Mergers and Acquisitions
MBA776A

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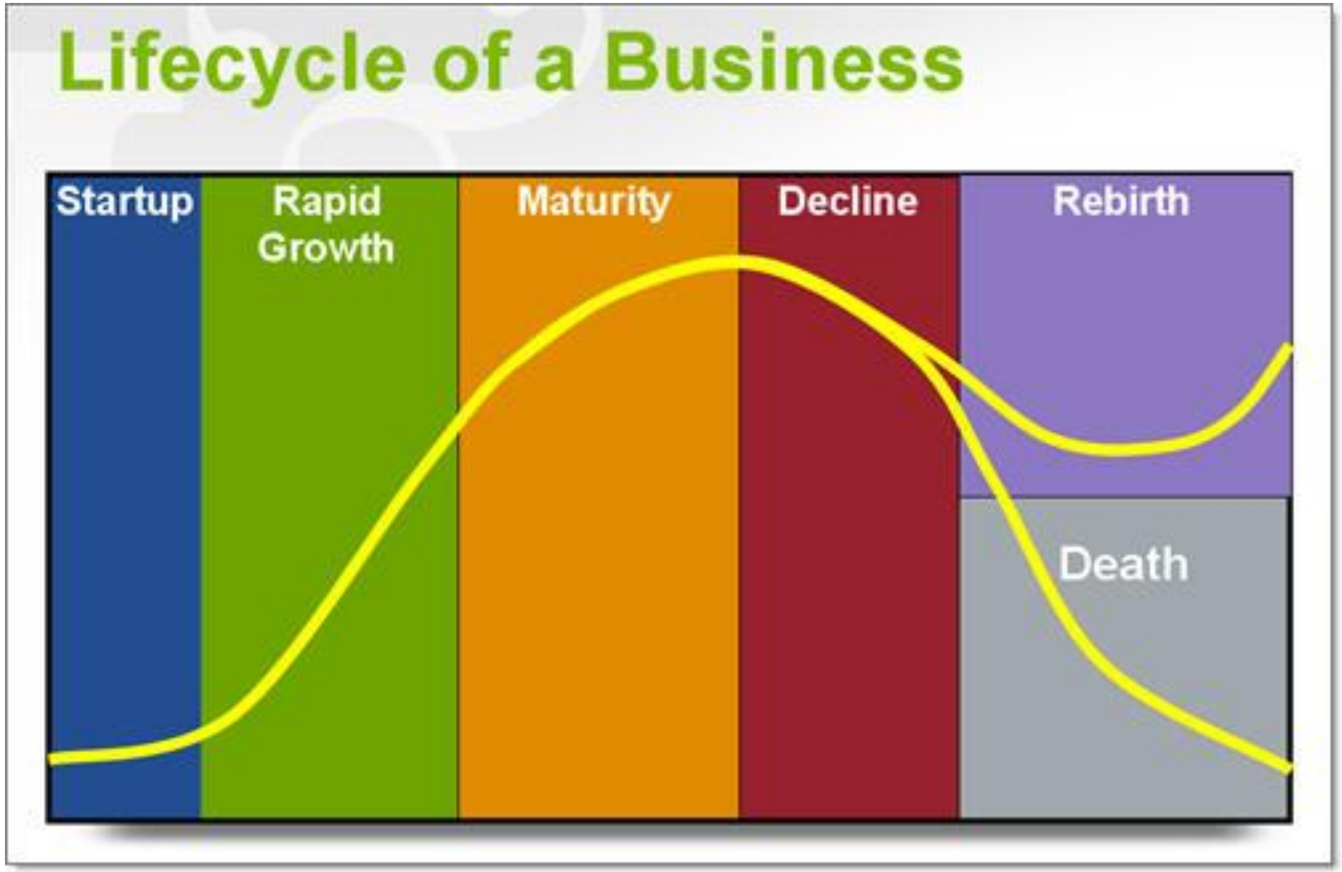
Course Objectives

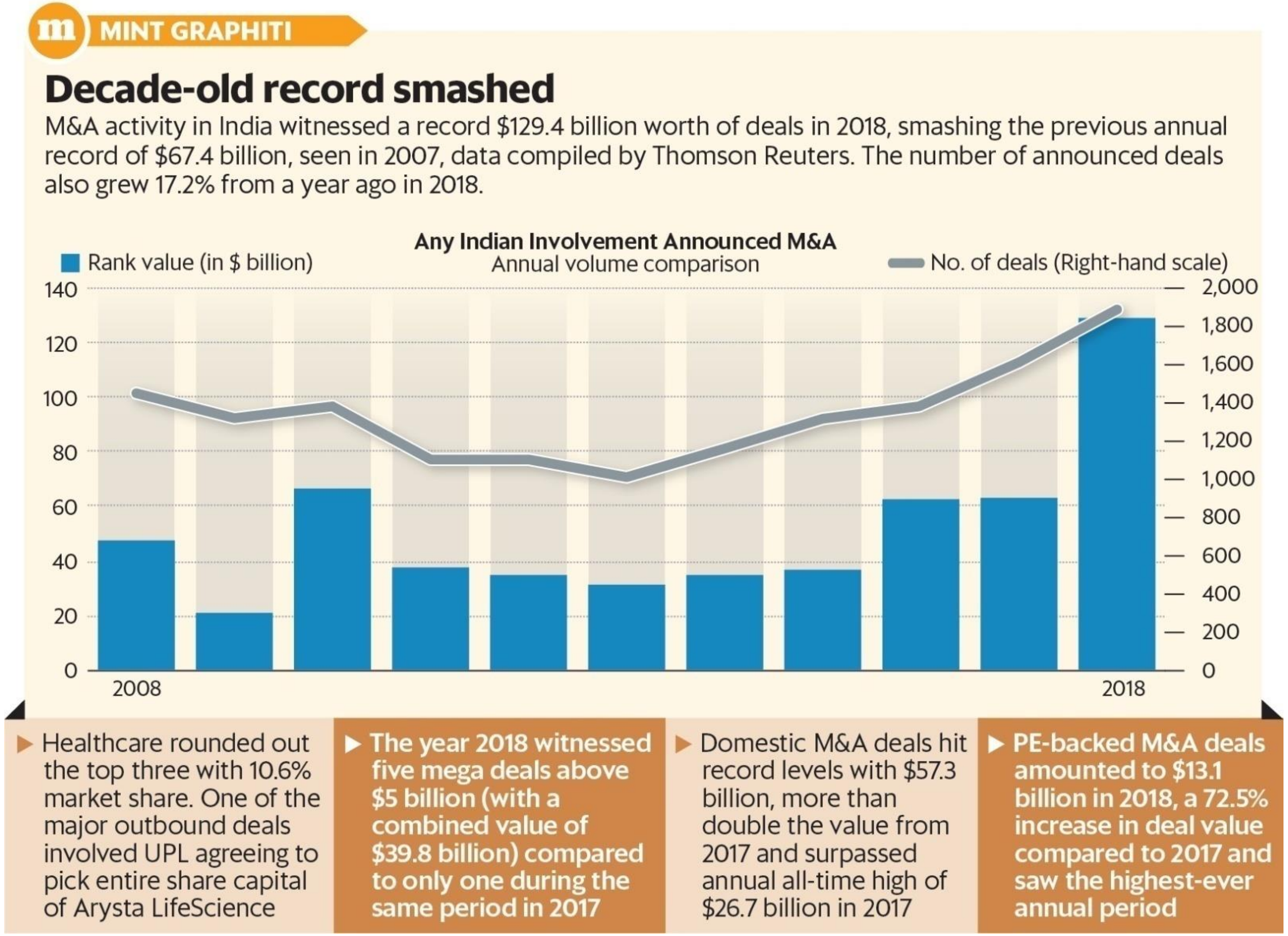
- Corporate restructuring: What, why and how?
  - Takeovers: Tactics and Defenses
  - How corporate restructuring creates/destroys value
- Stages in managing the M&A process
- Deal structuring in M&A
  - Primer on Valuation: DCF, EPS accretion/dilution, LBO
  - Apply financial models to value, structure and negotiate deals
- Regulatory aspects of M&A
- Pitfalls in M&A process

