**Mergers and Acquisitions**

- Mergers & Acquisitions
- Divestitures
- Valuation

*Concept: Is a division or firm worth more within the company, or outside it?*
The Market for Corporate Control

When you buy shares, you get dividends; and potential control rights

There is a market for corporate control—that is, control over the extent to which a business is run in the right way by the right people.

This market is constrained by

- Government
- Management
- Some shareholders

Example:
Allied Signal’s attempts to acquire AMP, which is located in Pennsylvania

The Market for Corporate Control

- **M&A&D situations often arise from conflicts:**
  - Owner vs manager ("agency problems")
  - Build vs buy ("internalization")
  - Agency problems arise when owners' interests and managers' interests diverge. Resolving agency problems requires
    - Monitoring & intervention, or
    - Setting incentives, or
    - Constraining, as in bond covenants
  - Resolving principal-agent conflicts is costly
  - **Hence market price may differ from potential value of a corporation**
“Internalization”: Is an activity best done within the company, or outside it?

Issue: why are certain economic activities conducted within firms rather than between firms?

- As a rule, it is more costly to build than to buy—markets make better decisions than bureaucrats.
- Hence there must be some good reason, some synergy, that makes an activity better if done within a firm.
- Eg: the production of proprietary information.
- Often, these synergies are illusory.

Takeovers as a Solution to “Agency Problems”

- There is a conflict of interest between shareholders and managers of a target company—Eg poison pill defenses.
- Individual owners do not have sufficient incentive to monitor managers.
- Corporate takeover specialists, Eg KKR, monitor the firm's environment and keep themselves aware of the potential value of the firm under efficient management.
- The threat of a takeover helps to keep managers on their toes—often precipitates restructuring.
Goal of Acquisitions and Mergers

- Increase size - easy!
- Increase market value - much harder!

Goal: Market Value Addition

Definition
It is a measure of shareholder value creation

Methodology
It is the change in the market value of invested capital (debt and equity) minus the change in the book value of invested capital
**Value Changes In An Acquisition**

- **Profit on sale of assets**: 40
- **Synergies and/or operating improvements**: 50
- **Value of acquired company as a separate entity**: 75
- **Value of acquiring company without acquisition**: 175
- **Gain in shareholder value**: 50
- **Taxes on sale of assets**: 10
- **Takeover premium**: 30
- **Initial value plus gains**: 250
- **Final value of combined company**: 300

**Goals of Acquisitions**

**Rationale**: Firm A should merge with Firm B if

\[ \text{Value of AB} > \text{Value of A} + \text{Value of B} + \text{Cost of transaction} \]

- Synergy
- Gain market power
- Discipline
- Taxes
- Financing
Goals of Acquisitions

**Rationale:** Firm A should merge with Firm B if 

\[ \text{Value of AB > Value of A + Value of B + Cost of transaction} \]

- **Synergy**
  - Eg Martell takeover by Seagrams to match name and inventory with marketing capabilities
- **Gain market power**
  - Eg Atlas merger with Varity. (Less important with open borders)
- **Discipline**
  - Eg Telmex takeover by France Telecom & Southwestern Bell (Privatization)
  - Eg RJR/Nabisco takeover by KKR (Hostile LBO)
- **Taxes**
  - Eg income smoothing, use accumulated tax losses, amortize goodwill
- **Financing**
  - Eg Korean groups acquire firms to give them better access to within-group financing than they might get in Korea's undeveloped capital market

Fallacies of Acquisitions

- **Size** (shareholders would rather have their money back, eg Credit Lyonnais)
- **Downstream/upstream integration** (internal transfer at nonmarket prices, eg Dow/Conoco, Aramco/Texaco)
- **Diversification into unrelated industries** (Kodak/Sterling Drug)
Methods of Acquiring Corporate Control

- **Mergers**
  - Bidder typically negotiates a friendly agreement with target management and submits this for approval to both sets of shareholders
  - Usually entails an exchange of securities
- **Tender Offers**
  - Often hostile, often opposed, often generates competing bids
  - Usually a direct cash offer to stockholders of an above-market price
- **Proxy Fights**
  - A method of gaining control without acquisition: dissident shareholders seek to change management by soliciting proxies from other shareholders.

Who Gains What?

- Target firm shareholders?
- Bidding firm shareholders?
- Lawyers and bankers?
- Are there overall gains?

Changes in corporate control increase the combined market value of assets of the bidding and target firms. The average is a 10.5% increase in total value.
The Price: Who Gets What?

