advance} knowledge of management's most realistic expectations. In addition, by comparing management's expectations, via projected financial statements, with actual results, the shareholders have better knowledge concerning both managerial planning ability and performance. Naturally, if actual or historical statements were based on one set of accounting principles while the projected statements were based on another set, any comparison between the two would certainly produce erroneous decision-making data.\textsuperscript{55}

\textsuperscript{54}Statements on Auditing Procedure No. 33, p. 42.

\textsuperscript{55}Similar conclusions concerning the second standard of reporting were reached earlier by another researcher. See Verner, "Proposed Principles and Audit Standards for Forecast Statements," p. 35.
To redefine the second standard of reporting in accordance with the objectives of comparing projected with actual (or historical) statements, a revision similar to the following is necessary.

The report shall state whether the generally accepted accounting principles employed in the historical financial statements are consistent with those used in the projected financial statements.

Third Standard of Reporting: Informative disclosures in the financial statements are to be regarded as reasonably adequate unless otherwise stated in the report.

W. Baker Flowers in a 1960 research study defined informative disclosure as: "... revealing in financial statements or the accompanying footnotes all accounts, transactions, and events that are needed for the proper interpretation of the financial statements for current position, rules of operations, and for future planning [emphasis supplied] by an interested person, agency, or institution."

One of the major problems posed by informative disclosure is: How much information should be disclosed? In seeking a solution to this question, three concepts abound in the literature--full disclosure, fair disclosure, and adequate disclosure. The distinction between these is primarily a semantical one, but nevertheless of importance when attempting to determine the amount and type of...

information to be disclosed in projected financial statements. The term "full disclosure" places primary emphasis upon the superabundance of accounting data available for disclosure, while "fair disclosure" stresses the application of the auditor's moral judgment in determining the boundaries of disclosure. On the other hand, the preferable term, "adequate disclosure," implies disclosing only information having the potential to affect external users' decisions.

Employing "adequate disclosure" as a standard for informative disclosure, the central issue then becomes one of determining the type of data to be presented in projected financial statements in order to be sure they are not misleading. The following should be minimal:

1. The projected and historical (actual)
financial statements for the current year
as well as projected financial statements
for the coming year should be disclosed.
This ties the projected financial statements to the historical statements and helps the user to better understand the projection for the coming year. In other words, the user can readily see the deviations between actual results of the current year and its forecast. This is likely to communicate to the user the
uncertainty surrounding the forecast for the coming year.

2. Any major uncertainty upon which the projected financial statements crucially depend should be disclosed along with disclosure of how the statements might be modified were that uncertainty not to occur. An example of a major uncertain factor is a sizeable government contract which the company may or may not receive. An appropriate disclosure would indicate how the government contract was treated in the projected statements and what effect failure to obtain it would have on the projected statements. 57

3. Material deviations between the current year's historical financial statements and the projected statements for the same year should be explained by management. Ideally, a separate schedule accompanying the financial statements will be used for such explanations. In cases where management's explanations are inadequate, the auditor should so state in his opinion on the projected statements.

4. A statement indicating the major techniques and principles employed in budgeting and forecasting should accompany the projected financial statements. This statement should include comments on the historical accuracy of the projected statements.

5. Every material assumption underlying the upcoming projected financial statements should be disclosed, preferably in a separate schedule. Some assumptions are made instinctively without consciously recognizing them as such. Hence, care should be taken to insure that every assumption is identified and properly noted.

Fourth Standard of Reporting: The report shall either contain an expression of opinion regarding the financial statements taken as a whole, or an assertion to the effect that an opinion cannot be expressed. When an over-all opinion cannot be expressed, the reasons therefore should be stated. In all cases where an auditor's name is associated with financial statements the report should contain a clear-cut indication of the character of the auditor's examination, if any, and the degree of responsibility he is taking.

In expressing an opinion on projected financial statements, the auditor is in effect rendering subsidiary opinions on: (1) the assumptions underlying the projected statements, (2) the soundness of the forecasting techniques employed, and (3) the accounting bases and calculations of the projected statements. Thus, before he can
express an opinion on the projected financial statements taken as a whole, he must have adequately reviewed each of the subsets.

The types of opinions expressed in reporting on historical financial statements can also be employed in rendering opinions on projected financial statements. That is, the auditor will either issue an unqualified opinion, a qualified opinion, a disclaimer of opinion, or an adverse opinion. Also, the auditor may at times wish to employ the piecemeal opinion in conjunction with the disclaimer or adverse opinion.

The unqualified opinion should be used when the projected statements taken as a whole represent reasonable inferences as to future expectations and when management's explanations of the past deviations between projected and actual results are considered adequate. On the other hand, the qualified opinion should be employed when the projected statements represent reasonable inferences except for some material item in question, or when management's explanations of past deviations are misleading or incomplete.

When the auditor has been unable to satisfy himself as to reasonableness of inferences, he should render a disclaimer of opinion which means, in essence, he has an insufficient basis for an opinion on the statements taken as a whole. However, if the projected financial statements do not represent reasonable expectations based on
sound forecasting techniques, adequate accounting bases, and calculations the auditor must issue an adverse opinion.

Certain situations may develop in which the auditor, although rendering an adverse or disclaimed opinion on the statements as a whole, will wish to indicate that certain items presented in the projected statements are reasonable inferences. For example, the auditor upon reviewing a client's projected financial statements may find the statements as a whole are not fairly presented, but the sales projected for the ensuing year may be reasonable, fairly presented, and based on sound forecasting techniques. Thus, in a piecemeal opinion the auditor should indicate that although no over-all opinion is being expressed regarding the projected financial statements, the projected sales are reasonable inferences for the coming year. In no case, however, should the statement concerning the sales projection overshadow the fact that the projected financial statements are not fairly presented.

Another reporting problem the auditor is likely to frequently encounter in reviewing projected financial statements concerns companies which do not budget any of their activities. Of course, it is not within the purview of the auditor to require these companies to employ budgets. The situation is similar to present cases where certain companies fail to maintain adequate or wholly-up-to-date accounting practices. The certifying accountant
should simply disclose the situation which actually exists. 58

Another situation the auditor might encounter concerns clients having newly developed budgeting programs. Until a firm's management acquires experience in budgeting and forecasting and a minimum level of confidence in their ability to project critical financial statement elements, the auditor should not associate himself with the projected financial statements.

Abrogation of Rule 2.04 and Redefinition of Opinion No. 10

Rule 2.04 of the Code of Professional Ethics and interpretative Opinion No. 10 59 as they presently stand are in conflict with the tentative statement of forecast auditing standards. In this section, consideration is given to their variation in interpretation and proposed revision or redefinition.

Rule 2.04 and Opinion No. 10 are subject to two extremes of construction. First, their traditional interpretation is that the auditor's opinion should not be applied to projected statements of any sort. This, in


effect, amounts to a total prohibition against assumption of any audit responsibility for projected data. However, the strict construction does not preclude the independent public accountant from performing management advisory services with respect to budgets and forecasted statements. Also, in rendering management services dealing with forecasts or budgets, the accountant may prepare reports to his client indicating the character of the work performed and the responsibility assumed. These reports to clients do not amount to, and should not resemble, audit opinions. Although it should be presumed that forecast reports may be seen by parties other than the client, the primary reasoning behind Rule 2.04 and Opinion No. 10 is to avoid widespread distribution of such reports and to prevent assumption on behalf of the accountant of any audit responsibility for projected data.

A second interpretation of the ethics committee's statements on forecasts is presently evolving. This is: "Forecast audits do not conflict with contemporary ethics."\(^{60}\) The reasoning behind this broad construction is that Rule 2.04 and Opinion No. 10 do not prohibit the independent accountant from attesting to the reasonableness of assumptions and inferences of forecasts. Instead, the member or associate is only prevented from attesting to the accuracy of the forecast.

\(^{60}\)Verner, "Proposed Principles and Audit Standards for Forecast Statements," p. 50.
A middle view between the strict and the broad constructionists was recently advocated by one author. Belda in the December, 1970, Journal of Accountancy reasoned:

... forecasting of significant information on an objective and organized basis can be of substantial value to companies, investors, creditors and other segments of the financial community. CPAs can make important contributions to this technique, and they can serve their clients effectively by performing services of this kind. It is important, however, that reports on engagements involving forecasts are carefully worded so that the reader [?] is adequately informed of the bases used. ... 61

In essence, Belda's recommendation represents a major revision of Opinion No. 10. The interpretative opinion stated in part: "... when a member associates his name with such statements and analysis [forecasts] or permits his name to be associated therewith, there shall be the presumption that such data may be used by parties other than the client." 62 According to Belda, it is not only presumptuous that external parties may occasionally have access to forecast reports, but these reports should be especially prepared with such parties in mind. Of course, such interpretation is beyond the original intent of Opinion No. 10. The purpose of Opinion No. 10 was to restrict the use of management service type reports to the

---


accountant's client and to an occasional external party having limited access via the client.

Opinion No. 10 was not meant to govern extensive distribution of reports and forecasts and should not be construed as permitting such. To hold otherwise would tend to give rise to a most confusing situation. Financial statements circulated among external users would be of two types: (1) historical financial statements audited by independent public accountants, and (2) projected financial statements constructed, or perhaps reviewed, but not audited by the independent accountant. If the latter were distributed to external parties with report terminology set forth in Opinion No. 10 or with Belda's suggested reporting formats, the user would be placed in a paradoxical situation. The external users in many cases would be unable to determine the nature of responsibility assumed by the accountant for the projected data. To avoid circumstances such as this, reports intended for external consumption should be audited or unaudited, and statements by the independent accountant, other than audit opinions, should not accompany them. Opinion No. 10 should be redefined according to its original intent; therefore, it should be applicable only to management service reports, not meant for extensive distribution to external users. Furthermore, Opinion No. 10 should require a management service report accompanying projected
financial statements to specifically state that the statements are not audited.

Besides being subject to varying degrees of interpretation, Rule 2.04 and Opinion No. 10 also make no distinction between the validity of assumptions used in a forecast and the mechanical accuracy of the forecast based on these assumptions. The independent accountant can certainly satisfy himself that the mechanical accuracy of a forecast is correct; to reason otherwise would require contradicting English practice. As one writer stated:

... the CPA is capable of verifying the methods and forecasting techniques used in a particular case. No one would expect the CPA to be a guarantor of future results, just as no one presently conceives of him as a guarantor of the past financial statements he audits and on which he reports—but if the CPA can verify, through tests, sample, and audit-type examinations, the forecasting methods and techniques and if the underlying assumptions and bases for the projection are clearly stated and accompany all published forecast and projected financial statements, it is extremely difficult to see where lies the danger to the public or to the CPA's prestige.63

The same writer concluded his proposed extension of audit responsibility by stating that the attitude of professional accountancy in the United States "retards progress and is in direct violation of the accounting community's stated objectives of improving and advancing the

quality of financial data compilation, summarization, interpretation and communication to all interested parties."

In addition to reviewing methods and techniques, the independent accountant can go further. He can and should review the reasonableness of assumptions underlying projected statements. Therefore, since Rule 2.04 has served its usefulness, revision along the following lines is suggested:

A member or associate may audit projected financial statements providing he reviews (1) the company's budgetary system, (2) reasonableness of assumptions underlying the projected financial statements, (3) forecasting techniques employed, and (4) accounting bases and calculations underlying the statements. In addition, the member or associate should determine if all material underlying assumptions are properly disclosed and should not undertake to audit projected financial statements for more than one year in advance.

Rule 2.04 as it presently stands contains an admonition that a member or associate should not vouch for the accuracy of a forecast. Under the above proposed revision this admonishment will still hold, just as it is applicable to historical financial statements. However, the fact remains that, Rule 2.04 in its present form represents a truism and serves no real purpose other than

64Ibid.
prevent extension of a much needed accounting service. To demonstrate the fallacious logic inherent in Rule 2.04, consider its application to historical data. A member or associate shall not permit his name to be used in conjunction with historical financial statements in a manner which may lead to the belief that the member or associate vouches for their accuracy. It is fundamental in existing accounting thought that the auditor does not and cannot guarantee historical financial statements, and this limitation does not prevent performance of an audit of such statements; hence, the same reasoning should hold for projected statements.

**Summary of the Chapter**

Based on the American auditor's responsibility for reviewing historical financial statements and the responsibility of the English chartered accountant in reviewing profit forecasts, a tentative statement of audit responsibility for projected financial statements in the United States was formulated. The main features of the tentative statement were that:

1. The major objective of the projected financial statement examination is the expression of an opinion by the independent auditor on the reasonableness with which the projected financial statements present expected financial position and results of operations.
2. The extent of audit test work applied to projected financial statements is determined by a thorough review of the underlying budgetary system and the degree of effective control built into the system.

