

# THE CUT



BYU VS UTAH



Week 11 – Overview of M&A

## Investment Banking Recruiting

November 15, 2024





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# Why Does M&A Occur?

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Market Expansion

Access to New IP

Inorganic Growth

Defensive Acquisition

Product Diversification

Acqui-Hire

Undervalued Assets

Access to New Customers

Economies of Scale

Control Over Supply Chains

Optimize Efficiency

Politics

Synergies

Pricing Power

Strategic Realignment

Access to Resources

# M&A Process Overview

2 forms of sale

Auction (Broad vs Targeted)



Negotiated sale



2 sides of a deal

# Sell-side vs Buy-side

# M&A Process Overview

**EXHIBIT 6.2** Advantages and Disadvantages of Broad and Targeted Auctions

	Broad	Targeted
Advantages	<ul style="list-style-type: none"><li>■ Heightens competitive dynamics</li><li>■ Maximizes probability of achieving maximum sale price</li><li>■ Helps to ensure that all likely bidders are approached</li><li>■ Limits potential buyers' negotiating leverage</li><li>■ Enhances board's comfort that it has satisfied its fiduciary duty to maximize value</li></ul>	<ul style="list-style-type: none"><li>■ Higher likelihood of preserving confidentiality</li><li>■ Reduces business disruption</li><li>■ Reduces the potential of a failed auction by signaling desire to select a "partner"</li><li>■ Maintains perception of competitive dynamics</li><li>■ Serves as a "market check" for board in discharge of its fiduciary duties</li></ul>
Disadvantages	<ul style="list-style-type: none"><li>■ Difficult to preserve confidentiality</li><li>■ Greatest risk of business disruption</li><li>■ Some prospective buyers may decline participation in broad auctions</li><li>■ Unsuccessful outcome can create perception of an undesirable asset ("taint")</li><li>■ Risk that industry competitors may participate just to gain access to sensitive information or key executives</li></ul>	<ul style="list-style-type: none"><li>■ Potentially excludes non-obvious, but credible, buyers</li><li>■ Potential to leave "money on the table" if certain buyers are excluded</li><li>■ Lesser degree of competition</li><li>■ May afford buyers more leverage in negotiations</li><li>■ Provides less market data on which board can rely to satisfy itself that value has been maximized</li></ul>

# How do you pick either one?

2 forms of sale

Auction

Negotiated sale

- Seller is indifferent toward confidentiality, timing, and potential business disruption
- Maximizes competitive dynamics
- Heighten probability of finding the best value
- Speed and confidentiality are priority
- Certain deal structure is priority
- Cultural fit is priority

# Transaction initiation – the rain maker

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The initiation of the transaction varies widely on a case-by-case basis. Managing directors at investment banks will ideate a deal and approach management with the prospect, a seller may enlist the help of a bank to go to market, or a buyer with an acquisition appetite may seek out a desirable asset.



# Transaction initiation – the rain maker

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Goldman Sachs CEO David Solomon DJs at clubs around NYC

# Winning business – the bakeoff

A “bake-off” (also called a “beauty pageant” or “beauty contest” though that sounds even weirder...) refers to several investment banks competing for the same business, whether it's an IPO, a financing or an M&A deal. These types of “contests” involve long and very painful pitchbooks.



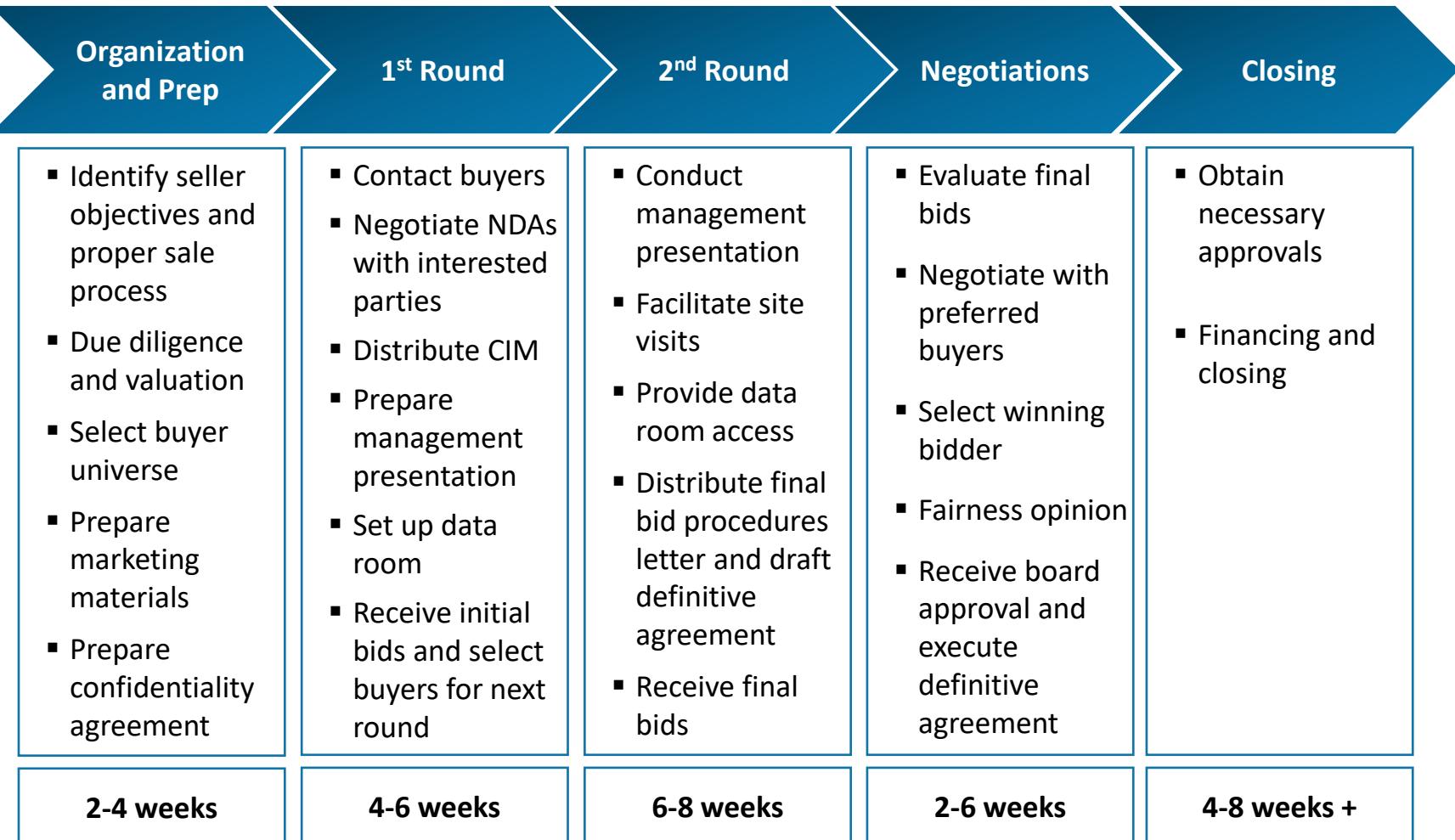
# Winning business – the bakeoff

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# Let's talk about how a broad auction works

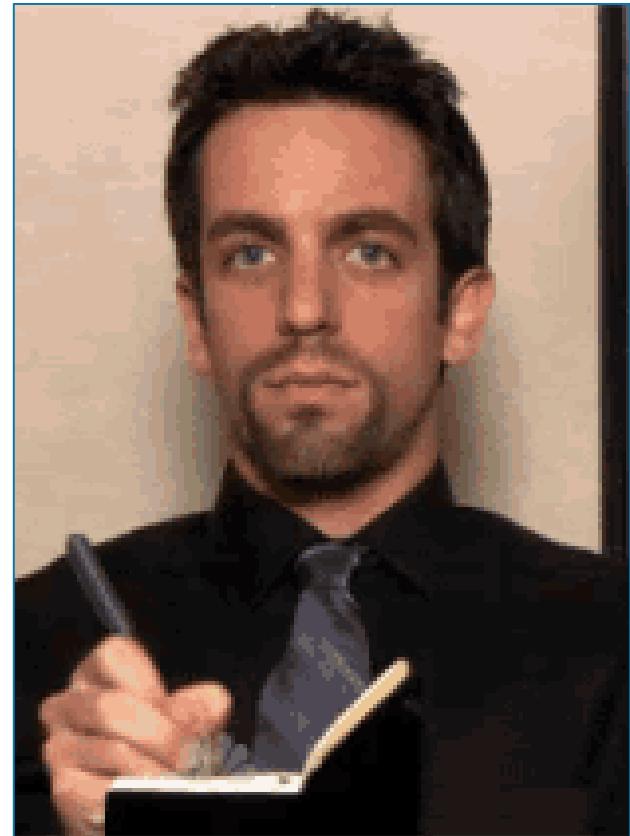
The traditional auction is a two-round process that generally spans from 3-6 months (or longer) from the decision to sell until the signing of a definitive purchase/sale agreement (“definitive agreement”) with the winning bidder



# Step 1 – Organization and preparation

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- Identify Seller Objectives and Determine Appropriate Process
- Perform Sell-Side Due Diligence and Preliminary Valuation Analysis
  - Long meetings with management
  - Valuation work beforehand
  - Understanding management projections
- Select Buyer Universe
  - This is the value of a good banker
  - Mix of strategic buyers and financial sponsors
- Prepare Marketing Materials
  - Teaser, CIM
- Prepare Confidentiality Agreement



# Teaser



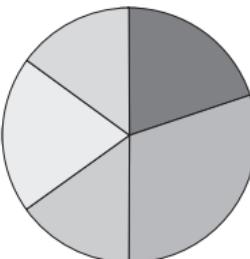
### Transaction Overview

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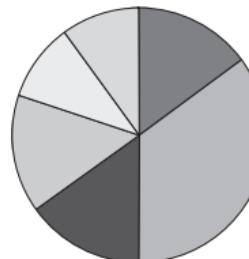
### Company Overview

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### Product Mix



### End Market Mix

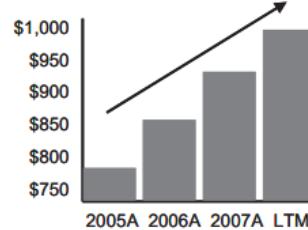




### Investment Highlights

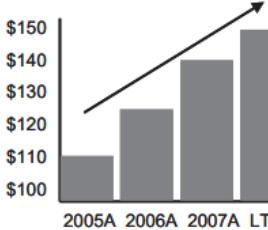
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### Sales Growth



Period	Sales (\$)
2005A	~\$820
2006A	~\$850
2007A	~\$920
LTM	~\$980

### EBITDA Growth



Period	EBITDA (\$)
2005A	~\$110
2006A	~\$120
2007A	~\$135
LTM	~\$145

### Contact Details

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Joshua Rosenbaum  
(212) XXX-XXXX

# CIM (confidential information memorandum)

The CIM is a detailed written description of the target (often 50+ pages) that serves as the primary marketing document for the target in an auction. The deal team, in collaboration with the target's management, spends significant time and resources drafting the CIM before it is deemed ready for distribution to prospective buyers.