<table>
<thead>
<tr>
<th></th>
<th>Daimler</th>
<th>Chrysler</th>
<th>Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market value before deal</td>
<td>$52.8</td>
<td>$29.4</td>
<td>$82.2</td>
</tr>
<tr>
<td>leaked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value added by merger</td>
<td></td>
<td></td>
<td>$18.0</td>
</tr>
<tr>
<td>Merged Value</td>
<td></td>
<td></td>
<td>$100.2</td>
</tr>
<tr>
<td>Shareholders get</td>
<td>57.2%</td>
<td>42.8%</td>
<td>100%</td>
</tr>
<tr>
<td>Which is now worth</td>
<td>$57.3</td>
<td>$42.9</td>
<td>$100.2</td>
</tr>
<tr>
<td>Shareholders' shares of</td>
<td>$4.5</td>
<td>$13.5</td>
<td>$18</td>
</tr>
<tr>
<td>the gain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Premium, as %</td>
<td>9%</td>
<td>46%</td>
<td></td>
</tr>
</tbody>
</table>

A Case Study: Kodak - Sterling Drugs

Eastman Kodak’s Great Victory

KODAK’S PRICE REACTION
Announcement on 10-24-99

Kodak’s market reaction indicates that investors expected no synergies. Kodak’s bid = $3.5 billion
- Kodak’s stock market value fell 17% prior to announcement
- Premium bid = $3.5 billion
- Decrease in Kodak’s market value = $2.2 billion

Source: The Alpha Group, Inc.
Earnings and Revenues at Sterling Drugs

Sterling Drug under Eastman Kodak: Where is the synergy?

Kodak Says Drug Unit Is Not for Sale
(NYTimes, 8/93)

- Eastman Kodak officials say they have no plans to sell Kodak’s Sterling Winthrop drug unit.

- Louis Mattis, Chairman of Sterling Winthrop, dismissed the rumors as “massive speculation, which flies in the face of the stated intent of Kodak that it is committed to be in the health business.”
Sanofi to Get Part of Kodak Drug Unit (6/94)

- Taking a long stride on its way out of the drug business, Eastman Kodak said yesterday that the Sanofi Group, a French pharmaceutical company, had agreed to buy the prescription drug business of Sterling Winthrop, a Kodak subsidiary, for $1.68 billion.
  - Shares of Eastman Kodak rose 75 cents yesterday, closing at $47.50 on the New York Stock Exchange.
  - Samuel D. Isaly an analyst, said the announcement was "very good for Sanofi and very good for Kodak."
  - "When the divestitures are complete, Kodak will be entirely focused on imaging," said George M. C. Fisher, the company's chairman and chief executive.

Smithkline to Buy Kodak’s Drug Business for $2.9 Billion

- Smithkline Beecham agreed to buy Eastman Kodak’s Sterling Winthrop Inc. for $2.9 billion.
- For Kodak, the sale almost completes a restructuring intended to refocus the company on its photography business.
- Kodak’s stock price rose $1.25 to $50.625, the highest price since December.
Reasons Why Many Acquisitions Fail To Generate Value

- Overestimating synergies
- Over optimistic market assessments
- Value Destruction
- Deal price not based on cash flow value
- Poor post-merger integration
- Overestimating synergies

Using Industry Structure Analysis

- SUBSTITUTES
  - Questions:
    - Do substitutes exist?
    - What is their price/performance?
  - Potential Action:
    - Fund venture capital and joint venture to obtain key skills
    - Acquire position in new segment

- CUSTOMERS
  - Questions:
    - Is the customer base concentrating?
    - Is value added to customer end product high, changing?
  - Potential Actions:
    - Create differentiated product
    - Forward - integrate

- SUPPLIERS
  - Questions:
    - Is supplier industry concentrating?
    - Is supplier value/cost added to end product high, changing?
  - Potential Actions:
    - Backward - integrate

- BARRIERS TO ENTRY
  - Questions:
    - Do barriers to entry exist?
    - How large are the barriers?
    - Are they sustainable?
  - Potential Actions:
    - Acquire to achieve scale in final product or critical component
    - Lock up supply of critical industry input
Goals of Acquisitions

Rationale: Firm A should merge with Firm B if

\[ \text{Value of AB} > \text{Value of A + Value of B + Cost of transaction} \]