3. In examining projected financial statements, the auditor must review: (a) the assumptions underlying the statements, (b) the forecasting techniques employed, and (c) the accounting bases and calculations.

4. The primary responsibility for the assumptions and reasonableness of inferences upon which the projected financial statements are based rests upon the management and directors of the firm whose expected affairs the statements purport to reflect.

5. The auditor's opinion with respect to projected financial statements reflects primarily the reasonableness of the inferences made in the statements, not their accuracy.

In developing the tentative statement of audit responsibility for projected financial statements, the ten generally accepted auditing standards were employed as a foundation. Emanating from the consideration of the extended meaning of the generally accepted auditing standards was a "Tentative Statement of Forecast Auditing Standards."
The major distinction between the original standards and the forecast standards, besides their applicability to different types of data, was the revamping of the first and the second reporting standards. Otherwise, the forecast standards were extracted verbatim from the Statements on Auditing Procedure No. 33. The interpretation of the forecast auditing standards paralleled the meaning of the historical standards with the tentative statement simply being a natural and logical extension.

Having blueprinted a proposed statement of audit responsibility for projected financial statements in the United States, attention is directed next to forecast audit procedures. Chapter V presents auditing procedures for reviewing projected balance sheets and projected income statements.
CHAPTER V

AUDITING PROCEDURES FOR PROJECTED FINANCIAL STATEMENTS

From the outset it seems reasonable to assume that the audit of projected financial statements should be similar in many respects to the review of historical financial statements. Since the typical audit normally begins with an evaluation of the accounting system and internal control underlying historical financial statements, the examination of projected statements should likewise be based on a detailed study of the client's budgeting system and budgetary control within that system.¹

The goal of reviewing the budgeting system and control is, of course, the same as the objective of reviewing internal control supporting historical financial statements--to determine the extent of audit tests necessary for the auditor to render his opinion.

¹To a limited extent, budget and variance analysis reports are beginning to be used as a part of the historical audit approach. The "business approach to auditing" or the "analytical audit" utilizes budgets (and other control devices) to pinpoint areas where management control is ineffective or weak. The auditor evaluates the impact of weaknesses on reliability and accuracy of the accounting records and directs the audit accordingly.
A number of differences exist between historical audits and forecast audits. The auditor who has been concerned primarily with past activities and past records of the firm will now be compelled to look forward and evaluate not the past or present, but the future of his client. As a result, the types of audit evidence and the audit sequence are two areas in which the auditor will encounter significant differences.

Relative to historical audit evidence, forecast audit evidence is, of necessity, more dependent upon testimonial, observation, and other internally-generated data as opposed to confirmations and arm's-length exchange transactions. In other words, in examining historical financial statements the auditor frequently utilizes the other party to an exchange transaction as an evidence source, but in forecast audits the latter type of evidence is in limited supply.

Another difference between historical audits and forecast audits lies in the audit sequence. The historical audit process traditionally commences with an evaluation of internal control followed by a review of balance sheet and related income statement accounts. For example, one segment of a historical audit might include the following accounts: (1) accounts receivable, (2) allowance for bad debts, (3) sales, and (4) bad debt expense. The forecast audit must, of necessity, differ significantly from this traditional audit approach. Activity or income
statement accounts must be audited before related balance sheet accounts. Hence, the forecast audit should be approached in the following order: review of (1) budgetary control, (2) projected income statement, and (3) projected balance sheet. The traditional audit sequence, reviewing the balance sheet accounts and the related income statement accounts, must be reversed since the projected balance sheet depends upon the projected income statement. For instance, budgeted sales must be audited before projected accounts receivables can be audited. Similarly, before projected cash can be examined, budgeted sales, production, and manufacturing costs should be reviewed. In essence then, a primary difference between the audit of historical financial statements and the audit of projected financial statements is that the audit review commences with the projected income statement, specifically with the sales budget unless there are resource input constraints such as production capacity, raw materials, or labor.

In conducting the examination of projected financial statements there is the question of what comes after the auditor has completed the budgetary system documentation (fact-finding on what the system is), testing the budgeting system or developing the detailed forecast audit program? Since the design of the audit program is dependent upon the results of the budgetary control review, it may appear logical to first complete the control examination.
Practically, however, the two often would be carried out simultaneously. In other words, while reviewing the budget system the auditor can gather evidence pertaining to certain items in the projected financial statements. Also, when testing assertions in the projected statements according to the requirements of the forecast audit program, the auditor may uncover evidence which could modify his initial findings as to the effectiveness of the budget system.

The following sections present elements that should be included in: (1) a budgetary system and control questionnaire, and (2) a forecast audit program. Although presented separately, the auditor should recognize that some degree of simultaneity in application between the questionnaire and audit program is both advantageous and economical.

**Budgetary System and Control Questionnaire**

The budgetary system and control questionnaire is intended to aid the auditor in obtaining data about

---


Of importance also, in 1964, the Institute of Internal Auditors initiated a research project entitled "Internal Audit of Budgeting Activities." Unfortunately, the project has been plagued with unforeseen problems, including the demise of two successive researchers. Hopefully, the results of research will be available in the near future. If and when the study becomes available, it should prove most helpful to public accountants in performing reviews of budgetary control.
attitudes, techniques, and budget administration as a necessary prerequisite to the audit of projected financial statements. Recognizing that it is not feasible to prescribe a questionnaire with standardized detail, the following is meant to develop some possibilities in the area. The questionnaire should be used solely as a guide to important points and by no means should be considered all-inclusive.3

The questionnaire developed in this chapter is divided into four areas corresponding to preliminary studies the auditor must make before designing a forecast audit program. These areas are: (1) a consultation with top management, (2) a review of the central budget staff (or other staff unit which coordinates budget preparation), (3) a review of the sales forecasting process, and (4) a review of the budget philosophy at lower organization levels.

Top Management Review

In examining projected financial statements the auditor should be concerned with management's attitude toward

3The review of budgetary control via a questionnaire could lead to abuses that are being associated with internal control questionnaires. These abuses include: (1) copying answers from the preceding year's questionnaire, (2) mechanical filling in of "yes" and "no" answers without any real understanding or study of the problem, and (3) treating the questionnaire as an end instead of a means. To avoid these, public accounting firms are beginning to substitute written descriptions or flow charts in place of the questionnaire. The fault lies, of course, not in the questionnaire, but in the preparer. See Walter B. Meigs and E. John Larsen, Principles of Auditing (Homewood, Ill.: Richard D. Irwin, 1969), pp. 112-113.
the budget, as well as budgeting and forecasting techniques. An understanding of the firm's philosophy of budgeting gives the auditor information concerning one of the most important factors leading to budgetary success—avowed support of top management. In discussing budget philosophy and the budget system with management, the auditor could start by ascertaining answers to the following questions:

1. What is the objective of budget preparation?

2. How does top management use the budgets for the control of operations?

3. To what extent is top management involved in the preparation and review of budgets?

4. Where does budget responsibility lie? (The auditor should ascertain the names and positions of all key individuals involved in budgeting or forecasting.)

5. How far ahead are forecasts and projections made?

6. How frequently does management receive budget reports?

7. Does the budget cover the entire business operation? (Limited budgets may be quite realistic in situations where

---

4 Many of these questions pertain to facts and could be answered by the central budget staff unit.
the budget is still in an experimental stage.)

8. Does the budget extend to both cash funds and earnings, or is it confined to one only? Does the budget cover a projected balance sheet?

9. Is the flexible budget technique employed (whereby expenditures are charted at different levels of sales)? Is the fixed budget technique also employed?

10. Are sub-budgets used for individual projects such as capital expenditures and contract jobs?

11. Are final budgets approved by the central budget staff, the executive officers, and the board of directors?

12. What are the firm's most pressing budgeting problems?

Central Budget Staff Review

The central budget staff forms a connecting link between those who prepare plans and those who approve them.\(^5\)

\(^5\)Large budget staffs are uncommon. Typically a budget department will have from 1 to 5 employees with some large (over 10,000 employees) companies running up to 40 employees. See Jeremy Bacon, Managing the Budget Function, Business Policy Study No. 131 (New York: National Industrial Conference Board, 1970), pp. 58-83.

Frequently, budget staff responsibilities are assigned to two or three members of the controller's department. The lack of a separate budget department should not preclude expression of an opinion on projected financial statements.
The group is often responsible for preparation of budgetary guidelines and recommendations for line managers. They design and distribute standardized forms used in budget preparation and prepare reports which highlight and interpret deviations from plans. One of the group's most important obligations is to review the proposed comprehensive budget for technical considerations. That is, they determine if estimated results meet approved company objectives (i.e., corporate goals), if all areas of operations have been included in the budget plan, if contradictions or disagreements exist between different elements of the plan, and if prescribed expenditure limitations have been observed.

The smooth operation of the entire budgetary plan depends upon the efficiency and attitude of the central budget staff. The reasonableness and accuracy of projected financial statements are especially contingent on this group; hence, the auditor should devote much attention to the staff's activities and effectiveness. The auditor's review should require answers to questions such as:

1. Is the central budget staff placed logically in the company's organization? (The staff should be placed high enough in a firm's structure to afford a high degree of organizational independence.)
2. Is the staff of the group competent and properly trained? Does the staff have to perform extraneous duties unrelated to budgeting? (In his review the auditor should obtain organizational and functional charts, determine the number of personnel employed, the division of functions, types, location, and condition of records, and the nature of special problems encountered by the budget staff.)

3. Does the central budget staff maintain channels of communication with all operating and financial levels on a continuing basis?

4. Does the central budget staff ensure that operating managers determine and adequately document the causes of budget deviations? (The auditor should be especially concerned with deviations between actual and projected data since significant differences require explanation by management and disclosure to external parties. A mere statement of arithmetical differences will not suffice.)

5. Are budget performance reports clear and meaningful in their presentation, and are they issued in a timely manner?
Sales Forecasting Review

Before examining the sales budget and supporting sales forecasts, it is imperative that the auditor be familiar with basic techniques, problems, principles, and current trends in the field of sales forecasting. In his initial review the auditor should obtain a description of the basic methods used and special problems encountered by the client in forecasting sales.

1. What forecasting methods are being used currently?

2. Is some of the informational input for sales forecasting obtained from the sales force? If so, are salesmen's bonuses dependent upon sales outcomes in which the actual results are better than forecasted results?

3. To what extent does the firm use independent information, such as Department of Commerce statistics, or some other source for market or industry projections?

4. Does the firm employ both judgmental and statistical forecasting techniques? How are results produced by different methods reconciled?

5. Before departmental budget preparation starts, is the sales budget tentatively approved by management and afterwards
Lower Organizational Levels Review

The review of the budgetary system should touch on every level of the client's organization. In the final analysis, the auditor should have complete understanding of the client's philosophy of budgeting, the scope of the budget operation, the competency of individuals having budget responsibility, and the overall effectiveness of the total budget program.

To complete the examination of the budgetary system, the auditor should ascertain answers to the following questions, giving primary consideration to how the budget is viewed by lower organizational levels.

1. Are policies, procedures, and budget methods clearly expressed in written instructions and disseminated to all operating centers responsible for preparing and administering budgets? (The auditor should review the budget manual and extract pertinent data. Whenever possible, he should obtain firsthand observations concerning budgetary
procedure to confirm whether the written policies, procedures, and methods are in actual use.)

2. Are the responsibilities for preparing, reviewing, and approving budgets clearly and logically defined? Do the individuals concerned properly understand their responsibilities, and do they have a realistic concept of the firm's budget process?

3. Does every department participate in creating its own budget? Does the most reasonably qualified level of management prepare its own budget with the aid of guidance from superiors and the central budget staff?

4. Does the budget time table make adequate allowance for developing details and making necessary adjustments preliminary to completion of the final budget? Do departmental managers have the feeling that the budgets are reasonable and attainable?

5. Do account classifications fit in logically with the requirements for budget preparation, analysis, and control?

6. Is the budget used as a measure of performance? Are variances promptly analyzed to
determine underlying causes? Does the performance reporting system incorporate volumes and other non-monetary standards in addition to financial data? (The post-operative functions of the budget in many cases will determine its importance in the eyes of top management and the credibility attached to the budget process by all involved.)

Conclusion

Conceptually, the auditor should review the client's budgetary system and control in two phases—the study and the evaluation. In the study phase, the auditor gathers evidence as to the structure of the budgeting system. In the evaluating phase, the client's total budgeting system is critically appraised to indicate both strengths and weaknesses. From this latter appraisal the forecast audit program is developed.