Lifecycle and scope of M&As



Source: PC Scholars

M&A Deals in India: (2008-2018)



Reference Textbook: Mergers, Acquisitions, and Other Restructuring Activities, Donald M. DePamphilis, 8th Edition,

M&As as a form of Corporate Restructuring

Restructuring Activity

1. Corporate Restructuring
   - Balance Sheet
   - Assets Only

2. Financial Restructuring

3. Operational Restructuring

Potential Strategy

1. Redeploy Assets
   - Mergers, Break-Ups, & Spin-Offs
   - Acquisitions, divestitures, etc.

2. Increase leverage to lower cost of capital or as a takeover defense; share repurchases

3. Divestitures, widespread employee reduction, or reorganization

Alternative ways of increasing shareholder's value

- Solo venture ("going alone" or "**organic growth**" or '**greenfield**')
- Partnering (Marketing/distribution alliances, JVs, licensing, franchising, and equity investments)
- **Mergers and acquisitions ('inorganic growth' or 'brownfield')**
- Minority investments in other firms
- Financial restructuring
- Operational restructuring

Theories and Motivations for M&A (1/2)

- Strategic realignment
  - Technological change
  - Deregulation

- Synergy
  - Economies of scale/scope
  - Cross-selling
  - Financial

- Diversification (Related/Unrelated)
  - New products/Current markets
  - New products/New markets
  - Current products/New markets

Theories and Motivations for M&A (2/2)

- Financial considerations
  - Acquirer believes target is undervalued
  - Booming stock market
  - Falling interest rates

- Market power

- Ego/Hubris

- Tax considerations

Economies of Scale (An example)

Period 1: Firm A (Pre-merger)

Assumptions:

- Price = $4 per unit of output sold
- Variable costs = $2.75 per unit of output
- Fixed costs = $1,000,000
- Firm A is producing 1,000,000 units of output per year
- Firm A is producing at 50% of plant capacity

Profit = price x quantity – variable costs
– fixed costs
= $4 x 1,000,000 - $2.75 x 1,000,000
- $1,000,000
= $250,000

Profit margin (%)[1] = $250,000 / $4,000,000 = 6.25%
Fixed costs per unit = $1,000,000/1,000,000 = $1

Period 2: Firm A (Post-merger)

Assumptions:

- Firm A acquires Firm B which is producing 500,000 units of the same product per year
- Firm A closes Firm B's plant and transfers production to Firm A's plant
- Price = $4 per unit of output sold
- Variable costs = $2.75 per unit of output
- Fixed costs = $1,000,000

Profit = price x quantity – variable costs
– fixed costs
= $4 x 1,500,000 - $2.75 x 1,500,000
- $1,000,000
= $6,000,000 - $4,125,000 - $1,000,000
= $875,000

Profit margin (%)[2] = $875,000 / $6,000,000 = 14.58%
Fixed costs per unit = $1,000,000/1,500,000 = $.67

Key Point: Profit margin improvement is due to spreading fixed costs over more units of output.

[1]Margin per unit sold = $4.00 - $2.75 - $1.00 = $.25
[2]Margin per units sold = $4.00 - $2.75 - $.67 = $.58

Economies of Scope (An Example)

Pre-Merger:

- Firm A's data processing center supports 5 manufacturing facilities
- Firm B's data processing center supports 3 manufacturing facilities

Post-Merger:

- Firm A's and Firm B's data processing centers are combined into a single operation to support all 8 manufacturing facilities
- By combining the centers, Firm A is able to achieve the following annual pre-tax savings:
  - Direct labor costs = $840,000.
  - Telecommunication expenses = $275,000
  - Leased space expenses = $675,000
  - General & administrative expenses = $230,000

Key Point: Cost savings due to expanding the scope of a single center to support all 8 manufacturing facilities of the combined firms.

Empirical Findings in academic works (1/2)

- Abnormal (or excess) returns:
  - financial returns are those earned by acquirer and target shareholders **above or below** what would have been earned **without a takeover**.

- Around transaction announcement date, abnormal returns:
  - For **target shareholders averaged 25.1%** during the 2000s as compared to 18.5% during the 1990s
  - For acquirer shareholders generally positive averaging about **1-1.5%**
  - However, **zero to slightly negative for acquirer shareholders for deals** involving large public firms and those using stock to pay for the deal

Empirical Findings in academic works (2/2)

- Positive abnormal returns to acquirer shareholders often are situational and include the following:
  - Target is a **private** firm or a **subsidiary** of another firm
  - The acquirer is relatively **small** (large firm management may be more prone to hubris)
  - The target is **small** relative to the acquirer
  - **Cash** rather than equity is used to finance the transaction
  - Transaction occurs **early** in the M&A cycle
- **No evidence** that alternative strategies (e.g., solo ventures, alliances) to M&As are likely to be more successful

Primary Reasons for Some M&A's Failure

- **Overpayment** due to over-estimating synergy
- **Slow pace** of integration
- Poor <u>strategy</u>

Global phenomenon of Merger Waves

Mergers waves

- Horizontal Consolidation (1897-1904)
- Increasing Concentration (1916-1929)
- The Conglomerate Era (1965-1969)
- The Retrenchment Era (1981-1989)
- Age of Strategic Megamerger (1992-2000)
- Age of Cross Border and Horizontal Megamergers (2003-2007)

Causes and Significance of M&A Waves

- Factors contributing to increasing M&A activity:
  - **Shocks** (e.g., technological change, deregulation, and escalating commodity prices)
  - Ample **liquidity** and **low cost of capital**
  - **Overvaluation** of acquirer share prices **relative to target share prices**
  - Improving **business confidence**

- Why it is **important to anticipate M&A waves**:
  - Financial markets **reward firms pursuing promising (often undervalued) opportunities early on** and **penalize** those that follow later in the cycle.
  - Acquisitions made early in the wave often **earn substantially higher financial returns** than those made later in the cycle**.**

Horizontal Consolidation (1897-1904)

- Spurred by
  - Drive for efficiency,
  - Lax enforcement of antitrust laws
  - Technological change
- Mostly <u>between competitors</u>, resulted in <u>concentration</u> in **metals**, **transportation**, and **mining** industry
- Major transactions:
  - US Steel, Standard Oil, Eastman Kodak, American Tobacco, General Electric
- M&A boom **ended** by 1904 **stock market crash** and fraudulent financing

Increasing Concentration (1916-1929)

