
EXPOSURE DRAFT

PROPOSED APPLICATION OF THE MANDATORY PERFORMANCE FRAMEWORK FOR THE FAIR VALUE QUALITY INITIATIVE

MAY 24, 2016

Comments are requested by August 24, 2016

Collaboratively prepared by AICPA, ASA, and RICS for comment from persons involved in conducting fair value measurements of entities and intangible assets for U.S. public company financial reporting purposes

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EXECUTIVE SUMMARY

Problem Identification

During the last 15 years, the global accounting model has increasingly gravitated towards the use of fair value as the measurement basis for assets and liabilities for financial reporting purposes. Estimating these fair value measurements often involves the use of sophisticated financial models, various valuation approaches and analytical assumptions, and professional judgment.

Within the past several years, public statements by U.S. capital market regulators have called into question whether some of the individuals that assist SEC registrants with estimating fair value for financial reporting purposes have the requisite training, qualifications, experience and expertise to perform this type of work. The SEC staff has expressed a desire that the various stakeholders in the valuation profession coordinate their efforts to establish rigorous and uniform qualifications, training, accreditation, and oversight of individuals conducting fair value measurements that serve as a basis for management's preparation of financial statements for public companies that are SEC registrants.

Regulatory concerns and public perceptions are driving the need for professionals engaged to estimate fair value measurements to conduct themselves with professionalism and demonstrate professional competence.

In response to these regulatory concerns and the public perceptions, numerous groups including not-for-profit **VALUATION PROFESSIONAL ORGANIZATIONS**¹ (VPOs), non-membership organizations and others collaborated to form a Task Force that focused on the issues facing the valuation profession and how best to address them.

The Task Force (known as the 'Fair Value Quality Initiative') formed four work-streams designed to address VPO governance and operational issues relevant to developing, implementing, and maintaining an infrastructure to support the new Fair Value Quality Initiative credential. The work-streams are as follows:

- Governance and Coordination
- Performance Requirements
- Qualifications
- Quality Control

Each of these work-streams has its own integral set of responsibilities to help the VPOs develop and support an infrastructure that will provide valuation professionals who obtain this new credential a roadmap to conduct more consistent, higher quality, and better documented valuation engagements. For an in-depth discussion on these efforts please review the Assessment of the Current Professional

¹ Words or terms defined in the glossary are set in **CAPITAL BOLD** type the *first time they are applied in context* within this document.

Infrastructure Governing Fair Value Quality – Progress Report available at the VPO websites. For purposes of this document, only a summary of the Performance Requirements work-stream follows below.

Performance Requirements

As U.S. accounting standards have evolved to a “mixed model”, combining aspects of historical cost measurement attributes with fair value measurements attributes. The SEC and the Public Company Accounting Oversight Board (PCAOB) have increased their expectations towards financial statement preparers and their advisors to provide consistent, supportable, and auditable fair value measurements.

The valuation profession has responded to this by developing technical standards and guidance, essentially addressing the “how to” question. Further, VPOs have increased their focus on providing training, accreditation, technical guidance and frameworks for ethical conduct, essentially addressing the “who is to do” question.

One area, however, where gaps in guidance are believed to still exist relates to performance (that is, addressing the “how much” to do question). Various terms have been used to describe this topic, such as “level of rigor”, “depth of analysis”, “scope of work”, “level of due diligence”, “extent of documentation”, or “extent of investigation”.

The Performance Requirements Work-Stream was tasked with developing a **MANDATORY PERFORMANCE FRAMEWORK** (‘MPF’, ‘Performance Framework’ or ‘Framework’) designed to establish a minimum threshold to the question of “how much” for valuation professionals who obtain this credential.

The following definitions are intended to differentiate “professional standards” and “technical standards” from “performance framework” for the purposes of this MPF:

PROFESSIONAL STANDARDS *are standards that encourage professional behavior (for example, codes of ethics, codes of conduct, acting competently, independently, objectively, transparently). These can also be considered standards that define a professional: ethical, independent, objective, having requisite skills, educated, experienced, tested, trained, and credentialed/licensed. Professional standards focus on characteristics of the individual professional and the conduct of their behavior.*

TECHNICAL STANDARDS *are standards that address the “how to” of work that must be done to prepare a “professional” work product. These standards address the technical “correctness” of the work product by considering appropriate input factors, application of methods and techniques, and reporting guidelines. Both mandatory standards and voluntary guidance have been developed around technical issues in valuation in general and, to a lesser extent, around fair value measurement (FVM).*

PERFORMANCE FRAMEWORK contains requirements that cover “how much” work should be performed in order to prepare a “professional” work product. Performance framework addresses scope of work and extent of documentation and analysis, consideration of contrary evidence, and documentation in both the report and the supporting work papers. Alternatively, the performance framework reflects the extent to which the professionals perform their work in terms of depth of analysis and documentation.

Structure of the MPF and Application of MPF sections

Mandatory Performance Framework (separate document)

- The first section of the MPF includes the Preamble (Section 1) that provides an overview of the Framework’s purpose and scope (that is, when and by whom the Framework must be followed)
- The second section of the MPF provides Evaluation Engagement Guidance (Section 2) that establishes the parameters of the documentation requirements that valuation professionals who obtain the new Fair Value Quality Initiative credential must abide by. This includes the fundamental engagement considerations and scope of work that manifest themselves within the engagement letter, the extent of documentation requirements, and professional skepticism required in the valuation process and in the reporting of any conclusions.
- Mandatory Performance Framework Glossary (Section 3) sets forth definitions of terms that may be unique to the Framework, and/or defines their meaning within the context of the MPF.
- Authoritative and Technical Guidance (Section 4) includes a list of accounting standards, audit standards, valuations standards and reference to certain technical literature applicable to the guidance presented in the Framework.

The content cited in the Authoritative and Technical Guidance section is delineated based on authoritative weight. The accounting standards are issued by regulators and accounting standard-setters and are mandatory for all financial statements issued for public interest reporting. The valuation standards issued by the VPOs are mandatory only for their respective members who engage in valuation services. Non-members who practice in certain jurisdictions, specialty subject interests, or both should be aware that they may be required by federal, state, or local laws or regulations to adhere to specified valuation standards either promulgated by VPOs or by non-membership organizations (for example, The Appraisal Foundation, International Valuation Standards Council). The technical literature is non-authoritative; however, these publications are prepared by professionals with in-depth knowledge of the topics and were broadly vetted by preparers and users of valuations, and auditors.

Application of the Mandatory Performance Framework

- General Valuation Guidance (Section A1) applies the MPF for selected areas of professional valuation practice that are often either misapplied or insufficiently supported, documented, or both in valuations prepared for **PUBLIC INTEREST REPORTING**.
- Business Valuation Guidance and Valuation of Assets and Liabilities Guidance (Sections A2 and A3) apply the MPF and identify the most common components of an engagement in which the valuation professional provides a conclusion of value of a business or business interest. It governs the scope of work and extent of documentation for selected areas associated with the valuation of businesses, business interests, intangibles assets, certain liabilities and inventory that are prepared for public interest reporting. Specifically, these sections address matters where there is need for greater consistency in the application of valuation approaches and methodology; support for matters that require the application of professional judgment; and documentation of inputs.

These sections will continue to evolve and expand to cover a broader spectrum of subject matter topics and professional practice trends in the valuation profession.

By design, the Framework and the Application of the MPF sections do not provide illustrative examples that might otherwise be interpreted as requirements for “how to” perform a valuation. Instead, the purpose of the MPF is to provide valuation professionals with guidance on “how much” documentation is required when performing valuation assignments for public interest reporting. In certain circumstances, however, the application of the MPF sections may provide *some* discussion of “how to” in order to complement the usability and application of this Framework.

Guide for Respondents

The VPOs are seeking comments specifically on the scope of the Application of the MPF and whether its contents will provide the appropriate set of parameters to help improve the documentation and auditability of fair value measurements. Respondents are asked to respond, in particular, to the following questions:

1. Are the objectives of the documentation guidance clearly stated?
2. Are there any topics or subtopics that should be included that are not currently in the document?
3. Would illustrative examples be helpful in providing instructive guidance for the application of the MPF?

Comments are most helpful when they refer to specific paragraphs; include the reason for the comments; and, when appropriate, make specific suggestions for any proposed changes to wording. When a respondent agrees with proposed language in the Application of the MPF, it will be helpful for the VPOs to be made aware of this view as well.

