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GUIDELINE SERIES NUMBER 3

Guidelines for Systems for the Preparation of Financial Forecasts

AICPA AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

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Guidelines for Systems for the Preparation of Financial Forecasts

AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

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Preface

This document, Guidelines for Systems for the Preparation of Financial Forecasts, was adopted in October 1974 by the AICPA's Management Advisory Services Executive Committee. It is the third in a series of MAS "Guideline" publications, and was developed by the MAS forecasting task force. Its purpose is to provide direction to developers of forecasting systems and to preparers of financial forecasts. The implementation of these guidelines should lead to increased confidence, on the part of users, that due care is exercised in the preparation of forecasts.

The preparation of a financial forecast is the responsibility of the management of an enterprise. However, management may require the assistance and counsel of outside professionals in meeting this responsibility; thus, CPAs may assist management in the development of forecasting systems and in the preparation of financial forecasts.

This document does not address guidelines for presentation of financial forecasts nor third-party attestation by CPAs. These matters are currently under study by other committees of the AICPA and will be the subjects of separate publications at a later date.

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Guidelines for Systems for the Preparation of Financial Forecasts

Introduction

Background

Persons concerned with economic matters and especially with economic decisions are usually interested in predictions of the future. Recently great interest has been shown in the possible preparation, by company management, of earnings forecasts which would subsequently be made available to security holders, potential investors, and the public.

SEC Pronouncements

The Securities and Exchange Commission, which historically has prohibited the inclusion of financial forecasts in prospectuses and reports filed with it, has now indicated that it will propose changes in its policies to permit the publication of forecast data under certain conditions.[1] In its statement on this subject, the commission indicated that companies under its jurisdiction should not be required to make forecasts, but that those who choose to do so should be required to meet certain standards and disclosure requirements, including rules for filing with the commission. The commission's statement also indicates that no certification of the

[1]"Statement by the Commission on the Disclosure of Projections of Future Economic Performance," Securities Act of 1933, SEC Release No. 5362. February 2, 1973.

forecast by any third party would be permitted in filings with the commission. The commission has stated its intention to develop such standards and rules but, as of the publication date of this document, no such proposed standards and rules have been issued.

The commission contemplates that a company subject to its jurisdiction that publicly discloses a forecast should be required to file such forecasts with the commission, to disclose how the forecasts were made and their underlying assumptions, to update the forecast on a regular basis to reflect material changes, and to provide a comparison of the forecast with actual results. A company would be permitted to stop issuing forecasts at its discretion with appropriate disclosure of the reasons for cessation or withdrawal.

Current Status of Financial Forecasts

A few companies have included a financial forecast or elements thereof in their annual reports to stockholders and in other generally available material. Forecast information is frequently made available on an informal basis to creditors, potential credit grantors, security analysts, and selected investors. Financial forecasts have sometimes been included in the offering material of certain bond issues relating to hospitals, airports, public facilities, and so forth.

A very high percentage of large companies and many smaller companies regularly prepare budgets or profit plans for internal management use and many of these companies also prepare financial forecasts for internal use.

In spite of the widespread preparation of financial forecasts, no authoritative statement of guidelines or standards exists for their preparation. Such guidelines are necessary if published forecasts are to be useful to the public. Although the Securities and Exchange Commission has stated its intent to issue forecasting guidelines, it is desirable and is consistent with commission policy that these guidelines be developed in the private sector and be based on experience with financial forecasting.

Objective of This Report

The objective of this document is to define guidelines for a system for the preparation of financial forecasts. The formal presentation of forecasts, including disclosure requirements, and the possible attestation of forecasts are outside the scope of these guidelines.

The publication of financial forecasts is neither advocated nor discouraged. This document has been prepared because financial forecasts are being disseminated, and accordingly, there is a need for authoritative guidelines for their preparation.

Ordinarily, financial forecasts are prepared as the output of a forecasting system that embraces the preparation of a forecast, the subsequent monitoring of actual results relative to the financial forecast, and the updating or revision of forecasts. These guidelines address the requirements such a system should meet.

There may be circumstances in which a financial forecast is prepared without benefit of a formal system—for example, forecasts prepared for a new enterprise or for a very small company. In such situations, a formal work program and an appropriately constituted forecast project team may be utilized in place of a forecasting system and still conform to these guidelines. The work program must provide for adequate definition of the procedures, methods, and practices to be employed.

Definitions and Scope

Common usage in practice has not developed consensus on the definition of such terms as forecast, projection, feasibility study, and budget. To improve the clarity of this document, the following definitions have been adopted and used throughout.