- Spurred by
  - Entry of U.S. into WWI
  - Post-war boom
- Resulted in **Oligopoly**
- Major transactions:
  - General Motors, IBM, Union Carbide, Middle West Utilities
- Boom ended with
  - 1929 stock market crash
  - Passage of **Clayton Act which more clearly defined monopolistic** practices

The Conglomerate Era (1965-1969)

- Spurred by:
  - **Conglomerates** buy earnings streams to boost their share price
  - **Overvalued firms** acquired undervalued high growth firms
- Resulted in **large conglomerates**
- Major transactions:
  - LTV, Litton Industries, Northwest Industries
- Era ended
  - **Number of high-growth undervalued firms declined** as conglomerates bid up their prices
  - **Higher purchase price for target firms** and increasing **leverage of conglomerates** brought era to a close

The Retrenchment Era (1981-1989)

- Spurred by
  - Strategic U.S. buyers and foreign multinationals dominated **first half** of decade
  - **Second half** dominated by financial buyers
    - Buyouts often **financed by junk bonds**
    - Drexel Burnham provided market liquidity
- Major transactions:
  - SmithKline Beecham, RJR Nabisco MBO
- Era ended with **bankruptcy of several large LBOs** and demise of <u>Drexel Burnham (Michael Milken)</u>

Age of Strategic Megamerger (1992-2000)

- Spurred by
  - Booming stock market, Internet revolution, Lower trade barriers and Globalization
- Dollar volume of transactions reached record in each year between 1995 and 2000[1]
- Purchase prices reached record levels due to
  - Soaring stock market
  - Consolidation in many industries
  - Technological innovation
  - Benign antitrust policies
- Major transactions
  - AOL-Time Warner, Vodafone-Mannesmann, Exxon-Mobil
- Period ended with the **collapse** in global stock markets and worldwide recession

[1]The cumulative dollar value of M&As during this period in the U.S. was $6.5 trillion, with $3.5 trillion taking place in the last two years.

Age of Cross Border and Horizontal Megamergers (2003 – 2007)

- Average merger larger than in 1980s and 1990s, **mostly horizontal**, and **cross border**

- Concentrated in **banking, telecommunications, utilities, healthcare, and commodities** (e.g., oil, gas, and metals)

- Spurred by
  - Continued **globalization to achieve economies** of scale and scope;
  - Ongoing **deregulation**;
  - **Low interest rates**;
  - Increasing **equity prices**, and
  - Expectations of **continued high commodity prices**

- Major transactions:
  - Mittal-Arcelor, P&G-Gillete, Verizon-MCI

- Period ended with global **credit market meltdown and 2008-2009 recession**

Debt Financed 2003-2007 M&A Boom

- Low Interest Rates & Declining Risk Aversion
  - Sub-Prime Mortgage Lending
  - LBO Financing & Other Highly Leveraged Transactions

- Investment Banks repackage & underwrite Mortgage Backed High Yield Bonds

- Banks & Hedge Funds create
  - Collateralized Debt Obligations (CDOs)
  - Collateralized Loan Obligations (CLOs)

- Foreign Investors **buy highest rated Debt**

- Hedge Funds **buy lower rated debt**

Similarities and Differences Among Merger Waves

- Similarities
  - Occurred during **periods of sustained high economic** growth
  - Low or **declining interest rates**
  - **Rising stock market**

- Differences
  - Emergence of **new technology** (e.g., railroads, Internet)
  - **Industry focus**
  - **Type of transaction** (e.g., horizontal, vertical, conglomerate, strategic, or financial)

Summary of key ideas

- Motivations for acquisitions:
  - Strategic realignment
  - Synergy
  - Diversification
  - Financial considerations
  - Hubris

- Common reasons M&As fail to meet expectations
  - Overpayment due to overestimating synergy
  - Slow pace of integration
  - Poor strategy

- M&As typically reward target shareholders far more than bidder shareholders

- Success rate of M&A not significantly different from alternative ways of increasing shareholder value

Legal and Regulatory Aspects of M&A

Reference Textbook: Mergers, Acquisitions, and Other Restructuring Activities, Donald M. DePamphilis, 8th Edition,

Federal Antitrust Laws

- Sherman Antitrust Act (1890) [Link]
  - Section 1
  - Section 2
- Establishes criminal penalties for restraint of trade
  - Makes mergers **creating monopolies illegal**
  - Applies to firms already dominant in served markets
- Clayton Antitrust Act (1914) [Link]
- Created FTC [Link]
- Celler-Kefauver Act (1914) [Link]
- Amended Clayton Act **to include asset** as well as stock purchases
- Hart Scott Rodino Antitrust Improvement Act (1976) [Link]
- Requires waiting period before transaction can be completed

Federal Securities Laws

1. Securities Act (1933) [Link]

1. Requires **registration** of publicly offered securities

2. Securities Exchange Act (1934) [Link]
   - Section 13
   - Section 14

2. Empowers **SEC to revoke registration**
   - Defines **content & frequency of SEC filings**
   - Defines **proxy disclosure** requirements

3. Williams Act (1968) [Link]
   - Section 13 D

3. Regulates tender offers
   - Defines **disclosure** requirements

Summary of Regulatory Pre-Notification Filing Requirements

- Williams Act
  - Schedule 13 D must be filled with the SEC within 10 days of acquiring 5% of stock in another firm.
  - Schedule 14 D-1 must be filed with the SEC for tender offers
  - Tender offers must stay open a minimum of 20 business days

- Hart-Scott-Rodino Act
  - Filing necessary with FTC when buyer purchases assets or securities >$63.4 million or buyer or seller has annual sales or assets ≥ $126.9 million and other party has sales or assets ≥ $12.7 million. These thresholds increased annually by change in GDP implicit price deflator
  - 30 day waiting period before transaction can be completed

State M&A Laws

- Anti-takeover Laws
  - Define **conditions** under which a <u>change in corporate ownership can take place</u>.
- Antitrust Laws
  - Similar to federal laws
    - States may **sue to block mergers** even if not challenged by federal regulators

Other Applicable Legislation

- **Industry specific** laws
- **Environmental laws** (federal and state)
- **Labor and benefit laws** (federal and state)
- Applicable **foreign laws**

- Banking, communications, railroads, defense, insurance, and public utilities
- Define disclosure requirements
- Define disclosure requirements
- **Cross-border transactions** subject to laws of countries in which participants have operations

Navigating Antitrust Laws (Horizontal Mergers)

- Step 1: Define market and determine **concentration**.
  - Herfindahl-Hirschman Index
- Step 2: Determine **potential adverse competitive effects** of mergers.
  - Coordinated interaction
  - Differentiated products
  - Similarity of substitutes
- Step 3: Identify **entry barriers**.
  - Proprietary technology, patents, government regulations, investment requirements, or exclusive ownership of natural resources.
- Step 4: Identify **potential efficiencies** resulting from business combinations.
- Step 5: Assess **continued viability of firm** without merger.