Written comments on the MPF and Application of the MPF will become part of the public record of the AICPA, ASA, and RICS, and will be available for public inspection at the offices of the respective VPO for one year beginning July 11, 2016.

Comment Period

The comment period for the MPF ends August 24, 2016.

Conclusion

In order for the valuation profession to grow and improve in terms of a discipline and in public's perception, it will need the structure of a profession. This will require adherence to a consistent set of professional, technical and ethical standards as well as a set of guiding principles that help define 'how much' work is necessary in order to provide supportable and auditable fair value measurements that serve as the basis for management's preparation of financial statements for companies that are SEC registrants.

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APPLICATION OF THE MANDATORY PERFORMANCE FRAMEWORK

The following sections apply the Framework to specific subject interests. The subject interest guidance will continue to evolve and expand; however, this first edition only addresses select topics within the following subject interest areas on: general valuation guidance, business valuation guidance, and guidance for the valuation of intangible assets, certain liabilities, and inventory.

This guidance is not designed to show valuation professionals “how to” perform a valuation; instead its purpose is to provide valuation professionals with guidance on “how much” work, level of rigor, and extent of documentation is required when performing valuation assignments for public interest reporting. In certain circumstances, however, the Application of the Mandatory Performance Framework section may provide some discussion of “how to” in order to complement the usability and application of this Framework. Such discussion is not intended to supersede existing or evolving technical guidance; however, in the event of conflicts between content in this MPF and such technical guidance, the latter shall take precedence.

This guidance is intended to establish minimum scope of work and documentation thresholds and should not be interpreted as a limitation or restriction that precludes a valuation professional from providing more comprehensive scope of work and documentation where deemed appropriate.

A1. GENERAL VALUATION GUIDANCE

A1.1 Fair value concepts are the foundation for estimating the value of a wide spectrum of assets and liabilities. Fair value is the measurement attribute of many such assets and liabilities included in an entity's financial statements prepared in accordance with US GAAP, and when appropriate, International Financial Reporting Standards (IFRS). This section sets forth the most common concepts the valuation professional should understand in order to estimate the fair value of a business, business interest, intangible asset, certain liabilities, or inventory. This section also provides the scope of work and extent of documentation. It is not intended to address valuation theory or to be a "how to" regarding valuation procedures.

A1.1.1 This section of the Framework covers three significant topics related to the fundamentals of fair value and may be applicable to many different subject interests. As a result, these general concepts are presented together in this introductory section. They are as follows:

- Fair Value Measurement
- Selection of Valuation Approaches and Methods
- Prospective Financial Information

A1.2 Fair Value Measurement

Topic Overview

A1.2.1 The valuation professional must evaluate and document management's assessment of fair value at the initial transaction (if applicable) and subsequent measurement dates, as well as management's selection of calibrated inputs used to value the subject interest on subsequent measurement dates.

Important: This section DOES NOT imply that the two topics discussed below (initial recognition and calibration) are the only critical areas within FASB Accounting Standard Codification, Topic 820 – Fair Value Measurement (ASC 820)^[1] or have any more prominence than other sections within ASC 820.

Initial Recognition

A1.2.2 As indicated in ASC 820-10-30-3, in many situations the transaction price equal the fair value based on market participant and as a result equal fair value at initial recognition. ASC 820 does not, however, make this presumption. Rather, ASC 820-10-30-3A requires several factors be considered when determining if the transaction price reflects fair value of the subject interest at initial recognition.

^[1] For foreign companies that file with the SEC, IFRS 13 may also apply.

A1.2.3 If the transaction price equals fair value, gains and losses may need to be recognized. Therefore, valuation professionals should never assume that transaction price equates to fair value at or near the transaction date.

Subsequent Measurement Dates

A1.2.4 Calibration is used with various valuation techniques; however, regardless of which valuation technique is used by the valuation professional ASC 820-10-35-24C requires that, “[i]f the transaction price is fair value at initial recognition and a valuation technique that uses unobservable inputs will be used to measure fair value in subsequent periods, the valuation technique shall be calibrated so that at initial recognition the result of the valuation technique equals the transaction price. Calibration ensures that the valuation technique reflects current market conditions, and it helps a reporting entity to determine whether an adjustment to the valuation technique is necessary (for example, there might be a characteristic of the asset or liability that is not captured by the valuation technique). After initial recognition, when measuring fair value using a valuation technique or techniques that use unobservable inputs, a reporting entity shall ensure that those valuation techniques reflect observable market data (for example, the price for a similar asset or liability) at the measurement date.”

Documentation Requirements

A1.2.5 The valuation professional, at a minimum, must document in writing within the work file:

- i. Management’s assessment of fair value of the subject interest at the initial transaction (for example, consideration of unit of account, principal market, market participants, and methods and inputs used to determine fair value)
- ii. The relevance of all calibrated inputs used to estimate fair value on subsequent measurement dates
- iii. The evaluation of all calibrated inputs not used to estimate fair value on subsequent measurement dates that, in the professional judgment of the valuation professional, management should have included in the estimation of fair value
- iv. The evaluation of management’s rationale and support for the inputs used to estimate initial fair value of the subject interest and their ASC 820 hierarchy classification (for example, level 1, level 2, or level 3)
- v. The rationale for any changes in valuation approaches or methods used for subsequent measurement dates as compared to the initial transaction

A1.3 Selection of Valuation Approaches and Methods

Topic Overview

A1.3.1 Consistent with accounting and valuation guidance, the three valuation approaches to estimate the fair value of a subject interest are the income, market, and cost (or asset-based) approaches. In addition, there are various valuation methods available for use within each of these three approaches.²

Valuation Methods

A1.3.2 In determining the appropriate valuation method(s), the valuation professional should consider, among other things, valuation guidance, the history and nature of the subject interest, academic research, market participant disclosure, and approaches utilized for similar business entities or assets. The following methods are commonly used to estimate fair value of the subject interest:

Methods under the Income Approach

- Discounted Cash Flow Method
- Income Capitalization Method
- Relief-from-Royalty Method (sometimes referred to as the Royalty Savings Method)
- Cost Savings Method
- Multi-Period Excess Earnings Method (MPEEM)
- Greenfield Method
- Disaggregated Method (a sub-set of MPEEM)³
- With-and-Without Method (sometimes referred to as the Premium Profit Method)
- Other income approach methods as applicable

Methods under the Market Approach

- Guideline Transaction Method
- Guideline Company Method
- Direct Sales Comparison Method
- Other Market Approach Methods as applicable

² Financial Accounting Standards Board (FASB) *Accounting Standards Codification* (ASC) 820, *Fair Value Measurement*, refers to valuation approaches and valuation techniques. However, most valuation standards and valuation literature refers to valuation approaches and methods (not techniques). The term ‘method’ as applied within the valuation standards appears consistent with the meaning attributed to valuation techniques in FASB ASC 820. Also, in practice, many valuation techniques are referred to as methods (for example, guideline public company method, guideline company transactions method, and discounted cash flow method). As a result, this Framework uses the terms *technique* and *method* interchangeably to refer to a specific way of determining value within an approach.

³ This term is designated to describe functional or activity based methods (for example, the distributor method).

Methods under the Cost Approach

- Adjusted Net Asset (balance sheet) Method
- Replacement Cost Method
- Other Cost Approach Methods as applicable

Considerations for Selection and reconciliation of Approaches and Methods

A1.3.3 For many valuation engagements, valuation professionals will rely on multiple valuation approaches and methods to estimate a fair value. For example, in a business valuation of a sufficiently-profitable operating company, it is common for one form of the income approach (such as discounted cash flow method) and two methods of the market approach (guideline public company method and guideline transaction method) to be completed. If developed correctly and with good information, the results from each approach or method should provide indications of fair value that are reasonably consistent with each other. If the results are not reasonably consistent, further analysis is generally required to determine if an error has been made in one method or the other, or if there is good reason why they would be significantly different.

When the valuation professional uses multiple approaches as part of the analysis, the valuation professional must reconcile the various approaches into a supportable and reasonable conclusion of value.

Documentation Requirements

- A1.3.4 The valuation professional, at a minimum, must document in writing within the work file:
- i. Where applicable, process and rationale for selecting the valuation method(s) or excluding common valuation methods to estimate the fair value of the subject interest.
 - ii. The process and rationale for selected weighting (or emphasis on) each approach and/or method in reconciling various indications of value to reach the final conclusion of value (if more than one approach/method is used).
 - iii. A reconciliation of the results should include among other things:
 - a. A supporting narrative about the applied methods and their applicability and usefulness to the valuation assignment; the reliability of the underlying data used in their preparation; and an explanation of inputs and assumptions
 - b. An assessment of the reliability of the results obtained and whether any of the results used to reach a conclusion of value are deemed more or less probative of fair value based on information gathered throughout the engagement (note: the extent of documentation

should be commensurate with the level of judgment and qualitative analysis involved in supporting the positive assertion).