Financial Forecast

A financial forecast for an enterprise is an estimate of the most probable financial position, results of operations, and changes in financial position for one or more future periods.

In this context, *enterprise* means an entity for which financial statements could be prepared in accordance with generally accepted accounting principles.

Most probable means that the assumptions have been evaluated by management and that the forecast is based on management's judgment of the most likely set of conditions and its most likely course of action.

The preparation of a financial forecast will ordinarily involve the forecasting of the entity's financial position and cash flow as well as the financial results of its operations. Certain elements of financial results, such as interest expense, frequently cannot be reliably estimated without forecasting cash flow and financial position.

The period of a financial forecast will depend on many factors such as the nature of the forecast's intended use, the economic situation, and the nature of the industry, and thus can be expected to differ by company. In forecasting and particularly in updating a forecast, part of the forecast period may have already expired, so that the financial forecast may consist of elements of attained results as well as estimates of the future.

Financial Projections

In contrast, a *financial projection* for an enterprise is an estimate of financial results based on assumptions that are not necessarily the most likely. Financial projections are often developed as a response to such questions as "What would happen if . . . ?" While many of the same principles apply, these guidelines are not directed toward the preparation of financial projections.

Feasibility Study

A *feasibility study* is an analysis of a proposed investment or course of action. A feasibility study frequently involves the preparation of financial projections and, under certain circumstances, may involve the preparation of a financial forecast. A financial forecast may in turn be based on the results of a feasibility study used in the formulation of management's plans.

These guidelines are not directed toward the preparation or conduct of financial feasibility studies; however, the guidelines are applicable to the preparation of financial forecasts contained within a feasibility study.

Financial Forecasting Systems

A system consists of a set of policies, procedures, methods, and practices systematically applied by qualified personnel. It embraces inputs, processing, and outputs of the system and includes the collection, recording, analysis, interpretation, processing, and review of information concerning all elements of the enterprise that are significantly interrelated relative to a particular area.

A financial forecasting system consists of a set of related policies, procedures, methods, and practices that are used to prepare financial forecasts, monitor attained results relative to the forecast, and prepare revisions or otherwise update the forecast. The system may or may not employ mechanized data-processing techniques.

Budgets, Plans, Goals and Objectives

Budgets, plans, goals, and objectives also involve elements of predicting the future. However, each of these tends to have elements distinguishing it from a financial forecast, although in some situations, each may be identical to a forecast. Budgets, plans, goals and objectives may have some elements of being targets or motivational hurdles. Budgets, especially, involve motivational, control, and performance evaluation considerations. A financial forecast should recognize these factors, but the forecast should be an objective, logical, supported statement of the most probable financial results.

Under appropriate circumstances, a planning or budgeting system may provide the basis for developing a forecast. These guidelines are applicable whether the financial forecast is prepared by a separate forecasting system or through the use of related planning and budgeting systems.

Nature of Forecasting

Forecasts are derived through a combination of judgment and science in which history, plans, reactions, aspirations, constraints, and pressures all play a part. Forecasts are based on management's assumptions of future events, some of which assumptions are explicit, but many of which are implicit. The assumptions, in turn, are based on present circumstances and information currently available, including both internal and external data. Forecasts may be affected favorably or unfavorably by many factors such as revenues, costs, employee relations, taxes, governmental controls, and general economic conditions. Accordingly, there is no assurance that the forecasted results will be achieved.

No one can know the future. Predictions are based on information about the past and present. Of necessity, judgment must be applied to estimate when and how conditions are likely to change. These judgments may subsequently prove to be inaccurate; thus, the accuracy and reliability of a forecast can never be guaranteed. Forecasts by their very nature are subject to error. When a succession of forecasts is made over a period of time, it is inevitable that at some point a particular forecast will turn out to have been significantly inaccurate. Because of this, forecasts may require updating and revision when conditions significantly change.

Forecast information is substantially less subject to objective verification than historical data. Expected results are often not achieved because of unforeseen occurrences. When working with or using forecast information, it is essential to understand the inherent exposure to inaccuracy involved in any forecast.

The difficulty in making a financial forecast can vary significantly from enterprise to enterprise, from industry to industry, and from time to time. Also, a financial forecast can be especially difficult to prepare in the case of a new venture, where no historical record of performance exists upon which to base a forecast.

Approach and Applicability of the Guidelines

This document establishes the broad principles and requirements which should govern the preparation of financial forecasts. These guidelines should have wide applicability to many kinds of enterprises; however, judgment is required to apply and interpret these guidelines to specific situations.