Navigating Antitrust Laws (Vertical Mergers)

- Steps described for horizontal mergers also apply to vertical mergers

- Regulators unlikely to challenge vertical mergers **unless**
  - Relevant market highly concentrated
  - Merger limits access by others to a key supplier

Navigating Antitrust Laws (Collaborative Efforts)

- Alliances and JVs do not generally require approval of regulatory authorities if
  - The **combined strength** of partners **does not result in a dominant market share** in the global market for the product or service
  - Smaller companies not holding dominant market shares are **unaffected**
  - Access to key resources by competitors is **not restricted**
  - **Pricing practices or customer allocation** among partners **does not** unreasonably restrict trade

Process of Due Diligence

#Additional Handout

Reference Textbook: Mergers, Acquisitions, and Other
Restructuring Activities, Donald M. DePamphilis, 8th Edition,

US – American Airways

- 1. Market competition
- 2. Labor issues
- 3. Regulators: DOJ, Bankruptcy Court (Chapter 11)
- 4. Deal terms: Part of slots where dominant player to be released (Ronald Reagan).
- 5. Creditors and Debtors
- 6. Financial creditors and Operational creditors
- 7. Market reactions
- 8. Industry's reaction
- 9. External factors: ATF, tourism,
- 10. Post merger style of management
- 11. Negotiations (delays and terms adjustment)

The M&A process

A planning based approach to managing M&As

Reference Textbook: Mergers, Acquisitions, and Other
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The Acquisition Process

- Pre-Purchase Decision Activities
  - Phase 1: Business Plan
  - Phase 2: Acquisition Plan
  - Phase 3: Search
  - Phase 4: Screen
  - Phase 5: First Contact
  - Phase 6: Negotiation
- Post-Purchase Decision Activities
  - Phase 7: Integration Plan
  - Phase 8: Closing
  - Phase 9: Integration
  - Phase 10: Evaluation

Phase 1: Business Plan

- Industry/market definition (Where have we chosen to compete?)

  Example: Automotive industry (a collection of markets)
  - Passenger car market by size and by geographic area
  - Truck market by size and geographic area
  - After-market

Why is it important to start by defining the target market?

Phase 1: Business Plan

- Industry/market definition

- **External analysis** (customers, current competitors, potential entrants, substitute products, and suppliers): Five Forces Framework

  - Key objective: Identification of industry trends and whether they constitute opportunities or threats

  - **Example:** Automotive industry

    What is changing with respect to

    - **Customers** by vehicle size and geographic area
    - Current **competitors** include Toyota, Daimler, GM, Ford, etc.
    - Potential **entrants** include China' Cherie and India's Tata Motors
    - **Substitute** products/technologies for internal combustion engine include hybrids, all electric car, hydrogen car, Zip Car, etc.
    - **Suppliers** include material vendors, lenders, labor, etc.

    How will these changes impact my business?

Phase 1: Business Plan

- Industry/market definition

- External analysis (customers, current competitors, potential entrants, substitute products, and suppliers)

- **Internal analysis** (strengths and weaknesses as compared to the competition)
  - Key questions:
    - Do our strengths enable us to pursue opportunities identified in the external analysis? (Google's acquisition of Motorola Mobility?)
    - Do our weaknesses make us vulnerable to the threats identified in the external analysis? (Microsoft's Bing search engine?)
  - Example: Automotive industry
    - If our targeted customer values fuel efficiency, do our strengths enable us to produce high-quality fuel-efficient cars better than our competition?

To what extent do our **strengths help us satisfy our customers' needs** better than the competition?
To what extent do our **weaknesses make us vulnerable to losing customers**?

Phase 1: Business Plan

- Industry/market definition
- External analysis (customers, current competitors, potential entrants, substitute products, and suppliers)
- Internal analysis (strengths and weaknesses as compared to the competition)
- **Opportunities/threats** (from external and internal analyses)
  - Summarizing strengths and weaknesses versus opportunities and threats using a SWOT matrix
  - Example: Amazon.com
    - Opportunity is to be perceived as the preferred online retail department store
    - Threat is that Walmart, Best Buy, and Costco increase their online presence

Phase 1: Business Plan

- Industry/market definition
- External analysis (customers, current competitors, potential entrants, substitute products, and suppliers)
- Internal analysis (strengths and weaknesses as compared to the competition)
- Opportunities/threats (from external and internal analyses)
- **Business vision/mission** (Defines direction and provides means of communicating succinctly with key stakeholder groups)
  - How do we wish to be **perceived** by key stakeholders?
  - What **quantifiable objectives** will be used to **determine progress in achieving vision/mission**? (e.g., market share, customer surveys indicating how we are perceived, etc.)
  - **Hypothetical Example:** Amazon.com wishes to be perceived by consumers as the preferred online department store by 20XX

Phase 1: Business Plan

- Industry/market definition
- External analysis (customers, current competitors, potential entrants, substitute products, and suppliers)
- Internal analysis (strengths and weaknesses as compared to the competition)
- Opportunities/threats (from external and internal analyses)
- Business vision/mission
- **Business Strategies** (cost/price, differentiation, focus, or some combination)
  - Which of **these generic business strategies best enables the firm** to achieve its vision/mission and objectives?

Phase 1: Business Plan

- Industry/market definition
- External analysis (customers, current competitors, potential entrants, substitute products, and suppliers)
- Internal analysis (strengths and weaknesses as compared to the competition)
- Opportunities/threats (from external and internal analyses)
- Business vision/mission
- Business Strategies (cost, differentiation, focus, or some combination)
- **Implementation strategy** (selected from a range of options)
  - Solo ventures or “go it alone”
  - **Merger or acquisition**
  - Alliances (including JVs, partnerships, and licensing)
  - Minority investments

Phase 1: Business Plan

Industry/market definition

External analysis

Internal analysis

Opportunities/threats

Business vision/mission

Business Strategies

Implementation strategy (selected from a range of options)

Merger or acquisition

Phase 2: Acquisition Plan (How to implement the acquisition)

- Plan objectives (support the realization of key business plan objectives)
  - How will the acquired firm enable the acquiring firm to better realize its vision/mission and business plan objectives?

Linkages Between Business and Acquisition Plan Objectives (1/3)

Business Plan Objectives

- **Financial:** The firm will
  - Achieve rates of return that will equal or exceed its cost of equity or capital by 20??
  - Maintain a debt/total capital ratio of x%
- **Size:** The firm will
  - Be the number one or two market share leader by 20??
  - Achieve revenue of $*x* million by 20??
- **Growth:** The firm will achieve through 20?? annual average
  - Revenue growth of *x*%
  - Earnings per share growth of *y*%
  - Operating cash-flow growth of *z*%

Acquisition Plan Objectives

- **Financial returns:** The target firm should have
  - A minimum return on assets of *x*%
  - A debt/total capital ratio ≤ y%
  - Unencumbered assets of $z million
- **Size:** The target firm should be
  - At least $*x* million in revenue
- **Growth:** The target firm should
  - Have annual revenue, earnings, and operating cash-flow growth of at least x%, y%, an z%
  - Provide new products and markets of x% by 20??
  - Possess excess annual production capacity of *x* million units

Linkages Between Business and Acquisition Plan Objectives (2/3)

Business Plan Objectives

- **Diversification:** The firm will
  - reduce earnings variability by *x*%.
- **Flexibility:** Achieve flexibility in
  - manufacturing and design.
- **Technology:** The firm will be recognized by its customers as the
  - industry's technology leader.
- **Quality:** The firm will be recognized by its customers as the
  - industry's quality leader.

Acquisition Plan Objectives

- **Diversification:** The target firm's earnings should be largely
  - uncorrelated with the acquirer's earnings.
- **Flexibility:** Target should
  - use flexible manufacturing techniques.
- **Technology:** The target firm should possess
  - important patents, copyrights
- **Quality:** The target firm's
  - product defects must be <*x* per million units manufactured.

