ICFR: INSIGHTS, ISSUES AND PRACTICES

INTERNAL CONTROL OVER FINANCIAL REPORTING

A Guide to Designing and Operating an Effective System of Internal Control Over Business Combinations

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Committee on Corporate Reporting

ICFR: INSIGHTS, ISSUES AND PRACTICES

Internal Control over Financial Reporting

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ICFR: Insights, Issues, and Practices highlights noteworthy circumstances that may affect how management establishes good ICFR and performs an attestation around the effectiveness of internal controls specific to business combinations to comply with Section 404(a) of the Sarbanes-Oxley Act of 2002 (SOX). Management should determine whether and how to respond to these ICFR Insights, Issues, and Practices under the existing requirements of the rules of its regulators and relevant laws. Management should determine whether and how to establish policies and processes (inclusive of internal controls) based on specific facts and circumstances. The statements contained herein are non-authoritative; they do not establish rules or reflect any auditor or regulator determination or judgment about the application of ICFR for business combinations.

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Introduction

This document has been prepared by Financial Executives International's (FEI) Committee on Corporate Reporting (CCR). The objective of this publication is to provide useful, relevant information that will help companies focus internal control efforts related to business combinations on areas that present risks of material misstatement. Due to the complexity surrounding business combinations (referred to as acquisitions throughout this document), we have observed that many preparers expend significant effort in designing controls and developing documentation to operate an effective system of internal control at the time of a business combination and post-acquisition. This document contains insights from financial statement preparers compiled to help other preparers in their respective application of internal control over business combinations. At a high level, the document includes insights, best practices, and recommendations related to the considerations around how to design and operate appropriate controls related to the valuation of assets acquired and liabilities assumed. This includes the calculation of goodwill, consolidations, manual journal entries, measurement period adjustments, accounting policy alignment, control environment integration, and disclosures.

This document is not authoritative literature. The insights provided are intended to be thought-provoking; therefore, they do not represent an "all-inclusive" or "one-size-fits-all" approach. It is expected that preparers will be able to leverage the considerations and examples in this document, but they will ultimately need to calibrate the information to the respective risks, judgments, and complexities involved in designing and operating internal controls for business combinations based on the facts and circumstances surrounding the entity and the specific transaction.

PART I: Purpose and background of this document

Purpose

The application of internal controls has been a persistent issue for financial statement preparers for many years. Part of the challenge lies in translating high-level internal control theory from principles into practice.

It is our view that the application of internal control principles to business combinations may be more efficient and effective if companies share insights and examples of key internal control areas. We believe that many companies have similar issues and questions due to the various complexities of business combinations. It is our hope that companies will want to participate in this process and share their own perspectives on techniques and approaches that appropriately balance the costs and benefits of particular business combination controls. Users of this document who wish to provide their perspective and/or who seek future engagement on the topic are encouraged to contact the following: techacct@financialexecutives.org.

From these efforts and similar ones previously performed on the recent new accounting standards for credit losses and leases, we hope to gain and disseminate insights that will be valuable when evaluating and addressing issues that exist with the application of internal controls.

Background

As preparers, we understand and appreciate the importance of an effective system of internal control over financial reporting. We recognize that every public company is subject to a legal requirement to maintain accurate books and records and that internal control is the foundation for achieving that state. This requirement was a central element of the Foreign Corrupt Practices Act (FCPA) of 1977, which also served as the impetus for the development and formalization of the internal control practices used today by public companies. The Sarbanes-Oxley Act of 2002 (SOX) requires evaluation of the effectiveness of an issuer's Internal Control over Financial Reporting (ICFR) as of the end of each fiscal year. The Securities and Exchange Commission (SEC) has identified the Committee of Sponsoring Organizations of the Treadway Commission's (COSO) Internal Control-Integrated Framework (COSO Framework) as an example of a suitable framework for use by management to evaluate the effectiveness of ICFR. It is our experience that preparers would welcome additional relevant, useful information to assist their understanding and application of the COSO Framework and that such help would be welcomed in the form of insights and practices gleaned from the experiences of other preparers. We believe that this type of sharing will help companies achieve a reasoned, focused application of internal control across industries and across a wide spectrum of companies.

The focus of this document is on internal controls around the acquisition accounting applied by an acquirer in a business combination. This document does not address specific internal controls related to asset acquisitions, other than when the internal controls related to asset acquisitions naturally overlap with the internal controls related to business combinations. This document also does not address the internal controls related to identifying the accounting acquirer, determining the acquisition date, accounting for step-acquisitions, and accounting for non-controlling interests. As part of a company's ICFR, we suggest designing and operating controls to assess whether an acquisition meets the definition of a business, as this conclusion is necessary to properly assess risks and identify related controls for the specific transaction.

The guidance for accounting for business combinations can be found in Accounting Standards Codification (ASC) Topic 805, which was codified primarily from Statement of Financial Accounting Standards No. 141r in 2007. Most recently, in January 2017, the guidance was revised when the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2017-01; ASU 2017-01 clarified the definition of a business for accounting purposes to help companies evaluate whether a transaction should be accounted for as an asset acquisition or as a business combination. Business combinations are particularly challenging for preparers because of the estimation, judgment, and complex valuations required to comply with the guidance in ASC 805 *Business Combinations* and ASC 820 *Fair Value Measurement*.

It is important that management understands the accounting requirements in ASC 805 and ASC 820 in order to design and operate effective processes and internal controls. This document is not meant to establish minimum standards for compliance; rather, it is intended to highlight controls over certain significant assumptions, data, and methods necessary to comply with the ASC 805 and ASC 820 and interaction with the related financial statement risks and associated controls. It is our intent to provide a document that assists companies in their analysis of the factors significant to them.

This document does not provide an end-to-end internal control solution for all business combinations. Every company and every acquisition has unique attributes, and what is applicable to one company and one acquisition may not be applicable to another. We, therefore, expect that the relevance and utility of the insights and practices in this document will vary depending on the size and complexity of the organization, the significance of the acquisition, the existing control environment, and the nature of the company's business.

It is important that a holistic approach be followed in making an informed risk assessment for the annual ICFR evaluation. This includes considering the complexity of the acquisition. A thorough assessment to identify the risks of material misstatement is essential to establishing the appropriate internal controls for each acquisition.

It is our hope and belief that the information provided in this document will help companies of all sizes successfully design and operate controls over business combination activities. In addition, we hope that the information in this document will facilitate ongoing dialogue between preparers and their auditors around the issues encountered in the design and operation of internal controls and promote efficiencies in this area by outlining some practical considerations that may generate a more reliable, relevant, and consistent approach. Management is ultimately responsible for the internal controls over financial reporting designed and operating over the business combination transaction which will be subject to audit procedures. In order to have an effective and efficient audit process, management should have frequent dialogues with its independent auditors throughout the initiation, preliminary accounting, and finalization of the accounting for the business combination.

PART II: Risk and control activities over business combinations

One of the first steps when contemplating the appropriate controls for a business combination is to identify all risks that present a reasonable possibility of a material misstatement related to the acquisition. The nature and level of risk of material misstatement may vary from acquisition to acquisition. The risks discussed throughout this document are example risks that need to be tailored to a company's specific acquisition. The risks and associated controls presented herein are not meant to be all-inclusive.

Like the risks, controls, including those over business combinations, are unique to each organization and must be tailored to reflect the relevant risks. In some cases, this may mean tailoring controls for an individual acquisition. The controls provided throughout this document are example controls that will require certain tailoring based on the facts and circumstances of each acquisition and the associated risks. Throughout the document, we have provided some examples of how controls could be tailored and indicated where further specificity may be required. Such tailoring would include specific levels of precision, expectations of individual amounts compared to actual amounts, and follow-up on outliers. Appendix A of the document outlines account-level considerations and may be helpful when companies are tailoring controls to specific facts and circumstances. Many of the example controls may need to be separated to clearly indicate that certain controls will have separate reviewers, procedures, and data sources. We encourage readers to tailor their own controls based on their specific facts and circumstances.

In designing and operating effective internal controls around business combinations that respond to the relevant risks of material misstatement, common considerations for most companies include the following:

- How can companies design and operate internal controls related to the valuation of assets acquired and liabilities assumed in a business combination?
- How can companies design and operate internal controls for other acquisition accounting concepts including manual journal entries, consolidations, disclosures and measurement period adjustments?
- How can companies design and operate internal controls around accounting policy alignment in a business combination?

The extent to which a company needs to answer these and other questions to demonstrate effective internal controls will depend on its own risk assessment and materiality considerations. Each of these questions is discussed further below, and examples of risks and control activities are provided.