Many different forecasting techniques and methods are available. The relevance of a particular technique for forecasting for a given enterprise at a given point in time must be determined largely on a case-by-case basis, depending on the specifics of the individual situation. Consequently, these guidelines do not address themselves to individual forecasting techniques.

In approaching guidelines for a system for the preparation of financial forecasts, some might look to very specific prescriptions as to how specific items should or should not be forecast. Examples would be standards for overall sales forecasting or perhaps for forecasting sales within a specific industry. However, financial forecasting is applicable to such a wide range of enterprises and the economy is so diverse and dynamic that the development of guidelines on such a specific basis is not practicable at this time.

These guidelines for systems for the preparation of financial forecasts are intended to apply to enterprises that prepare financial forecasts on a recurring basis and where updating may be necessary. These guidelines also apply to the preparation of forecasts that are not recurrent or where a formal forecasting system does not exist but where a formal work program and an appropriately constituted forecasting project team are used.

Role of the CPA

The preparation of a financial forecast is the responsibility of the management of an enterprise. Management may require the assistance and counsel of outside professionals in meeting this responsibility. Nothing in this document precludes the CPA from assisting management in the preparation of financial forecasts and in the development of forecasting systems.

Summary of Guidelines

1. *Single most probable result.* A financial forecasting system should provide a means for management to determine what it considers to be the single most probable forecasted result. In addition, determination of the single most probable result generally should be supplemented by the development of ranges or probabilistic statements.

2. *Accounting principles used.* The financial forecasting system should provide management with the means to prepare financial forecasts using the accounting principles that are expected to be used when the events and transactions envisioned in the forecast occur.

3. *Appropriate care and qualified personnel.* Financial forecasts should be prepared with appropriate care by qualified personnel.

4. *Best information available.* A financial forecasting system should provide for seeking out the best information, from whatever source, reasonably available at the time.

5. *Reflection of plans.* The information used in preparing a financial forecast should reflect the plans of the enterprise.

6. *Reasonable assumptions suitably supported.* The assumptions utilized in preparing a financial forecast should be reasonable and appropriate and should be suitably supported.

7. *Relative effect of variations.* The financial forecasting system should provide the means to determine the relative effect of variations in the major underlying assumptions.

8. *Adequate documentation.* A financial forecasting system should provide adequate documentation of both the forecast and the forecasting process.

9. *Regular comparison with attained results.* A financial forecasting system should include the regular comparison of the forecast with attained results.

10. *Adequate review and approval.* The preparation of a financial forecast should include adequate review and approval by management at the appropriate levels.

Guideline No. 1

A financial forecasting system should provide a means for management to determine what it considers to be the single most probable forecasted result. In addition, determination of the single most probable result generally should be supplemented by the development of ranges or probabilistic statements.

Users of forecasts have need in many circumstances for a single estimate representing the most probable financial result. The need for a single forecast is particularly great for users external to the enterprise. In addition, the comparison of a forecast with actual attained results is facilitated when the single most probable forecast is available.

The management of a company, through the use of its forecasting system, is in the best position to determine the single most probable forecasted financial result; consequently, a financial forecasting system should provide management with the means to determine it.

Because forecasts are not exact and are subject to varying degrees of inaccuracy, preparing a forecast in a manner that conveys the degree of uncertainty associated with it is very useful and should be encouraged. This guideline is intended to encourage the development of ranges, probabilistic statements, or estimates of error as supplements to the single most probable forecasted result. Such information is useful to underscore the essentially uncertain nature of all forecasts.

Guideline No. 2

The financial forecasting system should provide management with the means to prepare financial forecasts using the accounting principles that are expected to be used when the events and transactions envisioned in the forecast occur.

The objective of a financial forecast is to estimate financial results as they will be recorded in the financial statements of the enterprise once the events have occurred. Therefore, the accounting treatment applied to anticipated events and transactions in a forecast should be the same as the accounting treatment expected to be applied in recording the events once they have occurred.

From time to time organizations change the accounting principles they use. If such changes are expected, they should be reflected in the forecast and documented. The meaningfulness of financial data is enhanced when it is comparable to the data for other time periods. Therefore, when such changes in accounting treatment are anticipated, the forecasting system should include a means to adjust the financial data to a comparable basis.

Guideline No. 3

Financial forecasts should be prepared with appropriate care by qualified personnel.

Appropriate care requires that diligence and proper attention be exercised to ensure that the forecast is as reliable as is reasonable under the circumstances. The forecast should be honestly and objectively prepared in good faith with neither undue optimism nor pessimism. The preparer should question the validity of all information and assumptions.