Linkages Between Business and Acquisition Plan Objectives (3/3)

Business Plan Objectives

- **Service:** The firm will be recognized by its customers as the
  - industry's service leader.
- **Cost:** The firm will be recognized by its customers as the industry's
  - low-cost provider.
- **Innovation:** The firm will be recognized by its customers as the
  - industry's innovation leader.

Acquisition Plan Objectives

- **Warranty record:** The target firm's customer claims per million
  - units sold should be not greater than *x*.
- **Labor costs:** The target firm should be nonunion and not subject to
  - significant government regulation.
- **R&D capabilities:** The target firm should have
  - introduced at least ***x*** new products in the last 18 months.

Phase 2: Acquisition Plan

- Plan objectives (support the realization of key business plan objectives)

- **Timetable**
  - Defined by activity completion dates, deliverables (what is to be achieved), and individual (s) responsible for satisfying objectives

Phase 2: Acquisition Plan

- Plan objectives (support the realization of key business plan objectives)
- Timetable

- **Resource/capability review**
  - Determine maximum size of acquisition in terms of P/E, sales, cash flow, purchase price, etc.
  - Assess internal management capabilities (Can acquirer continue to manage current businesses as well as integrate the acquired firm?)

Phase 2: Acquisition Plan

- Plan objectives (support the realization of key business plan objectives)
- Timetable
- Resource/capability review

- **Management preferences** (Senior management guidelines to acquisition team)
  - Examples:
    - Prefer an asset or a stock purchase
    - Use cash only
    - Will consider competitors as potential targets
    - Want controlling interest
    - Limit EPS dilution to two years following closing

Phase 2: Acquisition Plan

- Plan objectives (support the realization of key business plan objectives)
- Timetable
- Resource/capability review
- Management preferences

- **Search plan**
  - Key search criteria include industry/geographic area and maximum size of acquisition
  - Relatively few criteria used to avoid limiting list of potential targets

Phase 2: Acquisition Plan

- Plan objectives (support the realization of key business plan objectives)
- Timetable
- Resource/capability review
- Management preferences
- Search plan

- **Negotiation strategy**
  - Starts with assessment of the needs of parties involved
  - Determine proposals to satisfy the highest priority needs of the parties involved. For example, consider
    - Using acquirer stock if seller wants a tax-free sale
    - Long-term employment contract if seller wants to stay with the business
    - Having seller sign a non-compete to avoid future competition with seller

Phase 2: Acquisition Plan

- Plan objectives (support the realization of key business plan objectives)
- Timetable
- Resource/capability review
- Management preferences
- Search plan
- Negotiation strategy

- **Determine initial offer price**
  - Requires buyer to estimate
    - Minimum purchase price (i.e., standalone or market price for purchase of shares or liquidation value for asset purchase)
    - Synergy created by combining acquirer and target firms
    - Percent of synergy acquirer willing to share with target (often reflects premium paid on recent similar transactions or the portion of synergy contributed by the target)

Phase 2: Acquisition Plan

- Plan objectives (support the realization of key business plan objectives)
- Timetable
- Resource/capability review
- Management preferences
- Search plan
- Negotiation strategy
- Determine initial offer price

- **Financing plan ("acid test")**
  - How will you pay for acquisition?
  - Will someone lend you the money?
  - Will acquirer shareholders tolerate EPS dilution?

Phase 2: Acquisition Plan

- Plan objectives (support the realization of key business plan objectives)
- Timetable
- Resource/capability review
- Management preferences
- Search plan
- Negotiation strategy
- Determine initial offer price
- Financing plan

- **Integration plan**
  - Objective: Combine businesses as rapidly as practical
    - What projects offer the greatest likelihood of realizing synergy?
    - What must be done to retain key people?
    - What investments must be made to keep businesses operational?
    - What is the appropriate communication plan?
    - How will the corporate cultures be best integrated?

Phase 2: Acquisition Plan

Plan objectives
Timetable
Resource/capability review
Management preferences
Search plan
Negotiation strategy
Determine initial offer price
Financing plan

Integration plan

Phase 3: Initiating the Search

- Two step procedure:
  - Establish primary selection criteria (e.g., industry and maximum size of transaction)
  - Develop search strategy to identify potential targets using computerized databases; directory services; legal, banking, and accounting firms; and the Internet.

- Brokers and finders:
  - A broker has a fiduciary responsibility to either the seller or buyer.
  - A finder introduces both parties without representing either party.
  - Fee structures are normally negotiated and may include a basic fee, a closing fee, and an "extraordinary" fee (i.e., fees paid if closing delayed due to obtaining antitrust approval, a hostile takeover, etc.)
  - Put everything in writing

Phase 4: The Screening Process

- As a refinement of the search process, **screening involves increasing the number of selection criteria** to reduce the list of potential candidates.

- In addition to the industry and maximum size of transaction used in the search process, additional criteria could include:
  - Market segment
  - Product line
  - Profitability
  - Degree of leverage
  - Market share
  - Cultural compatibility (e.g., AOL/Time Warner)

Phase 5: First Contact

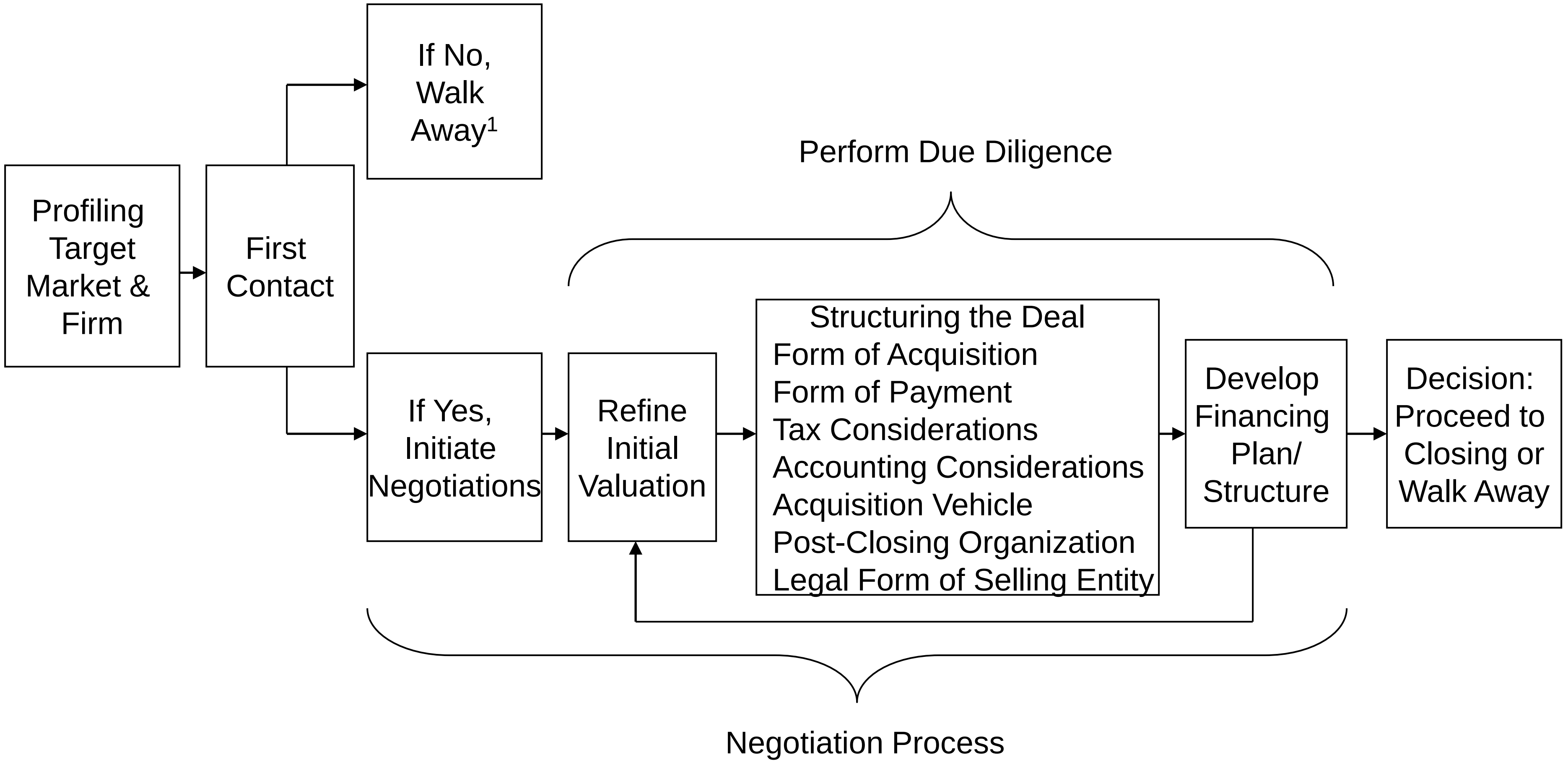
- The appropriate approach strategy depends on
  - Size of target
  - Whether target is publicly or privately held
  - Acquirer’s timeframe for completing transaction

