Finance Recruiting Interview Preparation

Mergers and Acquisitions, and Leveraged Buy Outs

Session #4

Introduction & Limestone Capital Offering

Finance Interview Preparation Workshops

- "Preparing for finance recruiting isn't just skimming The Vault anymore. Students should study for recruiting like a course and do their homework, because the final exam is the interview."

  – *VP, Recruiter for Queen's*
- Like a course, there should be:
  - "Homework:" regular readings are necessary
  - Practice (mock interviews)
  - Comprehensive, accessible resources for all interested students
- The most important "exam" of a finance student's life

Limestone Capital Offering

- **4 Sessions:** Customized curriculum to prepare you to answer any technical finance question that your recruiters may throw at you
  1. Accounting, Enterprise Value
  2. Comparable Analysis & Precedents
  3. Introduction to DCFs
  4. M&A & Leveraged Buyouts

Rationale

- Candidates differentiate themselves by knowing hard M&A and LBO questions
- Queen's needs to offer comprehensive resources to continue being competitive
- You will not learn the required knowledge from class
- It is insufficient to memorize an interview guide from WSO, WSP, M&I, Vault, walk into an interview, and hope you get the same questions
- Start early!

Agenda

1	M&A Overview
2	M&A Process
3	Accretion / Dilution
4	LBO Case Studies
5	IRR
6	LBO Financing
7	LBO Model

Types of Mergers & Acquisitions

Strategic

- **Strategic Acquisition:** Purchase of an operating business that is in the same industry or complements the buyer's current business

Sponsor

- **Sponsor Acquisition:** Purchase of a business by a financial sponsor (private equity firm, venture capital firm) typically funded primarily through debt

Strategic Acquirer	Strategic Target	Sponsor Acquirer	Sponsor Target
AB InBev	SAB Miller	Silver Lake	Dell
CVS pharmacy	aetna	Blackstone	Hilton
Bayer	Monsanto	BC Partners	PetSmart
Walmart	Flipkart	Bain Capital / KKR	Toys R Us

Which type of acquirer can typically afford to pay more?

Synergies Through Add-On Acquisitions

Roark Capital Group (Restaurant Chains)

Thoma Bravo (Cybersecurity)

Source: Company Websites

Types of Mergers & Acquisitions

Horizontal

- Acquirer and the target are in the same industry
- Same industry vertical (supply chain level)
- Usually to enhance market power, exploit economies of scale, or expand quickly
- Barrick and Randgold are both major explorers and developers of gold deposits

Vertical

- May be operating in different industries
- Different levels of the same supply chain
- Usually to achieve forward or backward integration of operations
- AT&A is a distributor and will gain access to Time Warner content including Turner, CNN and HBO

Conglomerate

- Acquirer and target are not necessarily related to each other
- Conglomerate attempts to diversify volatility in overall corporate performance by buying unrelated companies
- Most conglomerates have been dismantled as institutional investors realized they could achieve diversification risk reduction benefits more efficiently through realigning their own securities portfolios and are therefore unwilling to pay a premium for the diversification efforts of conglomerate managers

Types of Transactions

Plan of Arrangement

- No actual “plan” is prepared, showing the steps needed to close the deal
- No direct offer to shareholders
- Requires shareholder approval of two-thirds majority (66.67%)
- Provides maximum flexibility for structuring (e.g. three-way mergers)
- Useful when:
  - Multiple classes of shares involved
  - Buying a subsidiary of a publicly traded target corporation
- Costs more and takes longer
- Requires court approval
- **Must be a friendly deal**

Takeover Bid

- Offer to acquire outstanding voting or equity securities
- Bid must be made to all holders of the class with equal consideration
  - If bidder increases price, everybody who tendered gets the benefit of the increased price
- **One Stage Process:**
  - If 90% of shareholders tender, then compulsory acquisition of the remaining 10%
- **Two Stage Process:**
  - If only two-thirds tender, then move into second stage process
  - Company must call a shareholder meeting
  - Shareholders will vote to merge / amalgamate, requiring two-thirds approval
  - Minority shareholders are squeezed out

Types of Transactions

Benefits of a Friendly Deals Over Hostile Takeover Bids

Friendly Deal: A business combination that the management of both firms believe will be beneficial to shareholders, and is mutually negotiated.

Hostile Takeover Bid: An attempt to take over a company w/o the approval of the company's board of directors, making offers directly to shareholders to gain a controlling interest.

1. **Retention:** Targets key management and key employees who would leave in the event of a hostile takeover
2. **Due Diligence:** Bidder needs to conduct extensive due diligence on the target company's financials to satisfy its own board or financial backers
   - Much more difficult with a hostile takeover as target management will withhold non-public information
3. **Deal Protection:** Special ancillary conditions of the deal can be negotiated between 2 companies in a friendly deal
   - Break fees, no-shop, go-shop clauses
4. **Tax Benefits:** Only realizable through structured, negotiated transactions
5. **Regulatory Approval:** Government approval is much easier with the cooperation of the target company's management team

Types of Transactions

Stock Deals vs. Asset Deals

Stock Deal: By far the most common type of transaction, where the aggressor acquires the entire target entity by purchasing all of the target's equity ownership

Asset Deal: The aggressor acquires a majority of the target's assets. The target uses the cash to pay back shareholders and debt holders and "liquidates itself", leaving a shell firm with a corporate charter. This option is only available in a friendly negotiated transaction.