REVIEW CONTROLS—MAINTAINING REASONABLE SUPPORT

As part of management's responsibility to design and operate internal controls, management should retain sufficient appropriate documentation to evidence the operational effectiveness of each internal control. This is important with all controls and especially important for management review controls. Companies often identify management review controls within a business combination process, primarily due to the complexity, subjectivity, and estimation uncertainty associated with accounting for these transactions.

Companies should consider the following high-level questions when designing and operating management review controls within the business combination or other processes:

- What is the objective of the control?
- What are the risks that the control is addressing?
- Who is responsible for performing the control? Does that person have the necessary competence and authority to perform the control procedures?
- What procedures are performed by the control owner to validate the completeness and accuracy of data used within the control?
- What information is subject to review (e.g., significant assumptions, data, methodology)?
- What quantitative or qualitative criteria (or thresholds) are used to identify items that require the control owner's follow-up and investigation? Are the thresholds appropriately designed to detect a material misstatement?
- What follow-up procedures are performed, including questions raised and the evidence obtained, by the control owner to investigate and resolve items that meet the quantitative or qualitative review thresholds?
- What evidence is required to be maintained by the control owner to reasonably support the operational effectiveness of the control activities?

Management might consider the following when retaining evidence of the operational effectiveness of control activities:

- maintain a list of each follow-up item investigated by the control owner as well as the corresponding resolution;
- to the extent that management's investigation results in adjustment to data, assumptions or methodology within a calculation, retain multiple iterations of that calculation to demonstrate that the identified change was properly reflected in the final version;
- maintain email support evidencing the reviewer's follow-up questions to the preparer and the preparer's response to the reviewer addressing each follow-up question;
- if management's review occurs in a formal meeting, summarize key questions or action items within meeting minutes and further evidence resolution as questions or action items are subsequently addressed.

How can companies design and operate internal controls related to the identification and valuation of assets acquired and liabilities assumed in a business combination?

Under ASC 805, the acquirer is required to recognize and measure the assets acquired and liabilities assumed at their acquisition-date fair values from the perspective of a market participant.[1] The valuation or process used to measure the acquired assets and assumed liabilities is one of the most critical and complex steps in the purchase price allocation (PPA) process. Examples of risks and control activities for the accurate valuation of assets acquired and liabilities assumed are as described in the table below. As noted above, each risk and control activity should be tailored to the specific asset or liability subject to measurement and addressed for each acquired asset or liability significant to the acquisition. Furthermore, the control activities are not written to prescribe the appropriate design of a control (e.g., frequency and precision), completeness and accuracy of information used in the control, or how an effective management review is performed, and they have been drafted in varying levels of detail.

Note: We acknowledge that the control owners for the example controls within this document may not be within the accounting department. In the design and operation of the control, companies may consider control owners in other departments (e.g., financial planning and analysis, tax, mergers and acquisitions, etc.) and determine which individuals have the appropriate competence and authority to be control owners. For this reason, we have provided a general description of a control owner (e.g., relevant competent leader).

Bracketed language at the end of each risk description throughout the document represents the financial statement assertion(s) associated with the risk identified.

Risk Description	Control Activity
All acquired assets and assumed liabilities from the business combination are not properly identified. [completeness and existence]	The relevant competent leader reviews the underlying data from the target (e.g., historical accounting records and audited financial statements) and relevant accounting literature (e.g., implementation guidance in ASC 805) to understand what intangible assets the FASB believes meet the criteria for recognition apart from goodwill. The relevant competent leader also performs due diligence and reviews target board meetings, legal and tax matters, and similar transactions in the marketplace to understand acquired assets and assumed liabilities from the target.
The valuation approach (e.g., income, market, cost) and method (e.g., multi-period excess earnings method (MPEEM), relief from royalty, distributor method, etc.) selected are not appropriate for the asset or liability subject to measurement. [valuation]	The relevant competent leader discusses and reviews the valuation approach and method proposed (for each acquired asset and assumed liability) by the internal business development team or external specialists for appropriateness.
	The relevant competent leader discusses and reviews the specialist's valuation (throughout the valuation process and including the final report) including prospective financial information (PFI), data, assumptions, and methods created internally by the business development team and externally by the specialists. The relevant competent leader follows up with the deal team and specialists regarding the overall model, methodologies, and other data and assumptions used in the valuation report through meetings, calls and/or email correspondence. The respective control owner should be involved throughout the engagement with the external specialists including planning, interim drafts, etc.
The underlying data from the target used to create the PFI is not complete and accurate, prepared at an appropriate level of disaggregation, or relevant for the purpose of the valuation. [accuracy and completeness]	The relevant competent leader reviews the underlying data from the target (e.g., historical accounting records and audited financial statements), which is used to develop the PFI and verify the existence of assets acquired and liabilities assumed, to determine whether it is reliable, relevant, appropriately disaggregated, and consistent for the purpose of the valuation, in addition to being complete and accurate.

1 ASC 805-20-30-1; note, certain items are not measured at acquisition-date fair values (e.g. taxes payable), see ASC 805-20-25-16

Risk Description	Control Activity
The significant components of the PFI are not properly identified. Common examples include revenue, operating expenses, earnings before interest, taxes, depreciation and amortization (EBITDA), capital expenditures and depreciation, and net working capital. [valuation, accuracy, and completeness]	The relevant competent leader reviews an analysis that identifies the significant components of the PFI based on the asset subject to measurement. The relevant competent leader also reviews the calculation of the PFI, including the underlying data, assumptions, and methodology. For tangible assets, the relevant competent leader reviews the significant components (e.g., reproduction cost, market rates, etc.) used in the valuation. Please see Appendix A for additional tangible asset examples.
The significant data, assumptions, and methods used in the valuation analysis, including those included in the PFI, are not reasonable or not supportable, based on the facts and circumstances (e.g., the data, assumptions, and methods are not consistent with industry or historical data). Common examples include revenue and cost growth rates, customer attrition rates, royalty rates, contributory asset charges, tax rates, tax amortization benefits, and discount rates. [valuation, accuracy, and completeness]	The relevant competent leader reviews sensitivity analyses performed on the significant data and assumptions to evaluate the degree of change in the valuation resulting from reasonable variations in the assumption being analyzed.
	The relevant competent leader reviews and documents the data, assumptions, and methods considering the facts, circumstances, and sources of information. The relevant competent leader considers alternative and additional data, assumptions, and methods not proposed before finalizing and approving the data, assumptions, and methods to be used in the valuation. The relevant competent leader compares the data, assumptions, and methods used in the valuation to the data, assumptions, and methods used in other PFI prepared by the company to determine whether the data, assumptions, and methods used are reliable, relevant, and consistent. The relevant competent leader considers contrary evidence when the data and assumptions used differ from historical or industry data. *Significant assumptions may require additional controls over source data than the ones noted herein.*

Valuations can be an area of great complexity due to the number of qualitative and quantitative assumptions, data, and methods that requires management judgment. The financial statement risk associated with a valuation generally increases as the transaction's significance to the acquirer increases.

It is also important for the relevant competent leader to review the underlying data from the target (e.g., historical accounting records and audited financial statements) and relevant accounting literature (e.g., implementation guidance in ASC 805) to understand what intangible assets meet the criteria for recognition apart from goodwill. Another good comparison to consider is the total amount of goodwill that will be recognized relative to the total consideration transferred. Typically, acquisitions of mature businesses will result in lower percentages of goodwill while acquisitions of growth businesses will result in higher percentages of goodwill. Variances from industry averages or expectations may create the need for the acquirer to justify such a variance. For example, if an acquisition of a mature target in the acquirer's industry typically results in approximately 35% of the purchase price being recognized as goodwill but the acquirer's valuation is 50%, the purchase price appears under-allocated on its face. The appearance of such under-allocation may cause additional scrutiny to be placed on the valuation based on the risk that the purchase price was under-allocated to avoid future amortization expense. However, if the target will undergo a change in strategy or the acquisition was made primarily to achieve synergies, such a variance may make sense in the context of the acquisition.

Typically, the acquirer will use two valuation models as the acquisition progresses from negotiation through the completion of acquisition accounting after closing: the **Internal Deal Model** and the **Third-Party Valuation**.