- Trust and relationship building when time is not critical

- Discussing value

- Preliminary legal documents:
  - Confidentiality agreements
  - **Term sheets** (price range/formula, form of acquisition, extent of due diligence, no-shop provision))
  - Letter of intent (price range/formula, form of acquisition, form of payment, non-competes, employee contracts, no-shop provision)

Phase 6: Viewing Negotiation as a Process



[1]Alternatively, the potential buyer could adopt a more hostile approach such as initiating a tender offer to achieve a majority stake in the target firm.

Phase 6: Negotiation

- Negotiating strategy
  - Initially determine areas of agreement and disagreement
  - Solve the easiest areas of disagreement first
  - Establish and maintain trust throughout the process

- Concurrent activities:
  - Refining valuation
  - Deal structuring
  - Conducting due diligence (buyer, seller, and lender)
  - Developing the financing plan

Key Deal Structuring Considerations

- Form of Acquisition
- Form of Payment
- Tax Considerations
- Accounting Considerations
- Acquisition Vehicle
- Post-Closing Organization
- Legal Form of Selling Entity

Phase 6: Buyer Due Diligence During Negotiation

- Objectives:
  - Validate preliminary valuation assumptions (e.g., growth, cost, productivity, etc.)
  - Identify additional sources/destroyers of value (i.e., those providing upside potential & "fatal flaws")

- Activities:
  - Detailed legal (e.g., contracts) and financial record reviews
  - Management interviews (consistency in questions asked)
  - Site visits (e.g., inspect equipment, inventory, etc.)
  - Customer and supplier interviews

Determining the Purchase Price for the Target Firm

- Total consideration (TC):

$$PV_{TC} = C + PV_S + PV_{ND}$$

Where C = cash; PV_S = market value of acquirer stock; and PV_{ND} = market value of acquirer debt issued to seller, respectively.

Composition of purchase/offer price

- Total purchase price (TPP) or enterprise value (EV):

$$PV_{TPP} = PV_{TC} + PV_{AD}$$

Where PV_{TPP} = PV of total purchase price; PV_{TC} = PV of total consideration; PV_{AD} = PV of assumed Target debt, respectively.

Purchase/offer price plus long-term assumed liabilities

- Net purchase price (NPP):

$$PV_{NPP} = PV_{TPP} + PV_{OAL} - PV_{DA}$$
$$= (C + PV_S + PV_{ND} + PV_{AD}) + PV_{OAL} - PV_{DA}$$

Where PV_{OAL} = other assumed Target liabilities and PV_{DA} = PV of discretionary (non-critical) assets,[1] respectively.

Actual cash cost of acquisition

[1]Assets not critical to the ongoing operation of the combined businesses can be sold to finance the purchase price.

Phase 7: Developing the Integration Plan

- Use due diligence to determine post-closing sequencing of events necessary to realize potential savings and revenue enhancements

- Resolve contract-related transition issues in purchase agreement
  - Employee payroll and benefit claims processing
  - Seller reimbursement for products shipped before closing for which payment not received
  - Buyer reimbursement for vendor supplies/services received before closing for which payment had not yet been made

- Ensure contract closing conditions include those necessary to facilitate integration (e.g., employee contracts, agreements not to compete)

- Develop post-merger integration organization consisting of both target and acquirer managers to
  - Build a master schedule of what should be done, by whom and by what date
  - Establish work teams to determine how each function and business unit will be combined
  - Establish post-closing communication strategy for all stakeholders

Phase 8: Closing

- Obtain all necessary consents:
  - Shareholder
  - Regulatory (e.g., state and federal)
  - Third party (e.g., customer, lender, and vendor)
- Complete definitive agreement
  - Purchase price
  - Allocation of purchase price
  - Assumption of liabilities
  - Representations and warranties
  - Covenants
  - Closing conditions
  - Indemnification
  - Loan documents

Phase 9: Implementing Post-Closing Integration

- Communication plans (e.g., consistent and continuous)
- Employee retention (e.g., retention bonuses)
- Satisfying cash flow requirements (e.g., deferred maintenance expenditures)
- Employing best practices (e.g., competitor or similar business)
- Cultural issues (e.g. joint work teams, co-location of acquirer and target employees)

Phase 10: Conducting Post-Closing Evaluation

- Don’t change performance benchmarks
- Ask the difficult questions
- Learn from mistakes

Summary: The Acquisition Process

- Phase 1: Business Plan
- Phase 2: Acquisition Plan
- Phase 3: Search
- Phase 4: Screen
- Phase 5: First Contact
- Phase 6: Negotiation
- Phase 7: Integration Plan
- Phase 8: Closing
- Phase 9: Integration
- Phase 10: Evaluation

Identifying opportunities in corporate control market

Buy-side and Sell-side advisory

Buy-Side M&A

- Buy-side report
  - Detailed analysis, exhaustive planning, resource allocation, expertise to integrate the resources
  - Scope for negotiation, room for consensus, and flexibility in valuation and deal structuring
  - Due-diligence report

Important items in a buy-side report

- **Financial model** for target valuation, financing and deal impact
- **Acquisition premium** calculation
- **Synergy gains** involved
- Cash and stock **payment options**
- Related wealth transfer issues
- **Deal structuring**
- Integration issues

Other important factors in buy-side M&A

- Buyer motivation

- Nature of deal
  - Horizontal
  - Vertical
  - Diversification

Financing options in M&A deal (1/2)