The preparation of a financial forecast ordinarily involves the use of large amounts of data and requires a great many calculations, a situation which introduces the possibility of clerical error. Procedures should be utilized to facilitate the detection, control, and elimination of such errors.

Qualified personnel are necessary to ensure that appropriate knowledge and competence are present or acquired during the course of the forecasting work. An understanding of the enterprise and industry is essential. Personnel having competence in marketing, operations, finance, research and engineering, and other technical areas as appropriate should participate along with management in the development of the forecast.

Analytical capacity and expertise in the analysis and interpretation of the relevant historical data are also necessary. In appropriate circumstances, expertise in technical forecasting techniques and methodology is required.

Guideline No. 4

A financial forecasting system should provide for seeking out the best information, from whatever source, reasonably available at the time.

Information relevant to a forecast comes from many sources, both within and outside an organization. An effective forecasting system should provide for searching out information relevant to a forecast to achieve the best, most reliable information reasonably available.

The acquisition of information ordinarily involves a cost. This cost should be commensurate with the anticipated benefits to be derived from the information. For example, the cost of making a survey may far exceed any potential benefit, even though the survey might provide the most precise information available. This guideline does not require the acquisition of information regardless of cost, although it does not eliminate the requirement merely because it may be costly.

A forecast can only be based on information available at the time it is prepared. Often information permitting a more accurate forecast becomes available only after a forecast has been completed or disclosed or after the forecast period has expired. The fact that information exists does not necessarily mean that it is available to the forecasters.

Various sources of information involve different degrees of reliability. The reliability of the basic data should be considered in the forecasting process.

A key consideration in the preparation of a financial forecast is the use of an appropriate level of detail. In certain situations the use of more detail may improve the reliability of a forecast. For example, forecasting sales by product line instead of in the aggregate may improve the sales forecast, especially when the products are sold in different markets. However, situations also exist where the use of less detail or a more aggregated approach will improve reliability. For example, forecasting the cost of sales for a manufacturer of thousands of individual items may be done more effectively in groups than by individual item.

Guideline No. 5

The information used in preparing a financial forecast should reflect the plans of the enterprise.

A financial forecast should reflect the expected economic effects of anticipated management strategies, programs, and actions, including those being planned in response to the assumed future conditions.

Management's plans expressed in the form of budgets, goals, policies, and plans are a necessary part of the information going into a forecast. Care must be exercised to eliminate the effect of undue optimism or pessimism contained in such plans.

Plans and budgets are more reliable and credible when developed through the use of effective management planning and control systems. Sound reporting on a timely basis by functional responsibility, together with effective planning and budgeting, is the foundation of a financial forecasting system.

Guideline No. 6

The assumptions utilized in preparing a financial forecast should be reasonable and appropriate and be suitably supported.

Assumptions are the essence of forecasting and are the single most important ingredient of a financial forecast. The quality of the underlying assumptions largely determines the reliability of a forecast.

Assumptions vary in their relative potential importance to forecasted results. The attention devoted to the appropriateness of a particular assumption should be commensurate with the likely relative impact of that assumption. Assumptions with great impact should receive more attention and support than those with less impact. Often, assumptions pertaining to sales volumes and revenues have the greatest single impact on the financial forecast for an enterprise.

By nature, a financial forecast always contains a large number of assumptions, some of which may be obvious and explicit but many of which are implicit and obscure. Frequently, the most basic assumptions with enormous potential impact, such as those relating to war or peace conditions, are not addressed explicitly in the preparation of a forecast. However, those assumptions deemed to be most significant at the time of preparation should be made explicit to focus attention on them and to facilitate review by management.

Assumptions should be supported by appropriate evidence. While it is not possible to absolutely prove that any given assumption will be borne out by subsequent events, much evidence consisting of data and logical argument or theory is usually developed to support an assumption. Historical data appropriately analyzed will often reveal trends or other likely patterns of behavior. Special scrutiny should be given assumptions that are not consistent with past and current conditions.

Although it is ordinarily not feasible to exhaustively list and otherwise document and support all the assumptions underlying a forecast, nevertheless it is necessary to seek out and explicitly state support for the most crucial or significant assumptions. Despite these precautions, hindsight will often reveal basic assumptions that have been overlooked or that, in the light of later circumstances, received inadequate treatment. Furthermore, the nature of forecasting is such that some assumptions will turn out to be erroneous no matter what effort, analysis, or support may be applied.