**Forecast Audit Program**

The forecast audit procedures presented herein\(^6\) serve as a plan of action for guiding and controlling the formulation of the budget. The following sources were useful in developing the forecast auditing procedures: Institute of Chartered Accountants in England and Wales, "Accountants' Reports on Profit Forecasts," Accountancy, LXXX (June, 1969), 467-469; Yuji Ijiri, "Budget Auditing and Its Implementation" (unpublished working paper, Stanford University, 1966), especially pages 10-13; London and District Society of Chartered Accountants, "Programme for Review of Profit Forecasts" (unpublished course held on December 2, 1969, London, England); and Profit Forecast Audit Programs from two international accounting firms.
examination of the projected financial statements. The procedures outline the scope of work considered necessary to enable the auditor to express an opinion on projected statements and provide an orderly method for recording the results of the audit examination.

In 1947 the AICPA stated that "... it is not practical, because of the wide variance of conditions encountered, to issue anything like an 'all purpose' program of auditing procedures ..." The same reasoning holds true for forecast auditing procedures; a detailed forecast audit program of wide applicability cannot be developed. Different companies should be audited using different procedures. Well-managed companies having sophisticated budgeting systems require some audit procedures quite unlike those employed with companies having relatively undeveloped budgeting systems. Likewise, companies in dynamic or rapidly changing markets may require an audit approach much different from firms in highly stable industries.

Each company is unique, and forecast audit programs require tailoring to fit the particular situation. Furthermore, procedures should be selected and applied only after the auditor recognizes and understands the environmental and industrial conditions which affect the client's projected financial statements.

The audit of a projected income statement and a projected balance sheet can be broken down into five logical steps:

1. Initial Review and Analysis of Past Forecasting Performance.
3. Review of Underlying Assumptions.
4. Examination of Other Evidence.
5. Final Steps in the Forecast Audit.

Initial Review and Analysis of Past Forecasting Performance

The initial examination of projected financial statements requires a review of the company's general characteristics and recent history with reference to such matters as the nature of its activities and its main products, markets, customers, suppliers, divisions, locations, labor force, and trend of operating results. While certain information will be readily available in existing audit files, new data will also be needed. This data-development task will require judicious composition in order to portray the relevant characteristics of the company and its operating environment. In most cases the auditor should obtain the following:

1. An outline of the nature of the company's business and its basic organization.
2. A detailed statement of the company's accounting principles, philosophy, and methods employed in the historical financial statements.

3. A detailed statement setting out the accounting principles employed in preparing the projected financial statements.

4. A detailed outline of the company's sales forecasting methods.

5. A detailed outline of the company's method of projecting cost data including extent of usage of engineering estimates and analysis of historical cost techniques.

6. A statement of the assumptions underlying the current (for the ensuing year) projected financial statements. A separate statement of assumptions should be obtained for each division or product group of the company.

7. The completed projected financial statements together with any supporting budget working papers.

In addition to the above, the auditor should obtain a comparison of the detailed actual results and projections for past years, accompanied by management's explanations of the differences. An analysis of these representations allows the auditor to examine the trend of past
results and to determine the company's past success in forecasting. Furthermore, the correlation of previous projections with subsequent results should aid the auditor in assessing the scope and extent of audit procedures necessary for current projections.

The study of past forecasting accuracy will depend on the size and type of company but it should include, at least on a test basis, a review of the main items of revenue, expense, current assets, fixed assets, liabilities, and shareholders' equity. In those cases where the client has not done so, the auditor will need to calculate bias, average deviation, and range deviation for each projected item. To define bias, average deviation, and range deviation and to illustrate their calculation, consider the following hypothetical example where the forecasting accuracy on the sales of widgets is analyzed.8

In the following analysis, relative forecast error is defined according to the following formula:

\[
\text{Relative Forecast Error} = \frac{F_i - A_i}{F_i} \times 100, \text{ where:}
\]

\[F_i = \text{Forecasted Sales (for any given year), and}\]

\[A_i = \text{Actual Sales.}\]

---

8The example assumes that the data for each year were generated by models that are indistinguishable from each other.
### SALES OF WIDGETS

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Actual Sales</th>
<th>Forecasted Sales</th>
<th>Relative Forecast Error⁹</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>$195</td>
<td>$200</td>
<td>+2.5%</td>
</tr>
<tr>
<td>1966</td>
<td>270</td>
<td>265</td>
<td>-1.9%</td>
</tr>
<tr>
<td>1967</td>
<td>250</td>
<td>250</td>
<td>0.0%</td>
</tr>
<tr>
<td>1968</td>
<td>245</td>
<td>255</td>
<td>+3.9%</td>
</tr>
<tr>
<td>1969</td>
<td>260</td>
<td>255</td>
<td>-2.0%</td>
</tr>
<tr>
<td>1970</td>
<td>200</td>
<td>210</td>
<td>+4.8%</td>
</tr>
<tr>
<td>1971</td>
<td>273</td>
<td>272</td>
<td>-0.4%</td>
</tr>
</tbody>
</table>

Bias = +1.0%

Average Deviation = 2.2%

Range Deviation = +4.8% to -2.0%

To illustrate, 1965 sales were forecasted to be $200, while sales actually achieved were $195, the relative error forecast error is therefore:

\[
\frac{200 - 195}{200} = .025 \times 100 = +2.5\%
\]

⁹According to Schlaifer, general experience shows that the magnitude of the difference between forecast and actual tends to be larger for large forecasts than for small forecasts. Hence, the years for which forecasts are made will not be indistinguishable if the error in each forecast is measured by the difference between forecast and actual. It is more likely that errors will be independent of size of forecast if errors are measured in relative or percentage terms. See Robert Schlaifer, Analysis of Decisions Under Uncertainty (New York: McGraw-Hill Book Company, 1969), pp. 301-302.
 Relatives having plus signs indicate, of course, that actual is less than forecasted, while the converse indicates that actual is greater than forecasted.

After computing a relative forecast error for each fiscal year, bias is calculated by dividing the sum of the relatives by the number of years analyzed. The purpose of calculating bias is to provide a measure that indicates if an item is consistently projected optimistically or pessimistically. For example, the projection of the sale of widgets (above) indicates that management tends to forecast optimistically. Conceptually, the widget sales forecasted for 1972 should be decreased by one per cent in order to eliminate biasness.

In addition to the concept of bias, two other measures useful in auditing projected financial statement items are average deviation and range deviation (equal to 2.2% and +4.8% to -2.0%, respectively above). Average deviation is calculated by averaging the relative forecast errors, ignoring sign differences. Range deviation is

\[
\text{Bias} = \frac{1}{n} \sum (\text{Relative Forecast Error}_i), \text{ where:}
\]
\[
n = \text{number of years.}
\]

\[
\text{Average deviation} = \frac{1}{n} \sum_{i=1}^{n} \left( \frac{F_i - A_i}{F_i} \right) \times 100, \text{ where:}
\]
\[
F_i = \text{forecasted, and } A_i = \text{actual.}
\]
determined by comparing the greatest minus deviation for any given year with the greatest plus deviation for any given year. Average and range deviation serve as indicators of dispersion which exists between forecasted amounts and actual amounts for past fiscal years. By using these measures, the auditor is able not only to pinpoint areas in which the client has experienced difficulty in forecasting, but also to determine relative risk associated with each projected item. For example, in forecasting advertising expense average deviation may yield 1.5 percentage points, while in forecasting bad debts expense average deviation may be equal to 5.7 percentage points. By relative comparison, the auditor is able to say that more risk might be associated (depending on absolute amounts and their relation to net income) with bad debts expense forecasting than advertising expense. Consequently, more audit time may be allocated to items judged to have greater risk.

In all cases, the auditor should determine whether any alterations have been made to reduce deviations in the budgeting and forecasting process. When alterations are discovered, the auditor should compare bias, average deviation, and range deviation between the prior forecast period and the modified forecast period to determine if forecasting accuracy has actually improved.

Of particular importance to the auditor are projections subject to a high degree of risk, e.g., new product
sales. If any individual product line or division consistently shows an irregular, volatile trend, the audit opinion on the projected statements should disclose this fact, assuming the product line or division to be material.

In essence, the auditor's review of past projections and subsequent results can demonstrate whether budgets are based on likely, attainable expectations rather than hoped-for targets. The review also indicates whether management's forecast error is consistently conservative or optimistic.

Review of Projected Financial Statements and Supporting Working Papers

The current projected statements and the underlying supporting working papers should be examined for: (1) arithmetical correctness, (2) adequacy of budgetary working papers, and (3) reasonableness of relationships among data. More specifically, the auditor should consider whether the projected financial statements are properly prepared with regard to:

1. Arithmetical correctness of both the projected statements and the budgetary working papers.

2. Orderliness and traceability of underlying working papers. The working papers should show: (a) date of preparation and identification of person who prepared them; (b) sources of data and rates used; (c) what
the worksheet was designed to accomplish and, where necessary, how it relates to other worksheets; (d) extent of review of submitted budget data, and reasons for adjustment; and (e) good format.

3. Reasonableness of relationships among data within the projected financial statements and the budgetary working papers. To determine the propriety of relationships the auditor should:

A. Review internal consistency between current estimates and past estimates, e.g., if the firm estimated plant capacity as 40,000 units in preparing projected statements for 1970, the same 40,000 units should be used in the 1971 projected statements unless some explainable change has occurred in production capacity. Similarly, gross profit, net profit, working capital, debt to total assets, and other financial ratios in current estimates should not be significantly different from historical financial ratios unless the differences can be reasonably explained.
B. Review internal consistency among current data, e.g., production costs should not be based on 30,000 units while projected sales are based on production of 50,000 units.

C. Review external consistency between historical and estimated data, e.g., any sudden change in the firm's estimate of market share must be supported and explained.

D. Review external consistency among current data dealing with consistency of budget estimates with industry and general economic indicators, e.g., expectations of product selling price double that of the price forecasted by the industry is not consistent. Of course, the firm's estimate may turn out to be correct, but the firm must explain why its estimate should be accepted by the auditor as being more reliable than the industry forecast.

In examining the projected financial statements and supporting working papers, the auditor should also determine whether clear records of budget negotiations were made and whether revisions to budgets and forecasts submitted were adequately documented and explained.
Review of Underlying Assumptions

The assumptions underlying projected financial statements should be examined to establish their reasonableness and to determine whether or not all known material factors have been considered. In cases involving consolidated projected statements, the review of assumptions should be carried out by subsidiaries or divisions. The auditor must take particular care to ensure that every material assumption is identified in the client's statement of assumptions and to see that the calculations in the projected statements are consistent with the underlying assumptions.

Some of the assumptions which should be examined by the auditor and disclosed as a part of the projected financial statements are as follows:

1. Sales volume and price per unit.
2. Level of orders on hand (sales backlog).
3. Credit period taken by customers (accounts receivable turnover).
4. Credit period taken by company (accounts payable turnover).
5. Inventory levels.
6. Changes in management, company policies, or organizational structure.
7. Availability and cost of labor.
8. Possible interruptions from labor disputes.
10. Availability and cost of production facilities.

11. Interest rates and financing availability (short and long term).

12. General economic conditions.

13. Industry economic conditions.


15. Taxation legislation and government policies expected to affect the company.  

In making a review of these assumptions, the auditor should seek corroborating evidence from trade journals, government publications, and other reputable sources of economic and industry indicators.