- **Internal Deal Model (IDM):** The IDM is a valuation of the target created by the acquirer (typically the internal business development team) for the purpose of evaluating whether the acquisition should be pursued based on profitability and synergies with the existing business. If the acquisition is material, the IDM is presented to the board in order to obtain approval of the transaction and the purchase price. The IDM typically relies on publicly available information (e.g., historical SEC filings), information provided by the target (e.g., forecasts), and data, assumptions, and methods used by the acquirer's management.
- **Third-Party Valuation (the TPV):** The TPV is a valuation of the target created by a third-party valuation firm for the purpose of estimating the fair value of certain assets acquired and liabilities assumed from a market participation view. If an acquisition is not material, a TPV may not be necessary, and an acquirer may be able to use the IDM in place of a TPV depending on the relevance and sufficiency of the IDM. The TPV is different from the IDM as it is prepared from the perspective of a market participant, and many include additional financial and operational information available after the transaction has closed. The third-party valuation firm typically leverages the IDM as a starting point when creating the TPV. It is important to note that the acquirer's management is ultimately responsible for the data used in the TPV.

In practice, the IDM is most likely relevant and sufficient for the board of directors to approve the acquisition, but it may not always be reliable, relevant, and consistent for purposes of valuing individual assets acquired and liabilities assumed, or detailed or robust enough to satisfy Generally Accepted Accounting Principles (GAAP) in the United States reporting or internal control requirements depending on the materiality, complexity, and level of financial statement risk of the acquisition. As a result, an acquirer often uses the IDM as a starting point for TPV once the acquisition closes and more information is known about the target. Regardless of the valuation's final form or how it was created (i.e., IDM, TPV, or a combination of both), the related control activities must operate at a more precise level because the acquirer uses the valuation to record the acquisition for financial reporting purposes. As such, it is imperative that management has the appropriate internal controls in place in order to mitigate the risk associated with (1) measuring the consideration transferred (i.e., the purchase price), (2) valuing the assets acquired and the liabilities assumed and calculating goodwill, and (3) validating the data, assumptions, and methods used in the IDM and TPV.

It is important to note that buyer-specific synergies (i.e., synergies unique to the buyer that other market participants could not achieve) cannot be included in the valuation. This distinction between market participant and buyer-specific synergies is likely to result in a disconnect between the IDM (which likely includes buyer-specific synergies given that its purpose is primarily for internal use) and the TPV (which is prepared for accounting purposes) which will need to be reconciled by the acquirer.

Although a third-party specialist may be engaged to assist with the valuation of the assets acquired and the liabilities assumed in a business combination, management of the acquirer must take responsibility for the valuation process and its result. This will require a detailed review and understanding of the work performed by the third-party specialist. It is important that management adequately supports the review of the specialist's work and takes responsibility for the rationale and professional judgment over the data, assumptions, and methods used by the specialist.

CONSIDERATION TRANSFERRED

ASC 805, Business Combinations requires the consideration transferred to be measured at its acquisition-date fair value.[2] The consideration transferred is composed of:

- assets transferred (e.g., cash, tangible or intangible assets, businesses);
- liabilities incurred (e.g., promised or contingent future payments);
- equity interests issued (e.g., common or preferred stock, options, warrants).

2 ASC 805-30-30-7

While determining what consideration was transferred is typically clear in the case of cash paid or stock issued, the acquirer should carefully review the purchase agreement and any side letters for less obvious items that qualify as consideration from an accounting perspective (e.g., contingent earn-out clauses, exchanged share-based awards). The forms of consideration often have complex terms that can make measuring their acquisition-date fair value difficult. If necessary, the acquirer should consider hiring a third-party valuation firm to value the more complex types of consideration in such a manner that the data, assumptions, and methods can be validated to satisfy management's internal control requirements and to fulfill the need to issue financial statements that accurately reflect the consideration transferred in the transaction.

ASSETS ACQUIRED AND LIABILITIES ASSUMED

An acquirer should already have a good idea of the material assets acquired and the liabilities assumed based on the financial data that was gathered to evaluate the potential acquisition; however, this does not establish the completeness, existence, or accuracy of the list of assets and liabilities. Once the acquirer has full access to the target's financial data after the acquisition closes, the acquirer should gain a more granular understanding of the assets acquired and the liabilities assumed. However, certain assets and liabilities, particularly intangible assets, may not have existing book values that were recorded on the target's financial statements. The acquirer will need to identify these previously unrecognized assets and liabilities. The acquirer's third-party valuation firm (if applicable) can provide input on what types of asset an acquirer should expect to identify given the target's industry and maturity.

The acquirer's detailed review and examination of agreements and other contract terms can be helpful in identifying assets and liabilities that are not readily apparent. For example, off-market contract terms (i.e., favorable or unfavorable) may be identified only during detailed reviews of the target's contract portfolio (e.g., leases, rights, or supply agreements), which would not have been possible using pre-acquisition data. These off-market terms could lead to the recognition of additional assets (favorable terms) or liabilities (unfavorable terms) that were not originally contemplated. Similarly, in-place production agreements (i.e., contracted future revenue) may not become apparent until the assets underlying those agreements are examined in a detailed manner that was not possible prior to closing.

VALUATION FUNDAMENTALS

The means by which the acquirer's accounting team can validate the IDM and the TPV for internal control testing will be driven by the valuation approaches used. It is important to remember that all data, assumptions, and methods used in the valuation are the responsibility of the acquirer's management, even those used in the TPV. Accordingly, management is responsible for validating these data, assumptions, and methods for internal control purposes. In practice, the following three valuation approaches are typically used: (1) income approach, (2) market approach, and (3) cost approach.

- **Income Approach:** The income approach estimates fair value based on the income streams (e.g., cash flows or earnings) that an asset or business is expected to generate. The underlying theory is that the value of an income-producing asset or business is directly related to the future income attributable to such asset or business. The two models under the income approach are the discounted cash flow (DCF) model and the direct capitalization model.
  - **Discounted Cash Flow (DCF) Model:** A DCF model involves estimating the future cash flows of an asset or business for a certain period and then discounting those cash flows back to an acquisition-date present value.
    - **RFR and MPEEM:** Examples of some common DCF methods used to value intangible assets are the relief from royalty method (RFR), the incremental cash flow method, and multi-period excess earnings method (MPEEM).
  - **Direct Capitalization Model:** The direct capitalization model capitalizes net operating income based on the projected revenues and operating expenses for one period and then divides the amount by an overall capitalization rate or multiplies it by a multiple.

Under the income approach, there may be different levels of forecasted cash flows (i.e., some methods may have more underlying cash flow assumptions than others), so it is important to understand what model is being used. Most intangible asset valuations (e.g., trade names, in-place agreements, advertising relationships, etc.) are performed via the income approach.

- **Market Approach:** The market approach is used to estimate fair value based on market prices in comparable transactions. The underlying theory is to analyze similar assets and/or businesses, and then make adjustments tailored to the target to arrive at an estimated fair value; adjustments can be based on market location, size, and other factors. The market approach is typically used for real estate–related items and investments (e.g., buildings, leases, equity method investments, etc.) due to the difficulty of identifying comparable assets for other asset classes.
- **Cost Approach:** The cost approach estimates the cost to replace an asset or reproduce the asset in its current condition. The underlying theory is that a market participant would pay no more to purchase the asset than the cost to replace or reproduce the asset. The cost approach is often used for certain intangible and tangible assets (e.g., subscribers, equipment, etc.).

INTERNAL CONTROL REQUIREMENTS

As mentioned previously, and regardless of whether an IDM or TPV is used, designing and operating effective controls over business combinations requires the validation of qualitative and quantitative data, assumptions, and methods used in the valuation of the assets acquired and the liabilities assumed as well as the valuation model(s) selected.

- For valuations using an income approach, management must review the underlying cash flow assumptions, revenue and expense streams, growth rates, discount rates, allocations, tax rates, and market participant synergies that would affect that valuation model.
- For valuations using a market approach, management must review the comparable assets, their attributes, and the adjustments made.
- For valuations using a cost approach, management must review the cost data, assumptions, and methods to replace or reproduce the assets, and the condition of the assets.

The following discussion focuses on validating valuations using the income approach because it is the most commonly used approach for valuing assets in practice.

Document the IDM

Usually, the IDM is not sufficient to fulfill management's internal control responsibilities and a TPV becomes necessary. The acquirer should assess whether the IDM is ready to be used as a starting point for the TPV in order to save time and keep the valuation process progressing.

First, the acquirer should assess that the business development team or the accounting team has documented all the significant data, assumptions, and methods used in the IDM. This documentation will expedite the knowledge transfer to the third-party valuation firm when it begins building the TPV by leveraging the IDM, in addition to fulfilling management's requirements for internal controls.