- c. A clear explanation discussing any apparent inconsistencies in the analysis relative to external or internal documentation and/or data (for example, contrary evidence). This may then take the form of arithmetic/mathematical calculations when using quantitative weighting.
- v. An explanation, based on the results of items i-iv, that identifies whether the conclusion of value is based on the results of one valuation approach and method, or based on the results of multiple approaches and methods.

A1.4 Prospective Financial Information (PFI)

Topic Overview

A1.4.1 Prospective financial information (PFI) is a broad term that encapsulates several types of forward-looking financial information. PFI is any financial information about the future. The information may be presented as complete financial statements or limited to one or more elements, items, or accounts. Common categories include, but are not limited to, break-even analyses, feasibility studies, forecasts, or projections. This type of information is commonly prepared for external financing, budgetary purposes, or calculating the expected return on investments. Furthermore, how the PFI is expected to be used will usually dictate the type of PFI prepared.

Reasonably Objective Basis

A1.4.2 Since PFI represents future expectations, it is, by its very nature, imprecise. Therefore, the assumptions used in preparation of the PFI must be reasonable and supportable. In order for the valuation professional to determine if a PFI is reasonable he or she must compare it to the expected cash flows of the subject interest or entity (for example, expected cash flows might be determined by using a probability-weighted scenarios of possible outcomes). In order to achieve this, the valuation professional must incorporate the most reliable objective information available.

Understanding Management's Approach to Developing the PFI

A1.4.3 A company's PFI might be routinely prepared by an internal functional group often called financial planning and analysis (FP&A), or, in smaller entities, the PFI is often prepared by one or more members of management (subsequently referenced as 'management'). Valuation professionals should understand and document how the PFI was developed by management. Management may prepare PFI using a "top-down" method or a "bottoms-up" method or some combination of the two. A top-down method starts with aggregate assumptions regarding the entity, and allocates those assumptions across the elements of the entity (such as functional groups or reporting units). A bottoms-up method generally begins by collecting data at the lowest level of the entity and then

coalescing the expectations to arrive at a unified plan for PFI. Combining the two methods may involve an iterative process. For example, “top-level” management sets certain high level goals and as a result “mid-level” management revises its initial projections to conform to such high level goals. However, when mid-level management’s revisions do not reflect top-level management’s goals, top-level management may revise its goals to reflect the entity’s collective best-estimates.

A1.4.4 Valuation professionals should be aware of the purpose for which PFI is prepared. In addition, valuation professionals should understand whether the PFI was prepared using market participant assumptions. Management might prepare conservative PFI (if prepared with a goal of “beating” their plan), optimistic PFI (if prepared as a goal or incentive). Valuation professionals should strive for objective, reasonable, and supportable PFI relevant for use in the valuation process with the understanding that management bias may exist and, if present, should be properly adjusted to expected cash flows in the analysis.

Key Components of the PFI

A1.4.5 PFI may be used for a variety of purposes. However, in order for the valuation professional to assess the quality and reliability of the PFI, the key components of the PFI should be identified. These components commonly include but are not limited to:

- Base year metrics
- Annual revenue forecasts or revenue growth rates
- Annual gross margins
- Annual EBITDA/EBIT margins
- Annual depreciation and amortization
- Annual effective tax rate
- Annual capital expenditures
- Annual debt-free net working capital (DFNWC) requirements
- Other metrics where applicable

Written inquiries of management, or management interviews will help to establish which of these components are most reliable and which are most subject to judgment.

The Valuation Professional's Assessment of the PFI

A1.4.6 Part of the valuation professional's responsibility is to evaluate the PFI provided by management for reasonableness in general, as well as in specific areas. Factors to consider and common procedures to apply when performing this assessment include, but are not limited to:

- Comparison of PFI to expected values of the cash flows: The valuation professional should compare PFI to expected cash flows to evaluate for reasonableness. The evaluation of any differences between PFI and expected cash flows should be thoroughly documented in the work file.
- Frequency of preparation: If a designated group of management regularly prepares forecasts those forecasts are likely to be more consistent and meaningful compared to circumstances when management does not regularly prepare forecasts.
- Comparison of prior forecasts with actual results: The valuation professional should complete a comparison of prior forecasts (if they exist) against actual results. This type of analysis will help assess whether management's forecasts tend to be optimistic, conservative, or just generally not very accurate. There are many external influences that might make forecasting difficult and an inaccurate forecast does not necessarily indicate that management's process in preparing forecasts is deficient.
- Mathematical and Logic Check: It is important that valuation professionals test management's PFI for accuracy. Common errors include (but certainly not limited to): a) use of inaccurate cell references in applying functions (such as growth rates); b) simple summation errors (including use of inaccurate cell ranges); c) use of improper functions; d) use of improperly specified "macros" in the context of the use of spreadsheet analyses.
- Comparison to historical trends: The valuation professional should compare PFI to historical trends focusing on items such as revenue growth, decline, or variability; various levels of profitability; and levels of specific items (such as sales and marketing expense). The valuation professional should also perform other comparisons to internal data or information (such as the planned departure of a key executive). Valuation professionals should scrutinize PFI trends that do not account for long-term (or short-term) limitations. For example, if management builds a forecast indicating a trend of continued improvement in operating margin and there are structural or economic limitations that support an upper-bound limit on operating margins, the valuation professional should know what that reasonable limit is in order to judge how long the trend might continue compared to management's assumptions.
- Comparison to industry expectations: The valuation professional should complete an analysis of the PFI relative to the economy, industry, and other external data. This might include comparing key components of the entity's PFI to relevant industry data resources (for example, competitor disclosures, market or industry studies, analyst reports, government

reports, or other sources). The valuation professional should keep in mind that while such comparisons can (and should) be displayed in a quantitative fashion (for example, PFI revenue growth rates as compared to industry revenue growth rates), a qualitative analysis must also be performed to evaluate the reasons why the entity's PFI may mirror or diverge from industry data. This includes, but not limited to, assessing industry data that produces disparate or conflicting expectations. Under such circumstances, the valuation professional might decide to compare a "scatter-gram" of industry data to the entity's key PFI assumptions, rather than comparing single point estimates to means or medians. Regardless of the type of analyses performed, the valuation professional should perform qualitative comparative analyses to help assess where the entity would be best situated, relative to the range of economic and industry data available.

- Forecasts that vary from historical performance or industry trends: There are cases when the outlook for a company differs significantly from its historical performance and other industry information that is available. The former should be infrequent but may occur if the company is significantly changing its business focus, geographical location, or other factors. The latter could occur if a company is in a niche industry with relatively sparse industry information available, or the expectations of the company differ from that of its industry. The primary goal is to have a well-supported and clear explanation as to why this is the case.
- Check for Internal Consistency: The review of metrics should consist of review of each metric individually as well as a concurrent review to evaluate if all of the metrics used in the analysis are collectively consistent with each other (for example, PFIs with aggressive growth rates and improving margins would not be collectively consistent with forecasts for disinvestment of capital investments/expenditures, or significant reduction in sales and marketing expenses).

Documentation Requirements

A1.4.7 The valuation professional, at a minimum, must document in writing within the work file:

- i. The identification of the party or parties responsible for preparation of the PFI.
- ii. The process used to develop the PFI from the perspective of a market participant.
- iii. The explanation of key underlying assumptions utilized in the PFI such as revenue forecasts, percentage of market share captured by the entity or how the projected profit margins compare to those of other market participants.
- iv. The steps used in, and results of, testing the PFI for reasonableness including, but not limited to: a) a comparison of the PFI to expected cash flows, b) a comparison of the PFI to historical performance, b) a comparison of prior year's PFI against actual historical results (when prior

- PFI are available), c) an analysis of the forecast relative to economic and industry expectations.
- v. An evaluation of any differences between the PFI and expected cash flows.
 - vi. An analysis of any evidence that contradicts management's assumptions or conclusions used in their PFI.
 - vii. The rationale for any adjustments made to management's PFI.
 - viii. Evidence that a mathematical and logic check was performed.
 - ix. The components of the prospective balance sheet, and if available, cash flow statements.
 - x. The prospective capital structure.