- **Advantages of an asset deal**
  1. Acquirer is only purchasing the assets that it desires, and keeping only the employees that it needs
  2. Acquirer avoids the target firm's contingent liabilities
  3. Ability to depreciate purchased assets at purchase value and not historical cost to claim higher capital consumption allowances

Defensive Tactics Against Hostile Takeover Bids

Method	Description	Example
White Knight	▪ Seeking out a firm that management feels more comfortable handing over control to because of favorable and negotiated terms ▪ Even if the white knight is unsuccessful in its defensive bid, the terms of the deal will still be better because it bid up the price	▪ After an unsolicited takeover offer from Ensign Energy Services, Trinidad Drilling found a "white-knight" in Precision Drilling
Poison Pill	▪ Allowing existing shareholders to buy a large number of shares in TargetCo at a discounted price, increasing the number of shares the aggressor has to purchase ▪ Makes the takeover more expensive. Aggressor can concede and start negotiating in the friendly process, or fight the imposition of poison pill in media / court	▪ Papa John's implemented a Stockholders Rights plan granting existing investors (excl. ex-Chairman John Schnatter) a dividend distribution of one 'right' per common share
Golden Parachute	▪ Management severance packages that are triggered upon takeover ▪ Increases the cost of takeovers, sometimes prohibitively so	▪ Had Staples and Office Depot merged in 2016, the CEO of Office Depot stood to collect $39 million under the terms of his golden parachute

Defensive Tactics Against Hostile Takeover Bids

Method	Description	Example
Scorched Earth / Crown Jewel	▪ TargetCo makes itself unattractive ▪ One method is to sell off attractive assets that the aggressor is interested in (i.e. oil wells of patents) ▪ Another method is spending excess cash on acquiring a company that has absolutely nothing to do with TargetCo's business model	▪ After Unicorp Canada (P/E firm) made bid to acquire Union Gas, Union Gas acquired Burns Foods (a meatpacker in a completely unrelated industry) for $125 million
Pac Man	▪ Target company buying acquirer company, effectively negating loss of control	▪ In 2013, Jos. A. Bank launched a bid to acquire Men's Wearhouse. Men's Wearhouse ended up buying Jos. A. Bank for $1.8 billion.
General Tactics	▪ Press releases and mailed correspondence to TargetCo's shareholders from senior managers of the target company undermining the bid in attempts to convince shareholders not to tender shares ▪ Target management / accountants can nitpick at the takeover bid for areas where the acquirer failed to meet regulatory requirements in their documentation	

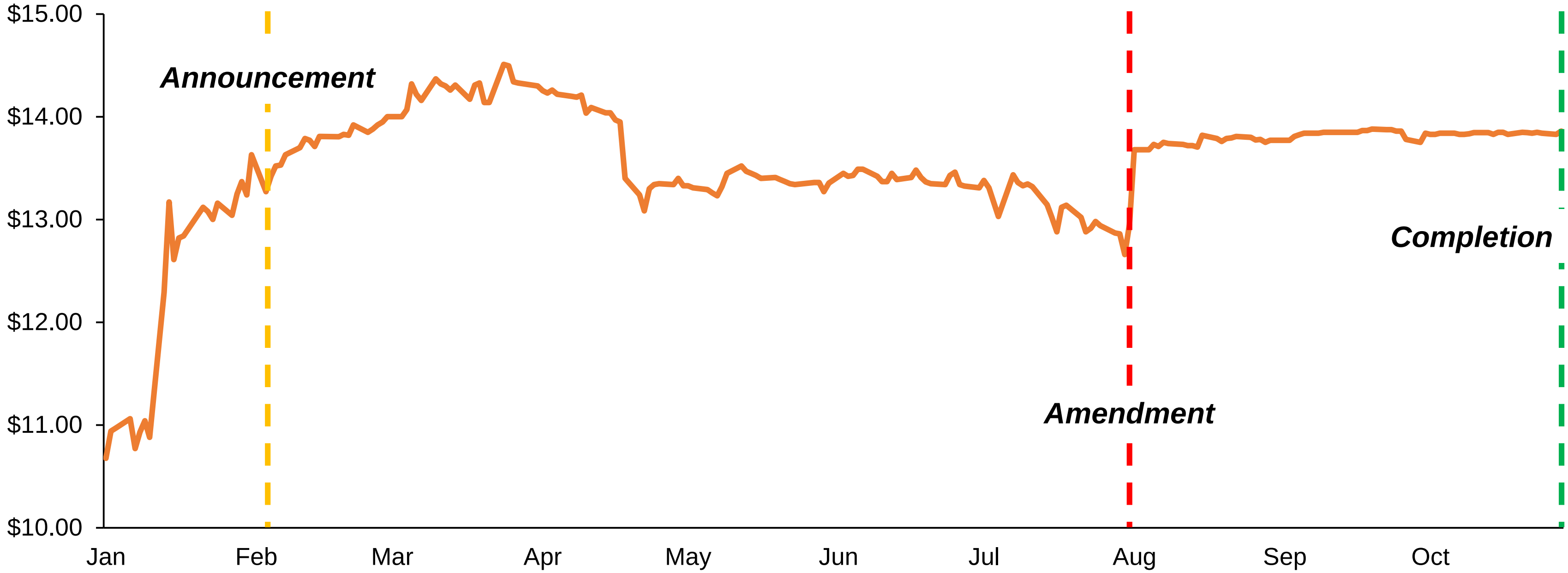
M&A Financing Options

Many deals are financed using a combination of the three sources of financing presented below

	Cash (From Balance Sheet)	Debt	Stock / Equity
Pros	▪ AcquireCo realizes all synergy-related gains ▪ Cheapest form of financing ▪ No need to access capital markets for financing ▪ Lower level of bidder disclosure ▪ No ownership control change	▪ AcquireCo realizes all synergy-related gains ▪ Cheaper form of financing than equity financing ▪ Lower level of bidder disclosure ▪ No ownership control change	▪ Easiest way access to external financing ▪ Beneficial if AcquireCo's management believes its firms are over-valued ▪ TargetCo shareholders can defer capital gains taxes
Cons	▪ Most companies do not carry sufficient cash for major acquisitions on hand ▪ May reduce ability to be opportunistic in the future ▪ Immediate capital gains tax on cash proceeds	▪ Taking on significant leverage to finance an acquisition may increase the riskiness of the business ▪ Immediate capital gains tax on cash proceeds	▪ Most expensive form of financing ▪ Share synergy-related gains with TargetCo shareholders ▪ Dilutes ownership for existing shareholders and alters ownership control ▪ Prospectus-level disclosure of the aggressor firm and resulting entity is required

How do we gauge the probability of a merger's success?

