

Mergers and Acquisitions

M&A = Merger & Acquisition
 DP = Deal Price/Share
 SP = Stock Price/Share
 FCF = Free Cash Flow
 NI = Net Income
 WACC = Weighted Avg. Cost of Capital
 NCC = Non-Cash Charges. Investment
 CapEX = Capital Expenditure

N = No. of Shares Target Received
 PAT = Price after Manager Announcement
 C = Cash Paid to Target
 P_T = Price Paid for Target
 V_T = Pre Merger Targets Value
 V_A = Pre Merger Value of Acquirer's Stock
 S = Value of Synergies
 V_{A*} = Post Merger Value of Combined Company
 MP = Market Price

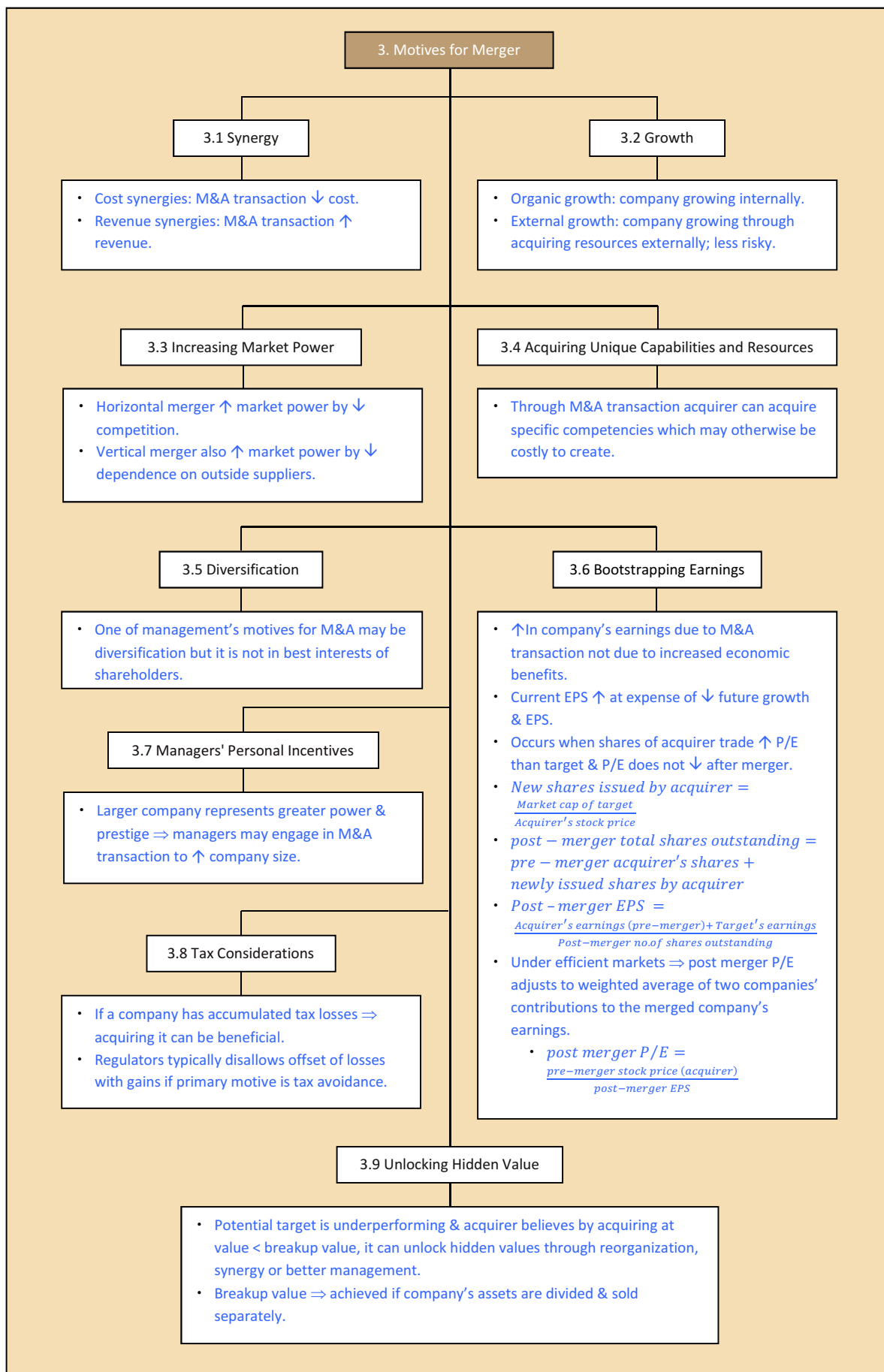
EV = Enterprise Value
 CF = Cash Flow/Share
 P = Price/Share
 BV = Book Value/ Share
 E = Earnings per Share.
 S = Sale per Share
 EBITDA = Earnings Before Interest, Tax Depreciation Amortization
 WCIInv = Working Capital Investment