- Synergy
- Gain market power
- Discipline
- Taxes
- Financing

Example: Ciba-Geigy/Sandoz

Most Value is Created on the Asset Side (Operational Restructuring)

- Discounted Cash Flow (DCF) analysis for project evaluation
- Value-Based Management for performance evaluation

Wärtsilä NSD
(from Wärtsilä Diesel & New Sulzer Diesel)
Wärtsilä NSD: Consolidating Production and Distribution

Wärtsilä NSD now has the world’s most extensive portfolio of heavy duty engines. Its 4-stroke engines are mainly Wärtsilä design, while the 2-stroke engines are based on Sulzer design. The engine range consists of lean burn gas engines, dual fuel engines and gas diesels. Market share is strong and production is being consolidated or out-sourced, particularly for low-speed engine technologies.

Wärtsilä NSD: Gains Market Power

<table>
<thead>
<tr>
<th>Global market share</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 %           First in medium-speed marine main engines</td>
</tr>
<tr>
<td>25 %           First in diesel, gas and dual fuel power generation based on medium-speed engines</td>
</tr>
<tr>
<td>35 %           Second in low-speed marine engines</td>
</tr>
</tbody>
</table>
Sometimes, Too Late is Too Little

**Peruvian Banks: Market Share by Deposits, %**

- BBV ACQUISITION
- SANTANDER ACQUISITION

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**Corporate Restructuring**

- **Divestiture**—a reverse acquisition—is evidence that "bigger is not necessarily better"

- **Going private**—the reverse of an IPO (initial public offering)—contradicts the view that publicly held corporations are the most efficient vehicles to organize investment.
**Divestitures**

Divestiture: the sale of a segment of a company to a third party

- Spin-offs—a pro-rata distribution by a company of all its shares in a subsidiary to all its own shareholders

- Equity carve-outs—some of a subsidiary’s shares are offered for sale to the general public

- Split-offs—some, but not all, parent-company shareholders receive the subsidiary's shares in return for which they must relinquish their shares in the parent company

- Split-ups—all of the parent company's subsidiaries are spun off and the parent company ceases to exist.

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**Divestitures Add Value**

- Shareholders of the selling firm seem to gain, depending on the fraction sold:
- Total value created by divestitures between 1981 and 1986 = $27.6 billion.

<table>
<thead>
<tr>
<th>% of firm sold</th>
<th>Announcement effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10%</td>
<td>0</td>
</tr>
<tr>
<td>10-50%</td>
<td>+2.5%</td>
</tr>
<tr>
<td>50%+</td>
<td>+8%</td>
</tr>
</tbody>
</table>
Gains from Breakup?

Going Private

A public corporation is transformed into a privately held firm

- The entire equity in the corporation is purchased by management, or management plus a small group of investors
- These account for about 20% of public takeover activity in recent years in the United States.
- Can be done in several ways:
  - “Squeeze-out”—controlling shareholders of the firm buy up the stockholding of the minority public shareholders
  - Management Buy-Out—management buys out a division or subsidiary, or even the entire company, from the public shareholders
  - Leveraged Buy-Out (LBO)
**Leveraged Buy-Outs**

LBO is a transaction in which an investor group acquires a company by taking on an extraordinary amount of debt, with plans to repay the debt with funds generated from the company or with revenue earned by selling off the newly acquired company’s assets.

- Leveraged buy-out seeks to force realization of the firm’s potential value by taking control (also done by proxy fights).
- Leveraging-up the purchase of the company is a "temporary" structure pending realization of the value.
- Leveraging method of financing the purchase permits "democracy" in purchase of ownership and control--you don't have to be a billionaire to do it; management can buy their company.

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**LBOs, Agency Costs and Free Cash Flow**

- "Free cash flow" is cash-cow type earnings in excess of amounts required to fund all positive-NPV projects.
- Payout of free cash flow, to stockholders, reduces the amount of resources under management's discretion. Forces management to go out into the markets and justify raising funds.
- Thus debt has a disciplining role. “Safe” managers choose less debt.
Example (June 1996)

- AT&T sells AT&T Capital (equipment leasing division) for $2.2 billion
- The division goes private
- Financed by:
  - Bank debt
  - Asset securitization
  - $900 million equity (85% GRS UK, 10% Babcock & Brown, 5% management)
- Another major step in AT&T's restructuring

The LBO of EMAS

- EMAS is in the retailing and hire-purchasing business in Malaysia
- An LBO was done in 1998 by financial investors
- The management of the business have been retained by EMAS to continue to operate the businesses
- EMAS's assets include a strong local brand-name, and high-yielding accounts receivables with a low default rate
The Buyout

- EMAS was incorporated to buy existing assets, liabilities and business at 10.5 times prospective PER i.e. equivalent to 2 times book value, subject to a minimum of $52m and a maximum of $63m.