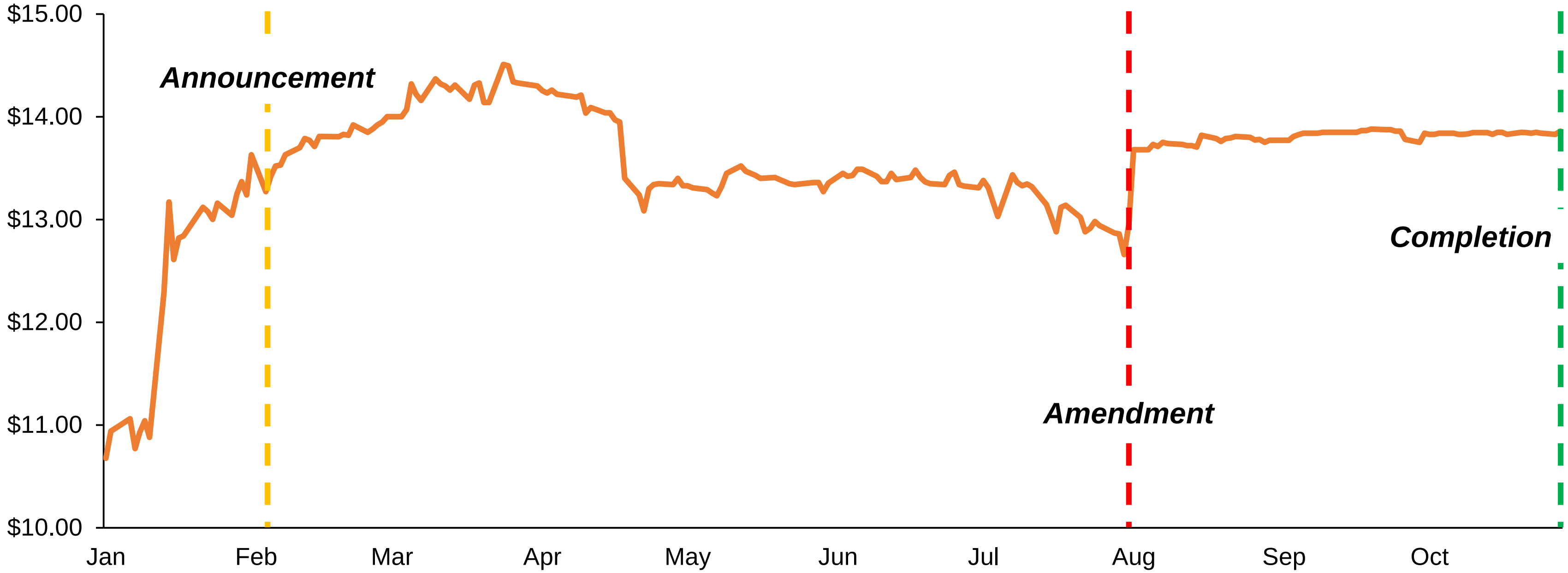
Silver Lake / Michael Dell Management Buyout of Dell Case Study



- Amended offer price of $13.75 per share in cash consideration, plus payment of a special cash dividend of $0.13 per share, for total consideration of $13.88 per share in cash
- Why did the share price react in January ***BEFORE*** the deal announcement (yellow line)?
- What does the share price reaction on the amendment date mean (red line)?

How do we gauge the probability of a merger's success?

Silver Lake / Michael Dell Management Buyout of Dell Case Study (cont'd)



- Market price and trading volume reactions of the target are a good indicator of the likelihood of the bid's success
- If TargetCo price jumps above the bid price, investors think the bid is too low and higher competing bids are likely
- If TargetCo price hovers around the bid price, investors think the bid is fair
- If there is no unusual spike in volume, this means that shareholders are likely sitting on their shares unwilling to tender, which means the likelihood of the bid's success is low
- If there is a spike in volume on the announcement date, TargetCo shareholders are selling out to merger arbitrageurs, and a change in control is inevitable

Merger Motives

Cost Synergies

- Building or manufacturing **consolidation**
- **Layoffs** of redundant support/admin staff
- **Economies of scale**
  - Spread fixed overhead costs over a larger number of units
  - More bargaining power with suppliers
- **Vertical Integration**
  - Disintermediation removes mark-ups, delivery fees
- Access to key competencies, IP, technology, infrastructure, or employees/management

Revenue Synergies

- **Cross-sell** products to new customers
- **Up-sell** products to existing customers
- **Expand** into new geographies
- **Market / monopoly power**
- Revenue synergies are tough to predict, hard to measure, and at time intangible
  - Often ignored in M&A analysis

Other Synergies

- **Net Operating Losses**
  - Bidding firm with past losses could acquire a profitable target and then apply its NOLs
  - Profitable bidding firm could acquire a target that is losing money, and apply its NOLs to its own stream of net income
- **Increased Debt Capacity:** A larger, more stable firm can sometimes get cheaper and more predictable financing
- **Depreciation:** Write-up purchased assets to fair market value, which provides a larger depreciation tax shield
- **Goodwill:** Amortization of goodwill leads to similar tax benefits but is no longer allowed under IFRS
- **Tax Benefits**: Access to a lower tax jurisdiction

Example of Vertical Integration

ticketmaster® LIVE NATION

The merger of Live Nation and Ticketmaster created a an entertainment company that manages and represents artists, produces shows and sells tickets.

Why does most M&A destroy value?

Value Destruction

- About two thirds of mergers and acquisitions destroy value
- From 1980 to 2001, acquisitions resulted in an average of 1 – 3% decline in acquirer share price, or $218 billion of value transferred from acquirers to sellers (McKinsey & Co.)

Reasons Why Mergers Fail

- **Management egos:** A larger company means bigger bonuses if compensation is tied to equity
- Diversification results in **loss of management focus**
- Acquirer **paid too much** for target
- Unsuccessful at **integrating disparate corporate cultures** leading to attrition of key personnel
- Managers focusing too intently on cost-cutting measures to neglect day-to-day business, resulting in lost customers
- **Easy to overestimate synergies**
  - Synergies are often not enough to overcome control premium and financing/transaction fees
  - Synergies take time to realize
- **Winner's curse**
  - When an attractive target is put into play, competing bidders often bid up the price
  - Potential merger gains become slimmer

Overpaid (1994)	Quaker	Snapple
CEO Power Struggle (1995)	WellPoint	HSI health.systems.international
CEO Power Struggle (1997)	GlaxoWellcome	SB SmithKline Beecham
Systems Integration (1998)	NS Norfolk Southern	Conrail
Overpaid (2001)	AOL	TimeWarner
Unsuccessful Integration (2005)	Sprint	nextel
Horrible Timing (2007)	RioTinto	Alcan

Role of Investment Bankers in M&A

How do investment bankers add value to M&A transactions?

