



# The Use and Valuation of Contingent Considerations (Earnouts) Under the New Appraisal Guidance

By Josh Schaeffer

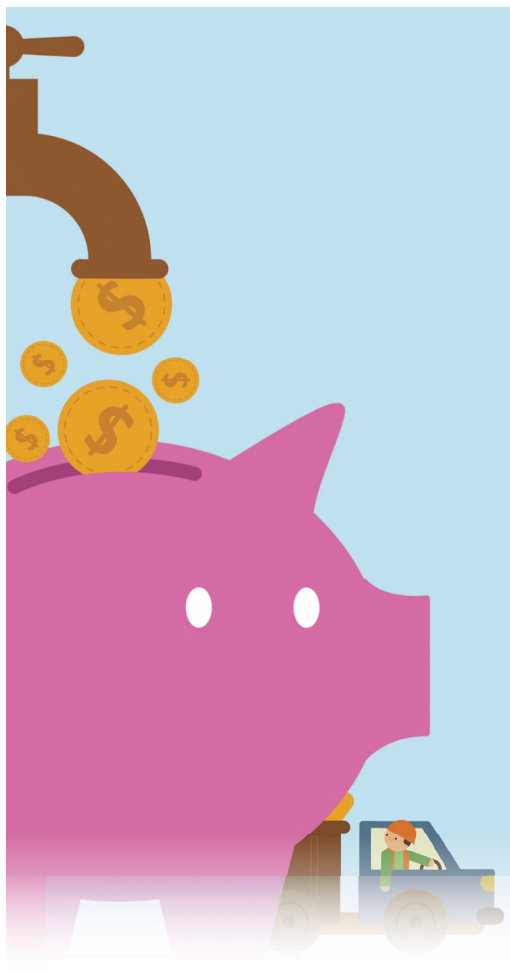
**H**ow should contingent consideration, also known as earnouts, be valued? A dozen specialists will likely give a dozen different answers. Ten years after FASB released Statement of Financial Accounting Standards (SFAS) 141(R), *Business Combinations* (now codified as ASC 805), requiring fair value of earnouts calculated in accordance with Accounting Standards Codification (ASC) 820, *Fair Value Measurements*, there is still no authoritative standard.

That, however, is about to change. Under the auspices of the Appraisal Foundation, a well-recognized authority on valuation, a team of valuation professionals has been readying guidelines for these instruments. An exposure draft that contains a model for classifying and valuing earnouts based on their payout structures,

as well as a set of responsive comments, was released in 2017, and a final version is expected to be released soon. This article reviews the definition of contingent consideration and explains details of the proposed guidance.

## Understanding Earnouts

In any merger or acquisition, the acquiring company wants to avoid paying too much, and the target company wants to avoid selling for too little. To bridge the valuation gap, many businesses use an earnout. Earnouts have several advantages: They allow buyers to pay part of the purchase price only if certain goals are met, they allow sellers to receive a higher transaction value when the business performs to their expect-



tations, and they motivate key employees to stay involved with the continued operation of the business.

Earnouts can be simple or elaborate; in any case, structuring them involves the same basic process. First, decide which metric to use for the earnout target; the metric can be financial or nonfinancial, so long as it is meaningful for the acquisition. Next, decide what to pay once the target is achieved, then build a payment stream based on the target. For example, an earnout might pay—

- \$5 million if a drug receives FDA approval;
- \$10 million if an EBITDA (earnings before interest, taxes, depreciation, and amortization) hurdle is met;
- \$20 million if annual revenues reach \$50 million in year one, \$15 million if in year two, and \$10 million if in year three;

- \$1.50 per widget sold in year one, with a minimum of \$5 million;
- 10% of net profit in year one, subject to a cap of \$10 million; or
- 10% of net profit in year one, subject to a cap of \$20 million, with an aggregate cap of \$25 million.

Acknowledging this diversity, ASC 805 allows earnouts to be classified as compensation, liabilities, equity, or even assets. Earnouts tied to employment are classified as compensation and accounted for as such; most other earnouts are liabilities, because they involve the buyer needing to make potential future cash payments to the seller. More uncommon treatments result if the risk of paying the earnout is shifted to the buyer via a clawback or repayment of part of the purchase price. For example, if the performance is insufficient or regulatory hurdles are not cleared, the seller may have to reimburse the buyer, and the buyer has a contingent asset rather than a liability. Under certain circumstances, if the earnout is paid in the acquiring company's stock, such as an additional 5,000 shares if the profit is sufficient, equity classification can occur.