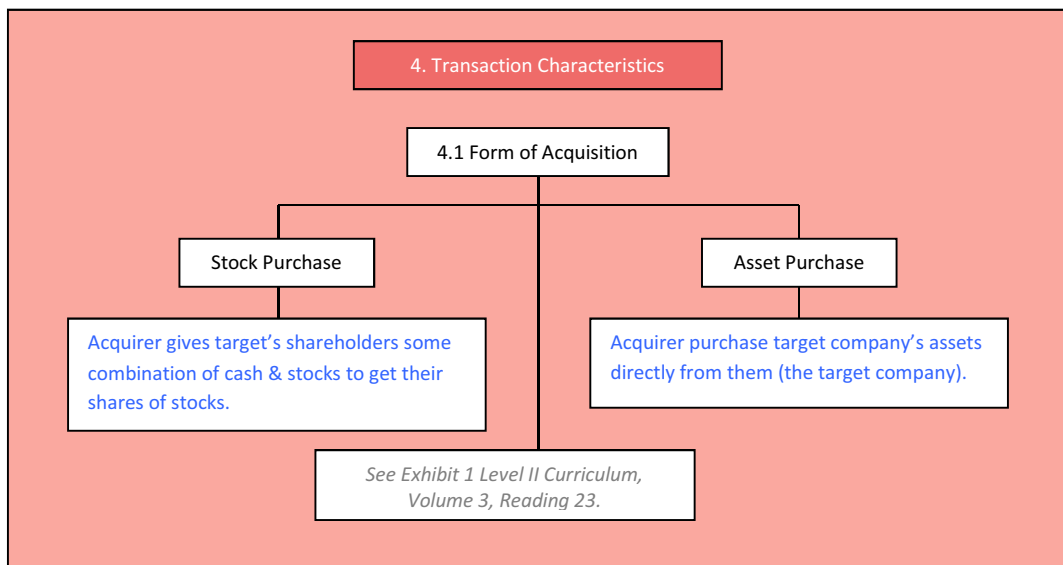
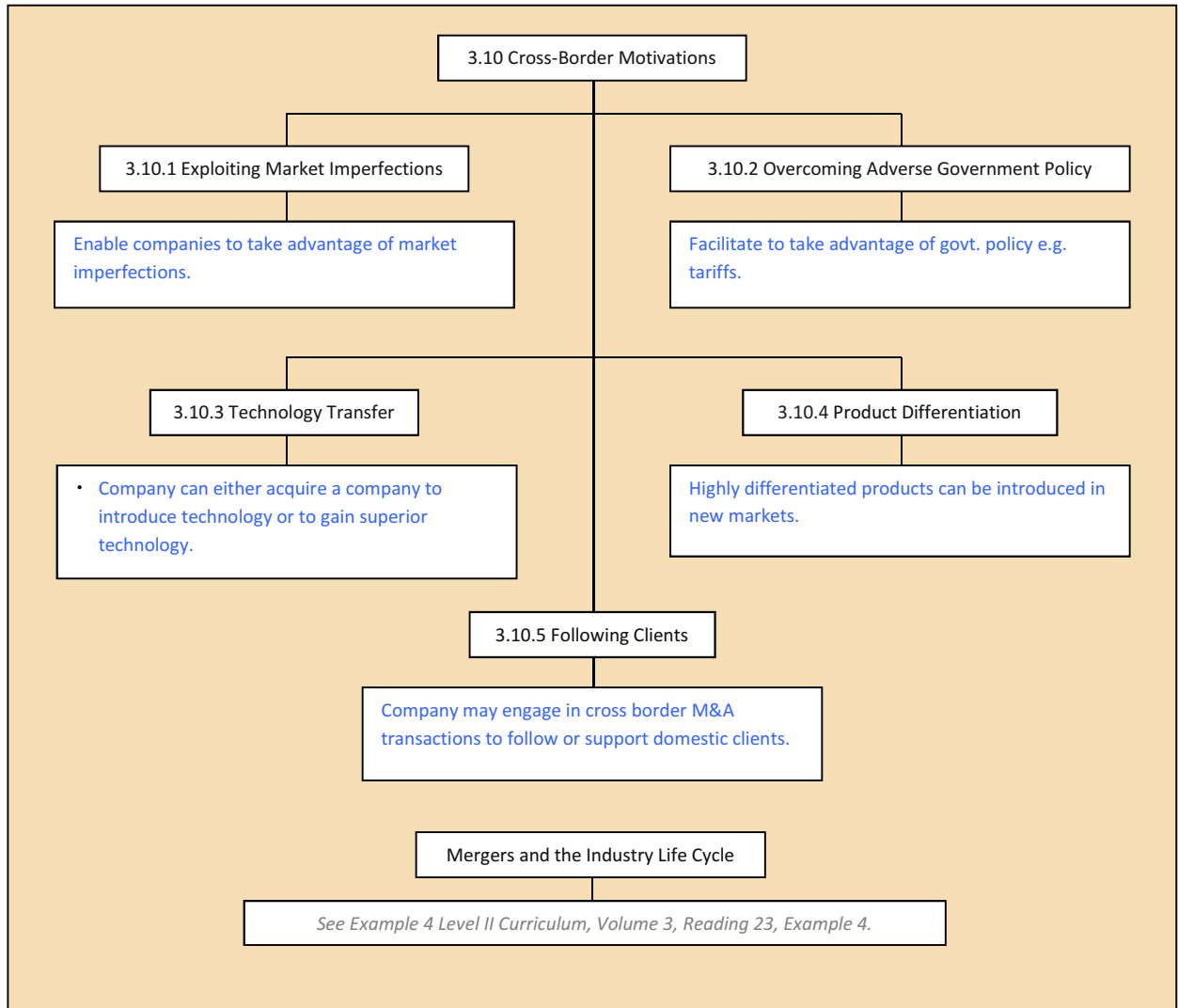
1. Introduction

