

# What's It Worth? (If it happens)

## **CBV CONNECT 2025**

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# Introduction

## Contingent Consideration

An amount an acquirer agrees to pay in the future, conditional on certain events occurring after a business acquisition. It can be an earnout (paid by the acquirer) or clawback (paid to the acquirer)

## **Motivations**



## Examples

## 1. Shire plc's acquisition of Baxalta (2016)

- Deal value: ~34 billion
- Contingent consideration: up to ~1.45 billion tied to future performance Baxalta's drug pipeline
- One of the largest in pharmaceutical M&A history

## 2. Roark Capital's acquisition of Subway (2023)

 Could reduce Subway's valuation by \$600 million if the company fails to meet specific performance targets over the following two years

# Industries with Heavy Use



# Key Concepts & Terms

Diversifiable Risk = unsystematic risk = idiosyncratic risk VS

 Risk specific to a single company or industry and can be eliminated through diversification.

#### • Examples:

- Successes of R&D effort
- Ability to meet a deadline for regulatory approval
- Ability to achieve software integration task
- Success in getting a specified percentage of the acquiree's existing customer base to agree to a contract modification

Non-diversifiable Risk = systematic risk = market risk

 Risk that affects the entire market or economy and can not be eliminated through diversification

#### • Examples:

- Revenue
- EBITDA
- EBIT
- Ability to sell X units of the products



# Key Concepts & Terms, continued



#### Inclusion of synergy

 From the prospective of a market participant in a hypothetical sale or transfer of a contingent consideration asset (or liability) on a standalone basis post-transaction



#### Compensation

 Contingent on an employee's continued employment 

 may be accounted for as postcombination employment compensation expense and not as contingent consideration

# Key Concepts & Terms, continued

Structure	Payoff	escription and Risk Characteristics <sup>13</sup>		
Constant (debt-like)	Metric	<ul> <li>A fixed (deferred) payment.</li> <li>The earnout cash flow is only subject to counterparty credit risk.</li> </ul>		
Milestone payment (digital / binary option) See Examples 9.3-9.4	Metric	<ul> <li>A fixed payment contingent upon achieving a future milestone or performance threshold.</li> <li>Nonlinear payoff, where the risk of the earnout cash flow depends on the risk of the underlying metric, the impact of the nonlinear structure (which is non-zero if the metric's risk is non-diversifiable) and counterparty credit risk.</li> </ul>		
Linear See Examples 9.1-9.2	Metric	<ul> <li>Payment is equal to a fixed percentage of the outcome for the underlying metric.</li> <li>Linear payoff, where the risk of the earnout cash flow is the same as the risk of the underlying metric, plus counterparty credit risk.</li> </ul>		
Percentage of total above a threshold (asset-or-nothing call option) See Example 9.6	Metric	<ul> <li>Payment is equal to a percentage of the underlying metric, but only if a performance threshold is reached.</li> <li>Nonlinear payoff, where the risk of the earnout cash flow depends on the risk of the underlying metric, the impact of the nonlinear structure, and counterparty credit risk.</li> </ul>		
Excess above a threshold with a cap (capped call option) See Example 9.7	Josée Metric	<ul> <li>Payment is equal to a percentage of the excess of the underlying metric above a performance threshold, with a payment cap.</li> <li>Nonlinear payoff, where the risk of the earnout cash flow depends on the risk of the underlying metric, the impact of the nonlinear structure, and counterparty credit risk.</li> </ul>		
Excess above a threshold (call option) See Example 9.5	Hocke	<ul> <li>Payment is equal to a percentage of the excess of the underlying metric above a performance threshold.</li> <li>Nonlinear payoff, where the risk of the earnout cash flow depends on the risk of the underlying metric, the impact of the nonlinear structure, and counterparty credit risk.</li> </ul>		
Clawback (put option) See Example 9.11	Hoked	<ul> <li>Payment is equal to a percentage of the shortfall of the underlying metric below a performance threshold.</li> <li>Nonlinear payoff, where the risk of the clawback cash flow depends on the risk of the underlying metric, the impact of the nonlinear structure, and counterparty credit risk.</li> </ul>		

## Linear vs. non-linear

- Risk of underlying metric
- Impact of nonlinear structure
- Counterparty credit risk



# Key Concepts & Terms, continued

#### **Path Dependency Features**

 Carry-forward or catch-up features, overall multi-year cap, payments dependent on the performance over multiple periods

#### **Multiple Metrics**

Correlation



#### **Buyer or Seller Choices**

 Earnout over a 5 year period, each year seller can choose between continue to receive the contingent payments or receiving a pre-specified cash settlement amount



#### **Settlement Types**

- Cash
- Specified monetary amount but settled through transfer of other assets (e.g. shares)→economically equivalent to cash
- Fixed number of acquirer's shares, correlation of share value and underlying metric



#### **Definition differences**

# **Valuation Approaches**



## Market Approach

• No active trading market



## **Cost Approach**

 No reliable way to estimate replacement cost, not forward looking



## **Income Approach**

- Scenario Based Method (SBM)
- Option Pricing Method (OPM)

# **Scenario Based Method (SBM)**

## Suitable for:

- Diversified metrics

   (e.g. regulatory
   approval, success of
   opening a new store)
- Non-diversified metric with linear payoff





# Scenario Based Method (SBM), continued

## **Steps**

- 1. Start with mean expected cash flows (deal model)
- 2. Make adjustments for definition difference and buyer specific synergies vs. market participant synergies
- 3. Different scenarios and scenario likelihood (based on experience, industry trends, historical performance) OR Estimate variance around the expected cash projection of the metric