Examination of Other Evidence

Besides testing the reasonableness among data, calculating the past forecasting accuracy of each projected element, and reviewing the underlying supporting working papers the auditor should examine additional evidence bearing on assertions made in the projected financial statements. For example, the auditor should consider the following:

<table>
<thead>
<tr>
<th>Projected Element</th>
<th>Evidence to Consider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (volume and price)</td>
<td>Detailed product sales budgets Forecasting techniques</td>
</tr>
</tbody>
</table>

12 It is interesting to note that English directors almost always include a "contingency" assumption, indicating that operations will not be materially affected by unforeseen circumstances, in the statement of assumptions accompanying a profit forecast. See Appendix IV.
<table>
<thead>
<tr>
<th>Projected Element</th>
<th>Evidence to Consider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (continued)</td>
<td>Consumer demand surveys</td>
</tr>
<tr>
<td></td>
<td>Company's long range sales goals</td>
</tr>
<tr>
<td></td>
<td>Price stability</td>
</tr>
<tr>
<td></td>
<td>Price of competing products</td>
</tr>
<tr>
<td></td>
<td>Sales backlog</td>
</tr>
<tr>
<td></td>
<td>Sales activity plan necessary for budget realization</td>
</tr>
<tr>
<td>Cost of sales (raw materials, direct labor, and overhead)</td>
<td>Product composition analyses prepared by competent engineers</td>
</tr>
<tr>
<td></td>
<td>Raw materials purchases budgets</td>
</tr>
<tr>
<td></td>
<td>Supplier price lists</td>
</tr>
<tr>
<td></td>
<td>Specific supply commitments</td>
</tr>
<tr>
<td></td>
<td>Labor budgets</td>
</tr>
<tr>
<td></td>
<td>Union contracts</td>
</tr>
<tr>
<td></td>
<td>Industry studies concerning expected wage rates</td>
</tr>
<tr>
<td></td>
<td>Overhead budgets</td>
</tr>
<tr>
<td></td>
<td>Plant capacity--practical capacity vs. expected capacity</td>
</tr>
<tr>
<td>General and administrative expenses</td>
<td>Administrative budgets isolating fixed and variable costs</td>
</tr>
<tr>
<td>Advertising expense</td>
<td>Discretionary advertising budget</td>
</tr>
<tr>
<td></td>
<td>Past advertising as a percentage of sales</td>
</tr>
<tr>
<td></td>
<td>Advertising commitments</td>
</tr>
<tr>
<td>Interest expense</td>
<td>Expectations regarding interest rate from client's usual source of supply</td>
</tr>
<tr>
<td>Cash</td>
<td>Cash budgets</td>
</tr>
<tr>
<td></td>
<td>Minimum level of desired cash</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>Sales budgets</td>
</tr>
<tr>
<td></td>
<td>Company credit policy</td>
</tr>
<tr>
<td></td>
<td>Percent of sales on account</td>
</tr>
<tr>
<td></td>
<td>Payment practices of principal customers</td>
</tr>
<tr>
<td></td>
<td>Average lag between sales and collections</td>
</tr>
<tr>
<td></td>
<td>Bad debt experience</td>
</tr>
<tr>
<td></td>
<td>Accounts receivable turnover</td>
</tr>
<tr>
<td>Projected Element</td>
<td>Evidence to Consider</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Inventories</td>
<td>Purchase budgets</td>
</tr>
<tr>
<td></td>
<td>Sales budgets</td>
</tr>
<tr>
<td></td>
<td>Production budgets</td>
</tr>
<tr>
<td></td>
<td>Company's safety stock requirement</td>
</tr>
<tr>
<td></td>
<td>Inventory turnover</td>
</tr>
<tr>
<td>Prepayments</td>
<td>Estimated insurance on new capital assets</td>
</tr>
<tr>
<td></td>
<td>Insurance policies--expirations and reinstatements</td>
</tr>
<tr>
<td></td>
<td>Unexpired insurance</td>
</tr>
<tr>
<td></td>
<td>Rent to be paid in advance--lease commitments</td>
</tr>
<tr>
<td>Fixed assets</td>
<td>Company's long range plans</td>
</tr>
<tr>
<td></td>
<td>Capital budgeting techniques used</td>
</tr>
<tr>
<td></td>
<td>Project budgets submitted</td>
</tr>
<tr>
<td></td>
<td>Planned reductions through retirements and depreciation</td>
</tr>
<tr>
<td></td>
<td>Maintenance policy</td>
</tr>
<tr>
<td></td>
<td>Company's capital vs. revenue expenditure policy</td>
</tr>
<tr>
<td></td>
<td>Source of financing for capital expansions</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>Managerial policies pertaining to creditor payment, cash discounts, payrolls</td>
</tr>
<tr>
<td></td>
<td>Lines of credit</td>
</tr>
<tr>
<td></td>
<td>Contractual stipulations in loan agreements</td>
</tr>
<tr>
<td></td>
<td>Credit terms extended by major suppliers</td>
</tr>
<tr>
<td></td>
<td>Accrual budgets for tax obligations</td>
</tr>
<tr>
<td>Long term liabilities</td>
<td>Bond indentures and loan agreements</td>
</tr>
<tr>
<td></td>
<td>Mortgages or trust deeds</td>
</tr>
<tr>
<td></td>
<td>Projected needs for outside sources of capital</td>
</tr>
<tr>
<td>Stockholders' equity</td>
<td>Stock retirements planned</td>
</tr>
<tr>
<td></td>
<td>Treasury stock purchases</td>
</tr>
<tr>
<td></td>
<td>Stock option plans</td>
</tr>
<tr>
<td></td>
<td>Dividend payment policy</td>
</tr>
<tr>
<td></td>
<td>Retained earnings and projected net income</td>
</tr>
</tbody>
</table>
Final Steps in the Forecast Audit

In completing a review of projected financial statements, the auditor should obtain letters of representation from the chief executive and the budget executive confirming their opinion that the projections are properly compiled and are attainable. Letters of representation should also be obtained from all executives of companies and/or divisions which contribute materially to the final projected statements. In securing these letters, the auditor is in effect requiring responsible individuals to acknowledge their primary responsibility for budgets and forecasts. The auditor should also ensure that the projected financial statements together with underlying assumptions and explanations of deviations between current results and the prior year's projections have been formally adopted by the board of directors.

Finally, if interim data have been prepared for an expired period covered by the projected financial statements, the last step in the forecast audit program should be a comparison of company's progress to date with detailed monthly or quarterly forecasts.

Summary of the Chapter

To render an opinion attesting to the reasonableness of inferences contained in projected financial statements, the auditor must examine: (1) the nature and history of the client's business, (2) the client's budgetary system and control within the system, (3) the past forecasting
bias, average deviation, and range deviation of projected statement items, (4) the assumptions underlying current projections, and (5) the accounting bases and calculations employed in current projections.

To give impetus to auditing of projected financial statements a budgetary system and control questionnaire and auditing procedures for forecasts were developed. The suggested budgetary control questionnaire was partially based on articles written by internal auditors concerned with advancing the effectiveness of business budgets. Similarly, the forecast audit procedures were based in part on English profit forecast audit programs and a working paper developed by Ijiri. (The latter represents one of the few sources of information dealing with the verification of budgetary data.)

Although the budgetary control and forecast audit procedures suggested herein are incomplete when compared with today's audit approach to historical financial statements, they do represent an extension of the available literature. Utilizing the questionnaire and audit procedures, projected financial statements can be meaningfully verified by independent public accountants. Moreover, it seems in the interest of external statement users for auditors to assume the entire audit responsibility and not limit their duty, as the English chartered accountants do, by sharing part of the responsibility with
investment (merchant) bankers and by neglecting an adequate review of the client's budgetary system.

In the next chapter the reporting problems associated with disclosure of projected financial statements are considered. Attention is directed to a study of the various methods of presenting projected income statements and balance sheets in financial reports, and suggested formats for audit opinions on projected financial statements are developed.
CHAPTER VI

IMPACT OF PROJECTED FINANCIAL STATEMENT DISCLOSURE ON
PUBLISHED FINANCIAL REPORTS AND AUDIT OPINIONS

For those interested in the form projected financial statements and forecast audit reports might take, this chapter presents various statement formats and suggested audit forecast opinions. Assertions about financial report format relevance and about terminology of the auditor's forecast opinion are highly tentative. Different variations must ultimately stand the test of practical acceptance. The following discussion is intended to show the kind of information which can be presented and the type of comparisons which can be made. The presentation is divided into two major sections: published financial reports and forecast audit reports.

Published Financial Reports

In accordance with the forecast auditing standard on informative disclosure, the independent auditor must be concerned with the form, arrangement, and content of projected financial statements. Various writers have proposed certain report formats for disclosure of projected or budgetary data to external parties. These proposals
may be classified into five major divisions: (1) delayed reporting of projected financial statements, (2) comparative historical and projected financial statements, (3) interim reporting of projected financial statements, (4) probabilistic projected financial statements, and (5) long form projected financial statements. Each of these is discussed below.

Delayed Reporting of Projected Financial Statements

To allow external assessment of the current performance of management and, at the same time, to avoid possible competitive harm arising from disclosure of managerial plans or budgets, Summers and Peterson advanced the delayed budget disclosure concept.¹

Summers suggested that a given year's budgetary data be disclosed only after actual results for the same year are available. In other words, management's 1971 budget (original, not revised) would be disclosed at the end of 1971 but not before actual results were released. The following format was suggested:²


### Income Statement/Budget for Period
**Ended December 31, 1972**

**The Forward Company**

<table>
<thead>
<tr>
<th>Account Name</th>
<th>Results of Operations</th>
<th>Favorable (Unfavorable) Operating Variations From the Budget</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
</tr>
<tr>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
</tr>
</tbody>
</table>

A similar format was presented for the balance sheet.

In rationalizing delayed budget disclosure, Summers stated:

> ... since it is not more about future expectations, but more about the correlation between past expectations and past realization that is to be presented to statement users, publication of budgets in advance of the comparable financial statements would be meaningless. What are wanted are budget and statements for the same period—and an analysis of their differences. [Emphasis supplied.]³

Along similar lines, Peterson proposed, in order to improve corporate reports, that actual net income should be reported as prospective net income plus or minus favorable or unfavorable deviations from expectations.⁴

Delayed reporting of projected financial statements provides a more suitable disclosure framework than is presently used. However, since external users desire not only data pertaining to managerial planning ability, but

---
³Ibid., p. 8.
⁴Peterson, "Significance of Prospective Income Data," p. 276.
also information about management expectations, delayed reporting fails to satisfy user needs for timely disclosure of future oriented data before planned events take place.

Comparative Historical and Projected Financial Statements

Davidson, Ijiri, Backer, and Stettler\(^5\) recommended the integration of projected financial statements with historical financial statements on a comparative basis. Davidson, for instance, suggested that comparative financial statements be converted into three columns: last year's results, the current year's results, and the budget for next year.\(^6\) In addition, he suggested that the budget should be at least as detailed as the historical financial statements.\(^7\)

Ijiri, on the other hand, advocated a slightly more refined comparative statement in proposing the following reporting format:\(^8\)


\(^6\)Davidson, "As I See It," p. 42.

\(^7\)Ibid.

\(^8\)Ijiri, "Budget Auditing and Its Implementation," p. 5.
## Comparative Financial Statements
### XYZ Corporation
### As of December 31, 1971

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
</tr>
<tr>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
</tr>
</tbody>
</table>

Ijiri indicated that this reporting format affords two advantages over other methods: (1) budgets are directly tied in with historical financial statements, which should help the auditor (and management) explain the material differences between estimated and actual results, and (2) investors can determine the reliability of past estimated and actual results.\(^9\)

Backer, one of the first to advocate disclosure of managerial plans, recommended disclosure of short-term profit plans by presenting in comparative form: (1) the ensuing year's profit plan, (2) the current year's profit plan, (3) the current year's actual results, and (4) the prior two years' actual results. As shown in Figure 2, Backer's income reporting format was prepared on a direct cost basis which has the major advantage of permitting financial analysts and others external to the business to calculate breakeven points and to trace the effect of

\(^9\)Ibid.
FIGURE 2
INCOME STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 1963,
1964, AND 1965, AND PLANNED PROFIT FOR 1966
(In Thousands of Dollars)

<table>
<thead>
<tr>
<th></th>
<th>Profit Plan</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1966</td>
<td>1965</td>
</tr>
<tr>
<td>Sales</td>
<td>$200,000</td>
<td>$175,000</td>
</tr>
<tr>
<td>Less: Costs that vary directly with sales</td>
<td>136,000</td>
<td>119,000</td>
</tr>
<tr>
<td>Contribution to nonvariable (capacity) costs and profit</td>
<td>$64,000</td>
<td>$56,000</td>
</tr>
<tr>
<td>Less: Nonvariable costs of a funds-flow (out-of-pocket) nature</td>
<td>20,000</td>
<td>19,500</td>
</tr>
<tr>
<td>Funds flow generated by operations before income taxes</td>
<td>$114,000</td>
<td>$36,500</td>
</tr>
<tr>
<td>Less: Income taxes</td>
<td>16,000</td>
<td>13,500</td>
</tr>
<tr>
<td>Funds flow generated by operations</td>
<td>$28,000</td>
<td>$23,000</td>
</tr>
<tr>
<td>Less: Nonvariable costs not affecting funds flow (depreciation, amortization, etc.)</td>
<td>20,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Income</td>
<td>$16,000</td>
<td>$13,000</td>
</tr>
</tbody>
</table>

expected changes in revenue and costs. To increase the usefulness of profit plan disclosure Backer also advocated that profit plan deviations be explained in a supporting schedule. The analysis of variations between the 1965 profit plan and the 1965 actual in Figure 2 are explained in Figure 3.