Second, if there is a significant time gap between the execution of the purchase agreement and the closing date (e.g., due to regulatory approval periods or other delays), the acquirer should determine whether it should update the forecasts in the IDM to use the most accurate information available for internal control purposes. If updating the IDM is not practicable (e.g., the data in the IDM was created specifically for the acquisition and is not otherwise regularly generated), the acquirer should be prepared to roll forward the data, assumptions, and methods in the IDM to the closing date to see whether they are still valid; a roll forward of the data, assumptions, and methods used should also be prepared if a TPV was used initially instead of an IDM. For example, if the IDM used forecast cash flows for the upcoming fiscal year but the acquisition then closed six months into that now current fiscal year, the actual cash flows for that six-month period should be used in the TPV (or at least evidence should be provided indicating that the difference between forecast and actual results was insignificant) before the valuation firm uses the IDM in the TPV. If there are significant variances between actual results and the forecast cash flows in the IDM or other contradicting information from the target, the acquirer should be prepared to explain and support such variances.

Evaluate the target's data for accuracy, completeness, and reliability

The acquirer must assess that underlying data provided by the target or used in the forecast is reliable, relevant, and consistent before using it in the valuation. Accuracy and completeness are generally considered factors for evaluating the reliability of the information, where reliability could include additional factors such as the source and nature of the information.

- **Accuracy:** Compare the forecasts received to the forecast the target provided to its board (or other stakeholders) to see if there are any discrepancies. Agree actual and forecast amounts in the valuation to underlying support when applicable (e.g., contracts, audited financial statements).
- **Completeness:** Request and review the detail behind the forecast (e.g., revenue by customer, line of business, region, etc.) to understand whether any data is missing or improperly included.
- **Reliability:** Examine how significantly the target's forecast typically varies from actual results. Compare the forecast to the available industry and peer company information.

If the target's information appears inaccurate, incomplete, or unreliable, the acquirer may have to refine its valuation approach to incorporate a new source of underlying data. In addition, if the acquirer is relying on forecasts provided by the target, it will need to have controls around the accuracy of those forecasts. In some cases, it may be easier for the acquirer to incorporate new controls than to identify and evaluate the target's controls.

Determine the valuation's significant assumptions

The acquirer must determine the valuation's significant assumptions, including those in the PFI. Common examples include revenue and cost growth rates, customer attrition rates, royalty rates, discount rates, contributory asset charges, tax rates, tax amortization benefits, etc. The acquirer can determine which assumptions are significant by performing a sensitivity analysis on the assumptions used in the valuation (i.e., a small change in a significant assumption will cause greater variability in the fair value of the assets acquired and the liabilities assumed). It is important to also consider materiality and financial statement risk when determining a valuation's significant assumptions since an immaterial or low-risk asset acquired or liability assumed is less likely to have a significant assumption included in its valuation. Not to be overlooked, it is important to understand that although an asset or liability may be immaterial, a significant assumption may exist. In addition, immaterial or low-risk assets acquired or liabilities assumed may still need to be evaluated individually if together they materially affect a financial statement line item (e.g., goodwill). For significant assumptions identified, the acquirer must have control activities in place to mitigate the risk of misstatement associated with the identified risks in the process. The process should determine that the assumptions used in the valuation are properly reviewed, reasonable, supportable, and documented.

Determine documentation protocols

Early in the valuation process, the acquirer should institute documentation protocols to define what level of documentation of both processes and controls is expected from each of the control owners. As part of the documentation, a control testing schedule will also assist in ensuring that all deadlines are met to fulfill management's internal control responsibilities.

When discussing documentation, an acquirer should seek to establish an understanding of materiality, financial statement risk, complexity, and sensitivity to determine whether there is a sufficient level of precision of the controls related to the valuation. The amount of analysis and documentation necessary to support an assumption or input may be lower when the assumption or input is not complex, is uncertain or does not materially impact the valuation. With respect to materiality, the acquirer should carefully define and document a threshold that would sufficiently prevent or detect a material misstatement relative to individual assets acquired and liabilities assumed.

Similarly, the acquirer should focus its documentation efforts by making it clear what data and assumptions are significant drivers of the valuation. For example, if growth rates assumed for cash flows in later years of a valuation period have an insignificant impact on the resulting fair value (i.e., the fair value is less sensitive to the outer year growth rates), the acquirer may not need to balance its effort relative to the impact on the calculations. It is important to note that the rationale for such determinations should be documented.

Validate the underlying cash flows

After establishing materiality thresholds, financial statement risk, and expectations regarding sensitivity, an acquirer may set up benchmark comparisons to evaluate the underlying cash flows used in the valuation of assets acquired and liabilities assumed. Examples of benchmark comparisons include (i) historical growth rates, (ii) existing contractual pricing (if applicable), (iii) market or peer data, and (iv) the acquirer's own long-range plans for each revenue and expense stream used. These benchmarks are not all-inclusive—others may be more reliable, relevant, and consistent depending on the target's profile.

- **Historical growth rates and margins** compared to the forecast growth rates and margins in the valuation allow the acquirer to see whether the future assumptions look reasonable based on past performance. If the growth rates in the valuation are significantly different from the historical rates, the acquirer will need to objectively support the basis for the difference (e.g., change in strategy, ability to realize market participant synergies, etc.).
- **Existing contractual pricing information** may include locked-in revenue streams (e.g., subscription revenues) or locked-in expense streams (e.g., leases or employment agreements) which allow the acquirer to better corroborate the underlying cash flow estimates by establishing minimums.
- **Market and peer data** allow the acquirer to analyze companies with similar characteristics as the target (e.g., industry classification, total revenue, geographic location, exchange listing, etc.) so that management can understand whether the total revenues or EBITDA cash flow projections are reasonable when compared to market and peer information. Research tools such as S&P Capital IQ and SNL Kagan make it possible to obtain market data for a revenue or expense stream (e.g., subscription revenue for US basic cable). The acquirer should leverage any research tools that its business development and commercial teams already have access to since these are likely the most reliable, relevant, and consistent tools for the acquirer's industry. When a revenue stream or expense stream does not have a direct market comparison available, general market indicators such as US nominal gross domestic product (GDP) growth or nominal GDP growth from another country (if related to an international entity) may be alternative market comparison tools.
- If the target is in a comparable industry to that of the acquirer, the acquirer's own **long-range plans** can be used to see if comparable reporting units or segments have supporting or contradicting evidence for the target's underlying cash flow assumptions.

Validate other quantitative and qualitative assumptions

Beyond the underlying cash flows, management should review the discount rate(s), tax rate(s), synergies, goodwill percentage, allocation methodologies, royalty rate(s), and amortization lives, among other assumptions as necessary.

- **Discount rates:** If the target has multiple business segments and each segment is valued separately, the acquirer should assess that the valuation's weighted average return on assets (WARA), weighted average cost of capital (WACC), and internal rate of return (IRR) are all reasonably close. If one of these rates is not aligned, it could signal that one or more segment's individual discount rate is not appropriate. Discount rates utilized to value individual assets and liabilities also need to be supported and documented by the acquirer.
- **Tax rates:** If a target has international operations, the acquirer should determine that the tax rates applied to the international cash flows are representative of the actual tax rates in the country that generates the cash flows.

- **Synergies:** GAAP requires valuation of the target to be performed from a market participant perspective.[3] As such, synergies (and their associated future cash flows) can be included in the valuation of the target only if the synergy would accrue to a market participant. Buyer-specific synergies (i.e., synergies unique to the buyer that other market participants could not achieve) cannot be included in the valuation. As mentioned earlier, this distinction between market participant and buyer-specific synergies is likely to result in a disconnect between the IDM (which likely includes buyer-specific synergies given that its purpose is primarily for internal use) and the TPV (which is prepared for accounting purposes) which will need to be reconciled by the acquirer.
- **Goodwill:** The ASC Master Glossary defines goodwill as an asset representing future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized; as such, goodwill cannot be measured directly (i.e., it is a result of the consideration transferred, less the assets acquired and the liabilities assumed). The acquirer should have processes and controls in place over the initial recognition, measurement, and assignment of goodwill to its reporting units, which, due to the nature of the accounting, may necessitate an increased focus on identifiable assets and liabilities that may otherwise be considered less significant.

3 ASC 805-20-30-1 and ASC 820-10-05-1B and 05-1C.

How can companies design and operate internal controls for other acquisition accounting concepts including manual journal entries, consolidations, disclosures, and measurement period adjustments?