- The leveraged buyout was financed primarily by bank borrowings ($10.25m equity and $42m senior debt). The loan was made by the Malaysian Bumi Bank at Libor + 2%.

- The vendors have an option to subscribe up to 20% of EMAS’s issued shares prior to IPO at an 8% discount from IPO price.

After the LBO

- EMAS’s existing business is profitable. However, additional funds are required to finance its expansion plan and the penetration into new business.

- EMAS intends to reduce its senior debt to more acceptable levels with proceeds from IPO targeted for launch before end-2000.

- Meanwhile, where can EMAS get additional funding?

- And how will the lender get paid back?
**Income Statement**

<table>
<thead>
<tr>
<th></th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Turnover</strong></td>
<td>139.8</td>
<td>117.8</td>
<td>119.4</td>
<td>165.2</td>
</tr>
<tr>
<td><strong>Net operating profit</strong></td>
<td>8.4</td>
<td>8.8</td>
<td>5.2</td>
<td>10.5</td>
</tr>
<tr>
<td><strong>Management and legal fees</strong></td>
<td>0.0</td>
<td>0.0</td>
<td>(0.2)</td>
<td>(0.5)</td>
</tr>
<tr>
<td><strong>Net operating profit before interest &amp; tax</strong></td>
<td>8.4</td>
<td>8.8</td>
<td>5.0</td>
<td>10.0</td>
</tr>
<tr>
<td><strong>Interest expense</strong></td>
<td>0.0</td>
<td>0.0</td>
<td>(0.7)</td>
<td>(2.1)</td>
</tr>
<tr>
<td><strong>Net profit before tax</strong></td>
<td>8.4</td>
<td>8.8</td>
<td>4.3</td>
<td>7.9</td>
</tr>
<tr>
<td><strong>Tax (Assume 26%)</strong></td>
<td>(2.2)</td>
<td>(2.3)</td>
<td>(1.1)</td>
<td>(2.1)</td>
</tr>
<tr>
<td><strong>Net profit after tax</strong></td>
<td>6.2</td>
<td>6.5</td>
<td>3.2</td>
<td>5.8</td>
</tr>
</tbody>
</table>

**Balance Sheet**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed Assets</strong></td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Goodwill</strong></td>
<td>25.6</td>
</tr>
<tr>
<td><strong>Current Assets</strong></td>
<td>54.4</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>81.2</td>
</tr>
<tr>
<td><strong>Current Liabilities</strong></td>
<td>28.5</td>
</tr>
<tr>
<td><strong>Bank Loan</strong></td>
<td>41.2</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>69.7</td>
</tr>
<tr>
<td><strong>Share capital</strong></td>
<td>10.3</td>
</tr>
<tr>
<td><strong>Retained Earnings</strong></td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Net Tangible Assets</strong></td>
<td>(14.1)</td>
</tr>
</tbody>
</table>
**What's It Worth?**

*Valuation Methods*
- Book value approach
- Market value approach
- Ratios (like P/E ratio)
- Break-up value
- Cash flow value -- present value of future cash flows

**How Much Should We Pay?**

Applying the **discounted cash flow approach**, we need to know:
1. The incremental cash flows to be generated from the acquisition, adjusted for debt servicing and taxes
2. The rate at which to discount the cash flows (required rate of return)
3. The deadweight costs of making the acquisition (investment banks' fees, etc)
How Should We Pay?

- Payment in cash
  - (What happens to acquirer's stock price?)
- Payment with debt
  - (When you buy something by mail order, it's best to pay with a credit card)
- Payment with equity shares
  - (Figure out how many shares acquirer needs to offer)

Framework for Assessing Restructuring Opportunities

1. Current Market Value
2. Company's DCF value, Current market overpricing or underpricing
3. Potential value with internal improvements
4. Potential value with internal + external improvements
5. Total restructured value

- Restructuring Framework
- Maximum restructuring opportunity
- Financial structure improvements (Eg Increase D/E)
- Disposal/Acquisition opportunities

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M&A 48

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M&A 49
Using The Restructuring Framework
($ Millions of Value)

1. Current Market Price
2. Company value as is
3. Potential value with internal improvements
4. Potential value with internal and external improvements
5. Optimal restructured value

- Maximum restructuring opportunity
- Financial engineering opportunities
- Eg Increase D/E

Gap: "Premium"

Gains from Divestiture & Merger?