FIGURE 3

ANALYSIS OF VARIATIONS FROM PROFIT PLAN
YEAR ENDED DECEMBER 31, 1965
(IN THOUSANDS OF DOLLARS)

<table>
<thead>
<tr>
<th>Causes of Variation</th>
<th>Effect on Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total market below expectations</td>
<td>($4,000)</td>
</tr>
<tr>
<td>Share of actual market less than expected</td>
<td>(1,500)</td>
</tr>
<tr>
<td>Average price realization greater than expected</td>
<td></td>
</tr>
<tr>
<td>Sales variation</td>
<td>500</td>
</tr>
<tr>
<td>Reduction in standard variable costs due to below planned sales</td>
<td>($5,000)</td>
</tr>
<tr>
<td>Reduced contribution margin due to below planned sales</td>
<td>3,400</td>
</tr>
<tr>
<td>Actual raw material prices below profit plan estimates</td>
<td>800</td>
</tr>
<tr>
<td>Labor rates in excess of profit plan estimates</td>
<td>(1,100)</td>
</tr>
<tr>
<td>Material utilization less than planned</td>
<td>(1,000)</td>
</tr>
<tr>
<td>Labor efficiency greater than planned</td>
<td>400</td>
</tr>
<tr>
<td>Other variable costs higher than expected</td>
<td></td>
</tr>
<tr>
<td>Variation in planned contribution margin</td>
<td>($3,000)</td>
</tr>
<tr>
<td>Nonvariable costs lower than expected</td>
<td>500</td>
</tr>
<tr>
<td>Income tax lower due to below planned profit</td>
<td>1,500</td>
</tr>
<tr>
<td>Variation in 1965 actual profit plan</td>
<td>($1,000)</td>
</tr>
</tbody>
</table>


In summary, a combination of the proposals on comparative projected statements would seem to meet the needs of external users better than any single approach. Ijiri's four column format accompanied by a schedule explaining income statement and balance sheet deviations (between prior year's projected statements and current actual results) could provide a suitable framework for projected financial statement disclosure. The comparative format could be made even more useful if forecasting bias, average deviation, and range deviation were added. External statement users would then tend to be more aware of the fact that projected financial statements are characterized by uncertainty.

Interim Reporting of Projected Financial Statements

Green suggested that a firm's projected profit goal and movements toward projected profit be disclosed in both interim reports and annual reports. The "profitometer concept" was proposed to provide a means by which projected profit for the year, actual results to date, and budgetary revision to date could be disclosed to external parties.

An illustrative profitometer prepared at the beginning of a fiscal year (say January 1) would appear as follows:
In the above graph, contribution is defined as the difference between sales and variable expenses; hence, to achieve the annual contribution goal of $2,600,000, assuming that 65 per cent of each dollar of revenue is expected to represent variable expense, the sales goal would have to be $8,000,000 (i.e., $8,000,000 times 35% = $2,600,000).

To demonstrate the firm's movement toward its annual contribution goal, to show the variation from budgeted contribution (to date), and to disclose fixed cost revision, Green presented the following profitometer as of March 31:¹¹

In the above, "budgeted contribution" ($749,350) is calculated by multiplying actual sales as of March 31 by the expected contribution margin.

The profitometer concept is useful in permitting the shareholder to gauge management's goal-achievement ability quarterly instead of having to wait for the release of annual report data. The proposal, however, has shortcomings since nothing is presented pertaining to actual and forecasted return on investment or expected dividends--two factors of primary importance to shareholders.

Probabilistic Projected Financial Statements

One criticism of the typical presentation of budgetary data is that projected amounts are treated as point values or deterministic measures. Budgets, however, are subjective estimates of most likely values, i.e., estimates of what is most probable in terms of revenues, costs, profits, assets, and equities. In order to indicate the variability of budgeted items, probabilistic projected financial statements may be employed.

Presently, probabilistic budget concepts are in the formative stage of development and are being applied, mainly in a small number of cases, to budgets meant solely for experimental internal use. Their potential value, however, should accrue to external users when they are sufficiently developed internally. Probabilistic budgets
vividly demonstrate the tentative nature of projected items.

Two types of probabilistic financial statements appear to provide useful vehicles for future disclosure of projected financial statements: (1) the three-level concept and, (2) the probability-tree concept. These are discussed briefly below.

Three-level probabilistic financial statements. Budgetary data is subjective, uncertain, and highly dependent upon the future. To convey this to statement users (internal and external) some writers have suggested that projected statements present (1) optimistic, (2) pessimistic, and (3) most likely values for each statement item. 12

Three-level estimates may be more informative than projected statements based on only most likely data. For example, in the 1968 Annual Report of Micro-Tol Engineering Corporation when projected sales (by product line) and projected profit after taxes for the fiscal years ending in 1969, 1970, and 1971 were presented, the profit potential for fiscal year 1970 ranged from an optimistic estimate of $137,700 to a pessimistic estimate of $40,650, with $73,700 being median. (Micro-Tol's forecasts are reproduced in Appendix III.) Obviously, the lone use of $73,700, the median value, could be misleading.

12 Thomas L. Holton, Chairman of the Auditing Procedures Committee of the AICPA, has advocated the three-level approach. See American Institute of Certified Public Accountants, "Possible Extensions of the Attest Function Are Outlined for Council," The CPA, L (June, 1970), 3.
Three-level statements demonstrate that projected data are subjective and dependent upon future happenings. In addition, three-level probabilistic projected financial statements readily facilitate comparisons between actual results and projected results since most likely values (median values) may be considered equivalent to single value projected results.

The major limitation preventing external disclosure of three-level probabilistic statements is simply that firms are just beginning to develop such statements internally; hence, considerable refinement will be necessary before any attempt should be made to incorporate them into an external financial report framework.

Probability-tree financial statements. According to Ferrara and Hayya, a more informative approach to probabilistic financial statements is probability-tree analysis, whereby (1) an expected value, (2) the standard deviation, and (3) a coefficient of variation are presented for each projected item. To demonstrate calculation of each of these, consider the following example involving calculations for revenue and variable manufacturing cost.

---


14 The example is adapted from Ferrara and Hayya, "Toward Probabilistic Profit Budgets," p. 25.
Revenue
(Price = $10)

<table>
<thead>
<tr>
<th>Revenue</th>
<th>Variable Manufacturing Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Price = $10)</td>
</tr>
<tr>
<td>$800,000</td>
<td>$5.10 x 80,000</td>
</tr>
<tr>
<td>$1,000,000</td>
<td>5.00 x 80,000</td>
</tr>
<tr>
<td>$1,100,000</td>
<td>4.80 x 80,000</td>
</tr>
</tbody>
</table>

The expected value of revenue\(^{15}\) is calculated by multiplying each level of revenue by its expected value, where:

\[
x = \text{revenue}, \quad \text{and} \quad p(x) = \text{probability of occurrence of a given } x.
\]

\(^{15}\)Expected value = \(x \cdot p(x)\), where:
probability of occurrence. In the above, the expected value of revenue is equal to $960,000 \left[$800,000 (.3) + $1,000,000 (.5) + $1,100,000 (.2) = $960,000\right].

The standard deviation of revenue is calculated according to the following formula:

\[
\text{Standard deviation} = \sqrt{\sum (x - \text{expected value})^2 \cdot p(x)},
\]

where:

\[x = \text{a given revenue value}, \text{ and}\]
\[p(x) = \text{probability of occurrence of a given revenue value}.
\]

For the three levels of revenue presented above, the standard deviation is $111,360.

To express the potential variability of a projected item, the coefficient of variation is calculated. The coefficient of variation is based on the percentage relationship between the standard deviation and the expected value. For revenue, the percentage is 11.6 \left[\frac{111,360}{960,000}\right].

Calculation of the expected value of variable manufacturing cost is more complex than the revenue attributes calculated above because joint probabilities are involved. To demonstrate, the expected value of variable manufacturing cost is determined as follows:
\[
\begin{align*}
[(.3)(.2)(5.10 \times 80,000) + (.3)(.6)(5.00 \times 80,000) + (.3)(.2)(4.80 \times 80,000)] + \\
[(.5)(.2)(5.10 \times 100,000) + (.5)(.6)(5.00 \times 100,000)] + \\
[(.2)(.2)(5.10 \times 110,000) + (.2)(.6)(5.00 \times 110,000)] = \\
\$478,080
\end{align*}
\]

The first set of brackets yields the expected variable manufacturing cost for the first revenue node of $800,000, the second set for $1,000,000, and the third set for $1,100,000. The standard deviation of variable manufacturing cost is $56,300, and the coefficient of variation is 11.8 per cent.

When the expected value, standard deviation, and coefficient of variation are calculated for each projected item in both the income statement and the balance sheet the following report format could be employed:

Projected Financial Statements for 1972

XYZ Corporation

<table>
<thead>
<tr>
<th>Account</th>
<th>Expected Value</th>
<th>Standard Deviation</th>
<th>Coefficient of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
</tr>
<tr>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
</tr>
</tbody>
</table>
Comparisons of past forecasting accuracy and past trends would be facilitated by adding current and prior years actual and expected data to the reporting format.

Two significant barriers to external disclosure of probability-tree based financial statements are: (1) a firm's budgetary system must be extremely sophisticated, and (2) external users might not understand the variability measures, the standard deviation and the coefficient of variation. To offset the latter, Ferrara and Hayya constructed a statement illustrating ranges for each projected item instead of using the standard deviation and coefficient of variation.\textsuperscript{16}

\textbf{Long Form Projected Financial Statements}

Two articles in the professional literature have advocated the framing of a long form report by management which would include a detailed analysis of expectations and performance. One article, co-authored by Birnberg and Dopuch,\textsuperscript{17} suggested a reporting framework should follow a classification and measurement scheme based upon: (1) the goals adopted by the enterprise, (2) the expectations underlying the acquisition and utilization of means of accomplishing these goals, and (3) a comparison of results

\textsuperscript{16}Ferrara and Hayya, "Toward Probabilistic Profit Budgets," p. 27.

anticipated to results actually achieved. Figure 4 shows more specifically the methods by which their disclosure framework can be made operational.

Birnberg and Dopuch criticized the current disclosure framework (balance sheet, income statement, funds statement) stating that it is based on classical economics which places undue emphasis on the periodic income stream.18 Corporate goals are much more complex than maximization of an income stream, and accountants should recognize that managers have other goals, e.g., market share, position in the industry, and public and employee welfare.19 Conceptually, Papandreou observed "... in the absence of knowledge concerning the entrepreneur's horizon and expectations, the profit maximization construction becomes an empirically irrelevant tautology."20

In a second article, written by Wilkinson and Doney, projected financial statement disclosure via a long form report was again proposed. They suggested disclosure and independent audit of:

1. An analysis of management's expectations for the coming year in the form of an anticipated statement of revenues and expenses, a pro-forma balance sheet, and a statement of expected sources and applications of funds.

18 Ibid., p. 57.
19 Ibid., p. 62.
FIGURE 4
A CONCEPTUAL FRAMEWORK FOR DISCLOSURE

1. Disclosure of management's goals and the relevant changes in goals which occurred during the previous periods.
   A. Income and funds statement.
   B. Income goals and nonincome goals.

2. Disclosure of management's expectations for the enterprise's future operations.
   A. Prospects for the economy.
   B. Prospects for the industry and the firm, i.e., sales projection of the industry and trend of input and output price.
   C. Specific expectations which underlie major enterprise investments. (Major investments include inventories, work force, plant and equipment, research and development, charitable and community expenditures, and major capital projects.)

   A. Indices of the plant's and equipment's remaining life, efficiency, and capacity.
   B. Service potential of the work force.
   C. Security of the firm, e.g., market share, research and development position, stability of the market, etc.

2. A comparison of the audited financial statements for the current period with the anticipated statements prepared at the beginning of the period, indicating to some extent how well management has met its short-run objectives.

3. The use of a long-form type of report in which an analysis of the differences between expectations and realizations might be explained and evaluated.21

Theoretically, the long form disclosure concept, especially as outlined by Birnberg and Dopuch, represents the most lucid treatment of the reporting of expectations found in the literature. Although abound with implementative problems, the framework's desirability seems unquestionable.

Conclusion

Considering the long-form reporting format, as proposed by Birnberg and Dopuch, as an ultimate goal, the four other proposals discussed above represent evolutionary steps to a conceptually sounder disclosure model. A first step in developing this model might begin with delayed reporting of projected data. External users would be partially satisfied with this framework since they could intelligently assess managerial planning ability. Likewise, management should not hamstring delayed disclosure since there is no competitive disadvantage involved therein, real or imaginary. Also, auditors would least

likely resist this proposal since no audit responsibility is assumed for the ensuing year's forecast. Auditing procedures could be easily extended to include verification of deviations between past plans and actual performance.

Moving to level two, comparative projected financial statement disclosure would serve to furnish external parties with both data upon which to assess planning ability and data indicative of management's best estimate of the future. Shareholders and other external users would also more likely understand that the projections for the ensuing year are tentative since they would have before them a statement of past forecasting bias, average deviation, and range deviation.

Once the major flaws have been eliminated from the comparative framework, it seems desirable to provide for interim reporting of management progress toward budgetary goals. Along with reporting progress, the interim reports may be employed to disclose projected financial statement modifications.

Disclosure of probabilistic projected financial statements must await widespread internal usage and debugging before incorporating them into an external disclosure model will be feasible. Once developed, their potential usefulness as effective conveyors of relevant information to both internal and external users is clearly evident.
Delayed, comparative, interim, and probabilistic projected financial statements all have one major deficiency--they report only financial goals. Obviously, since managerial goals are not restricted to financial and income goals, a reporting framework which considers only these factors to the exclusion of nonfinancial and nonincome goals is not in accordance with corporate reality. Hence, a long-form projected financial statement disclosure is a worthwhile goal the accounting profession should pursue.