 <p><b>Confidential Information Memorandum</b></p> <p>Control Number 001</p> <p>December 2008</p>	<p style="text-align: center;"><b>Table of Contents</b></p> <ul style="list-style-type: none"><li>1. Executive Summary</li><li>2. Investment Considerations</li><li>3. Industry Overview<ul style="list-style-type: none"><li>– segment overview</li><li>– competition</li></ul></li><li>4. Company Overview<ul style="list-style-type: none"><li>– history</li><li>– strategy</li><li>– products and services</li><li>– customers and suppliers</li><li>– management and employees</li></ul></li><li>5. Operations Overview<ul style="list-style-type: none"><li>– manufacturing</li><li>– distribution</li><li>– sales and marketing</li><li>– information systems</li><li>– legal and environmental</li></ul></li><li>6. Financial Information<ul style="list-style-type: none"><li>– historical financial results and MD&amp;A</li><li>– projected financial results and MD&amp;A</li></ul></li><li>Appendix<ul style="list-style-type: none"><li>– audited financial statements</li><li>– recent press releases</li><li>– product brochures</li></ul></li></ul>
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# Confidentiality Agreement / Non-disclosure Agreement

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A confidentiality agreement (CA) is a legally binding contract between the target and each prospective buyer that governs the sharing of confidential company information.



## Step 2 – First Round

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- Contact Prospective Buyers
- Negotiate and Execute Confidentiality Agreements with Interested Parties
- Distribute CIM and Initial Bid Procedures Letter
- Prepare Management Presentation
- Set up Data Room
- Receive Initial Bids and Select Buyers to Proceed to 2<sup>nd</sup> Round



# Management presentation

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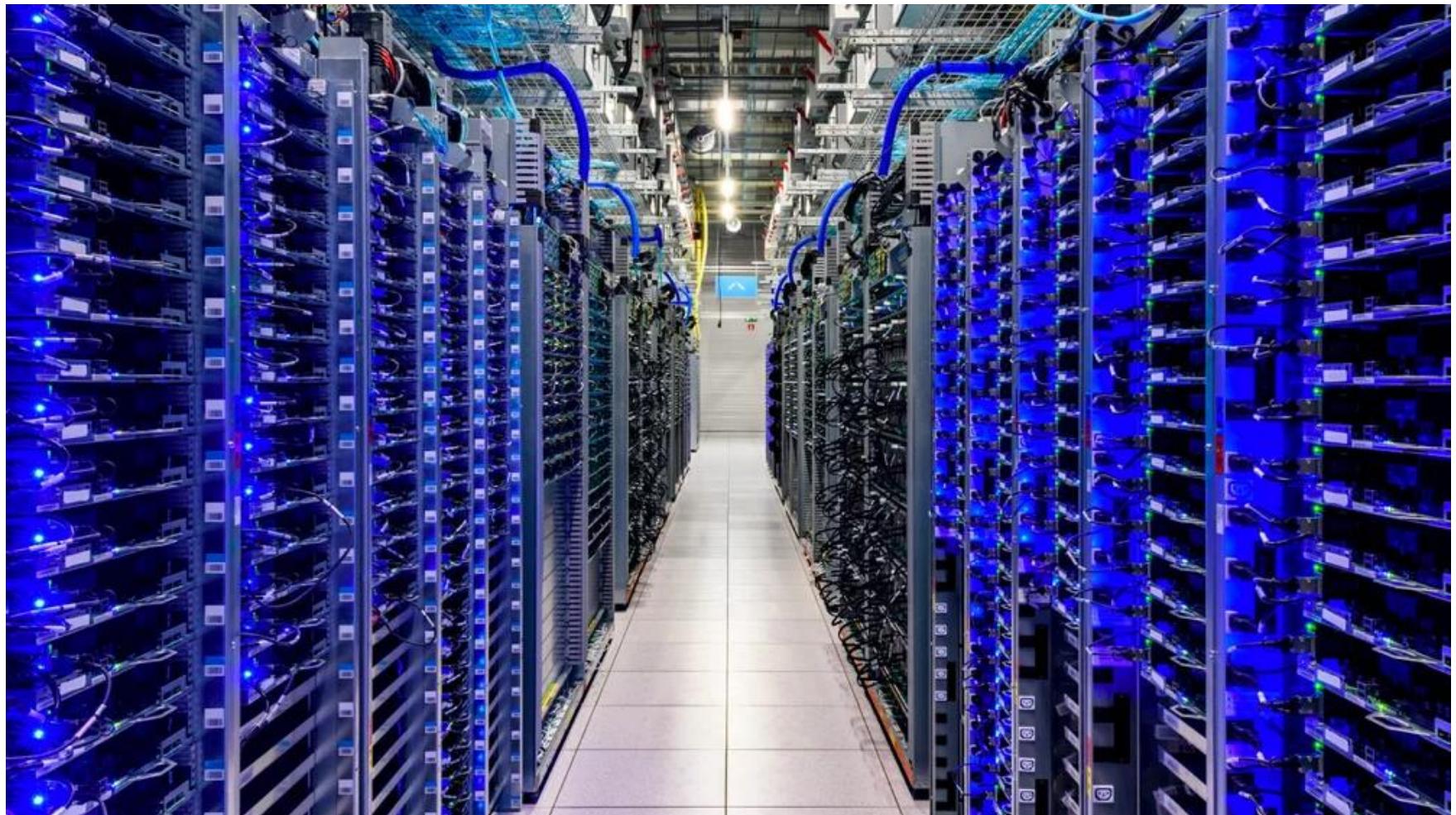


## **ValueCo Corporation Management Presentation December 2008**

- I. Executive Summary
- II. Industry Overview
- III. Company Overview
- IV. Operations Overview
- V. Financial Overview
- VI. Q&A

# Data room

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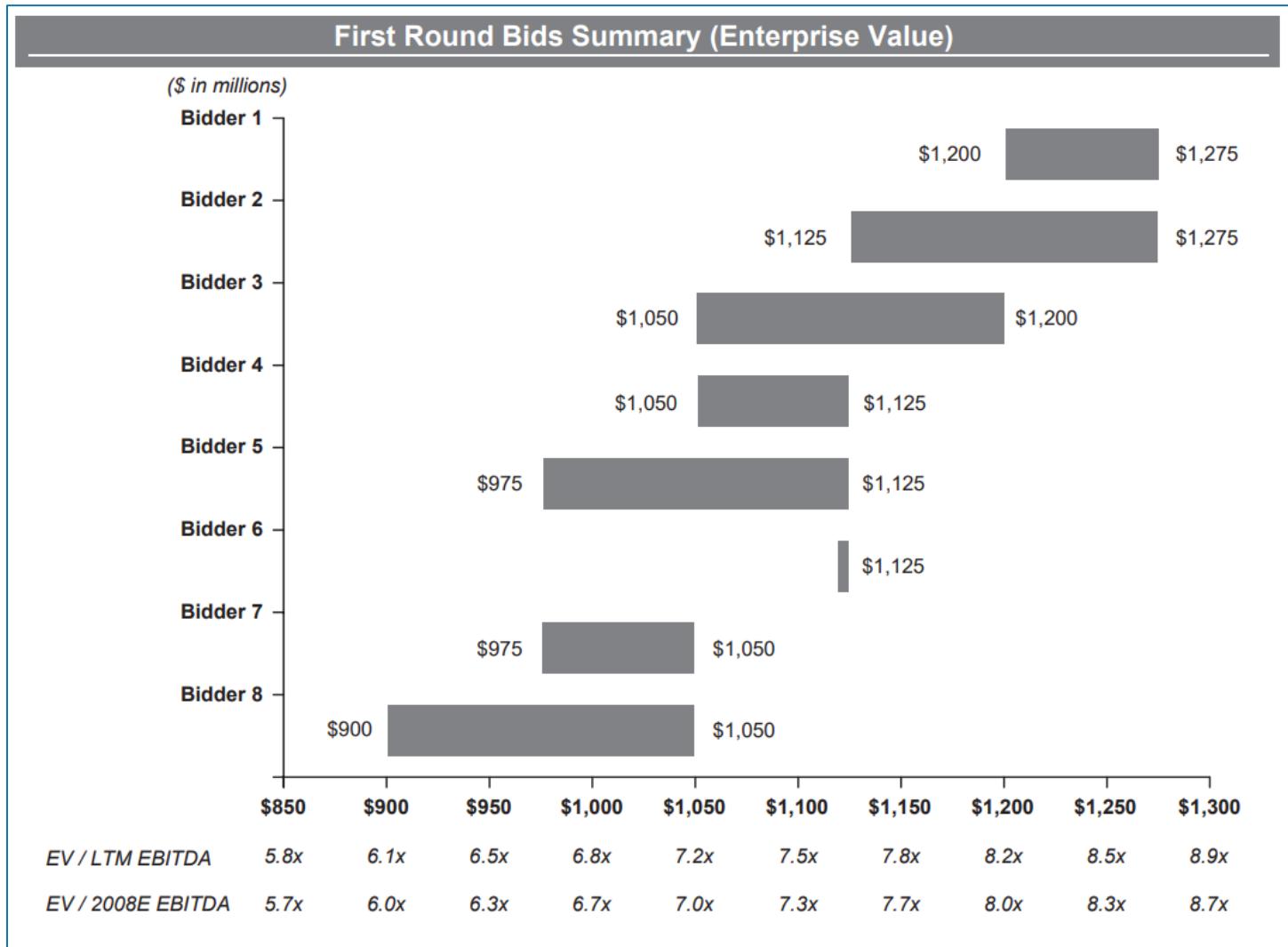