In analyzing alternative assumptions, care must be exercised to avoid undue optimism or pessimism and to assess the situation objectively. Relating an assumption to past or present conditions often is a useful approach to check on reasonableness; however, trends are not necessarily reliable indicators of the future. Particular attention should be given to the possibility of changes in conditions and these must rest mainly on theory and an understanding of the basic causal factors.

Care should be exercised to avoid unrealistic assumptions in situations where any assumption may involve a certain degree of arbitrariness. For example, it may be difficult to predict the precise rate of future cost inflation, but it is generally more realistic to estimate such a rate than to assume no inflation. Often, the most difficult assumptions to evaluate are those relating to worldwide macroeconomic conditions. In such cases, management is placed in the position of using subjective judgment to a greater degree than in many other cases.

The nature of business enterprise is such that many underlying assumptions are interrelated and certain of their elements may have multiple impacts. For example, a slowdown in economic activity will typically not only result in a slowdown in sales volume, but may also affect prices and the availability and cost of resources.

The conditions assumed in arriving at the sales or revenue forecast should be consistent with those assumed in forecasting the cost of operations. Care should be exercised to insure that likely costs and revenues have been considered, that sufficient capacity and resources will be available to produce the expected revenues, that capital expenditures have been recognized as appropriate, that provision has been made for applicable taxes, and that appropriate financing has been considered.

Guideline No. 7

The financial forecasting system should provide the means to determine the relative effect of variations in the major underlying assumptions.

Forecasted financial results are usually relatively more sensitive to certain elements and less responsive to others. Small changes in certain assumed conditions can result in relatively large variations in the predicted results, while relatively large changes in other elements cause only minor shifts in the forecasted result.

In forecasting, an understanding of the relative sensitivity of the results to the assumed conditions permits the allocation of analysis, study, and review to those areas with the most significant impact. Particular attention should be devoted to those items likely to cause large variations in the results.

Knowledge of a particular enterprise or industry frequently permits an initial identification of those key factors upon which the financial success of the business rests. In the absence of such knowledge, additional analysis should be performed to identify the most sensitive elements.

Guideline No. 8

A financial forecasting system should provide adequate documentation of both the forecast and the forecasting process.

Documentation makes possible management review and approval of a forecast. It facilitates comparison of the forecast with actual financial results, and it provides the discipline necessary for reliable forecasting.

Documentation involves recording the underlying assumptions as well as summarizing the supporting evidence for the assumptions. Documentation should provide the ability to trace forecasted financial results through intermediate calculations back to the basic underlying assumptions.

Adequate documentation makes it possible for persons experienced and qualified in forecasting to reconstruct the forecast. Documentation should cover the system, as well as individual forecasts, and should provide an organized record of both that can be maintained and made available for subsequent use.

Guideline No. 9

A financial forecasting system should include the regular comparison of the forecast with attained results.

The objective of a forecast is to estimate financial results for one or more future periods. The regular comparison of forecasted results with actual results provides a historical measure of forecasting success and may also be useful as an indication of the likely reliability of future forecasts. Regular comparison with actual results and analysis of deviations also provide a basis for making improvements in the forecasting methods and approaches.

The comparison with actual results should not be limited to financial results but should also include comparison of the underlying factors and key assumptions, such as sales volumes, prices, and production rates. Emphasis should be placed on those items sometimes called leading indicators, such as order rates, backlogs, and changes in capacity that precede attained financial results but that largely determine future results.

Comparison of the forecast with actual results should occur on a regular basis throughout the period of the forecast. Deviations from the forecast should be analyzed to provide an early indication that the forecast may be inaccurate and may need to be supplanted by the preparation of an updated or revised forecast. However, when recurring forecasts are not prepared, comparison on a regular basis throughout the period of the forecast may not be necessary.

Guideline No. 10

The preparation of a financial forecast should include adequate review and approval by management at the appropriate levels.

A financial forecast is an important statement of the most probable future financial results of an enterprise. The ultimate responsibility for a forecast rests with management at the highest responsible level of authority, the same level as for historical financial statements. Thus, this responsibility rests with the officers and directors of the company.

Adequate review means that the review is conducted in sufficient depth to assure the reviewers of the soundness of the forecasting process. The reviewer should satisfy himself that the forecast and subsequent revisions were prepared in accordance with the guidelines for the preparation of forecasts. Adequate review and approval require formal communication of the forecast, together with its supporting documentation.

Review at intermediate levels of management—including such functions as marketing, operations, engineering, and finance—insures that the reasonableness of the forecast is evaluated from several vantage points and especially that it is evaluated by those who will be responsible for the subsequent delivery of forecasted results.