As discussed above, the internal controls around the valuation of the consideration transferred, individual assets acquired and liabilities assumed, and the calculation of goodwill in a business combination are critical. The discussion in the previous section relates to the valuation methods and the underlying data. This section focuses on controls that are important to the acquisition accounting including the controls associated with manual journal entries, the consolidation process, and measurement period adjustments.

RECORDING AND DISCLOSING THE ACQUISITION

Once the valuation is complete, management records the transaction. Controls should be designed and operated to review the work performed by third-party specialists and to support the data, assumptions, and methods established by the company and provided to the specialist.

Controls need to be designed and operated to validate the accuracy and completeness of the financial statement disclosures required under ASC 805 and ASC 820. It may be helpful for unique controls to be designed and operated to specifically address the information included in the footnote disclosures, including the use of the measurement period. Incomplete or inaccurate disclosures about the measurement period increase the risk that subsequent changes to the amounts could be accounted for as errors rather than measurement period adjustments.

Example controls around the acquisition journal entries, including manual journal entries, and financial statement disclosure are listed below. The examples assume that the target's trial balance plus any adjustments recorded in the acquisition accounting equal the opening balance sheet at the acquisition date.

Risk Description	Control Activity
Journal entries related to an acquisition are not properly calculated or recorded in the general ledger based on underlying support. [valuation, existence, rights and obligations, completeness]	A competent individual recalculates the consideration transferred, the fair value adjustments, the goodwill, and other acquisition accounting adjustments based on the fair value of the consideration transferred as compared to the fair value of the assets acquired and the liabilities assumed used to prepare the acquisition accounting journal entries. The relevant competent leader reviews the calculations and compares them with the purchase agreements, acquisition accounting memo, valuation report, and other support as applicable and approves the journal entries.
	A competent individual prepares a reconciliation to assess that the opening balance sheet is recorded correctly in the general ledger by performing a tie-out between the preliminary opening balance sheet schedule, including acquisition accounting entries, and the target's adjusted opening balance sheet. The reconciliation is reviewed by the relevant competent leader.

Risk Description	Control Activity
The tax impacts of business acquisitions are not appropriately considered and recorded. [valuation, existence, completeness]	The appropriate tax department leader reviews the pre-acquisition deferred tax calculations for the acquired entities and determines whether any deferred taxes should be carried over into the opening balance sheet. Conclusions are documented in a tax considerations memo which is attached to the acquisition accounting memo and signed by a competent member of the tax organization, the appropriate tax department leader, and the appropriate accounting department leader.
	A competent member of the tax organization and the appropriate tax department leader review the acquisition accounting memo and balance sheet and discuss the tax implications of the transaction with the appropriate accounting department leader. A competent member of the tax organization and the appropriate tax department leader receive the summary of fair value adjustments from the corporate controller organization, and they assess each for potential deferred tax consequences. To the extent that deferred taxes are required for a particular adjustment, a competent member of the tax organization applies the appropriate blended jurisdictional tax rate to the gross basis differences derived from the fair value adjustment to arrive at the tax-effected balance of deferred taxes; this calculation is reviewed by the appropriate tax department leader. Conclusions are documented in a tax considerations memo which is attached to the acquisition accounting memo and signed by a competent member of the tax organization, the appropriate tax department leader, and the appropriate accounting department leader.
	The appropriate tax department leader reviews and approves the analysis of income tax–related balances on the opening balance sheet (including deferred taxes and uncertain tax positions).
Assets acquired and liabilities assumed are not properly identified and measured. [completeness, valuation, existence]	Assets acquired and liabilities assumed that may not be recorded on the target's closing balance sheet are identified through discussions and reviews performed by management (which may include representatives from the core deal team, finance, tax, HR) in conjunction with a third-party valuation expert when applicable. The results of this review, including the final fair value calculations and goodwill (i.e., opening balance sheet), are documented within an acquisition accounting memo which is prepared by a competent individual and reviewed by the relevant competent leader.
	Financial instruments assumed that are already presented on the target's balance sheet at fair value are reviewed by the relevant competent leader to support that these balances represent fair value on the acquirer's balance sheet.
The company's financial statement disclosures do not meet the requirements of ASC 805 and/or are developed using data that is not complete or accurate. [presentation and disclosure]	The relevant competent leader in the corporate controller organization performs a review of the business combination disclosures by validating that the financial statement disclosure is in accordance with ASC 805 and SEC rules and regulations, when applicable, including use of the measurement period and changes to provisional amounts. The relevant competent leader in the corporate controller organization also validates the accuracy by agreeing that the quantitative and qualitative disclosure information to appropriate source data. The completeness of the disclosures is evaluated through inspecting the relevant disclosure requirements of ASC 805.

CONSOLIDATION PROCESS

There are numerous situations/scenarios that can complicate the consolidation process for a business combination:

- different accounting systems, GAAP, degrees of controls compliance between acquirer and target;
- desire to not push acquisition accounting entries down to local enterprise resource planning systems until the measurement period is closed;
- scoping out of management's assessment of internal controls over financial reporting of the acquired company for up to the first-year post acquisition.

Companies should be prepared before the deal closes with a plan for a consolidation process that fulfills management's internal control responsibilities. This process is likely to be highly manual during the early reporting periods after a deal closes, and thus should allow for multiple levels of review. The acquirer should also be aware that although it might not be possible to assess the acquired company's ICFR in the year of acquisition, it is still required to have processes and controls over the financial statement data of that company and the valuation of assets acquired and liabilities assumed.

OTHER SCENARIOS THAT WOULD REQUIRE MANUAL INTERVENTION/JOURNAL ENTRIES

Acquisition accounting often requires companies to make accounting entries for consolidated financial reporting purposes that it may not want to make for standalone bookkeeping purposes. Thus, there may be situations where an acquirer desires to keep adjustments at more of a "top-side" level, for example:

- elimination of various reserves: billed AR, unbilled, inventory, etc.;
- revenue recognition measure of progress reset;
- contract liabilities arising from in-process revenue contracts not at current market margins (i.e., off-market executory contracts);
- write-downs to deferred revenue;
- intercompany eliminations;
- adjustments to property, plant, and equipment to bring book value to fair value.

In cases where these adjustments are recorded top-side, acquirers should have adequate controls and sufficient review over these adjustments as well as proper evidence of review.

MEASUREMENT PERIOD ADJUSTMENTS

ASC 805 allows the acquirer a period of time not to exceed one year after an acquisition closes to finalize acquisition accounting, but it requires that entities disclose balances and areas that are not finalized at interim reporting periods.[4] These balances and areas that are not finalized as at the reporting period could result in measurement period adjustments. Management should be aware that the one-year measurement period is not a safe harbor or grace period in which to finalize accounting for the transaction. The measurement period exists only to accommodate a reasonable time to receive the information about facts and circumstances existing as at the acquisition date in order to finalize the measurement. Once that information is obtained, the measurement should be finalized. As such, during the measurement period, management may have some measurements which are finalized as all information is received and some measurements which are still preliminary. Regardless, the process and the controls over provisional amounts need to be designed and operating effectively by the first public reporting date (annual or interim) after the close of the transaction. Common areas to be open during the measurement period include: legal and taxes (e.g., ASC 740 uncertain tax positions, stub period returns, etc.).

Thus, a company should have a process and controls with the appropriate level of documentation to:

- identify what valuation areas are not finalized as of the period presented;
- determine why these areas/items are not finalized and what information/processes are needed to finalize these adjustments;
- identify when all relevant information has been obtained and the amounts are no longer provisional;
- comply with disclosure requirements related to measurement period adjustments;
- review that adjustments to the opening balance sheet are appropriate.

Additionally, the timing of the close of an acquisition can complicate the accounting. Acquirers are required to use the best information available at any reporting period which may result in using provisional data for some reporting periods,[5] depending on the timing of the transaction close. Acquirers should be aware that this could cause controls around the valuation to be performed at each reporting date to support preliminary filings and subsequent final acquisition accounting. The acquirer cannot wait until the acquisition accounting is finalized to put controls in place.

In situations where the provisional amounts are finalized in the middle of a reporting period, acquirers should establish a process that includes adequate documentation, review, and controls over the facts and circumstances that existed at the end of the measurement period to support the opening balance sheet and fair value measurements. Example risks and related control activities for measurement period adjustments are as follows:

Risk Description	Control Activity
Subsequent adjustments to the provisional amounts recorded at the acquisition date are not properly identified or are not valid measurement period adjustments. [valuation, completeness, presentation and disclosure]	On a quarterly basis, a competent individual prepares and the relevant competent leader reviews subsequent adjustments related to the business combination to determine whether they are proper measurement period adjustments and whether they are identified appropriately. As part of the procedures, the relevant competent leader reviews reconciliations, sub-ledgers, and other supporting documents that were not available at the time of the initial PPA. Any differences are discussed with the target. The controller organization, CFO, and third-party specialists determine whether the changes have an impact on the opening balance by determining the root cause of each difference. The relevant competent leader reviews the calculations (and any journal entries) prepared by a competent individual.