# Data room

Data Room Index	
<b>1. Organization and Structure</b>	<ul style="list-style-type: none"><li>■ Corporate organizational chart</li><li>■ Board of directors meeting minutes</li></ul>
<b>2. Financial Information</b>	<ul style="list-style-type: none"><li>■ Audited financial statements</li><li>■ Financial model</li></ul>
<b>3. Operational Overview</b>	<ul style="list-style-type: none"><li>■ Contracts and agreements</li><li>■ Machinery and equipment leases</li></ul>
<b>4. Research and Development</b>	<ul style="list-style-type: none"><li>■ List of current programs</li><li>■ List of completed programs</li></ul>
<b>5. Suppliers</b>	<ul style="list-style-type: none"><li>■ Top 10 suppliers</li><li>■ Supplier agreements</li></ul>
<b>6. Products and Markets</b>	<ul style="list-style-type: none"><li>■ Top 10 competitors</li><li>■ Market consulting reports</li></ul>
<b>7. Sales and Marketing</b>	<ul style="list-style-type: none"><li>■ Top 10 customers</li><li>■ Customer agreements</li></ul>
<b>8. Intellectual Property</b>	<ul style="list-style-type: none"><li>■ List of patents, trademarks, and copyrights</li><li>■ Software license agreements</li></ul>
<b>9. Management and Employee Matters</b>	<ul style="list-style-type: none"><li>■ Employment agreements/benefits</li><li>■ Employee options details</li></ul>
<b>10. Property Overview</b>	<ul style="list-style-type: none"><li>■ Summary of owned/leased real estate</li><li>■ Deeds, mortgage documents, and leases</li></ul>
<b>11. Insurance</b>	<ul style="list-style-type: none"><li>■ List of insurance policies</li><li>■ List of insurance claims</li></ul>
<b>12. Environmental Matters</b>	<ul style="list-style-type: none"><li>■ List of environmental issues</li><li>■ Compliance certificates</li></ul>
<b>13. Litigation</b>	<ul style="list-style-type: none"><li>■ List of pending or threatened litigation</li><li>■ List of judgments and settlements</li></ul>
<b>14. Legal Documentation</b>	<ul style="list-style-type: none"><li>■ Charters; by-laws</li><li>■ Governmental regulations and filings</li></ul>
<b>15. Debt</b>	<ul style="list-style-type: none"><li>■ List of outstanding debt</li><li>■ Credit agreements and indentures</li></ul>
<b>16. Regulation</b>	<ul style="list-style-type: none"><li>■ List of appropriate regulatory agencies</li><li>■ List of any necessary permits</li></ul>

# Receive Initial Bids and Select Buyers to Proceed to Second Round

- Sell-side advisor receives the initial indications of interest from prospective buyers
- An effective sell-side advisor can discern which bids are “real”
- Certain bidders may be trying to get a free look at the target



## Step 3 – Second Round

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The second round of the auction centers on facilitating the prospective buyers' ability to conduct detailed due diligence and analysis so they can submit strong, final (and ideally) binding bids by the set due date.

- Conduct Management Presentations
- Facilitate Site Visits
- Provide Data Room Access
- Distribute Final Bid Procedures Letter and Draft Definitive Agreement
- Receive Final Bids



# Management presentation





**ValueCo Corporation**  
Management Presentation  
December 2008

I. Executive Summary

II. Industry Overview

III. Company Overview

IV. Operations Overview

V. Financial Overview

VI. Q&A

# Site Visits

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The typical site visit involves a guided tour of a key target facility, such as a manufacturing plant, distribution center, and/or sales office.



## Step 4 – Negotiations

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- Evaluate Final Bids
- Negotiate with Preferred Buyer(s)
- Select Winning Bidder
- Render Fairness Opinion (if required)
- Receive Board Approval and Execute Definitive Agreement



# Step 5 – Closing

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- Obtain Necessary Approvals
- Financing and Closing

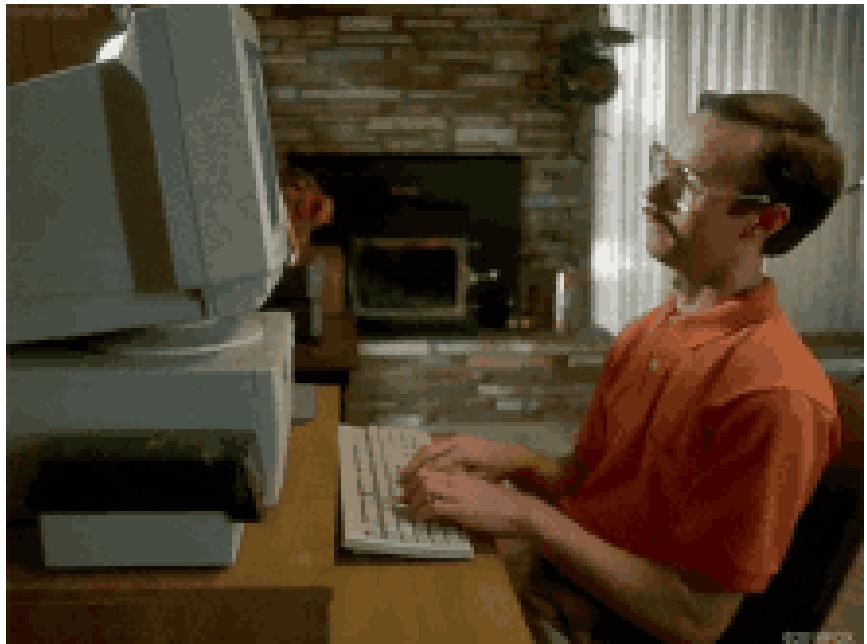
## **Financing and Closing**

In parallel with obtaining all necessary approvals and consents as defined in the definitive agreement, the buyer proceeds to source the necessary capital to fund and close the transaction. This financing process timing may range from relatively instantaneous (e.g., the buyer has necessary cash-on-hand or revolver availability) to several weeks or months for funding that requires access to the capital markets (e.g., bank, bond, and/or equity financing). In the latter scenario, the buyer begins the marketing process for the financing following the signing of the definitive agreement so as to be ready to fund expeditiously once all of the conditions to closing in the definitive agreement are satisfied. The acquirer may also use bridge financing to fund and close the transaction prior to raising permanent debt or equity capital. Once the financing is received and conditions to closing in the definitive agreement are met, the transaction is funded and closed.

# Which of these steps do the analysts work on?

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- Initial due diligence calls
- Teaser
- CIM
- Management presentations
- Valuation (LBO, DCF, Comps, Precedents)
- Creating and updating data room
- Answering questions from potential buyers
- Follow up calls with seller management
- Evaluating bids



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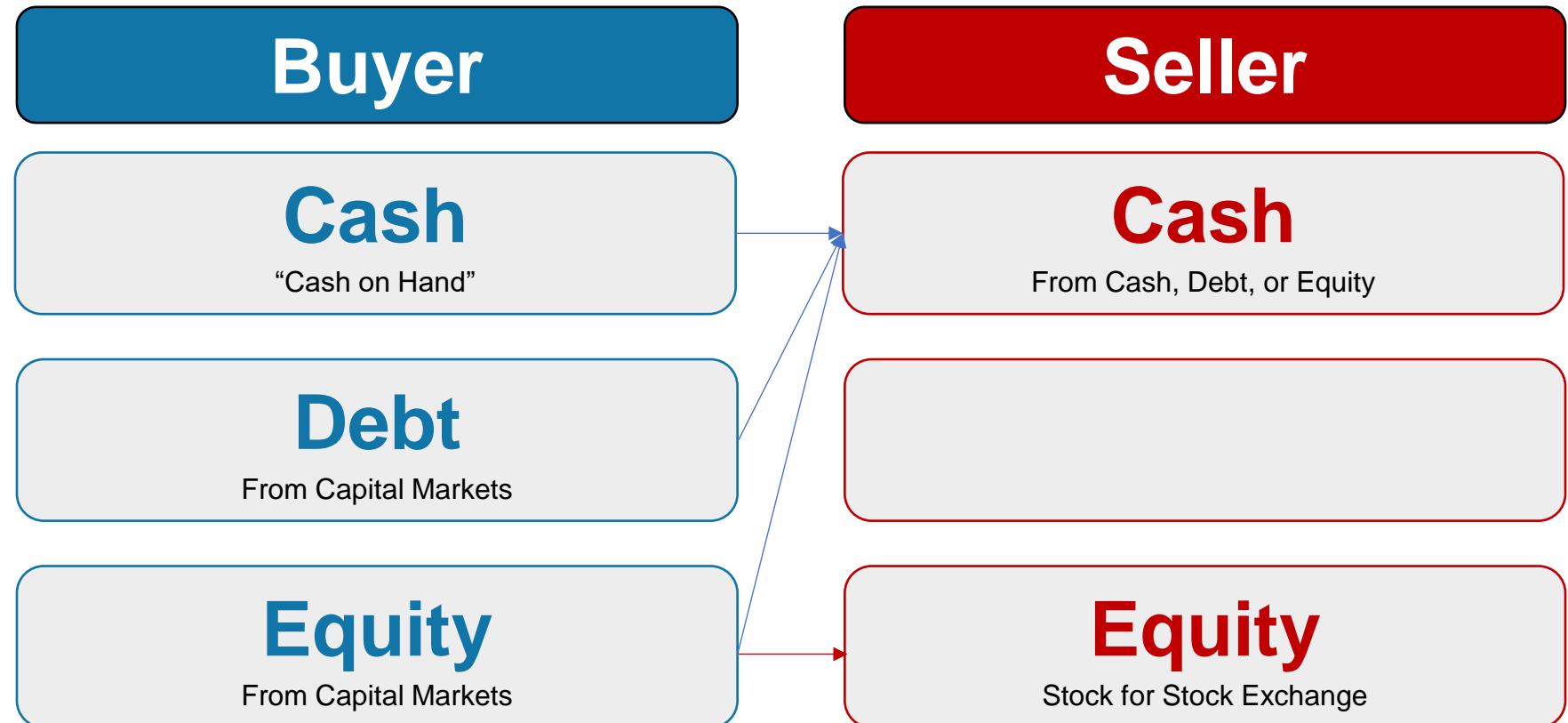
**Merger Consequence Analysis**