A2. BUSINESS VALUATION GUIDANCE

A2.1 Each valuation engagement is unique due to the myriad of facts and circumstances that comprise each assignment. However, there are core considerations that a valuation professional must consider and document when performing this type of engagement. This section identifies the most common components of an assignment where the valuation professional is retained to provide a conclusion of value of a business or business interest. It delineates requirements that govern the scope of work and extent of documentation. It is not intended to address valuation theory or to be a “how to” regarding valuation steps.

A2.1.1 This section of the Framework covers several significant topics related to valuations performed for the purposes of providing a conclusion of value. They are as follows:

- Discount Rate Derivation
- Growth Rates
- Terminal Value Multiples Methods/Models
- Selection of, and Adjustments to, Valuation Multiples
- Selection of Guideline Public Companies or Comparable Company Transactions
- Discounts and Premiums

A2.2 Discount Rate Derivation

Topic Overview

A2.2.1 Given the spectrum of discount rate models that exist, the valuation professional must carefully assess which model is most appropriate for a particular task and ensure that rationale is well documented in the engagement work file.

Documentation Requirements

A2.2.2 The valuation professional, at a minimum, must document in writing within the work file:

Cost of Equity

- i. The rationale for the selection of a model.
- ii. The source of the risk free rate used (when applicable) in the calculation and explain the rationale for its selection.
- iii. The source or calculation of the equity risk premium (when applicable) and rationale for its use.
- iv. An explanation of the calculation of beta of the guideline companies and the rationale for the method used (or rationale for the use of another source of beta) when using CAPM.
- v. The rationale for selecting the specific beta when using CAPM, including ‘adjusted betas’.

- vi. The amount of size premium, the source of the premium data (if applicable), and the rationale for selecting the concluded premium (even if that premium is zero) when applicable.
- vii. The amount of company-specific risk adjustment, if any, the rationale for application of the adjustment, and the objective and quantitative data sets used to develop the specific concluded adjustment. Qualitative factors may be considered in determining whether a company-specific risk adjustment should be applied; however, quantitative support must also be provided to support the amount of the adjustment (note: this type of support should not include the valuation professional's judgment or the level of company-specific risk premiums observed in other valuations). This is typically the most subjective part of the derivation of the cost of equity capital and, therefore, documentation related to this feature should be the most extensive. Comparisons to IRR calculations or to the results of other discount rate models may aid in supporting a company-specific risk adjustment. In certain instances it may be appropriate for the valuation professional to explain why no company-specific risk premium was used.
- viii. The amount of country-specific risk adjustment (if applicable), the source of the adjustment data (if applicable), and the rationale for selecting the concluded adjustment (even if that adjustment is zero).
- ix. Other significant assumptions should be clearly explained and documented as well as other inputs that may apply depending on the models chosen by the valuation professional.

Cost of Debt

- x. The source(s) of data used and the rationale for use of the source(s) (for example, yields based on interest expense divided by debt balance, or interest rates cited in the guideline company's annual reports).
- xi. The rationale to support the selection of the pretax cost of debt and any additional source documents
- xii. The rationale for the effective tax rate used to adjust the pretax rate to an after tax rate.

Capital Structure

- xiii. The capital structures of the guideline companies and rationale for selection of the time frame over which they are measured.
- xiv. The capital structure selected in the calculation of the WACC and rationale for its selection.

Other

- xv. When other discount rate models are used instead of CAPM or WACC, the valuation professional must provide within the work file details on:
 - a. the model specification,
 - b. inputs chosen and the sources of those inputs,
 - c. sub-methodological selections made, and
 - d. why, if applicable, any adjustments were made to the model results

A2.3 Growth Rates

Topic Overview

A2.3.1 The growth rates (GR) can be one of the most significant inputs used in the application of an income approach. Since even minor changes in the GR can have a significant impact on the total value of the subject entity or intangible asset, it is of critical importance for these to be developed with a supportable basis.

Documentation Requirements

- A2.3.2 The valuation professional, at a minimum, must document in writing within the work file:
- i. The rationale, support, and reasonableness assessment for the selected growth rate(s) used in the analysis.
 - ii. The rationale for all inputs that comprise the terminal or long-term GR.
 - iii. When estimating the valuation of an entity, the rationale to capitalize into perpetuity a particular GR at the point in time where the business had achieved a steady state of operation. For instance, if company management provides a five-year forecast, the valuation professional should not assume the terminal GR is appropriate after the forecasted period without performing additional analysis.
 - iv. Consideration of other models (for example, the H-model, also referred to as the “fading growth” model) when growth at the end of the projection period is not expected to be sustainable.

A2.4 Terminal Value Multiple Methods/Models

Topic Overview

A2.4.1 When using the Income Approach, the valuation professional can select and use several terminal methods or models to estimate terminal value. The following is a list of terminal methods/models used by valuation professionals (but is not limited to):

- Gordon Growth Model (also referred to as the Constant Growth Model or Perpetual Growth Model)
- “H-Model” (also referred to as the Fading Growth Model)
- Two-Stage Model
- Terminal Exit Multiples (for example, Revenue, EBITDA, or EBIT methods)
- Other methods (for example, salvage value or disposal costs)

Documentation Requirements

A2.4.2 The valuation professional, at a minimum, must document in writing within the work file:

- i. The rationale for selecting the appropriate terminal exit multiple(s) or model(s).
- ii. The rationale and support for each key assumption used in the terminal method or model such as, as applicable:
 - a. the discount rate
 - b. terminal or perpetual growth rate
 - c. second-stage or high-growth growth rate for the H-Model and two-stage model
 - d. high growth stage duration/life for the H-Model and two-stage model
 - e. terminal market multiple (exit multiple)
- iii. If more than one terminal method or model is utilized, the rationale for the selected weighting assigned to each terminal method/model and to reconcile the various indications of terminal values.

A2.5 Selection of, and adjustments to, valuation multiples

Topic Overview

A2.5.1 Market multiples are key measures that provide indications of the value placed on certain businesses or securities relative to certain financial (or other) characteristics of the business entity. Market multiples allow, for example, comparison of the value placed on one company to the value placed on a similar security of another company. For example, whether a market multiple for one company is higher or lower than that for another company valuation professionals should document their robust analysis of the factors that best explain the differences in multiples.

A2.5.2 The two broad classifications of multiples include invested capital multiples and equity multiples. Since each category measures very different expressions of fair value, the valuation professional must ensure the multiples selected have a logical relationship to the fair value required by market participants.

Documentation Requirements

A2.5.3 The valuation professional, at a minimum, must document in writing within the work file:

- i. The market multiples of the guideline companies and the source of the data used. The exhibit should include the numerators and denominators used in each multiple. Include a discussion of any assumptions necessary for these calculations.
- ii. The process used to select a multiple based on a consideration of all the comparative analyses performed, and the rationale for judgments along the way. This should include, but not limited to, discussion of: a) the decision regarding equity versus invested capital multiples, b) the decision regarding the time frame of earnings or other metrics, c) analysis of the comparative performance measures and how it affected the selection of the multiples applied to the subject entity, d) the comparative qualitative and quantitative analysis that affected the selection of the multiples applied to the subject entity, e) the selection of the starting point of the multiples within the range, and f) the rationale for adjustments, if any, to the starting point multiples to determine multiples applicable to the subject entity.
- iii. The identification of each significant accounting difference and adjustments made, if any, for better comparability.
- iv. The calculation of the multiples of the entire company (if reporting units are being analyzed in a publicly traded company) and rationale for differences in the multiples used.
- v. The calculation of multiples implied in a recent transaction and rationale for differences in the multiples used.

A2.6 Selection of Guideline Public Companies or Comparable Company Transactions

Topic Overview

A2.6.1 The selection of guideline public companies and comparable company transactions are appropriate for valuation methods under the market approach to estimate the fair value of an entity. In addition, the selection of guideline public companies is used to estimate the cost of capital when utilizing the CAPM. After concluding on the discount rate, the fair value of a business entity is estimated under the income approach.

A2.6.2 The valuation methods classified under the market approach provide the valuation professional with potentially comparable information that is the result of historical transactions by unrelated parties. The fair value measurement is derived from similar enterprises/entities or comparable/comparative transactions that indicate a value of the subject enterprise.

Under the market approach the following two methods are the most relevant for valuations used in public interest reporting:

1. Guideline Public Company Method
2. Guideline Company Transaction Method

Both methods leverage publically available information; however, valuation professionals must use professional judgment when assessing the relevance of this information for the development of supportable and reasonable conclusions of value.