- **Structure of Transaction**
  - Plan of arrangement, takeover bid, amalgamation
- **Consideration**
  - Cash, shares, preferred shares, warrants, special warrants
- **Offer / Bid Price**
  - Requires a full suite of valuation work
- **Deal Terms**
  - Break fee, reverse break fee, go-shop clause
  - Are options assumed by buyer, cashed out, or ignored?
  - Mgmt lock-up agreements, for board of directors, large shareholders
- **Tax Consequences**
  - Creation of goodwill
  - Transaction structure and consideration will affect taxes
- **Execution**
  - M&A process can be lengthy
  - Many legal procedures need to be followed
  - Due diligence
- **Regulation**
  - Certain deals must be carefully structured to maintain compliance with anti-trust, national interest, and other legal issues
  - Many large deals get blocked by the government
  - How can the acquirer avoid restrictive regulatory legislation preventing the deal from passing?

Investment banks can add a great deal of strategic value compared to more transaction oriented situations like equity or debt issuances. Many investment banks focus exclusively on M&A as their niche.

Role of Investment Bankers in M&A

How do investment bankers add value?

- **Special Situations**
  - Buying firm after bankruptcy or restructuring
    - Deloitte acquiring Monitor
  - Insider bids (protection of minority shareholders)
  - Reverse mergers
  - Three-way mergers
- **Fairness Opinion**
  - Independent valuation to determine if offer price is fair, associated with lower fees for the bankers
  - Most Boards of Directors require a fairness opinion before approving the deal
- **Other**
  - Spinoffs / divestitures
  - Acquisitions / divestitures of specific assets, especially in oil and gas, mining, real estate (Scotia Waterous, Brookfield Financial)
  - Hostile Defense
    - Is our company undervalued?
    - Are we vulnerable to a raider?

How does a firm choose an investment bank?

- **Relationship business**
- **Strategic expertise can play a role**
  - Certain banks are strong in certain sectors
- **Can banks compete by lowering their price?**
  - Most banks have competitive pricing and similar fee structures
  - Decision to hire an advisor is rarely based on fees
- **Buy Side Advisory**
  - Ease of and terms of financing offered by each bank is an important decision criteria
- **Stapled Financing Package**
  - The sell side advisor provides financing for buyers
  - Buyers no longer need to scramble for last minute financing

Buy Side vs. Sell Side

Buy Side vs. Sell Side

- Investment banks advise on the buy side or sell side
- **Buy Side:** Advising the acquirer / aggressor / bidder
  - Helps determine the right bid and deal terms
  - Can be complex with multiple bidders or with hostile takeover
  - Takes 16 – 36 weeks
  - Takes another 3 – 4 months to close after announcement
- **Sell Side:** Advising the seller / target
  - See previous slide

Which advisory role do investment banks typically prefer?

Good Case Studies to Read Up On

- Barrick / Randgold Resources
- Glencore International AG / Viterra
- CNOOC / Nexen
- Petronas / Progress
- Suncor Energy / Petro-Canada
- Loblaw Companies Limited / Shoppers Drug Mart
- Sobeys / Safeway (Canada Safeway Limited)
- Bell / Astral

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    - See previous slide

Sell Side, Strong Side?

- Investment bankers are paid a small portion of the total fee up front (work fee)
- The bulk of the fee is not paid until the deal is closed and approved by regulatory bodies
- Sell side advisory roles have much higher chance of closing than buy side advisory roles
- When a company is being sold, they are being sold for a good reason
- On the buy-side, there are typically multiple bidders meaning the bank may not be successful

Good Case Studies to Read Up On

BARRICK
RANDGOLD RESOURCES

GLENCORE INTERNATIONAL AG
VITERRA

CNOOC
nexen

PETRONAS
Progress

SUNCOR ENERGY
PETRO-CANADA

Loblaw COMPANIES LIMITED
SHOPPERS DRUG MART

Sobeys
SAFEWAY
Canada Safeway Limited

Bell
astral

Agenda

Buy Side Process

Assessment

(4 – 8 weeks)

- Analyze competitive landscape
- Identify potential targets
- Find key issues to address:
  - Pensions, contingent liabilities, off balance sheet items, inside ownership, unusual equity structures, special warrants
- Build out acquisition timetable, most of which have the tendency to be optimistic

Contacting Targets & Valuation

(4 – 8 weeks)

- Contact potential target candidates
- Negotiate a confidentiality agreement (CA)
- Perform preliminary valuation on target, including trading comparables, precedent transactions, discounted cash flow analysis, accretion / dilution model, LBO floor valuation

Pursuing the Deal & Due Diligence

(4 – 10 weeks)

- Send letter of intent (LOI) with details of initial offer
- Conduct due diligence: Create data room, analyze products and services, analyze the company and industry, assess the company's financials, identify contingent liabilities, conferences with management, auditors, lawyers, site visits
- Finish valuation

Definitive Agreement & Closing

(4 – 10 weeks)

- Finish due diligence
- Arrange, negotiate and execute definite agreement
  - Board must approve transaction for it to be considered "friendly"
- Provide financing, unless stapled financing package in place
- Conduct any required filings and announce deal
- Seek shareholder and regulatory approval, may take another 3-4 months before official close

Sell Side Process

Find An Advisor (1 – 2 weeks)	▪ Contact an investment bank with which it has a strong relationship ▪ Contact an investment bank which has strategic expertise in the company's sector ▪ Invite multiple investment banks to a beauty contest ▪ During a beauty contest, multiple investment banks will present their qualifications, expertise, proposed strategy, key issues, and universe of buyers to the firm