**Current State of M&A Markets**



# Financing M&A

From the buyside perspective, there are 3 forms of financing M&A – cash, debt, and equity, and from the sell side perspective there are two ways of receiving compensation – cash and equity



# Financing M&A

From the buyside perspective, there are 3 forms of financing M&A – cash, debt, and equity, and from the sell side perspective there are two ways of receiving compensation – cash and equity

	Buyer	Seller
Cash	<ul style="list-style-type: none"><li>Easiest and quickest source of financing</li><li>Great for funding smaller acquisitions</li><li>Least costly (foregone interest on cash)</li><li>Limits buyers' liquidity post-acquisition</li></ul>	<ul style="list-style-type: none"><li>Immediate receival of proceeds (complete exit)</li><li>Less risk</li><li>Loss of ownership</li></ul>
Debt	<ul style="list-style-type: none"><li>Less costly than equity</li><li>Available in greater quantities than cash</li><li>Positive market signaling</li><li>Lack of financial flexibility</li></ul>	
Equity	<ul style="list-style-type: none"><li>Financing For Largest Mergers</li><li>Often more costly than debt, but cheaper when the firm is trading at high PE multiples</li><li>Incentivize seller</li><li>Dilutive to EPS and ownership</li></ul>	<ul style="list-style-type: none"><li>Participate in upside of deal</li><li>Share in ownership of new firm</li><li>Increased risk</li></ul>

# Financing Structure and Deal Type

The size, caliber, and business model of the firms involved in the M&A transaction plays a critical role in determining how the buyer will choose to finance the acquisition

## Deal Type

### Cash

Smaller mergers of private companies &  
used to supplement debt/equity used in larger mergers

### Debt

M&A involving a private equity sponsor

### Equity

Mergers of large firms in which stock is used as the acquisition currency

# Mega-Merger

A mega-merger is commonly seen as an M&A transaction is of greater than \$10B in size – deals of this size are almost exclusively financed in a stock for stock exchange

## Capital One to Acquire Discover

Under the terms of the agreement, Discover shareholders will receive 1.0192 Capital One shares for each Discover share, representing a premium of 26.6% based on Discover's closing price of \$110.49 on February 16, 2024. Transaction is 100% stock consideration.

- Creates a global payments platform at scale, with 70 million merchant acceptance points in more than 200 countries and territories
- Positions the combined company to compete with the largest payments companies and deliver enhanced value to a franchise of over 100 million customers
- Enables Capital One to leverage its customer base, technology, and data ecosystem to drive more sales for merchants and great deals for consumers and small businesses
- Leverages Capital One's eleven-year technology transformation across a much larger enterprise
- Generates \$2.7 billion in pre-tax synergies and >15% accretive to adjusted non-GAAP EPS in 2027
- Delivers return on invested capital (ROIC) of 16% in 2027 with internal rate of return (IRR) >20%
- Companies to host a conference call February 20, 2024 at 8:00am ET

MCLEAN, Va. and RIVERWOODS, Ill., Feb. 19, 2024 /PRNewswire/ -- Capital One Financial Corporation (NYSE: COF) and Discover Financial Services (NYSE: DFS) today announced that they have entered into a definitive agreement under which Capital One will acquire Discover in an all-stock transaction valued at \$35.3 billion.



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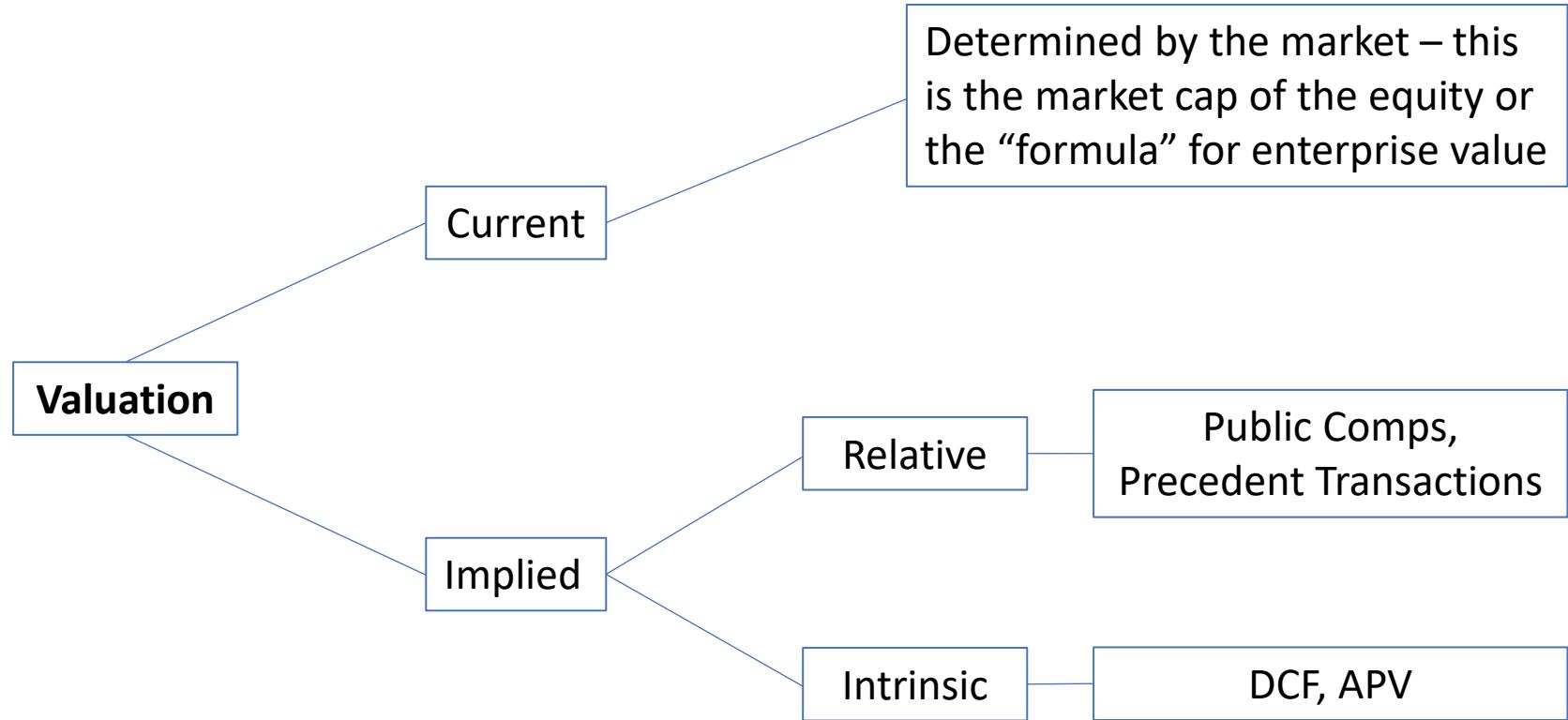
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# Valuation Overview

The most effective tool for valuing an asset is a financial market – analysis made by an investment banker seeks to represent value on either a relative or intrinsic basis to cross check market valuations and value private firms



# Valuation in M&A

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Over the course of the semester, we have covered a variety of valuation techniques that allow the investment banks advising on the transaction to ensure that the firm transacts as close to fair value as possible