Documentation Requirements

A2.6.3 The valuation professional, at a minimum, must document in writing within the work file:

- i. The understanding of the subject entity, including identification of which characteristics are appropriate for selection of guideline public companies or comparable company transactions.
- ii. The process used in the selection of the guideline public companies or comparable company transactions, and an indication of specific criteria used in that selection. This would include the rationale for the inclusion or exclusion of specific guideline public companies or comparable transactions if that selection was based on subjective factors (instead of specific criteria such as SIC code, transaction date, or existence of a certain level of profitability).
- iii. The identification and description of the selected guideline public companies or comparable company transactions.

A2.7 Discounts and Premiums

Topic Overview

A2.7.1 The value of an interest in an entity may be measured on a controlling or non-controlling interest basis and on a marketable or nonmarketable (meaning less marketable) or illiquid basis. Valuation professionals must consider these characteristics and determine what impact they have on the final conclusion of value.

Documentation Requirements

A2.7.2 The valuation professional, at a minimum, must document in writing within the work file:

- i. The understanding of the subject company's capital structure and concomitant rights and obligations of, and restrictions on, each class of capital.
- ii. The rationale for why a premium or discount is appropriate for the subject interest with proper references to supporting documentation (for example, executed contracts, registration statements, corporate documents, state law, and so forth).

- iii. The rationale for selection of methodology used to determine appropriate magnitude of premium or discount.
- iv. A discussion of how market evidence/data is used and adjusted for application to the subject interest.
- v. How the discount or premium was applied to the valuation method (for example, to the equity component of the TIC multiple, the entire multiple or value indication, and so forth).
- vi. Identification, and description where necessary, of each significant input used to arrive at the applied premium or discount. This should include, at a minimum:
 - a. Resources used to determine input (for example, company specific data, commercial or governmental data bases, and so forth)
 - b. Clear description of how inputs into a model were calculated (for example, inputs used to determine volatility, adjustments made for survivorship bias, and so forth)
 - c. Any other quantitative and qualitative considerations.

A3. VALUATION OF INTANGIBLE ASSETS, CERTAIN LIABILITIES, AND INVENTORY GUIDANCE

A3.1 Valuation professionals will typically value intangible assets such as trademarks / trade names, customer relationships, backlog/contracts, developed technology, and in-process research and development technology for purposes of a business combination, an asset acquisition, or an impairment analysis. In addition, valuation professionals who focus on business valuations will commonly estimate the fair value of certain liabilities and assets such as contract assets and liabilities and inventory for financial reporting purposes.

Each valuation engagement is unique due to the myriad of facts and circumstances that comprise each project. However, there are core considerations that a valuation professional must evaluate when commencing an engagement valuing certain assets and liabilities. This section provides guidance on the most common components of an engagement where the valuation professional is tasked with providing a conclusion of value of one or more intangible assets, contract liabilities, and inventory.

A3.1.1 This section of the Framework covers several significant topics related to valuations performed for the purposes of providing a conclusion of value. They are as follows:

- Identified Assets and Liabilities
- Operating Rights
- Life for Projection Period
- Attrition
- Royalty Rates
- Contributory Asset Charges
- Tax Amortization Benefit
- Reconciliation of Intangible Asset Values
- Discount Rates/IRR/WARA
- Contract Liabilities
- Inventory

A3.2 Identified Assets and Liabilities

Topic Overview

A3.2.1 ASC 805 provides guidance on business combinations and requires that the acquirer recognize separately from goodwill and measure at their acquisition-date fair values the identifiable assets acquired and liabilities assumed.

A3.2.2 The identification of assets and liabilities is the responsibility of management, even if the valuation analysis is performed, in whole or in part, by third-party specialists retained by management.

A3.2.3 All potential assets and liabilities should be evaluated, discussed and agreed upon among valuation professional, client, and auditor as existing or meeting recognition criteria and whether a fair value measurement is required. This process should be documented by the valuation professional in his or her work file.

Documentation Requirements

A3.2.4 A key component of an ASC 805 analysis is the identification of, and agreement regarding, the assets and liabilities to be valued from the perspective of a market participant. The valuation professional, at a minimum, must document in writing within the work file:

- i. Analyses and discussions with management that identify key value drivers and related assets associated with those value drivers, including the rationale for the transaction.
- ii. The description in sufficient detail of all the assets and liabilities being valued such that an experienced professional not associated with the valuation engagement could identify the assets and liabilities by accounting groupings, segment/reporting units, and so forth (note: the identification of assets and liabilities is the responsibility of management and so the valuation professional should ask management for properly documented support).
- iii. The analyses showing how each intangible asset met the separability criteria in ASC 805, if applicable.
- iv. The analyses showing how each intangible asset met the legal/contractual criteria.
- v. The rationale for the inclusion in the valuation analysis of the selected assets and liabilities.
- vi. The rationale of why certain assets and liabilities (that might otherwise be considered reasonable for inclusion) were excluded from the valuation analysis.
- vii. The extent to which the valuation professional used or relied on information contained in valuation reports with earlier measurement dates (particularly as it may relate to calibration).
- viii. The description of the identified principal market and market participant assumptions.

A3.3 Operating Rights

Topic Overview

A3.3.1 Historically, certain entities, particularly in the telecommunications, broadcasting, and cable industries, adopted a "residual method" to allocate fair value to certain intangible assets (that is, their operating rights) that, it was believed, could not be separately and directly valued. Therefore, the residual method was used to allocate fair value to an "indistinguishable" intangible asset, resulting in either zero goodwill or recognition of goodwill in a manner outside of the guidance in ASC 805.

This option was eliminated with the issuance of the guidance provided in ASC 805-20-S99-3. This provision now requires that all intangible assets, other than goodwill, be valued using a direct value method. This includes operating rights.

Intangible assets classified or designated as operating rights typically include (but are not limited to):

- FCC and other government granted licenses (for example, wireless or broadcast spectrums, casino license, certificate of need)
- Commercial Franchises (for example, fast food restaurant)
- Governmentally Granted Monopolies/Franchises (such as in the cable industry)

A3.3.2 In order to value operating rights, the valuation professional must first obtain from management an inventory of properly identified intangible assets (see Application of the MPF section A3.2). Once management has properly identified the operating right or rights to be valued, where applicable, the valuation professional needs to document how he or she determined the most appropriate valuation approach based on the facts and circumstances pertaining to the intangibles. The income approach is generally most appropriate for valuing operating rights, and the two most common valuation methods are: 1) the multi-period excess earnings method (MPEEM); and 2) the 'Greenfield' method.

A3.3.3 The MPEEM involves the valuation professional's use of management's prospective financial information (PFI) attributable to the *specific asset (or group of related assets)* tempered by market participant assumptions. The cash flow stream is further burdened with contributory asset charges (CACs), and then discounted to arrive at an indication of the value of the operating rights as of the valuation date.

A3.3.4 The Greenfield method assumes the intangible asset being valued is the only asset owned by the entity and incorporates other assumptions about 'start-up' costs and invested capital needed to use the asset. Once the projected net cash flows are identified, the valuation professional discounts them back with a discount rate commensurate with what market participants would expect for a similar asset. It treats the asset as a 'business opportunity' to be exploited as a start-up on day-one.

Documentation Requirements

A3.3.5 The valuation professional, at a minimum, must document in writing within the work file:

- i. The process applied and conclusions reached on the sufficiency of management's identification and analysis of operating rights and related cash flows
- ii. The process applied and conclusions reached by the valuation professional to select the appropriate valuation methodology for the operating rights
- iii. When using the MPEEM to estimate the fair value of the operating rights:
 - the identification and valuation of the contributory assets
 - support for the required rates of return on and of contributory assets
- iv. When using the Greenfield method to estimate the fair value of the operating rights, the rationale and the support for the length of ramp up period, and the start-up costs necessary to bring the entity up to a market participant operating level
- v. The applicable requirements in Application of the MPF sections A2.4 (PFI), A3.2 (Identified Assets and Liabilities), and A3.7 (Contributory Asset Charges).

A3.4 LIFE FOR PROJECTION PERIOD

Topic Overview

A3.4.1 An asset's economic life is the total period of time over which an asset is expected to generate economic benefits. In estimating an intangible asset's economic life, valuation professionals should consider the financial projections of the subject entity, its industry, the economy or economies of the particular geographic regions in which the subject entity operates or sells its products or services, and market participant assumptions. This section provides a brief discussion of estimating the economic life of non-contractual customer-related intangible assets.