Preliminary Assessment (2 – 4 weeks)	▪ Identify seller's objectives and determine appropriate sale process: broad or narrow auction?
	▪ **Broad Auction:** Contact many potential buyers, more bidders usually means a higher price
	    – Risks leaking competitive information,
	    – Could interfere with the deal itself and the morale of employees
	▪ **Strategic Review:** When a company announces this, it usually means a broad auction
	▪ **Narrow Auction:** Contact a few strategic buyers to prevent the leaks

First Round	▪ Contact potential buyers and execute confidentiality agreements ▪ Send out Confidential Information Memorandums (CIM) and initial bid procedures letter ▪ Prepare management presentation, build data room, negotiate stapled financing package ▪ Receive initial bids, and filter buyers to second round
Second Round	▪ **Facilitate Management Presentations:** Mgmt. brings bankers to add legitimacy ▪ **Facilitate Due Diligence:** Site visits, open up data room to buyers ▪ Send out final bid procedures letter and create a draft of the definitive agreement ▪ Buyers make final bids
Negotiations & Closing	▪ Evaluate final bids, negotiate with top bidders, and select the winning bidder, which may not always be the highest bidder – Other factors like deal terms, type of consideration, future plans are also important ▪ Arrange for fairness opinion, receive board approval and execute definitive agreement ▪ Announce Transaction ▪ **Closing:** Shareholder approval, regulatory approval, financing, and closing

Agenda

1	M&A Overview
2	M&A Process
3	Accretion / Dilution
4	LBO Case Studies
5	IRR
6	LBO Financing
7	LBO Model

Accretion / Dilution

What is accretion / dilution?

- **Accretion:** If pro forma (combined) EPS of the merged company is greater than the acquirer's original EPS
- **Dilution:** If pro forma EPS of the merged company is less than the acquirer's original EPS

Acquirer P/E of 10x, Target P/E of 5x, Accretive?

- **What is the consideration?:** Assume all stock
- **This transaction is accretive**
  - In an all stock deal, the transaction is accretive if the P/E of the target is less than the P/E of the acquirer
  - You are paying for a company that is generating more earnings than you are per dollar of stock price
  - Your shareholders are paying less for $1 of earnings than you would normally
  - Your EPS will thus go up if you buy their relatively underpriced stock with your own relatively overpriced stock
- Note: we have not accounted for financing fees, transaction fees, or synergies

Effects of an Acquisition

- **Depends on the consideration**
- Foregone interest on cash
  - Opportunity cost of balance sheet cash used in the transaction is lost interest income
- Interest on debt
  - If leverage is used, additional interest expense will be charged to the acquirer
- Additional shares outstanding
  - If consideration is a share exchange, acquirer will have to issue additional shares from treasury
- Combined Financial Statements
- Creation of Goodwill and other intangibles
  - Write up target's assets from historical cost to fair value
  - Goodwill represents the premium over this amount (approximately)

Accretion / Dilution

All-Cash Acquisition

- If a deal is financed only through cash and debt, there is a shortcut for calculating accretion / dilution
- If: interest expense for debt + foregone interest on cash < target's pre-tax income, then acquisition is accretive
- Think of it as: pre-tax cost of financing being used < pre-tax income being consolidated with your own
- Assumes no synergies, transaction fees, financing fees
- **Complete equation:**

Accretive if: Transaction Fees + Financing Fees + Interest Expense On Debt + Foregone Interest On Cash
<
Target's Pre-Tax Income + Synergies

Mix of Stock & Cash Consideration

- There are no shortcuts for finding accretion / dilution for acquisitions that use a mix of cash and stock
- Must build merger model
- Advantages of using a merger model:
  - Intrinsic valuation allows you to understand break-even synergies, key variables, as well as bull, base, and bear case scenarios
- Disadvantages of using a merger model:
  - Using precedent transactions may provide a more objective view, since there is less room for manipulation
  - Difficult to model out synergies, transition costs, effect on corporate culture and employee morale

Merger Model Walkthrough

Steps to a M&A Accretion / Dilution Model

1. Input purchase price assumptions (% cash, % stock, % debt
2. Build stand-alone income statement and balance sheet for acquirer AND target
3. Allocate purchase price to the writing-up of assets to fair value, the creation of new goodwill, and transaction fees
4. Build a sources and uses of capital table to calculate the necessary amount of sponsor equity needed to fill the gap
5. Make adjustments to the target's balance sheet based on Step 3
6. Create pro forma post-merger balance sheet and income statement, making adjustments for any synergies or new debt / interest expenses
7. Calculate post-merger fully diluted shares outstanding
8. Did EPS increase? Sensitize analysis to purchase price, % stock / cash / debt, revenue synergies, and expense synergies

Advanced Merger Model Concepts

Deferred Tax Liabilities

- Writing up target's assets to fair value creates deferred tax liabilities (DTLs)
- On your books, it seems like you don't have to pay as much tax, since you are writing up your assets up and increasing your depreciation base
- In reality, you still have to pay the same amount of tax
- Naturally, the government does not let you reduce taxes by writing up the target's assets after an acquisition
- There will be a discrepancy between your books and the taxes you actually pay
- This discrepancy creates a DTL
- DTL = Asset Write-Up x Tax Rate

Goodwill

- We write up the target's assets from historical cost to fair market value
- We then have to account for any DTLs

Equity Purchase Price	
	less: Seller's Book Value
Premium Paid Over Book	
	add: Seller's Existing Goodwill
	less: Asset Write-Ups
	less: Seller's Existing DTL
	add: Writedown of Seller's Existing DTA
	add: Newly Created DTL
Merged Company Goodwill	

Interview Questions

M&A Interview Questions

1. Walk through a merger model?
2. Why would one company want to acquire another company?
3. Rule of thumb for accretion / dilution?
4. Complete effects of an acquisition?
5. Why is goodwill created in an acquisition?
6. What are synergies and can you provide an example?
7. Which type of synergies is taken more seriously?
8. All else being equal, what type of consideration would be ideal for a deal?
9. How do you determine the purchase price?

Agenda

Leveraged Buyout Overview

What is an LBO?