1. Stock payment/Equity financing
   - Pure stock payment
     - **Exchange ratio, $x = P_T/P_A$** ; when both parties <u>agree to the market valuation</u>
     - **Minimum Exchange ratio, $X^{\#} = FV_T/FV_A$** ; when both parties <u>do not agree to the market valuation</u>
     - **Maximum Exchange ratio, $X^{\#\#} = (FV_T + AP)/FV_A$** ; where AP is the acquisition premium
     - **Final Exchange ratio**: depends on **<u>negotiation</u>** *(buyer wants lowest; seller wants highest)*
2. Cash payment
3. Stock plus cash payment

Financing options in M&A deal (2/2)

1. Stock payment/Equity financing
2. Cash payment
   - Cash on hand
   - Debt financing
     - Bridge loan
     - Bonds and debentures
     - Senior debt notes raised from specialized institutions
     - Junior debt or junk bonds raised from specialized institutions
     - Line of credit and revolver credit
3. Stock plus cash payment

Investment Bank and Buy-Side M&A

- **Identify** the tentative potential targets for acquisition
- Preliminary **due diligence** for the proposed targets
- Select the **best feasible option** for the buyer
- Carry out **complete financial due diligence** for the selected target
- Write and fix the **pre-purchase agreement**
- **Negotiate** with the target firms and **close** the deal

- Other inputs
  - Fairness Opinion
  - Definitive Agreement

Buy-side and deal valuation

Time to play the game!