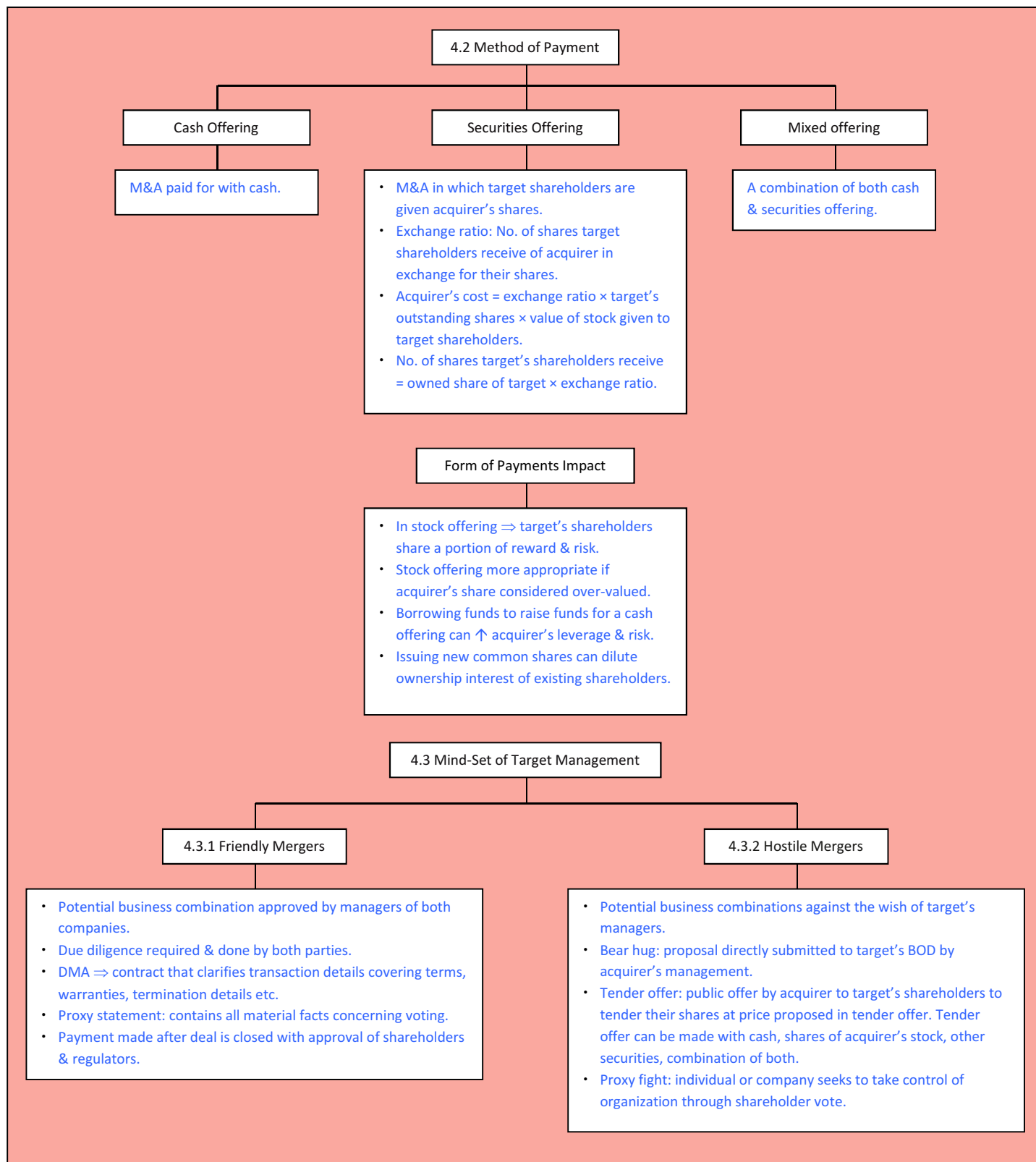
- Companies may enter into M&A activities for variety of reasons.
- Important for corporate executives & analysts to understand both motives, operational & financial consequences of mergers.