- Acquisition of a company, division, or collection of assets “target” using a large amount of debt
  - Usually around 60 - 70% debt
  - Some shops like Birch Hill use less → 40 - 60%
- Remainder of purchase price comes from an equity contribution by a financial sponsor
  - Private Equity Firm, Venture Capital
- The financial sponsor usually has no intention of staying in the company for the long-term

Why Leverage?

- Debt is taken out on the target’s balance sheet
  - The PE firm is the holding company
- If the portfolio company defaults, holding company has limited liability
  - Holding company cannot lose more than its equity investment
- Leverage increases returns
- Diversification

How are Returns Generated?

- Burden of leverage is placed on target company’s balance sheet
- Annual cash flows of target company used to pay off debt
  - Equity % stake in company increases, similar to paying off mortgage
- PE firm holds target for a set amount of years, helping it grow organically, through acquisitions, cost-cutting measures, or by installing new management / board members to implement all of the above
- PE firm sells target for a profit at the end of holding period
- Returns are most commonly measured by IRR

What Makes a Good LBO candidate?

Technology Driven / R&D Intensive / Automotive Industry

Power & Utilities Company

Consulting Firm

Financial Characteristics

- **Steady and predictable cash flows**
  - Greater volatility → greater risk of default → higher cost of debt
- **Strong tangible asset base (e.g. real estate)**
  - More collateral → lower cost of debt
- **Clean balance sheet**
  - Little existing debt allows more excess debt capacity for the private equity firm to lever up the balance sheet
- **Divestible assets**
  - Returns can be enhanced through spinoffs or selling non-core parts of the business

Non-Financial Characteristics

- Strong management team
- Viable exit strategy
- Synergies with other portfolio companies
- Potential for expense reduction
- Strong defensible market position
- Depressed market price because of special situation
  - Going private can sometimes solve these situations much quicker than a public situation, both operationally and legally

LBO Case Studies

"Classic" LBO Situations

- CEO wants to retire soon and needs to find a buyer who can help transition in professional management
- PE firm gains an effective monopoly on an industry
  - Birch Hill with school uniforms
- Target is bad at controlling costs; PE firm sees expense reduction opportunities
- A division is going through labour or legal difficulties
  - These issues may be easier to resolve if PE firm buys the division from the company, so the entire company is no longer at risk

RJR Nabisco – Barbarians at the Gate

Husky International – Cost Cutting

- One of the world's largest injection molding equipment suppliers purchased with $622 million equity contribution from Onex in December 2007
- Multiple cost cutting initiatives led to both EBITDA and multiple expansion
- Former owner was intent on having all parts sourced from Ontario
- Onex was able to source parts from China and reduce costs significantly
- Cost discipline was very low
  - Simply by switching from organic chicken to non-organic chicken in the employee cafeteria, $100k+ of annual savings were realized
- Onex sold Husky in June 2011 for net proceeds of $1.8 billion
  - IRR of 36%

Source: http://www.onex.com/Assets/PDFs/365_9.pdf

LBO Case Studies

Spirit AeroSystems – Labour Negotiations

- Previously a division of Boeing
- Provided large component parts and assemblies for commercial aircraft
- The division was undergoing labour negotiations
  - Complex for Boeing, since if a division signs a new contract, all North American operations must also get their contracts reviewed
  - Easier for Boeing to just sell the division
- Onex bought the division at a discount, and worked with management and unions to realize cost savings
- Previous contract had many wasteful and inefficient clauses that neither the union or management liked
  - Support staff was supposed to empty garbage bins twice a day even if there was barely anything in them
  - If a screw fell out, instead of putting the screw back in the component, the component would have to be placed in a bucket, labeled, and put in a special line for a different crew to examine
- Onex was able to renegotiate a favourable contract for all sides and sold the company about half a year later for an IRR of more than 80%

Hawker Beechcraft

- Business, special-mission and trainer aircraft manufacturer purchased in March 2007 for $537 million
- Horrible timing
  - When subprime crisis hit, luxury aircraft sales were next to nil
- Firm filed for bankruptcy protection in the U.S. in Q2 2012
- Onex will have minimal ownership interest in Hawker Beechcraft following restructuring

Agenda

Internal Rate of Return

Cash Flow Sweep, All Cash Used To Pay Down Debt

Cash flow sweep: All cash is used to pay down debt

($100)	$20	$20	$20	$20	$20 + $200
$100 equity, $100 debt, **Paid $100**	$100 BVE $80 debt	$100 BVE $60 debt	$100 BVE $40 debt	$100 BVE $20 debt	$100 BVE $0 debt **Received $200**

How do we Calculate IRR?

- Since there is no debt, and the firm is worth $200, the **market value** of our equity ownership is $200
- Beginning equity market value (at 50% ownership) = $100
- Ending equity market value (at 100% ownership) = $200
- Remember CAGR formula:

$$\text{CAGR} = \left(\frac{\text{Ending Value}}{\text{Beginning Value}}\right)^{\left(\frac{1}{\#\text{ of years}}\right)} - 1$$

IRR = CAGR $= (200 / 100)^{(1/5)} - 1$

$= 14.9\%$

Rule of 72

- You can approximate these CAGRs in your head using the rule of 72
- CAGR = 72 ÷ doubling period
- For example, in the previous example:

IRR = 72 ÷ 5 = 14.4%

Internal Rate of Return

No Cash Flow, Excess Cash is Reinvested

Reinvested Cash

($100)	$20	$24	$28.8	$34.5	$41.5 + $415
$100 equity, $100 debt, **Paid $100**	$120 BVE $100 debt	$144 BVE $100 debt	$172.8 BVE $100 debt	$207.3 BVE $100 debt	$248.8 BVE $0 debt **Received $315**

Assumptions

- Cash is reinvested into business at 20% return, as opposed to paying down debt
- Company is sold at 10x EV / EBITDA
  - For simplicity, assume cash flow = EBITDA
  - Final year cash flow is $41.50
  - Sold at EV of $415
- No debt has been paid down

Transaction Calculations

- Since selling price is $415, but $100 of debt is still outstanding
- Price-implied equity value is $415 - $100 = $315
  - EV – Leftover Debt = Equity Value
  - Assuming no financing / transaction fees, minority interest, preferred equity, cash, etc.
- Beginning equity market value (at 50% ownership) = $100