## DCF

Discounted Cash Flow Valuation

## Public Comps

Valuation by Relative Comparison

## Precedents

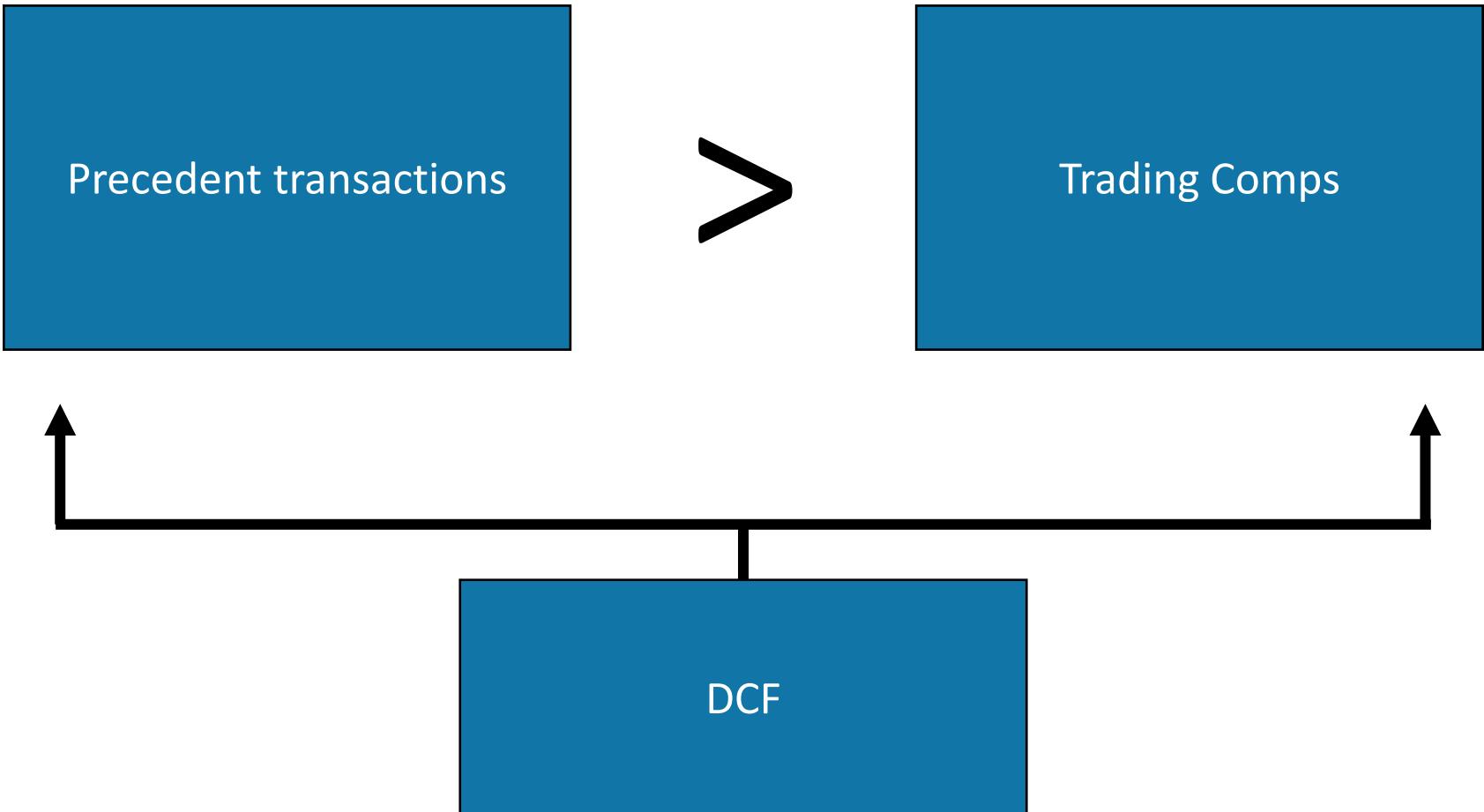
Valuation by Relative Comparison

## LBO

Leveraged Buyout – Floor Valuation

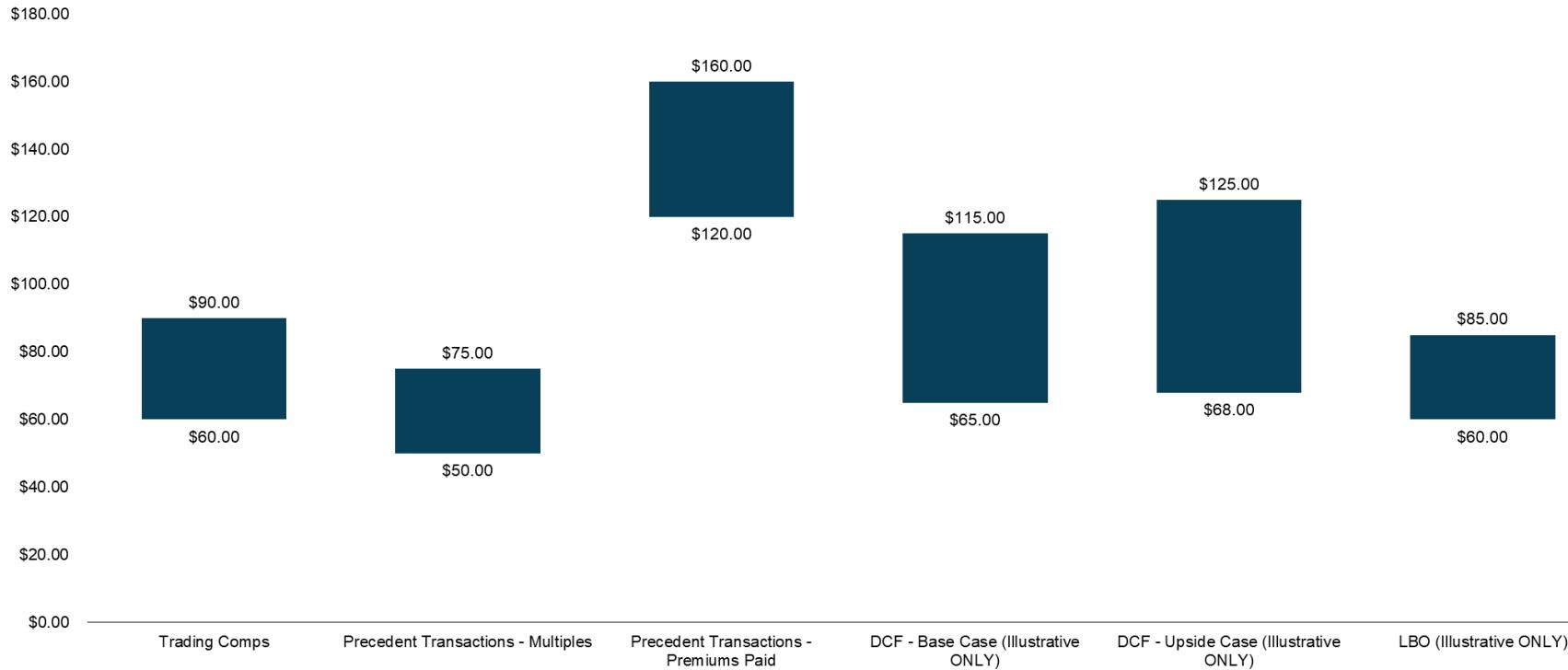
# Ranking the 3 major valuation techniques

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# Putting it all together – Football field

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**When advising on  
strategic M&A, what  
is the point of using  
an LBO valuation?**

# Synergies

Strategic acquirers can also absorb the cost of the control premium by realizing synergies



## Synergies

### Definition:

- **Synergies** are potential cost savings, growth opportunities, lower costs of capital, or other benefits resulting from the combination of two companies
- Expected incremental cash flow and earnings in the future (beyond what the buyer could generate on its own)

### Key Themes:

- Prices (and valuation multiples) can be impacted by the buyer's opinion of the probability of achieving potential synergies (timing, size, etc.)
- Most relevant for **strategic buyers** (less for **financial buyers**)
- Sometimes (not always) disclosed, either in absolute \$ or % of the target's revenue

### Key Takeaway

Synergies should be compared across precedent transactions (if possible) to provide greater context to each deal

# Cost & Revenue Synergies

Cost Synergies	Revenue Synergies
(Hard Synergies)	(Soft Synergies)
<ul style="list-style-type: none"><li>▪ Consolidation of administrative departments (accounting, finance, HR)</li><li>▪ Economies of scale to drive down production costs</li><li>▪ Consolidation of brick-and-mortar facilities</li></ul>	<ul style="list-style-type: none"><li>▪ Cross Selling</li><li>▪ Geographic Expansion</li><li>▪ Product Diversification</li><li>▪ Increased Pricing Power</li></ul>

# Synergies in M&A

Most synergies arising from large scale M&A transactions arise out of operating synergies – rarer are synergies associated with increases in revenue or improved capital structure

**Table 3**  
**Components of synergies**

	Total synergies	Financial synergies	Operating synergies	Revenue increases/ cost savings	Cutbacks in investments
Mean	10.03***	1.64***	8.38**	-4.91*	13.29***
( <i>p</i> -value)	(0.01)	(0.01)	(0.03)	(0.09)	(0.01)
Median	5.11***	0.02**	4.45***	-0.52	5.39***
( <i>p</i> -value)	(0.01)	(0.02)	(0.01)	(0.25)	(0.01)
% > 0	58.33	51.52	56.82	48.86	60.61

# Valuing Synergies

Both of the following methodologies are crude simplification of synergistic valuation in practice, but serve as a general picture of how the synergies associated with a deal may be valued

## Method 1: Combined Operating Model

1	<b>Estimate Synergies</b>	Qualify and quantify synergies as accurately as possible through operating income with oversight from senior bankers
2	<b>Combine Synergies and Firm Value</b>	Combine synergies on the pro forma income statement with the combined firm and filter through to net income, complete the rest of the operating model
3	<b>Value Combined Firm</b>	Using the any valuation methodology, determine the value of the combined firm which now includes the buyer, the seller, and the synergies

## Method 2: Independent Synergy Valuation

1	<b>Estimate Synergies</b>	Qualify and quantify synergies as accurately as possible through operating income with oversight from senior bankers
2	<b>Complete Synergistic P&amp;L</b>	Filter the synergies from operating income all the way through to net income assuming the same capital structure and tax rate as the buyer
3	<b>Value Synergies</b>	Using the any valuation methodology, determine the value of the synergies as if it was its own firm

# Treatment of Debt in an Acquisition

In an acquisition, the buyer and seller can negotiate between 1 of 3 options – the debt is repaid in full, the debt is assumed by the buyer (combined firm), or the debt is refinanced

CFDF

A deal in which the debt of the target is repaid in full prior to the acquisition is known as cash free debt free – in this scenario the seller uses their cash to pay down the debt, and the equity holders keep the remainder. As net debt has gone to zero, the enterprise value is equal to the equity value. This is common in small private mergers

Transfer  
of Debt

The buyer and seller may conclude that the assumption of the seller's debt by the combined firm post acquisition is the most beneficial course of action. When the transfer of debt ownership occurs, the same line item of debt may appear on both the sources and uses side of the balance sheet.

Re-  
financing

Commonly in large mergers, the combined firm will raise an amount of debt equal to the remainder of the principle outstanding of the target's debt balance and use the new debt to paydown the old – this is known as refinancing.

# The Real Purchase Price

Neither enterprise nor equity value can be viewed exclusively as “the real purchase price” – a sources and uses statement is useful in determining the price paid in acquiring the target firm

Uses	\$	%	Sources	X	\$	%
Equity Purchase Price	\$32,145	98.8%	Excess Cash from Acquirer and Target		\$3,544	10.9%
Refinance Target Debt	--	--	Refinanced Target Debt	--	--	--
Financing Fees & OID	279	0.9%	Revolver	--	--	--
Transaction Fees	100	0.3%	New Term Loan	2.00x	12,718	39.1%
<b>Total Uses</b>	<b>\$32,525</b>	<b>100%</b>	New Equity Issued		16,262	50.0%
			<b>Total Sources</b>		<b>\$32,525</b>	<b>100.0%</b>

# Investment Analysis

In the world of corporate finance, there exist several ways to assess the outcome of an investment– the most prominent of which is NPV; however, banks and management teams primarily focus on EPS

Method	Considers	Determination
NPV	TVM Risk Size of Cash Flows	Is NPV > 0?
IRR	TVM Risk Size of Cash Flows	Does IRR > Hurdle Rate?
Payback Period	Size of Cash Flows	Is payback period within reasonable time frame?
Profitability Index	TVM Risk Size of Cash Flows	Is PI > 1?
EPS Comparison	Size of Cash Flows	Is EPS post acquisition greater than EPS of buyer?