2. Mergers and Acquisitions: Definitions And Classifications

- Acquisitions: purchase of some portion of one company by another.
- Merger: absorption of one company by other.
- Statutory merger: acquirer acquires all target's assets & liabilities.
- Subsidiary merger: target becomes subsidiary after purchase.
- Consolidation: both cease to exist to become a new company.
- Target Company: one being acquired.
- Acquiring company: company acquiring target.
- Hostile transaction: potential business combinations without management & board's consent.
- Friendly transaction: business combinations approved by management of both companies.
- Horizontal merger: merging companies in same kind of business.
- Vertical merger: companies at different position in same value chain.
- Backward integration: acquirer purchases target ahead of it in value chain.
- Forward integration: acquirer purchases target further down the value chain.
- Conglomerate merger: Acquirer purchases target unrelated to its core business.







5. Takeovers

- Target's management under hostile attempt can sell the company or use defensive measures to resist & remain independent.
- Defensive measures ⇒ help in delaying transaction,
 - Negotiate better deal with acquirer, or
 - Keep company independent.

5.1 Pre-Offer Takeover Defense Mechanisms

- Shark repellants ⇒ changes to the corporate charter & right-based defenses.
- Flip-in pill: right given to target's shareholders to buy target's shares at substantial discount ⇒ ↑ cost of potential acquirer.
- Flip-over pill: right given to target's shareholders to buy acquirer's shares at discount ⇒ dilution to all existing acquirer shareholders.
- Dead hand provision: target board's right to cancel poison pill by vote of continuing director.
- Poison puts: right of target's bondholders to sell bonds back to target at pre-specified price.
- State law can be target friendly ⇒ give target companies power for defending against hostile takeover attempts.
- A portion of board seats are due for election each year ⇒ target become ↓ attractive.
- Restricted voting rights: restrict stockholders that have purchased large block of shares.
- Supermajority voting provision: ↑ no. of votes required for M&A approval, commonly a vote of 80% as opposed to 51%.
- Fair-price amendments disallow merger if offer < threshold price.
- Golden parachutes: allow executives to receive attractive payout if they leave target company following a change in corporate control.

5.2 Post-Offer Takeover Defense Mechanisms

- Just say no defense: management lobbies BOD & shareholders to decline offer.
- Litigation: target can file a lawsuit against the acquirer.
- Greenmail: agreement allowing target's management to purchase back shares from acquirer at premium.
- Share repurchase: target can repurchase its shares from shareholders to make target ↓ attractive by ↑ cost for acquirer.
- Leverage recapitalization: using ↑ amount of debt to finance share repurchases.
- Crown jewel defense: target can decide to sell a subsidiary or asset to a third party.
- Pac-man defense: target defends itself by making a counter-offer to acquire the hostile bidder.
- White-knight defense: target seeks a third party to acquire itself.
- White squire defense: target seeks third party to purchase substantial minority stake, enough to block a hostile attempt.