A3.4.2 When using the Income Approach, the economic life is equal to the period over which cash flows are projected, and the fair value of an asset is equal to the sum of the present value of cash flows expected to be generated by the asset over its economic life. In the application of the Income Approach, the valuation professional must evaluate a stream of discrete cash flows over a defined period of time that is projected to reflect the estimated future revenue, expenses of a subject entity. Beyond the discrete period, a terminal value component captures the future value of cash flows that are expected beyond the discrete projection period (if appropriate). The discrete projected cash flows typically come from management and their projection period can vary (for example, 1 year for a capital budget, to perhaps 40 years in the case of a specific project, or an asset's life). The valuation professional is responsible for selecting the appropriate cash flow period with terminal value

considerations which must be based on the appropriate market participant's expected economic life of the assets, not that of the current owner.

A3.4.3 For customer-related intangible assets that are not subject to contracts with a defined length, the economic life is a function of the growth of existing customer revenue net of attrition. Generally, the projected cash flows for customer-related intangible assets approach but never arrive at zero, which would imply an infinite projection period. Consequently, a valuation professional should document the methods, assumptions, and inputs used to determine when the life of the projected period should be truncated in order to capture the value of the cash flows expected during the estimated economic life of the customer-related intangible asset. Several common methods used in practice are outlined in technical literature (see MPF section 4 – Authoritative and Technical Literature).

A3.4.4 An economic life is estimated only for purposes of valuing the subject interest. Although this information may assist management in its determination of the amortizable life of the subject interest, it is not the valuation professional's responsibility to conclude on a specific life for amortization purposes. Thus, the valuation professional's report should not provide any conclusions of amortization life and must clearly state that determining the economic life of the subject interest is management's responsibility.

Documentation Requirements

- A3.4.5 The valuation professional, at a minimum, must document in writing within the work file:
- i. The rationale for the selected projection period
 - ii. Support for the steady state cash flow to be used for the estimated cash flows beyond the discrete cash flow period (for example, comparisons to industry margins, growth rates, and so forth)
 - iii. Support for ongoing growth or decline after the steady state cash flow is reached.
 - iv. The process and rationale for selecting the economic life of the intangible asset, including consideration of market participant assumptions
 - v. Rationale for selection of the specific 'threshold' or truncation point used in the analysis
 - vi. If applicable, discussions with company management and company's auditors about materiality considerations

A3.5 Attrition

Topic Overview

A3.5.1 The fair value of an intangible asset is typically based on future economic benefits expected from the ownership of the intangible asset for the duration of its expected economic life. This section provides a discussion of estimating an attrition rate for non-contractual intangible assets such as customer-related intangible assets.

When valuing non-contractual customer-related intangible assets, the valuation professional is usually required to perform an attrition analysis of the subject intangible asset. The economic life of customer-related assets is a function of the expected growth of existing customer revenue net of attrition. Attrition is the measurement of the rate of loss of existing customers. The addition of new customer relationships in the future should be excluded from the analysis.

A3.5.2 An attrition analysis is, by necessity, based on available historical data. However, in order to estimate the subject intangible asset's fair value, the valuation professional must identify and reflect the expected future economic life in the analysis. Just as in other areas of valuation, history can be a useful guide to the future; however, valuation professionals should not assume that the future will resemble the past. Accordingly, the valuation professional must analyze historical data through an attrition analysis, and assess the relevance of the results as it relates to future expected revenues for the subject intangible asset.

Valuation professionals should avoid accepting unsupported representations by management as they relate to attrition inputs and are expected to perform an independent analysis. In the absence of company-specific attrition information, valuation professionals may look to surrogate similar businesses, industry data, and so forth.

When estimating a reasonable attrition for customer-related intangible assets, the following factors should be considered:

- Historical customer attrition data as well as industry information on competitor customer attrition (if available)
- Projected attrition based on discussions with management and corroborated by industry and competitor studies (if available)
- Unit-based attrition versus revenue-based attrition

Documentation Requirements

- A3.5.3 The valuation professional, at a minimum, must document in writing within the work file:
- i. The process and rationale for the methods used to determine historical and future attrition patterns applied to the attrition analysis
 - ii. The source and description of the data used to determine historical and future attrition estimates
 - iii. The quantitative and qualitative impact of any relevant macro, micro economic influences, or both, incorporated into the attrition analysis

A3.6 Royalty Rates

Topic Overview

A3.6.1 The Relief from Royalty method (also known as the ‘royalty savings’ method), is based upon the presumption that the ownership of intellectual property assets or rights such as trademarks/trade names or patents is a valuable asset. Accordingly, the foundation behind the valuation of these assets is that an owner or buyer would be relieved from the need to pay a royalty for the right to use an intellectual property asset. Therefore, market-based royalty rates appropriate for a specific intangible asset must be estimated. If market based royalty rates are not available, simulated royalties or rules-of-thumb rates are often used.

A3.6.2 Consistent with the guidance in FASB ASC 820, development of inputs for this method using observed market data, such as observed royalty rates in actual arm’s length negotiated licenses, is preferable to more subjective unobservable inputs, such as those that might be found in ‘rules-of-thumb’ rates.

Important: the valuation professional should also understand the terms of observed royalty rates – whether there are upfront payments, graduated royalty rates, a percentage of revenue versus royalty per unit sold. Moreover, it is important to understand what expenses, if any, a licensee is responsible for versus a licensor.

Documentation Requirements

- A3.6.3 The valuation professional, at a minimum, must document in writing within the work file:
- i. The criteria used to search for third-party licensing agreements and the rationale for using or excluding an initial list of data in the analysis.
 - ii. The lists and data produced during the search
 - iii. The process used in analyzing the third-party licensing agreements and support for the selection of the royalty rate used.

- iv. If applicable, the rationale for using or excluding licensing arrangements of the subject entity when determining a reasonable royalty rate.
- v. The reasonableness of all rules of thumb methods considered and used in estimating or supporting a royalty rate to value the subject asset.
- vi. Identify sufficient excess earnings or cash flow to provide economic support for the selected royalty rate.

A3.7 Contributory Asset Charges

Topic Overview

A3.7.1 Contributory assets are defined as any tangible or intangible assets used in the generation of the cash flows associated with the subject intangible asset that is being valued. Each contributory asset charge (CAC) is a charge against revenues in a cash flow projection to reflect a fair return “on”, return “of”, or both, contributory assets used in the generation of the cash flows from the intangible asset being valued. Contributory asset charges once determined are typically allocated based on revenues.

A3.7.2 Under the Income Approach, the Multi-Period Excess Earnings Method (MPEEM) is often used to estimate the fair value of certain intangible assets such as customer relationships and technologies such as in-process research and development technology. Under this method, the PFI for the business serves as the starting point for the analysis of the subject intangible asset.

A number of areas of diversity still remain in the application of the MPEEM and in the estimation and application of CACs.

Documentation Requirements

A3.7.3 The valuation professional, at a minimum, must document in writing within the work file:

- i. The identification of all the contributory assets required to support the subject intangible asset that is being valued. In addition, an explanation should be provided if an intangible or tangible asset was valued in the business combination analysis but not included as a contributory asset. The following specifics should be provided, along with rationales for their selection when appropriate:
 - o Working Capital:
 - the appropriate level
 - the required rate of return
 - the working capital charge, as a percentage of revenue, for each projected period

- Land:
 - the appropriate market participant level of land and its associated fair value
 - the required rate of return
 - the land charge, as a percentage of revenue, for each projected period
- Fixed Assets (not including land):
 - the appropriate market participant level of fixed assets and the economic life for each fixed asset category
 - the required rate of return
 - the return “on” fixed asset charge, as a percentage of revenue, for each projected period
 - the return “of” fixed asset charge, as a percentage of revenue, for each projected period (if not otherwise reflected in the depreciation/amortization or in the expense structure of the entity)
 - any practical expedient method used (for example, “smoothed” percent of revenues)
- Intangible Assets valued using the Relief-From-Royalty Method
 - the appropriate royalty rate
 - an explanation should be provided for instances:
 - when the royalty rate “charge” is different from the royalty rate used to estimate the fair value of the intangible asset such as a trademark/trade name or
 - when an intangible asset such as a trademark/trade name is not valued but a royalty rate charge is still applied in the valuation analysis.
- Assembled Workforce and Other Intangible Assets
 - The assumptions used to estimate the fair value of the assembled workforce and other intangible assets
 - An exhibit showing the calculation of the value of the assembled workforce or other intangible asset
 - the required rate of return
 - the intangible asset charge, as a percentage of revenue, for each projected period

A3.8 Tax Amortization Benefits (TAB)

Topic Overview

A3.8.1 When estimating the fair value of an entity or an intangible asset, the tax amortization benefit (TAB), if any, should be considered to reflect the incremental cash flows (or increment value) resulting from the tax deduction and related tax savings generated by the tax amortization of intangible assets and goodwill in a taxable transaction. The tax benefit should only be included where appropriate.