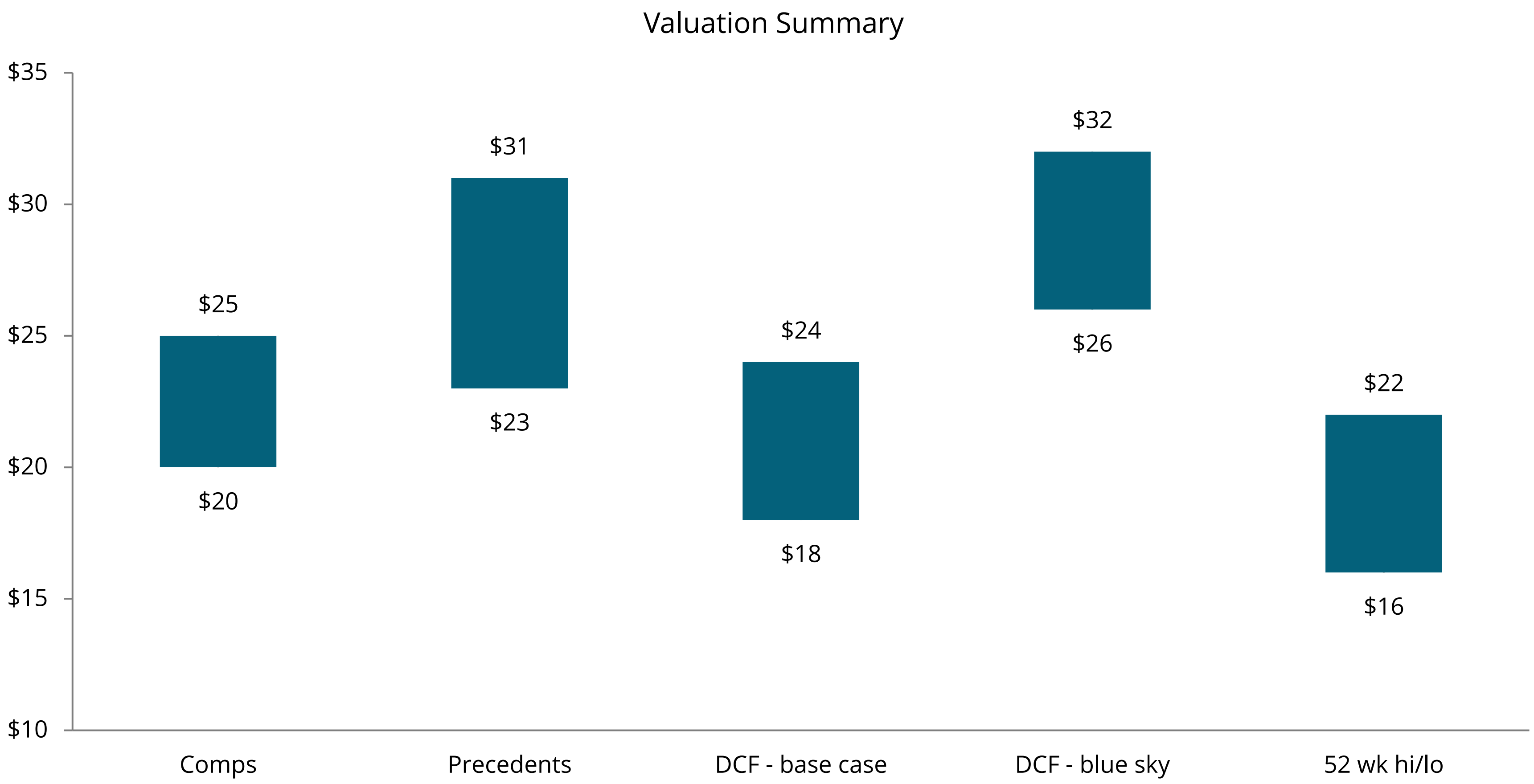
Buy-side deal analysis

- Football field
- EPS accretion analysis

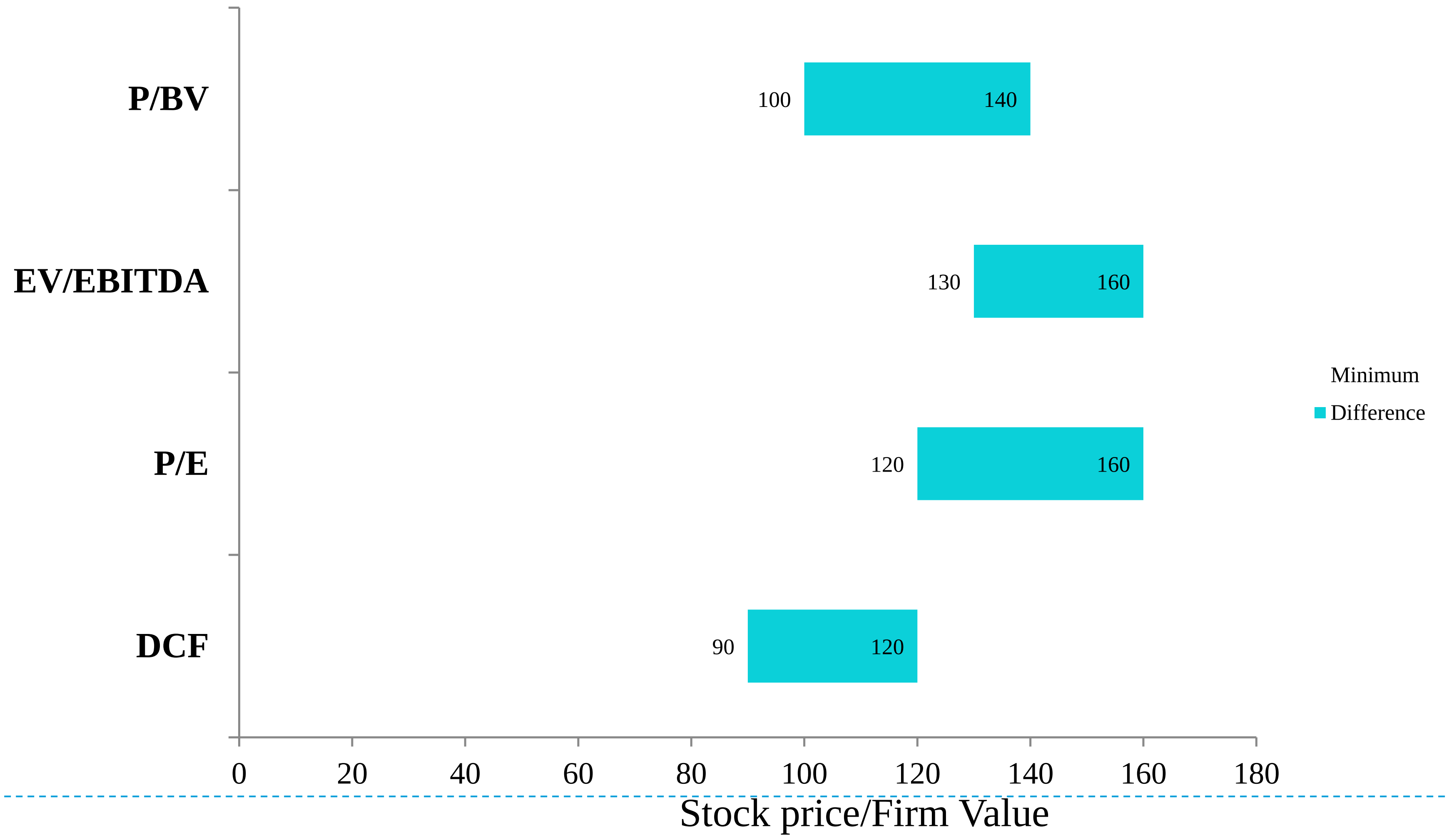
Valuation approaches

1. **Fundamental valuation:** Discounted Cash Flow (DCF)
2. **Relative valuation:** Comparable
    1. Market multiples for firm with peers
        1. Price-to-Earnings (P/E)
        2. Price-to-book (P/BV)
        3. Price-to-Free cash flow (P/FCF)
        4. Enterprise value-to-sales (EV/S)
        5. Enterprise value-to-EBITDA (EV/EBITDA)
    2. Market transactions
        1. Similar business, or similar divisions
3. **Cost based**

Football Valuation Field



Creating a football field of valuation: An example



EPS Accretion (Dilution) Analysis

- Core analysis model for buy-side M&A used by Investment Banks
- Assesses the impact of M&A on buyer's profitability

Impact of the deal	Condition
Accretive	Combined EPS > Acquirer's EPS
Dilutive	Combined EPS < Acquirer's EPS
Breakeven	No impact on Acquirer's EPS

Accretion and Dilution Calculation

1. Estimate the net income of the combined firm called “pro forma income”
   - Synergies created in the M&A deal (positive or negative)
   - Increased interest expense arising due to the new debt used to finance the transaction
   - Decreased interest income as a result of cash used in the transaction
   - Increased amortization as a result of the intangibles created in the deal
   - Increased depreciation as a result of the write-up of assets in the deal
   - Changes in tax rates (for cross-border M&As)

2. Calculate the new share of the combined firm

3. Divide the estimated net income of the combined firm by new share count

EPS Accretion (Dilution) Analysis: An Example

- An acquirer wants to purchase 100% of a target firm by issuing additional stocks against shares of target firm.
- Acquirer is traded at 30/share and target is traded at 65/share.
- Price-to-earnings (P/E) ratio is 6 for acquirer and 10.8 for target.
- Shares outstanding are 5000 and 1500, respectively, for acquirer and target.
- If no premium is paid, then **calculate the accretion or dilution** of the acquirer.

EPS Accretion (Dilution) Analysis: An Example

	Acquirer	Target	Combined
Share price before announcement	30	65	
P/E ratio	6	10.8	
EPS next year	5	6	**4.12**
Shares outstanding	5000	1500	**8250**
Net income next year	25000	9000	**34000**
New Shares Issued	**3250**		
Offer value	**97500**		
Exchange ratio	**2.17**		
Accretion/Dilution	**-17.58%**		

The Pitch Book or Pitch Report

Articulating an offer

Pitchbook for IB advisory on M&A (1/2)

I. Company Overview

- Company Overview
- Business Model
- Operating Forecasts
- Shareholder Analysis
- Liquidity Analysis

II. Industry Overview

- Competitive Environment
- Key Industry Trends
- Corporate Finance Activity

Pitchbook for IB advisory on M&A (2/2)

III. **Valuation**

- Historical Share Price Performance
- Valuation Summary (including Football Field)
- Comparables Overview
- Precedents Overview

IV. **Transaction Opportunities**

- Strategic Review and Opportunities
- Recommendation 1
- Recommendation 2
- Recommendation 3

V. **Team Overview**

- Investment Banking Deal Team
- Deal Tombstones

Project for the course (Part A): Buy-side pitch report

- **Objective:** To work on a project where you apply your understanding from other pre-requisite courses and topics being covered in this course to identify and evaluate targets for mergers or acquisitions.
- **Learning outcome:** The goal of this exercise is to give you hands-on exposure to how targets are identified and help you appreciate the implications of optionality embedded in such acquisition announcements which often results in delays in the deal execution.
- **Deliverables:** You are required to make a presentation at the end of the course highlighting why you
  - Chose the companies,
  - How did you value the targets, and
  - What synergy gains will be helping the combined entity to expand geographically and succeed.
  - Buy-side Pitch report (PPT) with all supporting excel illustration

Sell-side M&A

- Tough decision!
- Analysis:
  - When should the company sell off?
  - What price should the company sell at?
- Selloff
  - Going concern
  - Liquidation

Factors affecting sell-side M&A

- Company specific variables for sell-side
  - Non-core assets, difficult-to-manage, non-rewarding, transition in family business heirs
- Existing market conditions
  - Attractive valuations, founders/owners looking for exit, market sentiments
- Synergy opportunities
  - Economies of scale/scope, cross-selling, new markets, increased management depth
  - Operating synergy sources
    - Cost savings, revenue increases
  - Financial synergy sources
    - Tax savings, debt capacity, cash slack

Sell-side process

I. Preparing the business for review
II. Preparing the target for selling
III. Marketing the target
IV. Due diligence and selection
V. Negotiation and closing the deal

Investment Banking and Sell-side pitch

- Comprehensive due diligence of the target's business
- Strategic vision of the target firm, both before sell off and post sell off
- Identifying potential buyers for the target
- Establishing strategic fit with the target
- Inviting best valuations, bid and intent from the buyer
- Negotiating deal terms and closing the deal

Sell-side advisory

- Strategic advisory
- Legal advisory
- Accounting and financing advisory
- Tax advisory
- Integration advisory

Project for the course (Part B): Sell-side pitch report [Optional

- **Objective:** To work on a project where you apply your understanding from other pre-requisite courses and topics being covered in this course **<u>to identify and evaluate sell-off opportunities</u>**
- **Learning outcome:** The goal of this exercise is to give you hands-on exposure to how targets look for suitable acquirers and help you appreciate the implications of optionality embedded in such acquisition announcements which often results in delays in the deal execution.
- **Deliverables:** You are required to make a presentation at the end of the course highlighting why you
  - Chose the companies,
  - How did you value the targets, and
  - What synergy gains will be helping the combined entity to expand geographically and succeed.
  - Sell-Side Pitch report (PPT) with all supporting excel illustration