6. Regulation

6.1 Antitrust

- Antitrust law intend to stop M&A which impede competition.
- Sherman Antitrust Act of 1890: Act to maintain competition by restraining attempts to monopolize an industry.
- Clayton Antitrust Act of 1914: Act passed to clarify & strengthen The Sherman Antitrust act.
- Celler-Kefauver Act of 1950: Act passed to cover up loophole of pervious act.
- Hart-Scott-Rodino Antitrust Improvements Act of 1976 made necessary for M&A to be reviewed and approved in advance.
- $HHI = \sum_j^n (\text{Market Share in } \%)^2$

$$\sum_i^n \left(\frac{\text{sale (output) of firm}_i}{\text{total sales (output) of market}} \times 100 \right)^2$$

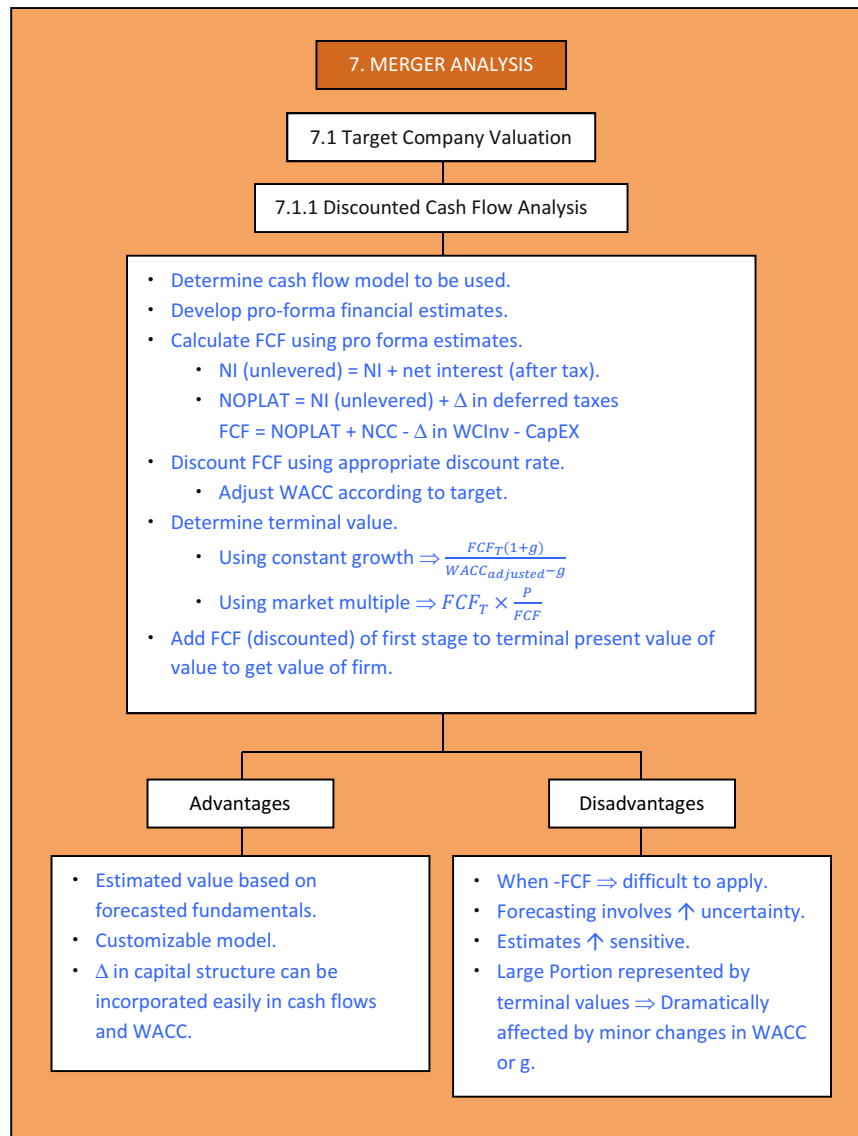
EXHIBIT 2**HHI Concentration Level and Possible Government Action****HHI Concentration Level**

Post-Merger HHI	Concentration	Change in HHI	Government Action
Less than 1,000	Not concentrated	Any amount	No action
Between 1,000 and 1,800	Moderately concentrated	100 or more	Possible challenge
More than 1,800	Highly concentrated	50 or more	Challenge

Reference: Level II Curriculum, Volume 3, Reading 23, Exhibit 2.