A3.8.2 To estimate the fair value of an entity, a TAB is generally considered appropriate when utilizing an income approach for a presumed taxable transaction. However, the TAB is not applicable under a non-taxable transaction or under the cost approach (unless a 'cost savings' method is considered) and the market approach, as the pre-tax costs expended or the price paid reflects the full fair value of the entity.

A3.8.3 When estimating the fair value of an intangible asset US GAAP requires a TAB be included, regardless of whether the asset was acquired in a taxable or non-taxable transaction. Since the purpose of fair value measurement is to determine an exit price for the asset, the fair value of the intangible asset would be expected to include its inherent tax benefits of amortization.

In addition, charges for contributory assets are generally based on the fair value of intangible assets inclusive of those same tax benefits of amortization because the resulting fair value would be the basis for economic rent if such contributory assets were to be truly leased.

A3.8.4 If a pre-tax cost is used to estimate the value of an intangible asset, the addition of a TAB is not commonly considered appropriate, whereas the addition of a TAB is commonly considered appropriate with an after-tax cost or cost savings.

Documentation Requirements

A3.8.5 The valuation professional, at a minimum, must document in writing within the work file:

- i. The valuation professional's understanding of the market participant tax jurisdiction requirements to determine:
 - o the appropriateness of the TAB,
 - o the amortization method, whether a straight-line amortization method or an accelerated amortization method can be utilized,
 - o the tax amortization life of the intangible asset. Under US tax law, 15 years is often used to calculate the TAB of the intangible asset and goodwill; however, an explanation should be provided when an assumption other than 15 years is used, and

- the rationale for the market participant tax rate
- ii. The rationale for selecting the discount rate used to estimate the TAB – whether it is the discount rate used to estimate the fair value of the intangible asset, the WACC, or another rate to estimate the TAB.
- iii. The consideration of the TAB in either a taxable or nontaxable transaction when performing a discounted cash flow or internal rate of return analysis.
- iv. The interaction with the WARA analyses (for example, pre-TAB vs. post-TAB).
- v. The consideration of the TAB in circumstances where foreign transactions are conducted and the TAB may or may not be applicable.

A3.9 Reconciliation of Intangible Asset Values

Topic Overview

A3.9.1 Intangible assets can be valued either on their own or in the context of their use within a business enterprise. When valued as stand-alone assets, valuation professionals consider the purpose of the valuation, the data pertaining to the assets and specific market factors that influence the value of the intangible asset. When valued as part of an ongoing business enterprise, additional considerations are necessary to ensure that the intangible assets are properly valued.

Because the business entity is an aggregation of all cash flows (for example, revenues and expenses), its fair value may be expected to set the upper limit for the value of all the underlying tangible and intangible assets, including goodwill unless it is a bargain purchase. In a business combination, goodwill is generally the residual amount of the consideration transferred less the net of fair values of the identifiable assets acquired and liabilities assumed. A reconciliation of the individual asset values with the business enterprise value should be performed.

Additional testing and diagnostic procedures include an analysis of the WARA, the WACC, and, in the case of a business combination, the IRR.

Considerations for Selection and Reconciliation of Approaches and Methods

A3.9.2 For many valuation engagements, valuation professionals will rely on multiple valuation approaches and methods to estimate a fair value. For example, in a business valuation of a sufficiently-profitable operating company, it is common for one form of the income approach (such as discounted cash flow method) and two methods of the market approach (guideline public company method and guideline transaction method) to be completed. If developed correctly and with good information, the results from each approach or method should provide indications of fair value that are reasonably consistent with each other. If the results are not reasonably consistent, further analysis is generally required to determine if an error has been made in one method or the other, or if there

is good reason why they would be significantly different. It is also noted that, in the valuation of intangible assets, most often only one approach or method used.

When the valuation professional uses multiple approaches as part of the analysis, the valuation professional must reconcile the various approaches into a supportable and reasonable conclusion of value.

Important: Within the context of a business combination engagement, the valuation professional will have developed a WACC for use in discounting the aggregate cash flows of the business, and compared it to the IRR developed from the present value of the prospective financial information and the purchase price of the acquired entity. An IRR that is significantly different from the WACC requires additional analysis of the purchase price, the PFI and the WACC. When settled, the WARA that was developed for the assets that comprise the business enterprise (normal working capital, fixed and intangible assets and goodwill) can be compared to the WACC. If the results of the WARA are significantly different from the results of the WACC, a reassessment of asset values, estimated returns and market participant assumptions is necessary.

Documentation Requirements

A3.9.3 The valuation professional, at a minimum, must document in writing within the work file:

- i. The aggregate projections and cash flows of the entity with a description of who prepared them (for example, management, subcontractor, third-party specialist, valuation professional).
- ii. In a business combination, an IRR analysis, comparison to the WACC, and any changes to PFI resulting from this analysis.
- iii. The WACC, its derivation and sources of information
- iv. The results of the WARA compared to the results of the WACC, including any commentary about significant or relevant observations based on the valuation professional's professional judgment.
- v. Reconciliation of the results of the WARA and results of the WACC reconciliation, if applicable (IMPORTANT: If these cannot be reconciled the work file must include documentation of the steps and analysis undertaken by the valuation professional that illustrate the attempted reconciliation, and include compelling commentary about why the disparity exists).
- vi. Evaluation of a subject's goodwill value as a percentage of the purchase price to comparable market data (if available) provides an indication of whether or not the subject company's asset values are in line with broad marketplace expectations. This should include a narrative about the results and whether the results are contrary to or supportive of the analysis.
- vii. Discussions of any apparent under payments or overpayments for the entity. In the event of an underpayment, valuation professionals should document their discussion with the company, and auditor if relevant, confirming that it is management's responsibility to assess whether a bargain purchase exists.

- viii. Application of relevant documentation requirements for reconciliation procedures enumerated in Application of the MPF section A2.3.4.

A3.10 Discount Rate / IRR / WARA

Topic Overview

A3.10.1 In order to determine the appropriate discount rate or required rate of return to apply to each of the assets, valuation professionals must first determine the overall after-tax discount rates. The discount rate considered appropriate for the entity serves as the initial basis for the intangible and tangible assets' required rates of return. If the analysis is tied to a transaction, an internal rate of return (IRR) can be calculated based on the purchase price and the forecasted cash flows. Also, often a weighted average cost of capital (WACC) is developed for the subject entity. The WACC is both a weighted average return on the invested capital and approximation of the weighted average return on all assets used in the generation of the subject entity's cash flows. Each of the assets has its own risk profile within the context of the overall entity WACC. As a means of testing the relative consistency of the rates of return for the various assets, valuation professionals may perform a calculation of the weighted average return on assets (WARA). Comparisons of the WARA results with the WACC results and IRR calculation can be useful diagnostic procedures.

A3.10.2 It is generally understood that the risk profile of an entity's assets tends to increase the further down the balance sheet they are listed. In estimating the WARA, rates of return are typically assigned for the following asset classes:

- working capital
- land
- net other tangible fixed assets; and
- intangible assets including assembled workforce and implied goodwill

The rates of return are selected based on the risk and return characteristics of the asset being valued. Often, the rate of return estimated for working capital, land and net tangible fixed assets is less than the WACC and the rate of return estimated for intangible assets is greater than the WACC (although there are exceptions to this and the rate of return on the assembled workforce is often equal to the WACC). Rates of return estimated for intangible assets are influenced by, but not necessarily limited by, the cost of equity in the WACC. Such estimates provide the inputs for the return for the overall entity implied by the weighted-average rate of return assigned to the assets (WARA) that make up the business. The purpose of the WARA calculation is to assess the reasonableness of the asset-specific returns for identifiable intangible assets, tangible assets, and the implied or calculated return on goodwill. Because the WARA and WACC are indicators of the market participant expected return of the overall entity, the two metrics can be compared and contrasted to identify any adjustments required to the estimate of discount rates assigned to the various assets. In the case of an asset acquisition (defined by ASC 805-50-05-3 as "a transaction in which the assets acquired and liabilities

assumed do not constitute a business”) or in cases of an over or under payment for the business, a WARA calculation as a diagnostic may not be as useful in assessing the reasonableness of asset-specific returns.