4 ASC 805-20-50-4A.
5 ASC 805-10-25-13 and 25-14.

How can companies design and operate internal controls around accounting policy alignment in a business combination?

In addition to designing and operating controls around the acquisition accounting, acquirers should also design and operate controls that align target accounting policies with those of the acquiring entity. Aligning accounting policies is a critical step in properly recognizing and measuring the assets acquired and the liabilities assumed. Example controls over this assessment are included below:

Risk Description	Control Activity
Assets acquired and liabilities assumed are not properly recognized and measured in accordance with the acquirer's accounting policies. [valuation, presentation and disclosure]	The target's significant accounting policies (if any) are reviewed by the technical accounting team. Any accounting policy inconsistencies that result in significant differences in net assets or income recorded ($XXMM income statement/$XXMM balance sheet) are documented within an acquisition accounting memo along with actions taken to align the policies. A summary of key policies and areas for alignment is communicated to impacted stakeholders and reviewed by the relevant competent leader.
	The relevant competent leader reviews and approves the mapping of acquired accounts to historical accounts, including any differences in classifications.

SCOPING AND IMPACT ASSESSMENT

A risk-based assessment can be used to assess that key policies are evaluated and aligned first. If applicable, the risk assessment should also consider the competency of personnel responsible for supporting or executing the newly acquired entity's internal controls.

The overall assessment may start with compiling an inventory of significant accounting policies identified by the target, either within existing policies or through interviews with target management, and review of the financial statements. The inventory of policies and procedures may be cross-referenced with acquirer policies and procedures in order to identify gaps and areas of highest risk. The assessment should align with a review of the target's risk and controls matrix, if available, to refine the population of accounting policies most impactful on the consolidated financial statements. Factors to consider when identifying the population of accounting policies and prioritizing the timeline for harmonization include the following:

- magnitude of financial statement line items and disclosures impacted;
- population and organizational/geographic disbursement of impacted personnel;
- system implications and the feasibility of manual workarounds.

A policy mapping and control matrix review will facilitate the identification of major policies for alignment; however, additional areas for convergence will likely be identified through financial statement mapping exercises. While material amounts on the balance sheet will be subject to review through opening balance sheet procedures, care should be taken to include knowledgeable personnel from both the acquirer and the newly acquired company in the mapping of trial balance detail. Formal policies for certain classification decisions (e.g., cost of sales vs. operating expense) may not exist at the general ledger account level of detail; therefore, judgment and a thorough understanding of the activities reflected in the target company's accounts are necessary for consistent classification of income statement activities. During this mapping exercise, it is possible that inconsistencies in historical classification for the legacy business may be identified. Broad communication of any changes with stakeholders across the entity will help identify any historical inconsistencies for correction.

A similar logic applies to non-GAAP adjustment policies previously utilized by the newly acquired company. Post-acquisition non-GAAP accounting policies related to the target should be subject to appropriate governance procedures, including disclosure controls, beginning with the reporting period of acquisition.

The measurement period is available only for those items for which the information required to complete identification and measurement is unavailable by the end of the first reporting period following the acquisition date; not to exceed a year from the acquisition date.[6] In most cases, this exception will not apply to policy alignment, making prioritization of the harmonization critical. A process to update, approve, and communicate the status of policy harmonization and execution of the controls over this process is recommended.

CONFORMITY TO ACQUIRER POLICY ELECTIONS

In most cases, the accounting policies of the target will be conformed to those of the acquirer. Different accounting policies may be appropriate in situations where dissimilar assets or liabilities have been acquired. Alternatively, if the acquirer intends to conform its policy to that of the target, it must justify that the use of an alternative accounting principle is preferable (e.g., switching from the retail method of inventory to an average actual approach).

Certain areas of GAAP require that the acquirer's policies be followed subsequent to the acquisition, regardless of the target company's historical practices. For example, an acquirer's policies around vesting for equity awards with graded vesting features must be applied to replacement awards granted to target company employees, even if the target applied a different approach for vesting of legacy awards.[7]

Misstatements identified in target financial statements

The correction of misstatements identified in the application of applicable GAAP in the newly acquired entity's financial statements is the responsibility of the acquirer after the acquisition. Misstatements in the application of GAAP by the target that would not result in a change to the ultimate consideration transferred may be reflected as an adjustment to the opening balance sheet with an offset to goodwill (i.e., the acquirer would have paid the same amount for the target if the proper amount of an asset or liability had been known). A misstatement that would have changed the consideration transferred, but that ultimately did not result in an adjustment to consideration, is recorded as an adjustment to earnings. The acquirer must also consider the impact of the misstatement on any ongoing reporting or filing requirements of the acquired entity. Given the judgment involved and the potential impact on net income, proper analysis and review of these adjustments is critical.

Re-evaluation of segment reporting conclusions and CODM changes

Acquisitions may drive leadership and reporting changes within the new combined entity. The chief operating decision maker (CODM) post-acquisition should be confirmed in accordance with the acquirer's policies. The financial results of new acquisitions are often subject to a high level of review and scrutiny and may drive changes in internal reporting during the period following the acquisition. Any changes to internal reports, including the creation of supplementary reports, must be closely monitored to assess that any significant changes in materials presented to the CODM are appropriately identified, as such changes could ultimately drive a change in the designation of operating and reportable segments. When evaluating segment determinations on a quarterly basis, specific inquiries into any new reports prepared to monitor the performance of the newly acquired entity may be helpful. External communications (press releases, scripts, and similar items) should also be reviewed to assess that messaging is consistent with the segment policy and position taken.

In addition to changes in internal reporting, resource allocation and performance evaluations may change as a result of an acquisition. Any such changes, including new reporting structures or performance metrics, must be monitored as part of an acquirer's ongoing process(es) for segment determination.

An acquisition may also drive the need to re-evaluate an entity's identified reporting units for goodwill impairment testing purposes. The assessment and consideration of potential changes in designated reporting units should be clearly documented, even if no changes are ultimately made.

6 ASC 805-10-25-13 and 25-14.
7 ASC 805-30-55-12.

CONTROL ENVIRONMENT INTEGRATION

While a public issuer may determine that it qualifies to exclude the target company's business process controls from the scope of its ICFR assessment for a period of up to twelve months from the date of acquisition, the controls over the business combination and purchase price allocation that operate at the entity level are subject to management's assessment of the effectiveness of ICFR.

The decision regarding the ability to assess the effectiveness of the internal controls of the newly acquired entity in the acquisition year assessment for the acquirer should consider the timing and extent of integration plans. The inability to include the acquired entity must be disclosed as part of the current year's management report on ICFR. A material weakness in the acquired entity's internal control identified during integration should be evaluated to determine whether it represents a material weakness for the consolidated group, and, to the extent that it does, it must also be disclosed in management's report on ICFR, regardless of whether the acquired entity is included in or excluded from management's assessment.

ONGOING SUPPORT FROM THE SELLER

When the acquired entity represents a carve-out from or portion of an ongoing business, transitional support to process transactions provided by the seller must be evaluated for relevance to the acquired entity's control environment. Existing certification controls may require modification to include representations provided by third parties. Oversight from existing personnel, familiar with internal certification processes, is recommended. Additionally, transition support agreements should be expanded to more clearly address implications for financial reporting in the year of acquisition and beyond.

Appendix A: Specific considerations for account-level risks

Controls need to be designed and operated to support the relevant account assertions for each acquired asset and assumed liability as of the acquisition date. The general account assertions that may be relevant include:

- valuation (e.g., were the measurement principles of ASC 820 and ASC 805 properly applied to value acquired tangible and intangible assets?);
- existence (e.g., do the property and equipment acquired exist?);
- completeness (e.g., were material acquired contingent liabilities identified?);
- presentation and disclosure (e.g., were the disclosures required by ASC 805 included in the financial statements and were they accurate?);
- rights and obligations (e.g., did the acquired entity have ownership rights for the tangible assets recorded on its balance sheet?).