$\text{IRR} = (315 / 100)^{(1/5)} - 1 = 25.8\%$

Internal Rate of Return

Other Methods of Generating Returns – Dividend Recapitalization

Cash flow sweep with dividend recapitalization

($100)	$20	$20 (and $100)	$20	$20	$20 (and $100)
$100 equity, $100 debt, **Paid $100**	$100 BVE $80 debt	$100 BVE $180 debt	$100 BVE $160 debt	$100 BVE $140 debt	$100 BVE $120 debt **Received $100**

Assumptions

- **Cash Flow Sweep:** All cash flow each year is used to pay down debt, debt goes down by $20 each year
- **In Year 2:** Take out $100 of debt to pay a special dividend of $100 to the financial sponsor (ourselves)
- **At exit:** Assume we sell our company for $220
  - With $120 of debt remaining, that implies an equity value of $100
  - After paying off debt, we effectively receive $100 in year 5

Transaction Calculations

- Can't calculate IRR using CAGR method since we are receiving cash flows at two discrete points in time
- Must use Excel (=IRR function) or financial calculator

$$\mathbf{0 = -100 + 100 / (1 + IRR)^2 + 100 / (1 + IRR)^5 = ???}$$

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Sample LBO Interview Question

You are a financial sponsor, buying a company for $200mm, 50% debt, 50% cash. You earn $10 earnings every year. $10 cash flow each year expected in the future. Assume cash flow sweep. You hold it for two years at an IRR of 20%, how much did you sell it at?

Assume cash flow sweep

($100) $10 $10 (Receive X)

$100 equity, $100 debt, **Paid $100**	$100 BVE $90 debt	$100 BVE $80 debt **Received $X**

$$\left(\frac{X - Ending\ Debt}{Equity\ Contributed}\right)^{1/2} - 1 = 20\%$$

$$\left(\frac{X - 80}{100}\right)^{1/2} - 1 = 20\%$$

$$\left(\frac{X - 80}{100}\right)^{1/2} = 1.2$$

$$X - 80 = 1.44 * 100$$

$$X = 224$$

Net Effect of Other Methods of Raising Returns

Dividend Recapitalization

- No changes to income statement
- On balance sheet, debt goes up as you lever up, and shareholder's equity goes down since you are paying out the dividend
- The changes counteract each other out so the balance sheet balances
- Cash flow from financing would go up from the additional debt and then go down from the cash paid to investors
- They cancel each other out, no change

Multiple Expansion

- Another example of how PE firms can generate returns is by expanding the exit multiple of the portfolio company
- If a PE firm can increase a portfolio company's growth prospects by:
  - Reshuffling current management or appointing new management
  - Resolving legal or labour issues
  - Rebranding
  - Establishing a successful strategy
- The PE firm can justify selling the firm at a higher multiple than what it bought it at, given the improved growth prospects

What do private equity firms do in reality to raise returns?

- Usually, private equity firms will try to use a combination of debt repayment, EBITDA expansion and multiple expansion to try to maximize returns
- Dividend recaps are not as common since they have a negative stigma attached
- PE firms may also exit part of their holdings by having an IPO
- Especially common if the portfolio company was a public company before
- Will only sell a portion to public, and will hold onto the other portion of the shares and participate in any price increase or decrease in the public markets

Agenda

Financing an LBO

Sources of Financing

Bank Debt	First Lien Secured Debt
Bank Debt	Second Lien Secured Debt
High Yield Bonds	Senior Unsecured Debt
High Yield Bonds	Senior Subordinated Debt
Mezzanine Debt	Subordinated Debt
Mezzanine Debt	Preferred Stock
Equity	Common Stock

Sources of Financing

- The higher the debt is ranked, the less risk there is
- First Lien Secured Debt is typically secured by inventory, accounts receivable, etc.
- Second Lien is typically secured by PP&E, fixed assets
- Much less collateral as you go down the chain
- Mezzanine could also include convertible debt

Revolving Credit Facility

- Line of credit provided to PE firm
- Like a credit card
- Can tap into it anytime they need it
- Must pay a financing fee (typically 0.5%) to keep this line of credit open
- Generally the least expensive form of capital in LBO financing

Revolving Credit Facility

- Sometimes bridge loan is necessary since PE firm cannot immediately access the necessary financing and wishes to perform the LBO quickly
- Bridge loan is a short term loan, which gives the PE firm time to arrange for more long term financing

Covenants

Affirmative vs. Negative Covenants

- Banks often require covenants to prevent moral hazard
  - Although additional leverage may increase returns for the PE firm, it also increases risks for the lenders
- Affirmative vs. negative covenants
  - Affirmative covenants include: maintaining insurance, complying with laws, continuing in the same line of business, regular financial reporting
  - Negative covenants include: limitations on debt, dividends, investments, mergers, prepayments of certain types of debt
  - We tend to focus on negative covenants more than affirmative
- In today's market, most debt financings are "CovLite"
  - Focus only on affirmative covenants

Maintenance vs. Incurrence Covenants

- Maintenance vs. incurrence covenants
  - Maintenance covenants are checked periodically and need to be maintained consistently
  - Incurrence covenants are only checked for given some trigger event, such as the issuing of new debt
- Common financial maintenance covenants include:
  - Senior debt to EBITDA
  - Total debt to EBITDA
  - EBITDA to interest expense
  - Maximum CAPEX
  - Minimum EBITDA

Agenda

LBO Model Walkthrough

Steps to a LBO Model

1. Build 3 statement model but leave debt-related items blank; build IS down to EBIT, B/S with liabilities section blank, CF with financing blank
2. Enter purchase price assumptions (% debt, % sponsor equity, purchase premium, holding period, exit multiple)
3. Build sources and uses table with equity contribution as the plug
4. Link sources and uses to balance sheet adjustments
5. Build debt schedule and find cash interest expense
6. Complete pro forma IS, B/S and CF and arrive at IRR
7. Sensitize IRR to entry and exit multiple, amount of debt