6.2 Securities Laws

- Williams Act ⇒ cornerstone of securities legislation for M&A activities.
- Ensures fairness of tender offer through disclosure requirements & formal tender offer procedures.
- Disclosure: section 13(d) requires public disclosure whenever a company acquires 5% or more of target's outstanding common stock.
- Section 14 creates tender offer process by establishing various rules & restrictions.



7.1.2 Comparable Company Analysis

- Identify comparable firms.
- Calculate relative value measure for these firms.
- $\left. \begin{array}{l} \frac{EV}{EBITDA} \\ \frac{EV}{EBIT} \\ \frac{EV}{SALES} \end{array} \right\}$ Estimating Enterprise value
- $\left. \begin{array}{l} P/CF \\ P/S \\ P/E \\ P/BV \end{array} \right\}$ Estimating Equity
- Calculate descriptive statistics of relative value metric & apply to target firm.
 - Value = $EPS \times (P/E)$
 - Mean, median & range can be calculated for relative value measures.
- Estimate takeover premium.
 - Takeover premium = deal price/share of target - current stock price of target.
 - Takeover premium in % = $\frac{DP-SP}{SP} \times 100$
- Estimate takeover price of target
 - Estimated stock price + estimated takeover premium.

Advantages

- Based on economic principle of law of one price.
- Estimation based on actual market data.
- Data required for estimation is easily available.

Disadvantages

- Method sensitive to market mispricing.
- Fair takeover premium \Rightarrow estimated separately.
- Difficult to incorporate specific plans for the target.
- Past data may not be timely.
- Difficult to apply on financially distressed company.

7.1.3 Comparable Transaction Analysis

- Identify set of recent transactions.
 - Sample of recent transactions must include M&A activities of companies in same industry as target.
- Calculate relative measures.
 - P/CF, P/E etc.
- Calculate descriptive statistics for relative value measure.
 - Value = $EPS \times (P/E)$

Advantages

- No need to separately estimate takeover premium.
- Value based on actual market data.
- Face \downarrow litigations risk.

Disadvantages

- If previous takeovers mispriced \Rightarrow technique may be inadequate.
- If few comparable transaction have occurred \Rightarrow difficult to apply.
- Difficult to incorporate specific plans for the target.
- Difficult to apply to a firm experiencing financial distress.

7.2 Bid Evaluation

- Merger if creates economic value \Rightarrow combined firm value $>$ sum of two separate firms.
- Target shareholders' gain = $P_T - V_T$
- Acquirer's gain = $S - (P_T - V_T)$
- $V_A^* = V_A + V_T + S - C$
- $V_T \Rightarrow$ Minimum bid target's shareholders should accept.
- $V_T + S \Rightarrow$ Maximum bid acquirer wants to pay.
- If acquires pays $> V_T + S \Rightarrow V_A^* < V_A$
- More managers are confident about expected synergies:
 - Acquirer managers \Rightarrow prefer to pay cash
 - Target managers \Rightarrow prefer to receive stocks
- \uparrow Stocks of acquirer paid $\Rightarrow \uparrow$ risk and benefits shared by target.
- Cash offer \Rightarrow target's profit = takeover premium.
- Stock offer \Rightarrow premium determined by value of combined firm.
- $P_T = N \times P_{AT}$

8. WHO BENEFITS FROM MERGERS

Target

- Empirically \Rightarrow short run benefits gained.
- On avg. 30% premium realized over pre-announcement MP

Acquirer

- Acquirer's SP \downarrow 1-3%.
- In long run acquirer have empirically underperformed.
- Avg. returns -4.3%.
- 61% acquirers lagging behind industry peers.
- Managerial hubris \Rightarrow managers over-estimating synergies \Rightarrow transfer \uparrow wealth to target's shareholders.

- Strong buyers, \downarrow premiums, \downarrow no. of bidders & favorable initial market reaction \Rightarrow create value in M&A.

9. CORPORATE RESTRUCTURING

- Divestiture: decision of company to sell, liquidate, spin-off a division or a subsidiary.

Reasons for Divestiture

- Change in strategic focus.
- Poor fit.
- Reverse synergy.
- Financial / cash flow needs.

Ways to divest Assets

- Equity carve-out.
- Spin-off
- Split-off.
- Liquidation.