**Although an acquisition could be negative NPV (a bad investment), if it is anticipated to be accretive to EPS, management will likely pursue the acquisition.**

# M&A Investment Analysis

Academic economists have found through consistent research that managers often place accurate methods of investment analysis as secondary to determining the impact of a project on EPS

Participants in study...	Are you making decisions based on...		
	NPV/DCF?		EPS? not asked (3)
	say "Yes" (1)	say "Yes" (2)	
<b>(a) Broad objectives</b>			
Graham (1947)		✓	
Petty et al. (1975)		✓	
Graham et al. (2005)		✓	
Dichev et al. (2013)		✓	
<b>(b) Capital structure</b>			
Pinegar and Wilbricht (1989)		✓	
Graham and Harvey (2001)	✓	✓	
Bancel and Mittoo (2004)	✓	✓	
Brounen et al. (2006)	✓		⊗
<b>(c) Repurchases/issuance</b>			
Baker et al. (1981)		✓	
Tsetsekos et al. (1991)		✓	
Badrinath et al. (2000)		✓	
Graham and Harvey (2001)		✓	
Brav et al. (2005)		✓	
Brounen et al. (2006)		✓	
Caster et al. (2006)		✓	
<b>(d) Cash holdings</b>			
Lins et al. (2010)	✓		⊗
<b>(e) Capital budgeting</b>			
Schall et al. (1978)	✓	✓	
Gitman and Maxwell (1987)	✓	✓	
Graham and Harvey (2001)	✓	✓	
Mukherjee et al. (2004)	✓	✓	
Baker et al. (2011)	✓	✓	

# HP Acquires Compaq

In their acquisition of Compaq, the management team at HP focused heavily on the impact of the deal to the combined firm's EPS post transaction at the expense of more accurate methods of investment analysis

## CREATING VALUE FOR HP SHAREHOLDERS

### WE PLAN TO DELIVER NON-GAAP EPS OF \$3.25 – \$3.65 IN FY22 TO HP SHAREHOLDERS

- Executing on our operating plan: driving projected non-GAAP operating profit of \$4.7 – 5.1B in FY22 and cumulative free cash flow of \$10.7 to \$11.7B from FY20-22
- Driving aggressive cost takeout: targeting \$1.2B structural cost reduction in FY22 with net flow through to non-GAAP operating profit of \$650M
- Utilizing HP's balance sheet for HP shareholders' benefit: target \$16B return of capital during FY20-22 (~50% of current market cap<sup>1</sup>); at least \$8B of share repurchase in first 12 months



### WE ARE HIGHLY CONFIDENT IN OUR ABILITY TO DELIVER ON OUR COMMITMENTS

- Operational strategy underpinned by realistic market assumptions with management team's proven execution across our portfolio of businesses
- Already executing against structural cost reductions, productivity opportunities and growth businesses
- Track record of delivering – met or beat non-GAAP EPS guidance 17 out of 17 quarters and free cash flow guidance 4 out of 4 years since separation

### WE BELIEVE VALUE CAN BE CREATED THROUGH CONSOLIDATION

- We led consolidation in the industry through our acquisition of Samsung Printing, demonstrating both cost takeout and incremental revenue opportunities
- Expect to continue to pursue consolidation opportunities but only when there is a path to create value for HP shareholders

### XEROX PROPOSAL WOULD CREATE SIGNIFICANT RISK, COMPROMISE HP'S FUTURE

- Meaningfully undervalues HP, exchanging HP stock for cash and Xerox stock at a fundamentally flawed value exchange; does not compensate HP shareholders for the value of HP executing on strategic plan; transfers value from HP shareholders to Xerox shareholders
- Uses HP's balance sheet as transaction consideration and creates irresponsible capital structure that jeopardizes the future value of the combined company and constrains its ability to invest in growth and innovation
- Overstates the transaction's potential synergies by including HP's existing plans for independent cost reductions and productivity gains



# HP Acquires Compaq

In their acquisition of Compaq, the management team at HP focused heavily on the impact of the deal to the combined firm's EPS post transaction at the expense of more accurate methods of investment analysis



/ business

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## Worst tech mergers and acquisitions: HP and Compaq

A corporate merger, like a marriage, can yield a whole stronger than its parts -- or it can end in utter disaster. We countdown the worst corporate romances in IT history.

# Table of Contents

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M&A Process Overview

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# What is a merger model?

A merger model is used to analyze the financial profiles of 2 companies, the purchase price and how the purchase is made, and determines whether the buyer's EPS increases or decreases.

1

- Make assumptions about the acquisition – the price and whether it was cash, stock or debt or some combination of those

2

- Project out an Income Statement for each one
- Determine the valuations and shares outstanding of the buyer and seller

3

- Combine the Income Statements, adding up line items such as Revenue and Operating Expenses, and adjusting for Foregone Interest on Cash and Interest Paid on Debt in the Combined Pre-Tax Income line
- Apply the buyer's Tax Rate to get the Combined Net Income, and then divide by the new share count to determine the combined EPS

# What is a merger model?

## How to Build a Merger Model

1.



Making  
Acquisition  
Assumptions

2.



Making  
Projections

3.



Valuation of  
Each Business

4.



Business  
Combination &  
Pro Forma  
Adjustments

5.



Deal Accretion  
/ Dilution



# What sensitivities would you look at in a merger model?

Purchase Price

% Stock/Cash/Debt

Revenue Synergies

Expense Synergies

## Share Price Sensitivity

		Revenue Growth				
		0%	5.0%	10.0%	15.0%	20.0%
Exit Multiple	6.0x	19.22	23.73	29.09	35.43	42.88
	7.0x	20.85	25.92	31.97	39.13	47.56
	8.0x	22.47	28.11	34.85	42.83	52.24
	9.0x	24.10	30.31	37.72	46.53	56.92
	10.0x	25.73	32.50	40.60	50.23	61.60

## Effects of M&A

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1. Foregone Interest on Cash – The buyer loses the Interest it would have otherwise earned if it uses cash for the acquisition.
2. Additional Interest on Debt – The buyer pays additional Interest Expense if it uses debt.
3. Additional Shares Outstanding – If the buyer pays with stock, it must issue additional shares.
4. Combined Financial Statements – After the acquisition, the seller's financials are added to the buyer's.
5. Creation of Goodwill & Other Intangibles – These Balance Sheet items that represent a “premium” paid to a company's “fair value” also get created.

# Goodwill & Other Intangibles

## What is goodwill?

- These represent the value over the “fair market value” of the seller that the buyer has paid
- You calculate the number by subtracting the book value of a company from its equity purchase price

Represents things like the value of customer relationships, brand names and IP – valuable, but not true financial Assets

## Difference between goodwill and other intangible assets?

- Goodwill typically stays the same over many years is not amortized
- Changes only if there is an impairment

## Accretion vs dilution

**EPS =**

$$\frac{\text{net income} - \text{dividend payments}}{\text{weighted average shares outstanding}}$$

### Accretion

- An acquisition is said to be "accretive" if the buyer's **EPS goes up** post-deal

### Dilution

- An acquisition is said to be "dilutive" if the buyer's **EPS goes down** post-deal



# Why do we care so much about EPS?

---

**EPS =**

$$\frac{\text{net income} - \text{dividend payments}}{\text{weighted average shares outstanding}}$$

- In theory, companies **should care only about expected future cash flows**
- EPS is important because it **reflects all acquisition effects**: foregone interest on cash, interest paid on new debt, and new shares issued to fund the deal
- So, if a company announces an acquisition that will “boost its long-term cash flows,” but it’s also expected to result in a huge EPS decrease next year, the **market may not react well**
- Another reason why EPS is the key metric in this analysis: it’s the **only easy-to-calculate metric that captures the deal's FULL impact**

## Easy rule

---

Must be 100% stock deal!

In an all-stock deal, if the buyer has a higher P/E than the seller, it will be accretive; if the buyer has a lower P/E, it will be dilutive.

On an intuitive level if you're paying more for earnings than what the market values your own earnings at, you can guess that it will be dilutive; and likewise, if you're paying less for earnings than what the market values your own earnings at, you can guess that it would be accretive.

## What makes a deal dilutive?

---

*An acquisition is dilutive if the additional amount of Net Income the seller contributes is not enough to offset:*

- Forgone interest on cash
- Additional interest paid on capital
- Effects of issuing additional shares
- Amortization of intangibles

# Impairment charges

## What happens when you overpay for another company?

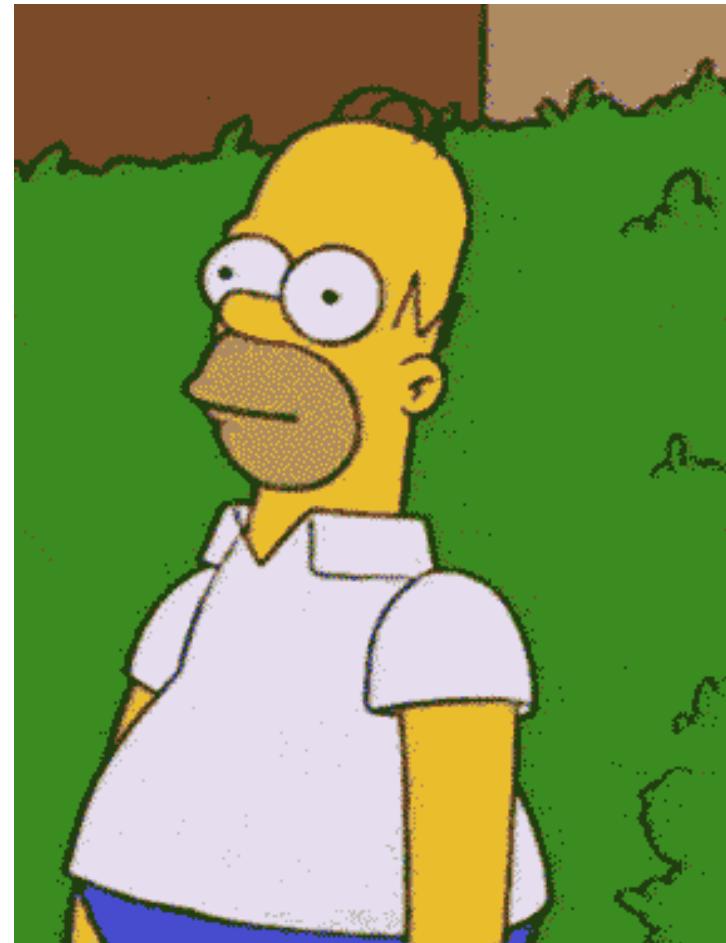
- There would be an incredibly high amount of Goodwill & Other Intangibles created if the price is far above the fair market value of the company
- The goodwill must be tested (at least annually) to determine if the recorded value of the goodwill is greater than the fair value
- If the fair value is less than the carrying value, the goodwill is deemed impaired and must be charged off
- The company needs to decrease its book value in the balance sheet and recognize a loss in the income statement

### Examples of large goodwill-related impairments

**AOL**  
TimeWarner

\$45.5 billion  
2002

**W** \$12.4 billion  
2023



# Control Premium

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Fair Market Value

**Control Premium**

+20%/30%  
Secures Ownership



## One example problem

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**QUESTION:** *"A company with a P / E multiple of 25x acquires another company for a purchase P / E multiple of 15x. Will the deal be accretive or dilutive?"*

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**ANSWER:** You can't tell unless it's a 100% Stock deal. If it is, it will be accretive because the Cost of Acquisition is  $1 / 25$ , or 4%, and the Seller's Yield is  $1 / 15$ , or 6.7%. Since the Seller's Yield is higher, it will be accretive.