These assertions can be used to facilitate a general risk assessment for the acquired significant accounts and to identify broad risks of material misstatement. This may facilitate an appropriate assessment for certain noncomplex accounts (e.g., does cash exist; are accrued liabilities complete?). However, a more precise and robust assessment may be needed to appropriately evaluate complex accounts with potentially unique considerations relevant to the account assertions at the acquisition date.

The table below includes example risks of material misstatement for certain potentially complex significant accounts to illustrate a more robust risk assessment. The listing below is not intended to be comprehensive. Each significant account requires a careful evaluation to determine the relevant risks depending on the facts and circumstances of the acquisition.

Account/Topic	Potential Risks of Material Misstatement
Consideration transferred	• Consideration transferred includes items that should be accounted for as separate transactions (e.g., transaction costs, compensation to employees or former owners for future services). • Consideration is not completely identified, or an inappropriate amount is estimated for the acquisition date fair value of the consideration transferred. • Assumptions used to estimate the fair value of contingent consideration are not reasonable or supported (e.g., discount rate, prospective financial information). • Contingent consideration is not properly classified as a liability or equity. • Share-based payment awards replaced in the acquisition are not properly valued. • The value of a share-based payment replacement award is not properly attributed to the consideration transferred and post-combination compensation expense.

Account/Topic	Potential Risks of Material Misstatement

Intangible assets	• Intangible assets acquired in the transaction are not identified (e.g., tradenames, trademarks, in-process research and development, customer relationships).
	• The valuation method selected is not appropriate for the item subject to measurement.
	• The valuation method was not properly applied to estimate the value of the acquired intangible assets.
	• The model used to perform the computation is not clerically accurate.
	• Information used in the valuation is not accurate (e.g., actual financial information used in the base year).
	• Prospective financial information (PFI) and other assumptions used in an income approach are not reasonable or supportable, including, but not limited to:
	  • revenue and related growth rates
	  • cost of sales and related growth rates
	  • operating expenses
	  • depreciation and amortization expense
	  • income tax rates
	  • capital expenditures
	  • debt-free net working capital.
	• Data and assumptions used in PFI are not appropriate for the context of the valuation or the valuation method (e.g., sales and marketing expenses used to value a customer relationship under a MPEEM include customer acquisition costs).
	• PFI used to estimate the fair value of the acquired intangibles was not established from the perspective of a market participant and improperly includes company specific synergies.
	• Events that occurred subsequent to the date on which the PFI was prepared that contradict the data, assumptions, and methods used to develop the PFI were not properly identified and evaluated.
	• Data, assumptions, and methods used in the PFI are not reasonable or supportable, including, but not limited to:
	  • royalty rates
	  • customer attrition rates
	  • technology migration rates (i.e., rate of decay or life of technology asset)
	  • probability of technical success
	  • terminal growth rates
	  • WACC
	  • discount rate
	  • contributory asset charges
	  • tax amortization benefits.
	• Data used to establish the PFI is not reliable, relevant, and consistent (e.g., historical revenue listings by customer from the acquired entity's financial systems were used to calculate customer attrition rates).
	• There are clerical errors in the data used to determine the assumptions.
	• Management's specialist does not have the appropriate qualifications or experience to perform the valuation.
	• Goodwill is not properly calculated (e.g., data, assumptions, and methods used to calculate the fair value of noncontrolling interests in the acquired entity are not reasonable or supported).

Account/Topic	Potential Risks of Material Misstatement
Inventory	• Inventory quantities as of the acquisition date are not accurate (e.g., inventory included in the acquired entity's sub-ledger does not exist). • Condition of the acquired inventory is not appropriately considered in the valuation (e.g., inventory is damaged). • Data, assumptions, and methods used to estimate the fair value of finished goods are not reasonable or supported (e.g., estimated selling price, costs of the selling efforts, profit allowance for the selling efforts). • Data, assumptions, and methods used to estimate the fair value of work-in-process are not reasonable or supported (e.g., estimated selling price, costs to complete manufacturing, costs of the selling efforts, profit allowance for the selling and manufacturing efforts). • Data, assumptions, and methods used to estimate the fair value of raw materials are not reasonable or supported (e.g., estimated current market prices). • Data used in the valuation analysis or to establish the assumptions is not reliable, relevant, and consistent (e.g., transaction registers the acquired entity's historical sales). • Data, assumptions, and methods used to calculate the fair value of the acquired inventory are not appropriate under the circumstances.
Property and equipment	• Property and equipment recorded as part of the business combination does not exist. • Methods and models used to calculate the fair value of the acquired property and equipment are not appropriate under the circumstances (including whether it has been determined at its highest and best use to a market participant). • Assumptions used to estimate the fair value of the acquired property and equipment are not reasonable or supported (e.g., functional and economic obsolescence, remaining useful lives). • Data used in the valuation or to establish the assumptions is not reliable, relevant, and consistent (e.g., acquisition costs of acquired equipment are not accurate in the acquired entity's sub-ledger). • Condition of the acquired property and equipment is not appropriately considered in the valuation (e.g., equipment is damaged). • Data, assumptions, and methods used to estimate the value of property and equipment to be sold (i.e., assets held-for-sale) are not reasonable or supportable in accordance with ASC 360-10 (e.g., fair value, costs to sell). • Property and equipment classified as held-for-sale do not meet the criteria of ASC 360-10 as of the acquisition date.
Leases	• Data, assumptions, and methods used to calculate the right-of-use assets and lease liabilities are not reasonable or supported (e.g., incremental borrowing rate). • Off-market lease terms are not identified. • Data, assumptions, and methods used to estimate the value of off-market lease terms (i.e., favorable or unfavorable) are not reasonable or supported. • Lease classifications are inappropriately changed in a business combination without any modification of the lease (e.g., a finance lease is re-classified to operating leases when acquired). • Leases embedded in the acquired entity's contracts are not identified at the acquisition date.

Account/Topic	Potential Risks of Material Misstatement
Off-market executory contracts	• Acquired executory contracts that include off-market terms are not identified. • Data, assumptions, and methods used to estimate the assets or obligations of off-market executory contracts are not reasonable or supported.
Contract assets and liabilities	• Cash flows from contract assets previously recorded by the acquired entity under ASC 606 are double-counted to value customer-related intangibles. • Data, assumptions, and methods used to estimate the fair value of contract liabilities (i.e., deferred revenue) are not reasonable or supported (e.g., estimated costs to fulfill the obligation, normal profit margin on fulfillment). • Assets recognized do not meet the contractual-legal criterion of ASC 805-20.
Contingent liabilities	• Existing contingent liabilities of the acquired entity are not identified or appropriately valued.
Long term debt	• Method/approach used to estimate the fair value of long-term debt and its related features are not appropriate under the circumstances. • Data, assumptions, and methods used to estimate the fair value of the acquired debt and its related features are not reasonable or supported (e.g., discount rate, expected cash flows). • Unamortized debt issuance costs recorded by the acquired entity prior to the business combination are inappropriately recognized in acquisition accounting. • Embedded features within the acquired entity's debt arrangements are not identified or accounted for properly.
Income taxes	• Valuation allowances are not established based on all available evidence as of the acquisition date. • Tax bases of acquired assets and liabilities are not accurate (when not stepped up). • Deferred taxes are not recorded or properly calculated for acquired assets and liabilities with temporary basis differences, including outside basis differences, partnership interests, and tax-deductible goodwill. • Existence of acquired tax attributes and carryforwards is not appropriately supported or limited (e.g., Section 382 is not properly applied). • Uncertain tax positions that exist at the time of, or that arise as a result of, the business combination are not identified. • Data, assumptions, and methods made to calculate uncertain tax positions are not reasonable or supportable.

Appendix B: Summary of example risk and control activitiess

This appendix is an aggregation of all the risk and control matrices throughout this document. This appendix should be used together with the discussion above and does not standalone.

Note: We acknowledge that the control owners for the example controls within this document may not be within the accounting department. In the design and operation of the control, companies may consider control owners in other departments (e.g., financial planning and analysis, tax, mergers and acquisitions, etc.) and determine which individuals have the appropriate competence and authority to be control owners. For this reason, we have provided a general description of a control owner (e.g., relevant competent leader).

Bracketed language at the end of each risk description throughout the document represents the financial statement assertion(s) associated with the risk identified.