Sources & Uses

Sources of Funds						Uses of Funds		
		% of Total	Multiple of EBITDA					% of Total
	Amount	Sources	9/30/2008	Cumulative	Pricing		Amount	Uses
Revolving Credit Facility	-	- %	- x	- x	L+325 bps	Purchase ValueCo Equity	$825.0	71.1%
Term Loan A	-	- %	- x	- x	NA	Repay Existing Debt	300.0	25.9%
Term Loan B	450.0	38.8%	3.1x	3.1x	L+350 bps	Tender / Call Premiums	-	- %
Term Loan C	-	- %	- x	3.1x	NA	Financing Fees	20.0	1.7%
2nd Lien	-	- %	- x	3.1x	NA	Other Fees and Expenses	15.0	1.3%
Senior Notes	-	- %	- x	3.1x	NA			
Senior Subordinated Notes	300.0	25.9%	2.0x	5.1x	10.000%			
Equity Contribution	385.0	33.2%	2.6x	7.7x				
Rollover Equity	-	- %	- x	7.7x				
Cash on Hand	25.0	2.2%	0.2x	7.9x				
Total Sources	**$1,160.0**	**100.0%**	**7.9x**	**7.9x**		**Total Uses**	**$1,160.0**	**100.0%**

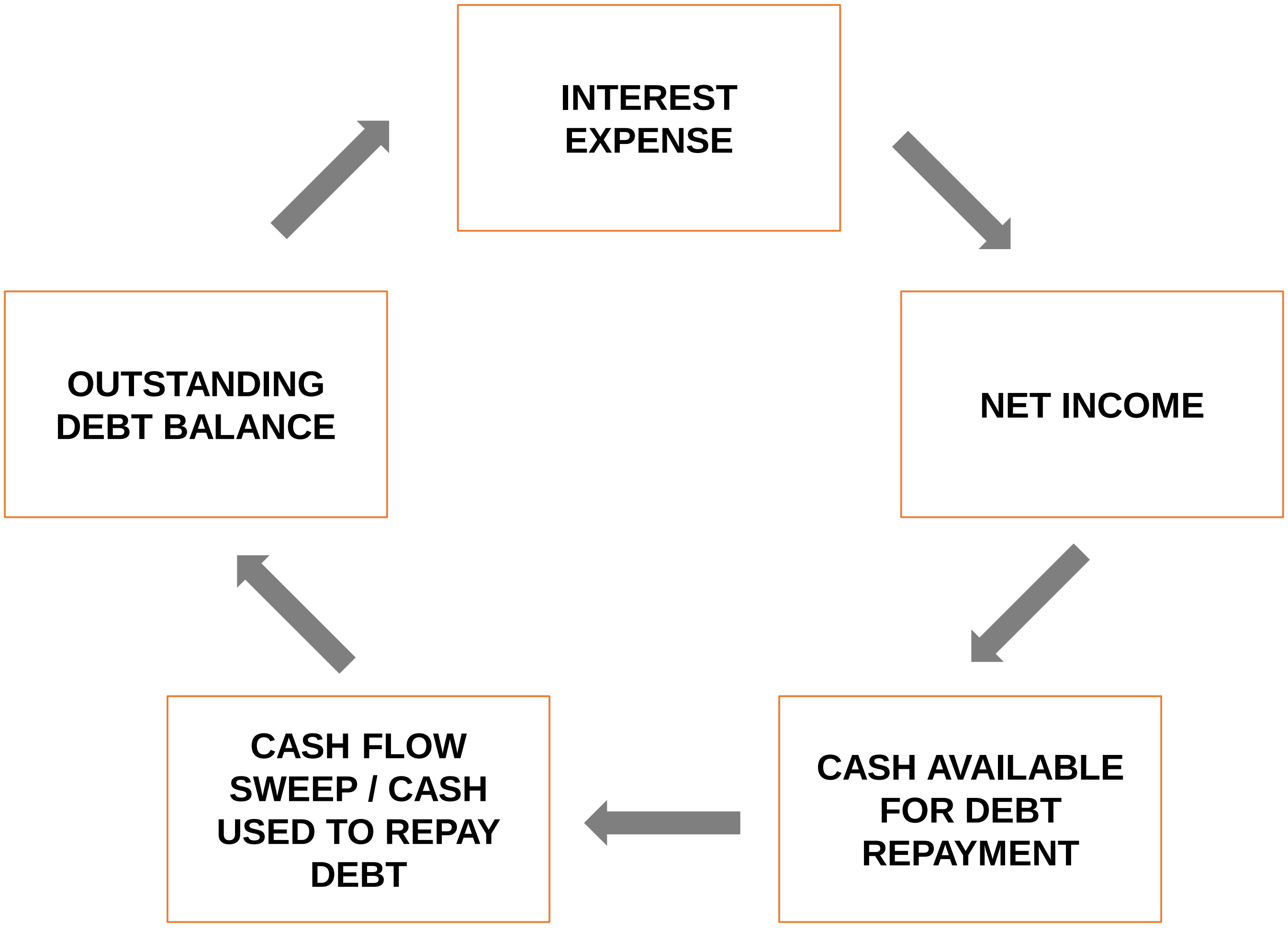
Sources

- Find total amount of debt available for financing (usually ~4.0 – 5.0x Debt / EBITDA) based on the expected EBITDA of the target
  - Can also be based on target firm's target capital structure
  - Split between new senior and high yield debt
- Cash on hand (from the target's balance sheet)
- Equity contribution is the plug to pay the financing / other fees in addition to the purchase price of the target

Uses

- Purchase price
- Existing debt on balance sheet of target
- Financing fees (fees paid to investment banks for raising money)
- Advisory fees (fees paid to lawyers, investment bankers, and accountants for services provided during the transaction)

The Circular Reference



Interview Questions

LBO Interview Questions

1. Walk through an LBO model?
2. Why would you use leverage?
3. What variables impact an LBO the most?
4. How to pick purchase and exit multiples?
5. Ideal LBO candidate?
6. Real life LBO?
7. How is the balance sheet affected in an LBO?
8. If a strategic transaction would usually be preferred with a cash consideration (lowest cost of funds), why would an LBO use debt?
9. Bank debt vs. high yield debt?
10. How can you increase returns in an LBO?
11. What is a dividend recapitalization?