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**ANSWER:** The buyer's EPS is  $\$10 / 10 = \$1.00$ . It must issue  $\$150 / \$25.00 = 6$  additional shares to do the deal, so the Combined Share Count is  $10 + 6 = 16$ .

Since both companies have the same tax rate and since no Cash or Debt is used, Combined Net Income =  $\$10 + \$10 = \$20$ , and Combined EPS =  $\$20 / 16 = \$1.25$ , so the deal is 25% accretive.

# For more problems



[Access the Rest of the IB Interview Guide](#)

## IB Interview Guide, Module 4: M&A Deals and Merger Models

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# Other Methods of Assessing M&A

The following methods are used by both public companies as supplements to an EPS accretion/dilution analysis as well as by private companies to determine an M&A transaction is justifiable

## M&A Valuation

The firm is valued as a standalone entity + the value of the synergies that would be realized post-acquisition. The sum of those two is compared with the equity purchase price of the firm to determine if the buyer is getting a “good” deal.

## IRR vs Discount Rate

This method of valuation upholds the core principles of capital budgeting in that it accounts for the time value of money as well as the riskiness and size of the cash flows – if the IRR (the rate of return of the investment) is greater than the cost of capital, the deal is likely “good”.

## Relative Contribution Analysis

This valuation is commonly used in private M&A, all stock deals, and mergers of equals. The idea is simple – compare the fraction of a certain item on the P&L that the buyer is contributing post M&A, and back into the implied price they should be paying. For example, if the buyer would be contributing 70% of the combined firm’s EBITDA, the price being paid should reflect at least 70% of the seller’s equity.

## Value Creation Analysis

Value creation analysis analyzes the value of the combined firm on a relative basis accounting for the fact that a larger firm may trade at a higher multiple. For example, if two small companies in a sector trade at 6x EBITDA, but the largest players in the space trade at 15x EBITDA, value creation analysis would say that  $6x+6x=15x$ , and therefore shareholder value has been created.

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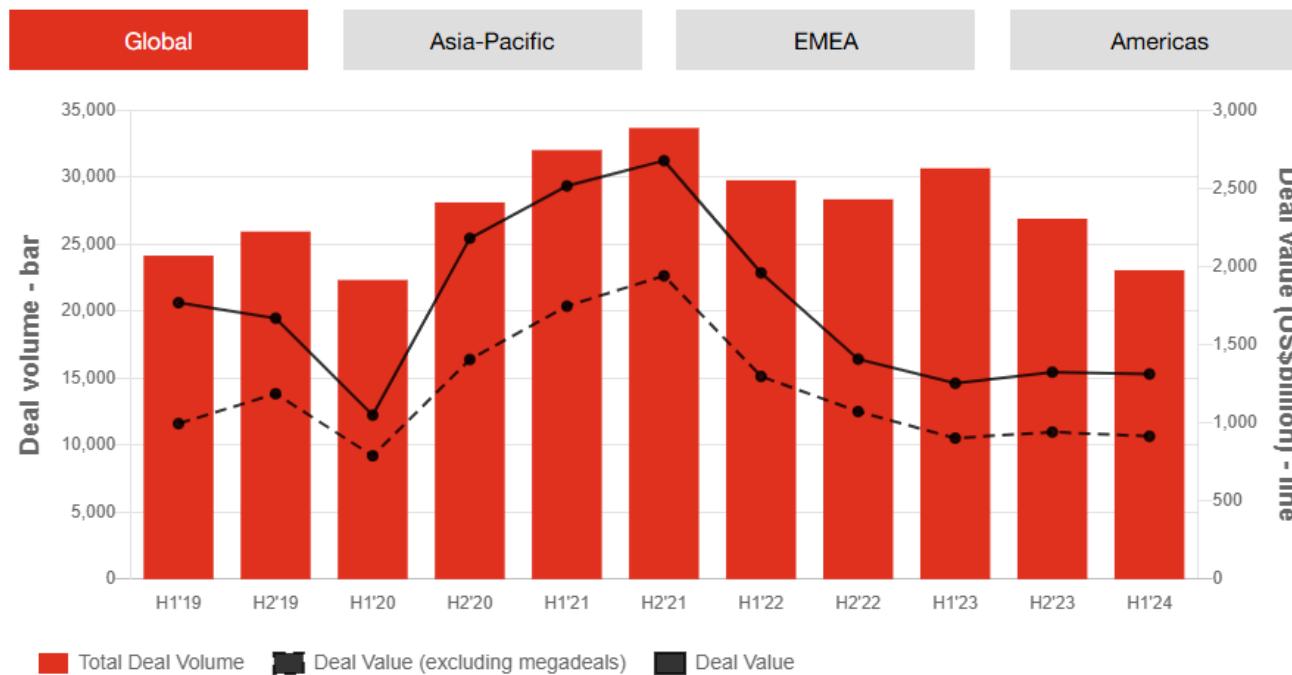


# M&A Activity

Total deal volume has been steadily decreasing for several years amidst the high-interest rate environment; however recent and anticipated rate cuts in coming months are set to increase total deal volume

## Deal volumes and values, 2019-H1'24

Click the tabs to view the chart and commentary for each region.

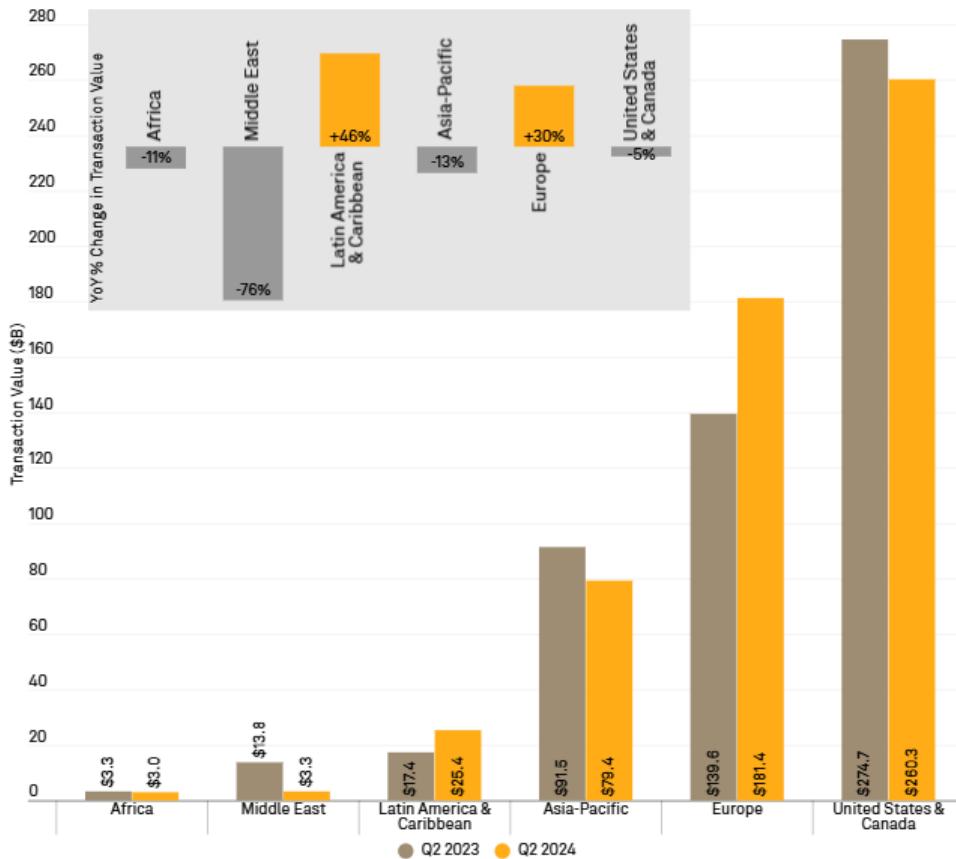


Sources: LSEG and PwC analysis

# Q2 2024 Deal Volume

Deal volume in the second quarter of 2024 was down slightly from levels previously observed in the same period in 2023 as firms suffered the effects of higher interest rates as well as economic and political uncertainty