**Forecast Audit Reports**

Two alternatives should be considered by the profession in developing an audit report on projected financial statements. These are: (1) an audit report on projected statements may be integrated with the traditional audit report, or (2) an audit report on projected statements may be clearly distinct from the traditional audit report.

In support of the integrated forecast audit report, it might be noted that since the projected financial statements will be incorporated with the historical financial statements on a comparative basis, one audit report would help avoid reader misunderstanding of which opinion applies to which set of statements. In time, as users more clearly understand the basic concepts of audit responsibility, it may be possible to combine the historical
opinion with the forecast opinion and employ an integrated report such as follows: 22

We have examined with due audit care the actual and projected data found in the statements of financial position for December 31, 1971 and 1972 and the statements of operations and retained earnings for the years ending December 31, 1971 and 1972. We find that they present fairly the actual and projected position and operations of the XYZ Corporation.

On the other hand, there are two advantages in selecting the separate report alternative. First the forecast auditing standards developed in Chapter IV are sufficiently different from historical auditing standards so that their integration could confuse statement users. Second, the auditor should, until users understand the nature of the responsibility assumed, include more detailed comments in the forecast audit report than are presented in the historical audit report.

Assuming a separate forecast audit opinion should be used in reporting on projected financial statements, the forecast opinion, similar to the historical audit opinion, may be divided into a scope paragraph and an opinion

22 As the basic concepts of auditing become more clearly expressed and more widely understood, the abandonment of the present short-form audit report is the logical outcome. For a discussion of this see: R. K. Mautz and Hussein A. Sharaf, The Philosophy of Auditing (Menasha, Wisconsin: American Accounting Association, 1961), pp. 202-203.
paragraph. The scope paragraph, which contains the nature of the audit work performed, should identify and indicate:

1. The projected financial statements which were examined,
2. Whether the assumptions underlying the projected financial statements were examined,
3. Whether the schedule of deviations between the prior year's projected financial statements and actual results were examined, and
4. Adherence or nonadherence to the forecast auditing standards.

Similarly, the opinion paragraph, which contains the independent auditor's conclusions, should indicate:

1. Whether projected financial statements for the ensuing year are reasonable inferences based on realistic assumptions and sound forecasting techniques, and
2. Whether the projected financial statements are in accordance with generally accepted accounting principles which are consistent with those employed in historical financial statements.

Not only should the forecast audit report contain a scope and an opinion paragraph, but also a third paragraph should be included. Until external users understand the responsibility assumed by the auditor when expressing an opinion on projected financial statements, the report
should contain a separate third paragraph pointing out
the uncertainty inherent in the projected statements, and
a statement indicating that the auditor does not guarantee
actual results will be equal to the projected results.

Using the aforementioned as guidelines, the following
sections present illustrative forecast audit reports for
unqualified, qualified, adverse, disclaimer, and piecemeal
opinions. The comparative projected financial statement
reporting format is assumed in each of the following
opinions.

The Unqualified Opinion

According to the interpretation of forecast auditing
standard No. 10, the unqualified opinion "should be used
when the projected statements taken as a whole represent
reasonable inferences as to future expectations and when
management's explanation of the deviations between pro-
jected and actual is considered adequate." The following
opinion represents an example of the form unqualified
reports might take:

Scope Paragraph

We have examined the projected balance sheet
of XYZ Corporation for December 31, 1972, the
projected income statement for the coming year
ending on December 31, 1972, and the related
schedule of assumptions underlying these pro-
jected statements. In addition, we have examined
the schedule entitled "Explanation of Differences between Projections and Actual Data for 1971." Our examination was made in accordance with generally accepted forecast auditing standards and accordingly included such tests of the budgeting records and budgetary system as we considered necessary in the circumstances.

Opinion Paragraph

In our opinion, the accompanying projected balance sheet, projected income statement, and related schedule of assumptions represent reasonable inferences regarding the expected financial position of XYZ Corporation as of December 31, 1972, and expected operations for the year then ending. The projected financial statements are in conformity with generally accepted accounting principles and sound forecasting techniques. Also, the accounting principles employed in the actual financial statements for 1971 are consistent with those used in the projected statements for 1971 and 1972, and the explanation of deviation between 1971 projections and actual results is adequate.

Uncertainty Paragraph

Since the projected financial statements for 1972 are based on assumptions about
circumstances and events that have not yet taken place, they are subject to variations which may arise as future operations actually occur. Accordingly, we cannot guarantee that the predicted results will actually be obtained.

The Qualified Opinion

The qualified forecast audit report should be employed when the projected financial statements are reasonable except for some material assumption or when management's explanation of past deviations is inadequate in some material respect. To convey the nature of the exception to statement users, the auditor may modify the unqualified forecast audit report by inserting an "exception" paragraph between the scope and opinion paragraphs. For instance, if the projected financial statements hinged upon the client being awarded a sizable government contract involving material expected profits, this uncertainty should be disclosed to statement users. If the client does not present both projected statements based on getting the contract and projected statements based on not getting the contract, the auditor should indicate the possible financial impact. The additional paragraph in the auditor's report might read:
Exception Paragraph

One of the major assumptions upon which the projected financial statements crucially depends is assumption No. 5 in the statement of assumptions. The projected financial statements have been prepared based on receiving this contract, but since it is possible that XYZ Corporation could be underbid, the effect of not being awarded the contract should be considered--projected profit will decline approximately $100,000.

Opinion Paragraph

In our opinion, with the exception stated in the previous paragraph . . .

The Adverse Opinion

When the auditor finds that the projected financial statements do not represent reasonable expectations for the coming year, an adverse audit report should be issued. The adverse opinion should indicate the auditor's reasoning as to why the projected financial statements fail to represent acceptable inferences. Adverse opinions would be required when projected statements are based on unrealistic assumptions, unsound forecasting techniques, unattainable goals, or inadequate budgetary controls. An illustrative adverse opinion resulting from unrealistic assumptions might read:
The projected financial statements for 1972 presented above should not be considered as reasonable inferences as to the XYZ Corporation's expectations for the coming year. The Company's sales budget is based on increasing its share of the market for widgets from the present level of 25 per cent to 60 per cent. We have no information which leads us to believe that this level of sales can be attained. Hence, we are of the opinion that the projected financial statements taken as a whole are not reasonable indicators of what actual results and financial position will be for the fiscal year ending December 31, 1972.

The Disclaimer of Opinion

The auditor should use a disclaimer audit report when the forecast audit provides an insufficient basis for an opinion on the projected financial statements taken as a whole. For example, the disclaimer should be used when the client restricts the examination or refuses to disclose projected statements, and in situation where the client does not have a budget system. Consider the following audit report examples:

Client Does Not Have a Formal Budgeting System

Since the XYZ Corporation does not have a budgeting system, projected financial statements are not presented herein.
Client Does Not Wish to Disclose Projected Financial Statements

Projected financial statements are not presented herein because the management of XYZ Corporation feels that their disclosure would result in competitive harm. Thus, in accordance with management's wishes, our examination did not include XYZ Corporation's budgeting system or projected financial statements. Consequently, we cannot express an opinion on the projected income statement and balance sheet.

Auditor Is Not Independent With Respect to Projected Financial Statements

We are not independent with respect to the projected financial statements of XYZ Corporation. Accordingly, we do not express an opinion on them.

The Piecemeal Opinion

In conjunction with certain adverse or disclaimed opinions, the auditor may wish to render a piecemeal audit report stating that certain items included in the projected statements are reasonable inferences for the coming year. The piecemeal opinion should be worded so as to avoid contradiction of the adverse or disclaimer of opinion concerning the reasonableness of the projected statements taken as a whole. An example of a piecemeal audit
report follows. The example is based on the aforementioned adverse forecast opinion.

The projected financial statements for 1972 presented above should not be considered as reasonable inferences as to the XYZ Corporation's expectations for the coming year. The Company's sales budget is based on increasing its share of the market for widgets from the present level of 25 per cent to 60 per cent. We have no information which leads us to believe that this level of sales can be attained.

Because of the materiality of the matter described in the preceding paragraph, we do not express an opinion of the projected statements taken as a whole. However, in our opinion projected capital additions and projected dividends represent reasonable inferences for the fiscal year 1972, ending December 31, 1972.

Conclusion

Forecast audit opinions, similar to historical audit opinions, pertain to the reasonableness and fairness of projected financial statements, not their accuracy. Until external users understand that the auditor rendering a forecast opinion is not guaranteeing the projections, it is necessary to segregate opinions into two classes: (1) historical audit opinions, and (2) forecast audit opinions.
Moreover, until forecast auditing standards and historical auditing standards can be integrated, separate opinions will be required.

In rendering an opinion on projected financial statements, the auditor should include: (1) a scope paragraph, (2) an opinion paragraph, and (3) an uncertainty paragraph. The latter serves to remind the reader of the tentative nature of projections and to inform the reader that the auditor does not guarantee projected results will be equal to actual results.

**Summary of the Chapter**

In this chapter five major divisions of projected financial statement reporting formats were considered. These were: (1) delayed reporting, (2) comparative historical and projected statements, (3) interim reporting, (4) probabilistic projected statements, and (5) long-form projected statements. This order of presentation may be viewed as a step-by-step process by which projected financial statement disclosure can be made operational in moving toward a sound disclosure model. In other words, delayed reporting minimizes implementation and audit verification problems while long-form projected statement disclosure is inherently more difficult to implement and audit, but more in accordance with reporting corporate reality.
Based on the analysis of the five divisions of reporting formats and assuming attainment of the second level of reporting (comparative projected financial statements), the second section of this chapter considered the problem of forecast audit reports. Two audit reporting alternatives were discussed: (1) an audit report separate from the historical audit opinion and, (2) an integrated audit report including both historical and projected financial statements. At the present time, employing separate audit reports seems advisable, at least until there is some understanding as to the nature of the auditor's responsibility for forecast audits.

Using the separate forecast audit report approach, various suggested reporting formats for unqualified, qualified, adverse, disclaimer, and piecemeal opinions were developed. The particular wording adopted merely developed possibilities in the area. As auditors are called on to review projected financial statements, the standard short-form opinion must of necessity undergo change. It will become increasingly difficult to find acceptable phrases to describe the scope of the auditor's work and the nature of his conclusion.
CHAPTER VII

SUMMARY AND CONCLUSIONS

Restatement of Objectives

In 1966, Yuji Ijiri completed a working paper at Stanford University entitled "Budgeting Auditing and Its Implementation." This working paper represented the first attempt to deal with the technical audit problems associated with disclosure of projected financial statements. At the time of Ijiri's work, disclosure and audit of projected income statements and balance sheets were at the level of advocacy. Since then, however, the English chartered accountant has assumed an audit obligation and public reporting duty for profit forecasts included in merger or take-over circulars. Although profit forecasts are not the same as projected financial statements, profit forecast audits have created support for disclosure and audit of projected financial statements.

The objectives of this study were to build on Ijiri's approach to projected financial statement audit methodology. Three stages were involved: (1) delineation of a tentative statement of audit responsibility for projected financial statements, (2) development of forecast audit procedures, and (3) formulation of suggested audit
opinions to be used in reporting on projected financial statements.

In conjunction with authoritative statements on the American auditor's responsibility for historical financial statements, the statements of responsibility for profit forecast audits issued by the Institute of Chartered Accountants in England and Wales were used to delineate a tentative statement of audit responsibility for projected financial statements in the United States. Afterwards, based upon the tentative statement, forecast audit procedures were developed by employing English profit forecast audit programs, Ijiri's working paper, logical reasoning, and relevant suggestions from the literature. Finally, suggested forecast audit opinions were formulated by modifying and combining certain aspects of audit opinions on historical financial statements with certain elements of the English accountant's report on profit forecasts.

**Summary and Conclusions**

In studying six selected authoritative organizations concerning their philosophies on disclosure and audit of financial forecasts, the AICPA, SEC, and AAA (three of four American organizations included) were found to consider it unethical for independent public accountants to lend their names to any projection of business events. The FTC, the fourth American organization included, has indicated that historical financial statements provide inadequate bases for use in rate regulation decisions.
The attitude of the AICPA, SEC, and AAA appears to be unresponsive to the current tendency to use data as indicators of future events. Further, this attitude is at odds with English practice where management's expectations regarding the firm's future prospects are often presented to external users. In acknowledging the shareholder's and other users' need for reliable and relevant future data, the Institute of Chartered Accountants in England and Wales, with some degree of coercion, has required its members to assume some audit responsibility and public reporting duty for profit forecasts presented in a merger or take-over circular. This acceptance of responsibility for auditing profit forecasts represents the first time accountants have explicitly acknowledged a duty for reporting on projected data.