### Valuation of Earnouts

The wide variety of earnouts can complicate valuations. This is particularly important for earnouts classified as liabilities or assets because they need to be revalued each reporting period, resulting in potential earnings volatility. Although changes will happen as an earnout target becomes more or less likely to meet its threshold, a defensible and well-reasoned valuation approach can help mitigate volatility.

Business valuation providers have tried a number of different techniques, sometimes resulting in unstable valuations. The Appraisal Foundation's response has been to collect best practices from providers and standardize them. The resulting valuation guidance relies on two types of models. The first is the scenario-based model (SBM), which uses a fixed number of

potential outcomes. The other, more complicated type is based on an option pricing model (OPM). Which model should be used depends on the payout structure, which can be independent, linear, or dependent/nonlinear.

Independent earnouts—which do not depend on market factors—need not be adjusted for market-based risk; therefore, SBMs can be used. Independent earnouts pay a fixed amount based on a company-specific milestone that is independent of the broader economy. The milestone can be something beyond the company's control, as with an earnout that pays \$1 million if a drug gains regulatory approval upon completing clinical trials. Alternatively, the earnout might reward employees for achieving an internal objective, such as closing the first commercial sale of a product. Regardless, the assumption is that a holder of this risk would be able to diversify, either by holding many similar investments or by splitting the earnout into small pieces. This means that the milestone must be uncorrelated with the market and contain only so-called “diversifiable risk.” Otherwise, even a small, seemingly diversified holding would still be subject to some market risk.

Because the risk is presumably diversifiable, it is not priced under the standard capital asset pricing model (CAPM) used to develop discount rates for valuations. Instead, value is established based on the underlying scenarios, likelihood, and payout. Simply stated, earnout value is equal to the probability of success, or of each possible outcome, multiplied by the amount to be paid given the outcome. Usually, the company assesses the probabilities and then applies a discount based on the time value of money and the probability that the company is unable to pay.

Linear earnouts are not complicated enough to require more complex modeling, so SBMs can be used here as well. As the name implies, these earnouts have a strictly linear payout, such as a percentage of revenues or EBITDA. While less common in

practice, these earnouts also allow for the use of SBMs, as they produce balanced results from up-and-down movements in the target metric (e.g., the buyer pays the seller a fixed percentage of revenue or a royalty of \$0.50 per widget over some period of time).

Earnouts like these resemble a more traditional discounted cash flow (DCF), where using the probability-weighted average from likely scenarios results in an appropriate valuation. In short, an SBM similar to an independent valuation can be used. Like any DCF, a discount rate commensurate with the riskiness of the underlying metric applies. Also like independent earnouts, actual payments must reflect discounts based on the buyer's credit risk. With this approach, however, one must make sure the payouts really are linear. Appearances can be deceiving; for example, a percentage of EBITDA is not strictly linear if negative EBITDA is possible, assuming that it would not result in a claw-back payment to the buyer.

Dependent/nonlinear earnouts are either not strictly linear or they pay a fixed amount based on a milestone correlated with the broader economy; thus, they require an OPM, as their complexity and discounting cannot be adequately captured in an SBM. These earnouts include ones with caps, floors, thresholds, or catch-ups; for example, if the buyer pays \$50 million if EBITDA is at least \$75 million in the first three years, or if the buyer pays 40% of revenues above \$50 million in year two, subject to a maximum of \$40 million. Another, more complicated example: The buyer pays 40% of revenues in years one to three, subject to a minimum of \$10 million and a cap of \$40 million.

For dependent/nonlinear earnouts, an SBM will not do, because it is impossible to adjust the discount rate to accommodate the riskiness of the payout structure. Instead, one of two modified OPMs can be used. The first treats earnouts like ordinary options and uses standardized option models such as Black-Scholes. This approach can work

for simpler earnout structures, such as if the holder earns the payout only if the target metric hits a threshold, or for linear payouts with caps or floors. The second method is for earnouts that pay out over multiple periods or multiple metrics and are subject to combined caps or floors. In these cases, Monte Carlo simulation reflects the correlation between metrics or payouts over multiple periods.