Risk Description	Control Activity
All acquired assets and assumed liabilities from the business combination are not properly identified. [completeness and existence]	The relevant competent leader reviews the underlying data from the target (e.g., historical accounting records and audited financial statements) and relevant accounting literature (e.g., implementation guidance in ASC 805) to understand what intangible assets the FASB believes meet the criteria for recognition apart from goodwill. The relevant competent leader also performs due diligence and reviews target board meetings, legal and tax matters, and similar transactions in the marketplace to understand acquired assets and assumed liabilities from the target.
The valuation approach (e.g., income, market, cost) and method (e.g., MPEEM, RFR, distributor method, etc.) selected are not appropriate for the asset or liability subject to measurement. [valuation]	The relevant competent leader discusses and reviews the valuation approach and method proposed (for each acquired asset and assumed liability) by the internal business development team or external specialists for appropriateness.
	The relevant competent leader discusses and reviews the specialist's valuation (throughout the valuation process and including the final report) including PFI, data, assumptions, and methods created internally by the business development team and externally by the specialists. The relevant competent leader follows up with the deal team and specialists regarding the overall model, methodologies, and other data and assumptions used in the valuation report through meetings, calls, and/or email correspondence. The respective control owner should be involved throughout the engagement with the external specialists including planning, interim drafts, etc.
The underlying data from the target used to create the PFI is not complete and accurate, prepared at an appropriate level of disaggregation, or relevant for the purpose of the valuation. [accuracy and completeness]	The relevant competent leader reviews the underlying data from the target (e.g., historical accounting records and audited financial statements), which is used to develop the PFI and verify the existence of assets acquired and liabilities assumed, to determine whether it is reliable, relevant, appropriately disaggregated, and consistent for the purpose of the valuation, in addition to being complete and accurate.
The significant components of the PFI are not properly identified. Common examples include revenue, operating expenses, EBITDA, capital expenditures and depreciation, and net working capital. [valuation, accuracy, and completeness]	The relevant competent leader reviews an analysis that identifies the significant components of the PFI based on the asset subject to measurement. The relevant competent leader also reviews the calculation of the PFI, including the underlying data, assumptions, and methodology. For tangible assets, the relevant competent leader reviews the significant components (e.g., reproduction cost, market rates, etc.) used in the valuation. Please see Appendix A for additional tangible asset examples.

Risk Description	Control Activity
The significant data, assumptions, and methods used in the valuation analysis, including those included in the PFI, are not reasonable or not supportable, based on the facts and circumstances (e.g., the data, assumptions, and methods are not consistent with industry or historical data). Common examples include revenue and cost growth rates, customer attrition rates, royalty rates, contributory asset charges, tax rates, tax amortization benefits, and discount rates. [valuation, accuracy, and completeness]	The relevant competent leader reviews sensitivity analyses performed on the significant data and assumptions to evaluate the degree of change in the valuation resulting from reasonable variations in the assumption being analyzed.
	The relevant competent leader reviews and documents the data, assumptions, and methods considering the facts, circumstances, and sources of information. The relevant competent leader considers alternative and additional data, assumptions, and methods not proposed before finalizing and approving the data, assumptions, and methods to be used in the valuation. The relevant competent leader compares the data, assumptions, and methods used to the data, assumptions, and methods used in other PFI prepared by the company to determine whether the data, assumptions, and methods used are reliable, relevant, and consistent. The relevant competent leader considers contrary evidence when the data and assumptions used differ from historical or industry data. *Significant assumptions may require additional controls over source data than the ones noted herein.*
Journal entries related to an acquisition are not properly calculated or recorded in the general ledger based on underlying support. [valuation, existence, rights and obligations, completeness]	A competent individual recalculates the consideration transferred, the fair value adjustments, the goodwill, and other acquisition accounting adjustments based on the fair value of the consideration transferred as compared to the fair value of the assets acquired and the liabilities assumed to prepare the acquisition accounting journal entries. The relevant competent leader reviews the calculations and compares them with the purchase agreements, acquisition accounting memo, valuation report, and other support as applicable and approves the journal entries.
	A competent individual prepares a reconciliation to assess that the opening balance sheet is recorded correctly in the general ledger by performing a tie-out between the preliminary opening balance sheet schedule, including acquisition accounting entries, and the target's adjusted opening balance sheet. The reconciliation is reviewed by the relevant competent leader.

Risk Description	Control Activity
The tax impacts of business acquisitions are not appropriately considered and recorded. [valuation, existence, completeness]	The appropriate tax department leader reviews the pre-acquisition deferred tax calculations for the acquired entities and determines whether any deferred taxes should be carried over into the opening balance sheet. Conclusions are documented in a tax considerations memo which is attached to the acquisition accounting memo and signed by a competent member of the tax organization, the appropriate tax department leader, and the appropriate accounting department leader.
	A competent member of the tax organization and the appropriate tax department leader review the acquisition accounting memo and balance sheet and discuss the tax implications of the transaction with the appropriate accounting department leader. A competent member of the tax organization and the appropriate tax department leader receive the summary of fair value adjustments from the corporate controller organization, and they assess each for potential deferred tax consequences. To the extent that deferred taxes are required for a particular adjustment, a competent member of the tax organization applies the appropriate blended jurisdictional tax rate to the gross basis differences derived from the fair value adjustment to arrive at the tax-effected balance of deferred taxes; this calculation is reviewed by the appropriate tax department leader. Conclusions are documented in a tax considerations memo which is attached to the acquisition accounting memo and signed by a competent member of the tax organization, the appropriate tax department leader, and the appropriate accounting department leader.
	The appropriate tax department leader reviews and approves the analysis of income tax–related balances on the opening balance sheet (including deferred taxes and uncertain tax positions).
Assets acquired and liabilities assumed are not properly identified and measured. [completeness, valuation, existence]	Assets acquired and liabilities assumed that may not be recorded on the target's closing balance sheet are identified through discussions and reviews performed by management (which may include representatives from the core deal team, finance, tax, HR) in conjunction with a third-party valuation expert when applicable. The results of this review, including the final fair value calculations and goodwill (i.e., opening balance sheet), are documented within an acquisition accounting memo which is prepared by a competent individual and reviewed by the relevant competent leader.
	Financial instruments assumed that are already presented on the target's balance sheet at fair value are reviewed by the relevant competent leader to support that these balances represent fair value on the acquirer's balance sheet.
The company's financial statement disclosures do not meet the requirements of ASC 805 and/or are developed using data that is not complete or accurate. [presentation and disclosure]	The relevant competent leader in the corporate controller organization performs a review of the business combination disclosures by validating that the financial statement disclosure is in accordance with ASC 805 and SEC rules and regulations, when applicable, including the use of the measurement period and changes to provisional amounts. The relevant competent leader in the corporate controller organization also validates the accuracy by agreeing the quantitative and qualitative disclosure information to appropriate source data. The completeness of the disclosures is evaluated through inspecting the relevant disclosure requirements of ASC 805.

Risk Description	Control Activity
Subsequent adjustments to the provisional amounts recorded at the acquisition date are not properly identified or are not valid measurement period adjustments. [valuation, completeness, presentation and disclosure]	On a quarterly basis, a competent individual prepares and the relevant competent leader reviews subsequent adjustments related to the business combination to determine whether they are proper measurement-period adjustments and whether they are identified appropriately. As part of the procedures, the relevant competent leader reviews reconciliations, sub-ledgers, and other supporting documents that were not available at the time of the initial PPA. Any differences are discussed with the target. The controller organization, CFO, and third-party specialists determine whether the changes have an impact on the opening balance by determining the root cause of each difference. The relevant competent leader reviews the calculations (and any JEs) prepared by a competent individual.
Assets acquired and liabilities assumed are not properly recognized and measured in accordance with the acquirer's accounting policies. [valuation, presentation and disclosure]	The target's significant accounting policies (if any) are reviewed by the technical accounting team. Any accounting policy inconsistencies that result in significant differences in net assets or income recorded ($XXMM income statement/$XXMM balance sheet) are documented within an acquisition accounting memo along with actions taken to align the policies. A summary of key policies and areas for alignment is communicated to impacted stakeholders and reviewed by the relevant competent leader.
	The relevant competent leader reviews and approves the mapping of acquired accounts to historical accounts, including any differences in classifications.

About CCR

FEI is a leading international organization of more than 10,000 members, including chief financial officers, controllers, treasurers, tax executives and other senior-level financial executives. The Committee on Corporate Reporting (CCR) is a technical committee of FEI comprised of 45 chief accounting officers and corporate controllers from Fortune 100 and other large public companies, representing approximately $10.1 trillion in market capitalization. CCR reviews and responds to pronouncements, proposed rules and regulations, pending legislation, and other documents issued by domestic and international regulators and organizations such as SEC, FASB, and PCAOB. To learn more about CCR's advocacy efforts, visit the FEI website.