Notwithstanding the current philosophies of the AICPA, the AAA, and the SEC, recent signs indicate that their attitudes may be changing. For instance, the AICPA has scheduled a research project on opinions on forecasts, and the SEC has recently required accountants, under certain situations, to ascertain the ability of their client to continue as a going concern. Conceivably, these organizations in the near future could require (or encourage) auditors to attest to future data contained in financial reports.

The shareholder, financial analyst, creditor, and other external financial statement users are today at a
disadvantage. Because of the paucity of reliable data available to them, outside parties have an inadequate basis for a serious verdict on managerial planning ability and for a realistic determination of a firm's future prospects. Disclosure of audited projected financial statements (balance sheet and income statement) could give external users more reliable grounds to evaluate managerial ability and to ascertain future expectations.

Before projected income statements and balance sheets can be disclosed externally, they must be constructed internally as a part of the usual budgeting procedures of business firms. Existing research indicates that many companies with widely traded shares prepare projected income statements as a matter-of-course. A lesser number construct a projected balance sheet, but many of the non-preparers do utilize balance sheet sub-budgets such as cash budgets, capital budgets, and inventory budgets; hence, combining these sub-budgets into a projected balance sheet should not be a burdensome task.

Another important aspect pertaining to the feasibility of projected financial statement disclosure concerns the accuracy of projected income statements and balance sheets. An overall statement about the accuracy of projected financial statements cannot be made. The problem must be considered on an individual firm basis. Available evidence indicates that many firms have perfected their budget forecasts to a degree which would be conducive to
disclosure of projected financial statements. Other firms experiencing less reliability are able to project certain elements (sales, dividends, capital expenditures planned, etc.) of the projected income statement and balance sheet with enough accuracy to justify disclosure. Certainly, corporate financial reporting could be improved by disclosure of projected financial statements or by disclosure of those projected elements which are feasible.

If demand for disclosure of projected financial statements becomes significant, it seems reasonable to assert that the independent auditor will be called upon to audit these statements. At that point, the task confronting the accounting profession will be to identify audit responsibility and to develop auditing procedures for projected financial statements.

With an understanding of the more sophisticated approaches to budgeting and forecasting, it should be possible for accountants to attest to the reasonableness of projected financial statements. The independent auditor (certified public accountant or chartered accountant) is especially fitted for this undertaking because he possesses the review skills, the knowledge of accounting principles, the familiarity with corporate affairs, the broad knowledge of business, and most important, the professional status to minimize management data manipulation.

With slight modification of two standards, the present generally accepted auditing standards can be adapted
to delineate the auditor's responsibility for projected financial statement examinations. The first and second reporting standards are basically related to the review of historical data, not future data; thus the following revisions are proposed:

**First Standard of Reporting:** The report shall state whether the projected financial statements are presented in accordance with generally accepted principles of accounting, and if the projected statements are based on reasonable assumptions and sound principles of forecasting.

**Second Standard of Reporting:** The report shall state whether the generally accepted accounting principles employed in the historical financial statements are consistent with those used in projected financial statements.

Since it is necessary to modify two of the generally accepted auditing standards and since the remaining standards take on extended meaning when applied to the audit of projected financial statements, it is proper to label the resulting standards a "Tentative Statement of Forecast Auditing Standards." The main implication of the tentative statement may be summarized as follows:

1. The major objective of the projected statement examination is the expression of an opinion on the reasonableness with which
the projected financial statements present expected financial position and results of operation.

2. The extent of audit test work applied to projected financial statements is determined by a thorough review of the underlying budgetary system and the degree of effective control built into the system.

3. In examining projected financial statements the auditor must review: (a) the assumptions underlying the statements, (b) the forecasting techniques employed, and (c) the accounting bases and calculations.

4. The primary responsibility for the assumptions and reasonableness of inferences upon which the projected financial statements are based rests upon the management and directors of the firm whose expected affairs the statements purport to reflect.

5. The auditor's opinion with respect to projected financial statements reflects primarily the reasonableness of the inferences made in the statements, not their accuracy.

Rule 2.04 of the Code of Professional Ethics reads: "A member or associate shall not permit his name to be used in conjunction with any forecast of the results of future transactions in a manner which may lead to the
belief that the member or associate vouches for the accuracy of the forecast." As Rule 2.04 is presently interpreted, it is in conflict with the tentative statement of forecast auditing standards. Consequently, revision along the following lines is suggested:

A member or associate may audit projected financial statements providing he reviews (1) the company's budgetary system, (2) reasonableness of assumptions underlying the projected financial statements, (3) forecasting techniques employed, and (4) accounting bases and calculations underlying the statements. In addition, the member or associate should determine if all material underlying assumptions are properly disclosed and should not undertake to audit projected financial statements for more than one year in advance.

The actual examination of projected financial statements may be divided into two steps: (1) a budgetary system and control questionnaire, and (2) a forecast audit program. The questionnaire is a necessary prerequisite to the construction of the forecast audit program and aids the auditor in obtaining data about attitudes, techniques, and the effectiveness of budget administration. The forecast audit program outlines the scope of work (audit procedures) considered necessary to enable the auditor to express an opinion on the projected financial statements.
To ensure adequate disclosure, projected financial statements included in financial reports should, as a minimum, disclose the following:

1. The projected and historical (actual) financial statements for the current year as well as the projected financial statements for the coming year.

2. Any major uncertainty upon which the projected financial statements crucially depend along with how the statements might be modified if the uncertainty were to not occur.

3. A schedule explaining material deviations between the current year's historical financial statements and the projected financial statements for the fiscal year just completed.

4. A statement indicating the major techniques and principles employed in budgeting and forecasting.

5. A schedule identifying every material assumption underlying the coming year's financial statements.

To present projected financial statements in financial reports in such a manner that comparisons between prior projections and actual results are facilitated and in a manner that reminds the statement reader of the
tentative nature of the coming year's projected statements, the format below is suggested:

Comparative Financial Statements
XYZ Corporation
As of December 31, 1971

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
</tr>
<tr>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
</tr>
</tbody>
</table>

Ideally, the 1972 estimated values should be presented as interval estimates, based on historical or expected future deviations.

In rendering an opinion on projected financial statements it seems preferable, at present, for the forecast audit opinion to be separate from the historical audit opinion. However, the types of opinions expressed in reporting on historical financial statements can also be employed in reporting on projected statements. That is, the auditor will either issue an unqualified opinion, a qualified opinion, a disclaimer of opinion, or an adverse opinion. Also, the auditor may use a piecemeal opinion in conjunction with the disclaimer or adverse opinion.

The forecast audit opinion, similar to the historical audit opinion, should contain a scope paragraph and an opinion paragraph. Plus, until external users
understand the responsibility assumed by the auditor, the audit opinion should contain a separate paragraph pointing out: (1) the uncertainty inherent in projected financial statements, and (2) a statement indicating that the auditor does not guarantee actual results will be equal to projected results.

To illustrate the form forecast audit opinions might take, the following unqualified opinion is proposed:

**Scope Paragraph**

We have examined the projected balance sheet of XYZ Corporation for December 31, 1972, the projected income statement for the coming year ending on December 31, 1972, and the related schedule of assumptions underlying these projected statements. In addition, we have examined the schedule entitled "Explanation of Differences between Projections and Actual Data for 1971." Our examination was made in accordance with generally accepted forecast auditing standards and accordingly included such tests of the budgeting records and budgetary system as we considered necessary in the circumstances.

**Opinion Paragraph**

In our opinion, the accompanying projected balance sheet, projected income statement, and related schedule of assumptions represent reasonable inferences regarding the expected
financial position of XYZ Corporation as of December 31, 1972, and expected operations for the year then ending. The projected financial statements are in conformity with generally accepted accounting principles and sound forecasting techniques. Also, the accounting principles employed in the actual financial statements for 1971 are consistent with those used in the projected financial statements for 1971 and 1972, and the explanation of deviation from 1971 projections and actual results is adequate.

**Uncertainty Paragraph**

Since the projected financial statements for 1972 are based on assumptions about circumstances and events that have not yet taken place, they are subject to variations that may arise as future operations actually occur. Accordingly, we cannot guarantee that the predicted results will actually be obtained.

In conclusion, accounting must concern itself with the future as well as with the past. At present, a fundamental change is needed in the accounting model. The traditional model is concerned with a rather static situation, the balance sheet. Supplemental models, the income statement and funds statement, have attempted to make the
model dynamic by explaining some of the more important changes between two balance sheets. However, the traditional accounting model is still historical. One way to add increased relevance to the accounting model is to disclose projected financial statements along with the historical statements. No doubt in the not-too-distant future the auditor, manager, and external users will come to realize that all financial statements are estimates, and, although estimates of past results may be more exact, estimates of future results may be equally useful.

Suggestions for Further Research

The development of audit responsibility, forecast audit procedures, and suggested forecast audit opinions has been based primarily on logical reasoning, not empirical research. Consequently, the most obvious research opportunity suggested by this study is to test the feasibility of the tentative statement of audit responsibility and the forecast audit procedures by utilization of a case study. The verification problems associated with projected financial statements are difficult to assess completely until there is actual experience with obtaining and using forecast audit evidence.

In addition to the need for a case study, other related problems remain untouched by this study. Some of these problems where additional research efforts could be very productive follow.
1. Further research should be done to determine the usefulness of projected financial statements to shareholders, creditors, financial analysts, employees, and the general public. Recent literature on financial disclosure increasingly seems to be indicating that the foundation of decision-making is knowing what is expected to be as well as what is and what was.

2. Further research is needed to determine if disclosure of projected financial statements will hamper business development. Actually, this is part of a broader problem concerned with determining the extent to which external data could be disclosed without jeopardizing the security of the firm. Whenever an extended disclosure framework is proposed, business organizations consistently bring up a universal argument—the competitive disadvantage argument. Therefore, research is needed to ascertain the extent to which financial disclosure has helped accelerate, or has served to hamper, business and economic development. Conceivably, it might even be discovered that economic growth and strength
are related to the extent of financial disclosure by business organizations.

3. Further research should be undertaken as to the impact of projected financial statement disclosure on the traditional accounting system, accounting principles, and historical financial statements. It is possible, if projected financial statements become more important relative to historical statements, for the system of accounts as well as the management information system to become oriented to the planning function and not to the stewardship function. This could have a significant effect on traditional accounting systems, accounting principles, and financial statements.

4. Further research is needed to determine the behavioral considerations involved in disclosure and audit of projected financial statements. In other words, what affect will projected financial statement disclosure have on corporate management? Will they begin to budget more conservatively in order to make goal achievement easier?

5. Further research concerning the extent of and accuracy of projections made by financial analysts and business firms is needed.
A sizable number of publicly held corporations disclose sales and/or earnings via some financial media. Research is needed to determine if external parties utilize these projections and if the projections are reliable. Financial analysts also construct sales, dividend, and earnings projections. Very little data are available to indicate the forecasting accuracy of analysts' projections. Perhaps the entire problem of corporate projections and analysts' predictions can be stated in one question: Are external users getting reliable and relevant data as to the future prospects of entities in which they are interested?

6. Further research on budgeting and forecasting methods should be done. This future research work should concentrate on determining budgeting and forecasting methods that are appropriate for specific products and industries. For example, a comparative study of forecasting accuracy in specific industries using different methods would serve to fill a void in existing sales forecasting literature.
SOURCES CONSULTED

Books


Publications of the Government, Learned Societies, and Other Organizations


Burns, Thomas J. ed. The Use of Accounting in Decision Making. Columbus, Ohio: College of Commerce and Administration, The Ohio State University, 1967.


**Periodicals**

"Accountancy Unlike Other Professions." Journal of Accountancy, LVIII (August, 1934), 89.


"As I See It." Forbes, CV (April, 1970), 41-42.


Guy, Dan M. "Correspondence to the Editor." Canadian Chartered Accountant, XCVIII (January, 1971), 9.


"Pro-Forma Balance Sheets." Accounting Review, VIII (September, 1933), 243-245.


"Question of Prophecy is Revived." Journal of Accountancy, LVIII (August, 1934), 88-89.


Stone, Marvin L. "From the President." The CPA, XLVIII (June, 1968), 2 & 11.


Judicial Decisions

American Kid Company, 1 SEC 694 (1936).

American Sumatra Tobacco Corporation, 7 SEC 1033 (1939).


Cleveland, Cincinnati, Chicago and St. Louis v. Backus, 154 U.S. 439 (1893).


Continental Distillers and Importers Corp., 1 SEC 78 (1935).

Crosby v. Emerson, 142 Fed. 713 (1906).


Haddam Distillers Corp., 1 SEC 52 (1934).


Thomas Bond, Inc., 5 SEC 71 (1939).


Ultramares Corp. v. Touche, Niven & Co., 174 N.E. 441 (1931).