- MPH
- Popular
M&A Advisory Services:
1. Role of the Seller's Advisor

- Develop list of buyers
- Analyze how different buyers would evaluate company
- Determine value of the company and advise seller on probable selling price range
- Prepare descriptive materials showing strong points
- Contact buyers
- Control information process
- Control bidding process
- Advise on the structure of the transaction to give value to both sides
- Ensure all nonfinancial terms are settled early
- Smooth postagreement documentation

M&A Advisory Services:
2. Role of Buyer's Advisor

- Thoroughly review target & subs
- Advise on probable price range
- Advise on target's receptiveness
- Evaluate target's options and anticipate actions
- Devise tactics
- Consider rival buyers
- Recommend financial structure and plan financing
- Advise on initial approach and follow-up
- Function as liason
- Advise on the changing tactical situation
- Arrange the purchase of shares through a tender offer
- Help arrange long term financing and asset sales
M&A & D Opportunities
Target Companies

- Need value chain integration – e.g. dependent on supplier – vertical integration
- Benefit from greater efficiency – avoid cutthroat competition, achieve production or distribution efficiencies
- Company has weak financials – flat earnings, overleveraged
- Has several businesses that have no synergies – some growth, some flat
- Company has businesses with incompatible cultures – or two different companies with compatible cultures
- Company is in sector with overcapacity – too much bread (!) – benefit from consolidation
- Company wants to buy competitor who could end up in a rival’s hands
- Company wants to do an IPO but is not suitable – e.g. not in a “new economy” business, or the size is insufficient
- Companies in the same line of business, but with P/E differentials
- Conglomerate discount – company is undervalued in the market and would be worth more if some businesses were hived off
- Owner wants to retire

Strategic Alliances:
An Alternative to Acquisition

- “A strategic alliance is a collaborative agreement between two or more companies, which contribute resources to a common endeavor of potentially important competitive consequences, while maintaining their individuality.”
- Example with internal emphasis: Sunkyong with GTE, Vodafone & Hutchinson Whampoa for cellular system
- Example with external emphasis: Santander with Royal Bank of Scotland for European market in financial services
- Driving forces:
  - Complementary resources - gain strategic resources
  - Similar capabilities - gain economies or market power
A List Of Alliance Options

<table>
<thead>
<tr>
<th>Alliances</th>
<th>Acquisitions</th>
<th>Mergers</th>
<th>Core Business JV</th>
<th>Sales JV</th>
<th>Production JV</th>
<th>Development JV</th>
<th>Product Swap</th>
<th>Production License</th>
<th>Technology License</th>
<th>Development License</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Develop new product markets</td>
<td></td>
<td>Share upstream risks</td>
<td>Share development costs</td>
<td>Leapfrog product technology</td>
<td>Increase capacity utilization</td>
<td>Exploit economies of scale</td>
<td>Fill product line gaps</td>
<td>Penetrate new geographic markets</td>
<td></td>
</tr>
</tbody>
</table>

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Forms of Strategic Alliance

Many linkages are options for future development of relationships

POTENTIAL FOR CONTROL

ACQUISITION

MERGER WITH FULL INTEGRATION

JOINT VENTURE

SPECIFIC DISTRIBUTION OR SUPPLY AGREEMENT

INFORMAL ALLIANCE

IRREVERSIBILITY OF COMMITMENT
Questions to Ask Before the Alliance

- Identify value creation logic to both firms. Are the logics similar? Are they compatible?
- What is the potential value of the alliance to each firm (versus the cost of not having the alliance)?
- What are the specific financial and competitive risks to each partner?
- What is the value of complementary assets? Of common assets contributed?
- Evaluate the investment each partner would make.
- Evaluate other resource commitments.
- What are the scope and boundaries of the alliance?
- What commitments are made in the alliance?
- What are the criteria for success? Are they shared?
- What revenues and returns are projected? What risks?
- What are the critical limiting factors?
- Is there an action plan to reduce the limiting factors?

Mergers and Acquisitions: Summary

- Mergers & Acquisitions
- Divestitures
- Valuation

Concept: Is a business worth more within our company, or outside it?