WARA under a taxable transaction versus nontaxable transaction

A3.10.3 When a business combination is structured as a taxable transaction, the PFI and purchase price are likely to reflect tax benefits. However, when estimating the WARA under a nontaxable transaction, the PFI may not include the tax benefits of amortization and depreciation implicit in the fair value of the underlying assets. Therefore, valuation professionals should make an adjustment to the total consideration used in the WARA calculation. Because the fair value of an individual asset would not change based on the tax structure of the transaction, individual intangible asset values include the TAB and fixed asset values include the tax benefit of increased depreciation. Therefore, the entity transaction value must also be increased by the additional tax benefit as if the deal had been structured as a taxable transaction for comparison purposes in a WARA analysis. This adjustment is necessary to ensure consistency in the WARA analysis, since the fair values of depreciable and amortizable assets would incorporate a proportional share of the tax benefit regardless of the structure of the transaction. If this adjustment is not applied, the potential exists to understate the implied goodwill and, therefore, distort the stratification of the discount rates and reconciliation of the WARA to the WACC and IRR.

Documentation Requirements

A3.10.4 The valuation professional, at a minimum, must document in writing within the work file:

- i. A rationale for the applicable market participant tax rate used to estimate rates of return for each asset.
- ii. A rationale for the after-tax rates of return for each asset used in the WARA calculation.
- iii. An explanation of any discrepancies between the WARA, IRR, and WACC.
- iv. All adjustments in the WARA calculation under a nontaxable transaction.

A3.11 Contract Liabilities

Topic Overview

A3.11.1 In a business combination, a legal performance obligation may give rise to the recognition of an asset and a liability by the acquirer. For instance, a revenue arrangement may result in the assumption of a legal obligation to provide goods or services, requiring the recognition of both contract liabilities and a customer related intangible asset. Therefore, the contract liabilities and acquired customer assets are recognized separately. In this section, we will only cover contract liabilities.⁴

A3.11.2 The fair value of contract liabilities is measured at the date of acquisition. There are generally two methods of measuring the fair value of contract liabilities:

- Bottom-up or cost build-up approach - the cost build-up approach is based on a market participant's estimate of the costs (excluding marketing, recruiting, and training) that will be incurred to fulfill the obligation plus a "normal" profit margin for the level of effort or assumption of risk by the acquirer after the measurement date. Furthermore, the normal profit margin should be from the perspective of a market participant and should not include any profit related to selling or other efforts completed prior to the acquisition or measurement date.
- Top-down approach – an alternative approach for measuring the fair value of contract liabilities is by obtaining evidence from market information about the amount of revenues an entity would receive in a transaction to provide the remaining obligation under the contract, less the selling effort (which has already been performed by the acquiree prior to the acquisition date) and the profit margin on that selling effort. Also, the normal profit margin should be from the perspective of a market participant. Although market information, generally provides the most reliable and best evidence of fair value, the information can be difficult to obtain.

A3.11.3 To confirm the reasonableness of the estimated value of contract liabilities, in general, the fair value of an assumed contract liability is often less than the book value amount recognized by the acquirer on its closing balance sheet but rarely more.

⁴ Valuation professionals performing entity or intangible asset valuations also typically estimate the fair value of this liability.

Documentation Requirements

A3.11.4 The valuation professional, at a minimum, must document in writing within the work file:

- i. The rationale for selecting one of the two methods described previously to value contract liabilities
- ii. When utilizing the bottom-up approach, clearly indicate all the costs necessary to fulfill the contract liability and how the “normal” profit margin was estimated
- iii. When utilizing the top-down approach, provide market data and support for each assumption for related selling costs and profits thereon
- iv. The life of the contract liability in case discounting is applied
- v. The rationale for the rate of return used to estimate the fair value of the contract liabilities

A3.12 Inventory

Topic Overview

A3.12.1 Inventory may be subject to fair value measurement in the context of business combinations, asset acquisitions, impairment and other areas of the financial literature. Valuation professionals performing entity or intangible asset valuations also typically estimate the fair value of this tangible asset.

Background

A3.12.2 The guidance for inventory valuation has primarily evolved in tax literature, particularly as related to allocations of purchase price for tax purposes. Little additional guidance has been separately developed with respect to fair value measurement for financial reporting. The common acceptance of current (mostly tax-related) guidance for the selection and application of valuation methods to the fair value measurement of inventory for use with respect to financial accounting has been viewed by many as a “practical expedient”. Many inventory valuation methods in use today apply a “profit split” concept, between buyer and seller in the context of a real (or hypothetical) transaction. Such a “profit split” is viewed from the perspective of margin on revenue, suggesting that some portion of “total profit” may have already been earned by the seller of the inventory, while the remaining portion has yet to be earned by the buyer. These methods, however, may have been more grounded in revenue and profit recognition concepts, than pure fair value measurement concepts. In the future, guidance may evolve in a more theoretically pure direction of “return on investment” rather than “return on revenue”, taking the economic incentives of the buyer into account to measure a true “exit value” as contemplated in ASC 820.

Alternatives for Current Methods

A3.12.3 As outlined in IRS Revenue Procedure 2003-51, the three primary approaches/methods suggested for the valuation of inventory are: 1) the market approach (comparative sales method), 2) the income approach (income method), and 3) the cost approach (replacement cost method). Further detail on the application of these approaches/methods is contained in IRS Revenue Procedure 2003-51. The application of the comparative sales method effectively begins with the eventual selling price, but includes consideration of a “profit split” discussed above. It is often used for valuing inventory of manufacturers. The replacement cost method is often used for valuing the inventory of retailers and wholesalers, as they may be able to readily replace their inventory at cost from their vendors. The method that is described in IRS Revenue Procedure 2003-51 as the income method, most closely appears to consider return on investment and a true “exit value” as contemplated in ASC 820, but is rarely, if ever, applied in current practice.

Issues to Consider

A3.12.4 Many complicating issues arise in the valuation of inventory. For instance, the industry in which the entity operates may have a bearing on the valuation method selected (for example, replacement cost method for retailers and wholesalers, versus comparative sales method for manufacturers). Also, when an element of “step-up” is included in the valuation of inventory, this may overlap with the valuation of certain intangible assets such as contract backlog or customer relationships. Care must be taken to avoid “double counting” the step-up in multiple assets. Finally, some industries, particularly those that do business with contracts, may have different ways of characterizing what might otherwise be labeled as inventory. Such industries may utilize terms such as “costs in excess of billings” or “unbilled receivables” to describe accounts that are, in effect, similar to inventory that might otherwise exist in companies engaged in manufacturing or retail/wholesale distribution.

Engagement and Scope Limitations

A3.12.5 When management requires the valuation professional to accept the assertion that their inventory has a zero step-up in basis (for example, through a management representation letter), or the valuation professional is not engaged to value inventory as part of the engagement’s scope, the valuation professional must clearly document these restrictions in the final valuation report.

The valuation professional must also consider whether management’s assertion of a zero step-up in inventory value or scope limitation is significant enough to impact the valuation professional’s ability to conduct the engagement in accordance with the MPF.

Areas of Diversity

A3.12.6 The valuation professional should be aware that the use of the tax literature related to inventory valuation is common practice as a practical expedient in fair value measurement of inventory in financial accounting, and diversity still remains in the selection of methods in a particular circumstance, the application of methods, and the use of inputs. Appropriate support should be developed for each of these areas, and properly documented in the valuation professional's work file.

Documentation Requirements

A3.12.7 The valuation professional, at a minimum, must document in writing within the work file:

- i. The nature and characteristics of the inventory being valued.
- ii. The process used in, and rationale for, selecting the methods used in the valuation analysis(es).
- iii. If commonly used approaches and methods were not used in the valuation analysis(es), document reasons as to why.
- iv. As applicable, information regarding obsolescence, discontinued product lines, operations to be sold and other factors
- v. When management has asserted a zero step-up in basis for inventory value or limited the scope of the engagement not to include inventory, or both, the final valuation report must disclose:
 - The inventory was not valued in accordance with the MPF
 - Management has asserted a zero step-up in basis for inventory value or limited the scope of the engagement not to include inventory, or both
 - This assertion or scope limitation may impact other conclusions of value within the final report.