#### 4. Build a distribution based on the mean and variance







# Scenario Based Method (SBM)

## **Steps**

- 1. Identify multiple outcomes
- 2. Assign probability to each outcome and calculates probability weighted payoff

Scenario	EBITDA (a)	Earnout Payoff (b) =30% x (a)	Probability (c)	Probability Weighted Earnout Payoff (d) = (b) x (c)
Low	1,500	450	25%	112.5
Base	2,000	600	50%	300.0
High	2,500	750	25%	187.5
Total			100%	600.0

#### 3. Discount the probability weighted payoffs

- A metric with only diversifiable risk: Rf + RMRP + impact of payoff structure + credit risk
- Linear payoff structure: Rf + RMRP + impact of payoff structure + credit risk
- Nonlinear payoff structure: Rf + RMRP + <u>impact of payoff structure</u> + credit risk → very difficult

# **RMRP for an Earnout Metric**

## **Top-down approach for Earnings Based RMRP Estimation**

- EBIT or EBITDA
- Start with RMRP for risk associated with the earnings of the firm (WACC Rf (LT))
- Adjust for differences in <u>duration</u> and in <u>financial leverage</u>
- Assumption: risk associated with the earnings of the firm is comparable o risk associated with the underlying assets of the firm
- B(EBITDA)  $\approx$  B(EBIT)  $\approx$  B(Asset)  $\rightarrow$  unlevered equity beta
- Assumption: leverage introduced by taxes, capital expenditures, and working capital requirements is minimal:

WACC – Rf (LT)  $\approx$  RMRP (EBITDA)  $\approx$  RMRP (EBIT)

# **RMRP for an Earnout Metric, Continued**

## Top-down approach for Revenue Based RMRP Estimation

- Start with RMRP for risk associated with the earnings of the firm (WACC Rf (LT))
- Adjust for differences in <u>duration</u> and in <u>financial leverage</u> and in <u>operational leverage</u> (fixed costs)
- Two methods for delivering the RMRP for earning based metric for operational leverage

#### 1. The Fixed Costs vs. Assets Method

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RMRP (Revenue) = RMRP (EBIT) / [1+ PV (fixed costs) / PV (EBIT)]
RMRP (Revenue) = 15% / [1 + (50/100)] = 10%
RMRP (Revenue) = 15% / [1 + (80/100)] = 8.3%
```

### 2. Volatility-Based Method

RMRP (Revenue) = RMRP (EBIT) x  $\sigma$  (revenue) /  $\sigma$ (EBIT)

■ Most cases: RMRP (Revenue) ≤ RMRP (EBIT)

# **Option Pricing Model (OPM)**

## Nonlinear and involves a metric or event with non-diversifiable risk

#### Steps:

- 1. Start with management's real world forecast (revenue, EBITDA, EBIT)
- Discount it using a risk-adjusted rate to remove risk embedded in the forecast → risk-neutral expected value at time zero \*\*half year rule
- 3. Simulate the above risk-neutral expected value at time zero out to the future periods assuming a lognormal distribution or Geometric Brownian Motion (GBM).
  - 1. A deterministic trend (the "drift") and a random shock (the "volatility")
- 4. Simulate the above risk-neutral expected value at time zero out to the future periods assuming a lognormal distribution or Geometric Brownian Motion (GBM).



5. PV at Rf + credit risk

# **Option Pricing Model (OPM), continued**

## Non-diversifiable metric

(Say EBITDA), but it is heavily dependent on a diversifiable event (say success of opening another store): 2 OPMs for each of the scenario then probability weight the two outcomes

#### **Volatility of Metric**

- 1. Deleveraging Equity Volatility Method
  - Equity volatility is de-levered for financial leverage for earnings based earnouts; and for financial leverage and operational leverage for revenue based metric

#### 2. Historical Metric Variability Method

- Look at the historical evidence as guidance for an estimate for future metric growth rate volatility of subject company or comparable companies.
- If quarterly data is used, volatility in growth rate should be calculated based on year-over-year growth (Q1of current year vs. Q1 of previous year)
- Need to consider aggressiveness of the deal model relative to history → usually large uncertainty may require higher volatility estimate than comparable
- Check:  $\sigma(Metric) \ge (RMRP / MRP) \times \sigma (Market)$

# **Binomial / Lattice Model**

• Risk-neutral probability distribution of future metric outcomes is modelled at successive time steps. The optimal decision feature can then be incorporated by working backward



Limitations for path dependent metrics

# **Commonly Asked Questions**

#### **Credit risk**

Subordinated unsecured obligation – pre-tax cost of debt

- Mitigated via funds in escrow account
- Increase seniority and/or securitization of the obligation by structuring the earnout as a note issued by the buyer
- Obtaining a guarantee from a bank or external third party.
- Credit risk has to be assessed at the time of the payment – if earnout is large it may affect the credit worthiness of the buyer or if when earnout is paid the combined business is in a significant better position, then lower credit risk
- Form of payment: fixed # of shares no credit risk; fixed dollar amount settled in variable number of shares, credit risk same as cash

#### Multiple currency structure

- Contractual terms have a linear relationship with the earnout payment, convert the contractual terms using the FX forward rate at the time of measurement
- Contractual terms that have a nonlinear relationship with the earnout payment, stochastic
   FX rate model or perform the valuation analysis in which the threshold, caps, tiers and other contractual monetary terms of the earnouts are specified



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