Mergers and Acquisitions

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.
3. Motives for Merger

3.1 Synergy
- Cost synergies: M&A transaction ↓ cost.
- Revenue synergies: M&A transaction ↑ revenue.

3.2 Growth
- Organic growth: company growing internally.
- External growth: company growing through acquiring resources externally; less risky.

3.3 Increasing Market Power
- Horizontal merger ↑ market power by ↓ competition.
- Vertical merger also ↑ market power by ↓ dependence on outside suppliers.

3.4 Acquiring Unique Capabilities and Resources
- Through M&A transaction acquirer can acquire specific competencies which may otherwise be costly to create.

3.5 Diversification
- One of management’s motives for M&A may be diversification but it is not in best interests of shareholders.

3.6 Bootstrapping Earnings
- ↑ in company’s earnings due to M&A transaction not due to increased economic benefits.
- Current EPS ↑ at expense of ↓ future growth & EPS.
- Occurs when shares of acquirer trade ↑ P/E than target & P/E does not ↓ after merger.
- New shares issued by acquirer = Market cap of target
  Acquirer’s stock price
- post – merger total shares outstanding = pre – merger acquirer’s shares + newly issued shares by acquirer
- Post – merger EPS = Acquirer’s earnings (pre – merger) + Target’s earnings
  Post – merger total shares outstanding
- Under efficient markets ⇒ post merger P/E adjusts to weighted average of two companies’ contributions to the merged company’s earnings.
  post merger P/E = pre – merger stock price (acquirer)
  post – merger EPS

3.7 Managers’ Personal Incentives
- Larger company represents greater power & prestige ⇒ managers may engage in M&A transaction to ↑ company size.

3.8 Tax Considerations
- If a company has accumulated tax losses ⇒ acquiring it can be beneficial.
- Regulators typically disallows offset of losses with gains if primary motive is tax avoidance.

3.9 Unlocking Hidden Value
- Potential target is underperforming & acquirer believes by acquiring at value < breakup value, it can unlock hidden values through reorganization, synergy or better management.
- Breakup value ⇒ achieved if company’s assets are divided & sold separately.
3.10 Cross-Border Motivations

3.10.1 Exploiting Market Imperfections
Enable companies to take advantage of market imperfections.

3.10.2 Overcoming Adverse Government Policy
Facilitate to take advantage of govt. policy e.g. tariffs.

3.10.3 Technology Transfer
- Company can either acquire a company to introduce technology or to gain superior technology.

3.10.4 Product Differentiation
Highly differentiated products can be introduced in new markets.

3.10.5 Following Clients
Company may engage in cross border M&A transactions to follow or support domestic clients.

Mergers and the Industry Life Cycle

See Example 4 Level II Curriculum, Volume 3, Reading 23, Example 4.

4. Transaction Characteristics

4.1 Form of Acquisition

Stock Purchase
Acquirer gives target’s shareholders some combination of cash & stocks to get their shares of stocks.

Asset Purchase
Acquirer purchase target company’s assets directly from them (the target company).

See Exhibit 1 Level II Curriculum, Volume 3, Reading 23.
4.2 Method of Payment

Cash Offering
- M&A paid for with cash.

Securities Offering
- M&A in which target shareholders are given acquirer’s shares.
- Exchange ratio: No. of shares target shareholders receive of acquirer in exchange for their shares.
- Acquirer’s cost = exchange ratio × target’s outstanding shares × value of stock given to target shareholders.
- No. of shares target’s shareholders receive = owned share of target × exchange ratio.

Mixed offering
- A combination of both cash & securities offering.

Form of Payments Impact
- In stock offering ⇒ target’s shareholders share a portion of reward & risk.
- Stock offering more appropriate if acquirer’s share considered over-valued.
- Borrowing funds to raise funds for a cash offering can ↑ acquirer’s leverage & risk.
- Issuing new common shares can dilute ownership interest of existing shareholders.

4.3 Mind-Set of Target Management

4.3.1 Friendly Mergers
- Potential business combination approved by managers of both companies.
- Due diligence required & done by both parties.
- DMA ⇒ contract that clarifies transaction details covering terms, warranties, termination details etc.
- Proxy statement: contains all material facts concerning voting.
- Payment made after deal is closed with approval of shareholders & regulators.

4.3.2 Hostile Mergers
- Potential business combinations against the wish of target’s managers.
- Bear hug: proposal directly submitted to target’s BOD by acquirer’s management.
- Tender offer: public offer by acquirer to target’s shareholders to tender their shares at price proposed in tender offer. Tender offer can be made with cash, shares of acquirer’s stock, other securities, combination of both.
- Proxy fight: individual or company seeks to take control of organization through shareholder vote.
5. Takeovers

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.
- 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.
- \[ HHI = \sum_i (\text{Market Share in } \%)^2 \]
  \[ \sum_i \left( \frac{\text{sales of firm i}}{\text{total sales of market}} \times 100 \right)^2 \]
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.

EXHIBIT 2

<table>
<thead>
<tr>
<th>HHI Concentration Level and Possible Government Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Post-Merger HHI</strong></td>
</tr>
<tr>
<td>Less than 1,000</td>
</tr>
<tr>
<td>Between 1,000 and 1,800</td>
</tr>
<tr>
<td>More than 1,800</td>
</tr>
</tbody>
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7.1.1 Discounted Cash Flow Analysis

- Determine cash flow model to be used.
- Develop pro-forma financial estimates.
- Calculate FCF using pro forma estimates.
  - NI (unlevered) = NI + net interest (after tax).
  - NOPLAT = NI (unlevered) + Δ in deferred taxes
  - FCF = NOPLAT + NCC - Δ in WCInv - CapEX
- Discount FCF using appropriate discount rate.
- Adjust WACC according to target.
- Determine terminal value.
  - Using constant growth \( \frac{FCF_y (1 + g)}{WACC_{adj} - g} \)
  - Using market multiple \( FCF \times \frac{P}{V_{EF}} \)
- Add FCF (discounted) of first stage to terminal present value of value to get value of firm.

Advantages

- Estimated value based on forecasted fundamentals.
- Customizable model.
- Δ in capital structure can be incorporated easily in cash flows and WACC.

Disadvantages

- When -FCF ⇒ difficult to apply.
- Forecasting involves ↑ uncertainty.
- Estimates ↑ sensitive.
- Large Portion represented by terminal values ⇒ Dramatically affected by minor changes in WACC or g.
7.1.2 Comparable Company Analysis

- Identify comparable firms.
- Calculate relative value measure for these firms.
  
  \[
  \begin{align*}
  &\text{EV} \\
  &\text{EBITDA} \\
  &\text{EV} \\
  &\text{SALES} \\
  &\text{P/CF} \\
  &\text{P/S} \\
  &\text{P/E} \\
  &\text{P/BV}
  \end{align*}
  \]
  
  Estimating Enterprise value

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

8. WHO BENEFITS FROM MERGERS

- Empirically ⇒ short run benefits gained.
  - On avg. 30% premium realized over pre-announcement MP
- Acquirer’s SP ↓ 1-3%.
  - In long run acquirer have empirically underperformed.
  - Avg. returns –4.3%.
  - 61% acquirers lagging behind industry peers.
  - Managerial hubris ⇒ managers over-estimating synergies ⇒ transfer ↑ wealth to target’s shareholders.

- Strong buyers, ↓ premiums, ↓ no. of bidders & favorable initial market reaction ⇒ 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.