Regional M&A activity in Q2, with YoY Changes

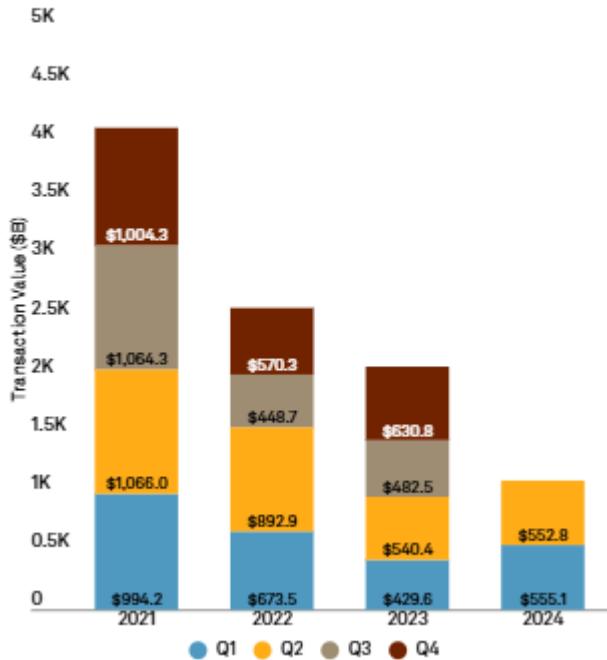


# Q2 2024 Deal Volume

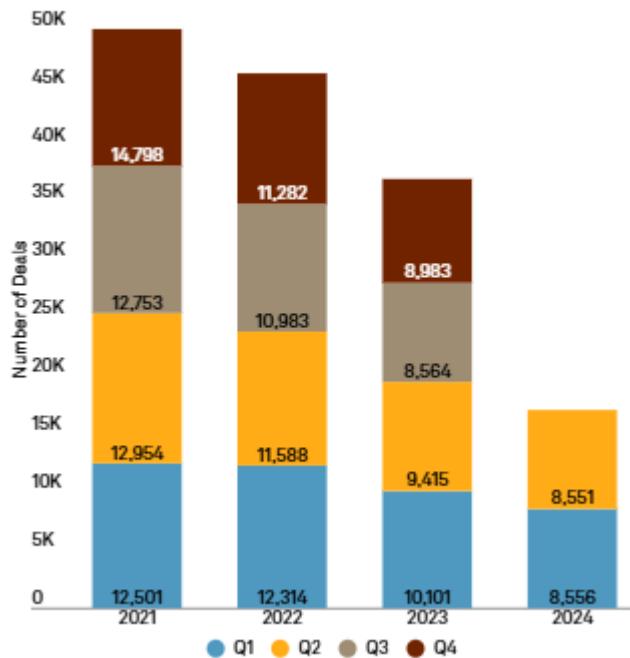
The number of deals announced in through the first half of 2024 was less than the same figure in the previous year, however the size of deals has increased as shown by the increase in total transaction value

## Global M&A activity by year

Transaction value (\$B)



Number of deals



# 2024 – The Return of the Mega-Merger

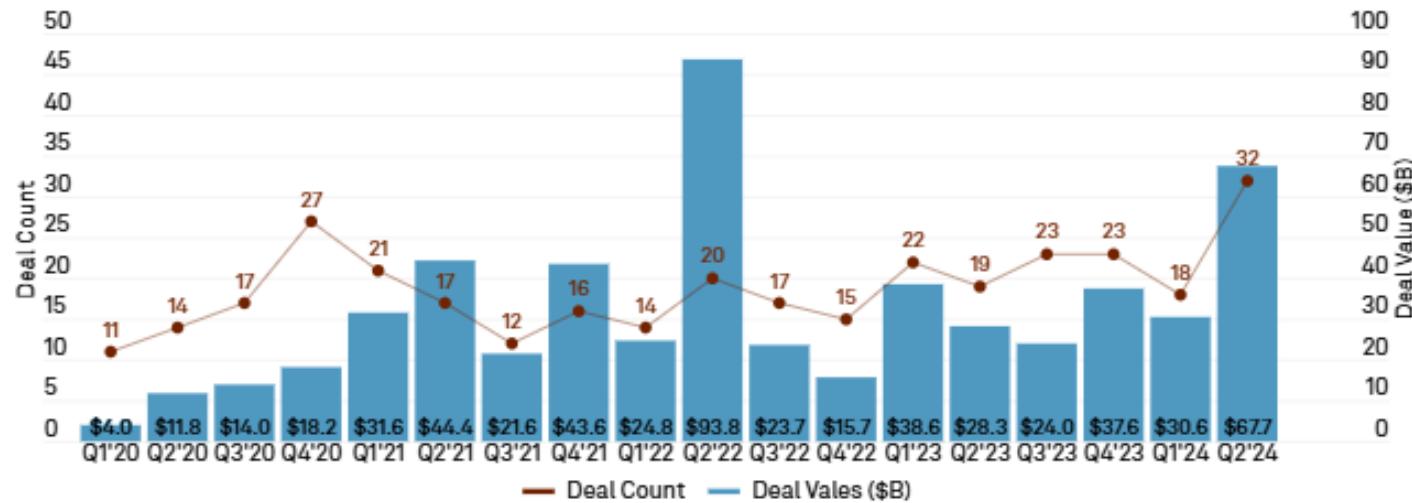
Deal size has increased significantly in the first half of 2024 – public equity valuations have soared higher allowing large strategics to use their own stock as a more cost effect form of financing large scale acquisitions

Target name	Target Country	Buyer Name	Buyer Country	Target Industry Sector	Transaction Value (\$B)
Marathon Oil Corp.	US	ConocoPhillips	US	Energy	\$22.5
Endeavor Group Holdings Inc.	US	Silver Lake Technology Management LLC	US	Communication Services	\$21.1
Minsheng Securities Co. Ltd.	China	Guolian Securities Co. Ltd.	China	Financials	\$17.0
Covestro AG	Germany	Abu Dhabi National Oil Co.	UAE	Materials	\$15.4
Shockwave Medical Inc.	US	Johnson & Johnson	US	Healthcare	\$12.9
Banco de Sabadell SA	Spain	Banco Bilbao Vizcaya Argentaria SA	Spain	Financials	\$12.3
Fab 34, Intel's leading-edge fabrication facility	Ireland	Apollo Global Management Inc.	US	Information Technology	\$11.2
Millicom International Cellular SA	Luxembourg	Atlas LuxCo 4 Sarl	Luxembourg	Communication services	\$10.0
Apartment Income REIT Corp.	US	Blackstone Real Estate Partners X LP	US	Real Estate	\$9.2
Atlantica Sustainable Infrastructure PLC	UK	Energy Capital Partners LLC	US	Utilities	\$7.9

# 2024 – The Rise of the Take-Private

Alongside a notable increase in mega-merger type deals, private equity sponsors have grown increasingly active as the medium by which public firms are being delisted – such a transaction is known as a “take-private”

## Going private transactions on the rise



# Deal Spotlight – ExxonMobil Acquires Pioneer

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In the largest corporate M&A deal of the year, ExxonMobil has announced plans to acquire Pioneer Natural Resources for a total consideration of ~\$60B in an all-stock deal



# Deal Spotlight – Vista Equity and Blackstone Take Smartsheet Private

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This major take private demonstrates the power of private equity firms operating as a “consortium” to complete a large deal – the total transaction value was ~\$8B and was financed entirely by a combination of debt and equity

# Blackstone



Source: Blackstone – note the transaction was said to be financed by all cash; this is because the private equity sponsor paid the shareholders of the target in cash using the equity proceeds from their funds and debt from various lenders – recall the definition of a leveraged buyout



# Why do mergers fail?

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BUSINESS | DEALS

## M&A Can Pay Off, but It's Far From a Sure Thing

Companies can get better at doing successful mergers and acquisitions, advisers say

Does M&A work? The latest research says it's a tossup.

Business-school students are often taught that successful mergers and acquisitions are a long shot. One influential Harvard Business Review article, dating from 2011, says a range of studies show roughly 70% to 90% of deals [fail to create value for the buyer.](#)

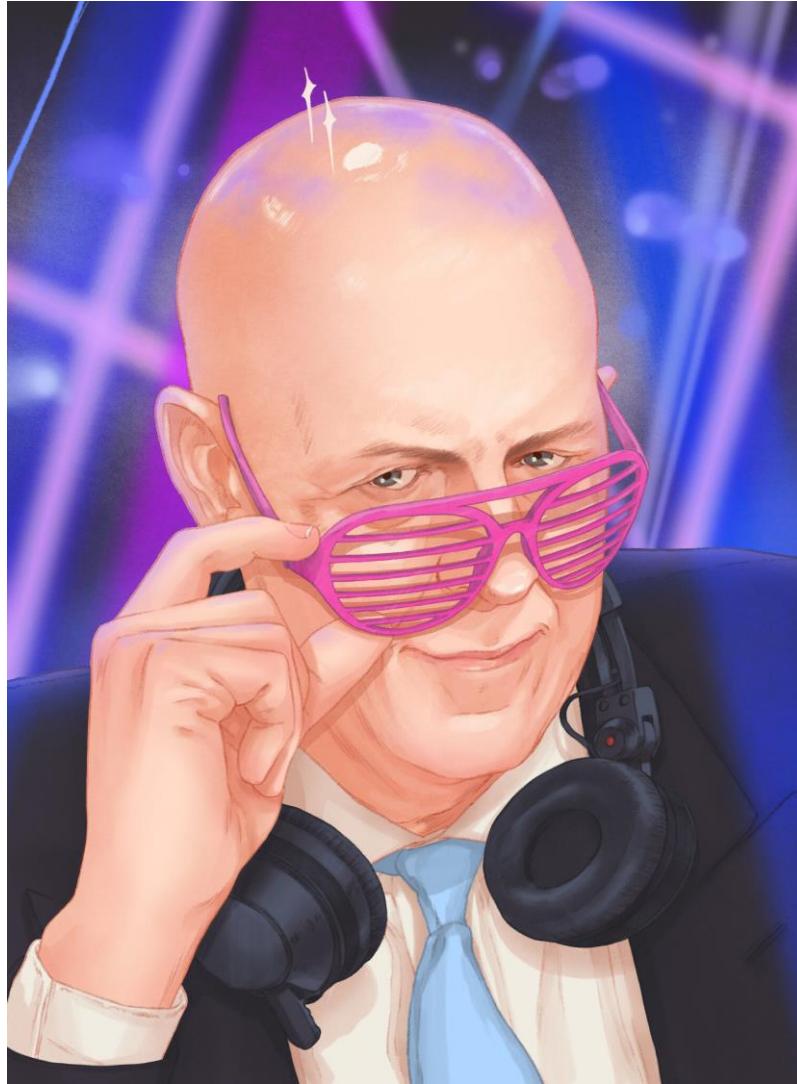
And many investors worry that takeovers are more reliably lucrative for investment banks—which [LSEG](#) says earned some \$13.1 billion in M&A fees in the first half of this year—than for the acquiring companies and their shareholders.

But more recent research from academics and consultants puts the success rate closer to even. Companies that do frequent smaller deals, as well as making bigger bets, tend to outperform, advisers say. That is because they hone their ability to identify targets, integrate those businesses and reap the intended financial benefits.



## Attendance word: DJ Solomon

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Extra slides