Both approaches require adjusting the company's forecasts for market-based risk, akin to using a discount rate in the SBM. This is accomplished either by discounting management's forecast by the risk premium, or by adjusting management's growth rate by the risk premium. The outcome either way is the same. Finally, just like independent earnouts, dependent/nonlinear earnouts require discounting the actual payments in view of the buyer's risk of nonpayment.

### Guidance on Key Inputs

Besides offering guidance on methodology, the exposure draft weighs in on key inputs used for valuations.

**Discount rate applied based on risk of target metric.** For earnouts that require this kind of discount rate, the exposure draft recommends using either the top-down or bottom-up approach to develop the rate. These approaches are well known in the valuation field. They rely on the concept of beta ( $\beta$ ), which reflects the level of market risk reflected in an instrument. A  $\beta$  of 1 implies market levels of systematic risk, whereas a  $\beta$  less than 1 denotes levels of systematic risk that are lower than the market. If  $\beta$  is zero, the metric has no market correlation.

In the top-down approach,  $\beta$  is the deal's rate of return adjusted for the difference in market risk between the target metric and the overall enterprise value. Adjustments can reflect many relevant factors, such as the general riskiness of the target metric, leverage, term, size premium, and company-specific risk. In the bottom-up approach,  $\beta$  is the target met-

ric adjusted for term, size, company-specific risk, and other relevant valuation factors. The bottom-up approach may rely on statistical analysis of the target metric from the company or its peers.

However the discount rate is determined, it is applied using a mid-period convention. It might seem wrong to apply this convention when actual payments are made at the end of the period, but it captures the actual risk with the underlying variable, which is typically achieved over the whole period. (Separately, once the actual cash flows are discounted, the convention is to discount the payment based on the actual payment date.)

**Discount rate applied based on cash flow risk.** Earnout cash flow is typically a subordinate, unsecured obligation of the company. As such, it usually should be discounted based on a rate that would be applied for such an obligation. There are, however, a few noteworthy exceptions. One is if the payment is held in escrow, guaranteed, or provided through a senior security. The other is if achieving the target metric is enough to guarantee funds are available for payout. This could be, for example, due to a high correlation between the buyer and seller's business performance.

**Volatility.** Valuation techniques that rely on options modeling or Monte Carlo simulation require a volatility of the target metric. The exposure draft lays out four ways to estimate volatility:

- Historical changes in the target metric for the acquired company and public comparables
- Company volatility based on the relationship between the target metric and the enterprise value
- The difference between analyst forecasts and actual results for peer companies
- Fitting a distribution to management's estimates.

With any of these methods, a conversation with management is helpful, because a derived volatility may fail to accurately capture the economics of the company's situation.



**Probability, management estimates, and metric distributions.** The exposure draft generally recommends using management expectations of probabilities and outcomes. One caveat—most important for volatility—is to carefully control for known cognitive biases. These include fixing on a prior projection or past result (anchoring) as well as a volatility that is too low for outcomes (overconfidence). Another bias is to ignore hidden assumptions, such as the response to market forces. Careful consideration of future cases is crucial to developing appropriate probabilities and, as a result, values.

In option-based cases, the probability will be defined by a distribution. The exposure draft acknowledges that not every variable will follow the lognormal distribution typically used for stock prices,

but it nevertheless recommends their use across all metrics, as the benefits of these distributions outweigh the costs.

**Synergies.** A key difference between business valuation and earnout valuation is synergies. For a business, the guidance is to exclude synergies. For a hypothetical earnout buyer, however, synergies can change the projections for both the earnout and the purchase price.

**Consistency with business valuation.** Synergies aside, earnout valuation should align with the broader valuation for a purchase price allocation. For example, the average projection should be the same as that used in the deal model. The discount rate likewise should be consistent with the company as a whole, adjusting for metric and time differences. The same adjustments

should be made for size, company, and country-specific risk.

### **A Welcome Development**

For companies that offer contingent consideration, growing complexity is a fact of life. This new set of proposed standards codifies several of the more complex valuation approaches, signaling the limitations of scenario-based models. They can also require more complicated assumptions; as a result, companies should consider their deal projections carefully so they can assist in the valuation of the earnouts they provide. □

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