Unpublished Sources


Correspondence


Zeff, Stephen A. Professor of Accounting, Tulane University, New Orleans, Louisiana. Letter dated March 9, 1971.

Miscellaneous


Four Seasons Nursing Centers of America, Inc. Prospectus, May 9, 1968.

Offer by Hill Samuel & Co. Limited on behalf of Metropolitan Estate and Property Corporation Limited to acquire the Ordinary and Preference stock units of the London County Freehold and Leasehold Properties Limited, 11th December, 1969.

Profit Forecast Audit Programs from two international accounting firms.

APPENDIX I

A SPECIMEN ACCOUNTANTS' REPORT ON THE ACCOUNTING BASES
AND CALCULATIONS FOR PROFIT FORECASTS
To the directors of X Ltd.

We have reviewed the accounting bases and calculations for the profit forecasts of X Ltd (for which the directors are solely responsible) for the periods ... set out on pages ... of this circular. The forecasts include results shown by unaudited interim accounts for the period ... In our opinion the forecasts, so far as the accounting bases and calculations are concerned, have been properly compiled on the footing of the assumptions made by the Board set out on page ... of this circular [and separately reported on by Messrs ... on page*] and are presented on a basis consistent with the accounting practices normally adopted by the company.

*i.e., the merchant bank or other adviser, if any.

APPENDIX II
MICRO-TOL ENGINEERING CORPORATION:
SALES AND PROFIT FORECASTS FOR
FISCAL YEARS 1969, 1970,
AND 1971
### MICRO-TOL ENGINEERING CORPORATION

#### SALES FORECAST

<table>
<thead>
<tr>
<th>Product</th>
<th>Probability</th>
<th>68/69 FY</th>
<th>69/70 FY</th>
<th>70/71 FY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Resolution Multiplier</td>
<td>O*</td>
<td>$300,000.</td>
<td>$600,000.</td>
<td>$1,300,000.</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>150,000.</td>
<td>300,000.</td>
<td>650,000.</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>75,000.</td>
<td>150,000.</td>
<td>350,000.</td>
</tr>
<tr>
<td>2. High Vacuum System</td>
<td>O</td>
<td>55,000.</td>
<td>110,000.</td>
<td>150,000.</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>27,500.</td>
<td>55,000.</td>
<td>75,000.</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>11,000.</td>
<td>27,500.</td>
<td>35,000.</td>
</tr>
<tr>
<td>3. Electron Optics Kits</td>
<td>O</td>
<td>8,000.</td>
<td>12,000.</td>
<td>18,000.</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>5,000.</td>
<td>7,000.</td>
<td>10,000.</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>3,000.</td>
<td>4,000.</td>
<td>6,000.</td>
</tr>
<tr>
<td>4. Detector System</td>
<td>O</td>
<td>250,000.</td>
<td>650,000.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>125,000.</td>
<td>350,000.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>50,000.</td>
<td>200,000.</td>
<td></td>
</tr>
<tr>
<td>5. Engrg. &amp; Mfg. Contract Work</td>
<td>O</td>
<td>260,000.</td>
<td>405,000.</td>
<td>425,000.</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>150,000.</td>
<td>250,000.</td>
<td>250,000.</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>100,000.</td>
<td>175,000.</td>
<td>175,000.</td>
</tr>
<tr>
<td>6. Totals</td>
<td>O</td>
<td>$623,000.</td>
<td>$1,377,000.</td>
<td>$2,543,000.</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>332,500.</td>
<td>737,000.</td>
<td>1,335,000.</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>189,000.</td>
<td>406,500.</td>
<td>766,000.</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>33,250.</td>
<td>73,700.</td>
<td>133,500.</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>18,900.</td>
<td>40,650.</td>
<td>76,600.</td>
</tr>
</tbody>
</table>

*Optimistic (70%)
Median (93%)
Pessimistic (99%)

APPENDIX III

THE CITIZENS & SOUTHERN NATIONAL BANK:

PROJECTED OPERATIONS AND NET EARNINGS

FOR 1962
The Citizens & Southern National Bank  
Projected Operating Statement  
for Year 1962  

<table>
<thead>
<tr>
<th>Income</th>
<th>1962</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Received from Loans</td>
<td>$21,121,498</td>
</tr>
<tr>
<td>Income from Securities</td>
<td>2,602,768</td>
</tr>
<tr>
<td>Accrual of Discount &amp; Losses on Bonds</td>
<td>944,850</td>
</tr>
<tr>
<td>Service Charges on Checking Accounts</td>
<td>2,303,000</td>
</tr>
<tr>
<td>Fees for Trust Services</td>
<td>1,380,000</td>
</tr>
<tr>
<td>Rent from Safe Deposit Boxes</td>
<td>135,826</td>
</tr>
<tr>
<td>Income from Bank Buildings (net)</td>
<td>233,751</td>
</tr>
<tr>
<td>Other Income</td>
<td>1,662,958</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td><strong>$30,381,651</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest on Savings Accounts</td>
<td>$3,147,500</td>
</tr>
<tr>
<td>Salaries</td>
<td>9,529,845</td>
</tr>
<tr>
<td>Taxes Other than Federal Income</td>
<td>1,446,057</td>
</tr>
<tr>
<td>Cost of Insuring Deposits (FDIC)</td>
<td>166,087</td>
</tr>
<tr>
<td>Depreciation of Buildings &amp; Equipment</td>
<td>1,050,308</td>
</tr>
<tr>
<td>Pension</td>
<td>329,070</td>
</tr>
<tr>
<td>Profit Sharing Contribution</td>
<td>440,868</td>
</tr>
<tr>
<td>Other Operating Expenses</td>
<td>5,145,696</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td><strong>$21,255,431</strong></td>
</tr>
</tbody>
</table>

Operating Income Over Expenses            $ 9,129,220

Applicable Federal Income Taxes            4,055,979

Net Operating Earnings                    $ 5,073,241
Estimated Net Operating
Earnings - 1962

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Albany</td>
<td>$286,470</td>
<td>73.55%</td>
<td>$210,699</td>
</tr>
<tr>
<td>Bank of Atlanta</td>
<td>163,528 (A)</td>
<td>99.03</td>
<td>161,942</td>
</tr>
<tr>
<td>DeKalb</td>
<td>87,730</td>
<td>95.00</td>
<td>83,344</td>
</tr>
<tr>
<td>Dublin</td>
<td>100,766</td>
<td>76.67</td>
<td>77,257</td>
</tr>
<tr>
<td>East Point</td>
<td>115,933</td>
<td>89.80</td>
<td>104,108</td>
</tr>
<tr>
<td>Emory</td>
<td>94,354</td>
<td>94.40</td>
<td>89,070</td>
</tr>
<tr>
<td>LaGrange</td>
<td>188,362</td>
<td>53.84</td>
<td>101,414</td>
</tr>
<tr>
<td>Newnan</td>
<td>66,278</td>
<td>69.08</td>
<td>45,785</td>
</tr>
<tr>
<td>Thomaston</td>
<td>111,706</td>
<td>92.26</td>
<td>103,060</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,215,127</strong></td>
<td><strong>$976,679</strong></td>
<td></td>
</tr>
<tr>
<td>C&amp;S National Bank</td>
<td></td>
<td></td>
<td>5,073,241 (B)</td>
</tr>
<tr>
<td>C&amp;S Holding Co.</td>
<td></td>
<td></td>
<td>73,083</td>
</tr>
<tr>
<td>Real Estate Holding</td>
<td></td>
<td></td>
<td>108,775</td>
</tr>
<tr>
<td><strong>Total Affiliates, National and Holding Companies</strong></td>
<td></td>
<td></td>
<td><strong>$6,231,778</strong></td>
</tr>
</tbody>
</table>

(A) Five months' operations in 1962.

(B) Based on the merger of The Citizens & Southern Bank of Atlanta.

* As of 1-1-62.

APPENDIX IV

METROPOLITAN ESTATE AND PROPERTY CORPORATION:
PROFIT FORECASTS ACCOMPANIED BY ACCOUNTANT'S
REPORT AND MERCHANT BANKER'S REPORT THEREON
Forecast of Profits and Dividends of M.E.P.C.

(Metropolitan Estate and Property Corporation)

The consolidated profits before tax of MEPC and its subsidiaries for the year to 30th September, 1969 were £5,692,129 compared with £4,440,119 for the previous year. For the year to 30th September, 1970, the Directors of MEPC anticipate that, in the absence of unforeseen circumstances, the consolidated profits (after all charges but before deducting taxation) of the MEPC Group as presently constituted will be approximately £6,800,000, and that earnings available for Ordinary dividends (after deducting appropriation to overseas properties reserve) will be approximately 17.4 per cent. compared with 14.5 per cent. for the previous year, both figures being calculated on the Ordinary share capital as increased by the proposed capitalisation issue. It is the intention of the Directors that for the current year dividends of at least 13 per cent. will be paid on the Ordinary share capital of MEPC increased as above compared with 11.8 per cent. (adjusted for the proposed capitalisation issue) for the previous year.
Assumptions Underlying M.E.P.C.'s Forecast

The forecast of profits before taxation, and earnings available for Ordinary dividends, for the year to 30th September, 1970, of the MEPC Group as presently constituted has been based on specific estimates of:

(i) rental income and property outgoings attributable to each of the properties in MEPC's portfolio, with a margin being provided as a general provision against voids;

(ii) the return anticipated from new property investment and development which may be made during the year;

(iii) interest and other income receivable, principally on the basis of rates of return from current fixed loans;

(iv) dealing profits arising from property sales which have already been negotiated, with no material amounts being included in respect of dealing profits which may arise from future transactions;

(v) administration expenses, making due allowance for anticipated increases;

(vi) interest payable on the basis of current interest rates;

(vii) the results of trading subsidiaries;

(viii) taxation payable on the basis of current legislation;

(ix) amounts attributable to minority interests in the light of the various estimates referred to above;

and on the following material assumptions:

(i) no unforeseen occurrences will affect the specific estimates of income and outgoings referred to above;

(ii) the income from possible future property transactions not provided for in the above estimates will be approximately equivalent to the cost of financing any such transactions;

(iii) there will be no change in taxation materially affecting the MEPC Group;

(iv) no other legislation materially affecting the MEPC Group will be introduced;

(v) there will be no significant changes in the exchange rates between the Pound Sterling and any other relevant currency.

(vi) stockholders of £2,590,000 of 6 3/4% First mortgage debenture stock 1997/2000 will exercise their right to convert 10 per cent. of such stock into Ordinary shares of MEPC in December, 1969.
Reporting Accountant's and Merchant Banker's Reports
on M.E.P.C.'s Profit Forecast

Set out below are copies of letters addressed to the Directors of MEPC relating to the forecast of profits before taxation and earnings available for Ordinary dividends for the year ending 30th September, 1970:

11th December, 1969

Dear Sirs,

We have reviewed the accounting bases and calculations for the forecast of profits before taxation and earnings available for Ordinary dividends (for which the Directors are solely responsible) of Metropolitan Estate and Property Corporation Limited and its subsidiaries ("the Group") for the year ended 30th September, 1970 set out on page 6 of the Offer Letter dated 11th December, 1969. The auditors of the Canadian and Irish subsidiaries have reported to us on the accounting bases and calculations used in making the forecast of profits and earnings in those countries which in the aggregate amounts to 17 per cent. of the forecast profits before taxation of the Group.

In our opinion the forecast of profits before taxation and earnings available for Ordinary dividends of the Group, so far as the accounting bases and calculations are concerned, has been properly compiled on the footing of the estimates and assumptions made by the Board and is prepared on a basis consistent with the accounting practices normally adopted by the Group, except for a minor change in the calculation of amortisation of leasehold properties, which have been limited to those leaseholds having unexpired terms of 50 years or less and which, due to the revaluation of properties in 1969, will give rise to a slightly higher charge against profits than in the year ended 30th September, 1969.

Yours faithfully,
THOMSON McLINTOCK & CO.,
Chartered Accountants.

11th December, 1969

Dear Sirs,

We have discussed with you and the Company's Auditors, Thomson McLintock & Co., the forecast of profits before taxation and earnings available for Ordinary dividends of Metropolitan Estate and Property Corporation Limited for the year ended 30th September, 1970, set out on page 6 of the Offer Letter dated 11th December, 1969.

In our opinion, the forecast of profits and earnings and the estimates and assumptions on which they are based (for which the Directors are solely responsible) have been made after due and careful enquiry.

Yours faithfully,
HILL SAMUEL & CO. LIMITED,
R. A. Clark, Director

Source: Offer by Hill Samuel & Co. Limited on behalf of Metropolitan Estate and Property Corporation Limited to acquire the Ordinary and Preference stock units of the London County Freehold and Leasehold Properties Limited, 11th December, 1969, pp. 6 & 11.