Competitive Strategy: Week 3

Organisational Scope

Simon Board

Make or Buy?

- Should you make a product in-house, or buy from outside?
- Example: Lockheed Martin is merchant buyer
  - A division buys cheapest parts, from inside or outside.
- Example: General Motors makes many of its parts internally
  - Not put out to tender.
- Tapered Integration: Both make and buy

The Firm as a Technology

- Economics 101: The firm is a cost curve.
- This is black box
  - Where does the cost curve come from?
- What happens if two firms merge?
  - What is the resulting cost curve?

Transactions Cost Analysis

"It is surely important to inquire why coordination is the work of the price mechanism in one case and of the entrepreneur in another." Ronald Coase (1937)

- Why not let market do everything?
  - Markets are efficient and provide incentives (see FWT).
  - Markets coordinate economic activity.
- What are the limits to organisation?
  - Suppose two firms, A and B, operate separately.
  - Why not merge them? One can always keep everything the same, and replicate the unintegrated outcome.
- Unit of analysis: Transaction
- Design organisations to minimise costs of production and trade.
  - Would like to hold production costs constant.

Dimensions of Transactions

- Specificity of investments
  - Potential for hold-up.
- Frequency transactions occur and duration they last for
  - Cooperation requires repeated contact.
  - Frequent contact means contract can be more specific.
- Complexity of transaction.
  - Is item standard or one-of-a-kind?
  - How much uncertainty is there?
- Difficulty in measuring performance.
  - How measure performance of your doctor?
- Connectedness to other transactions
  - To sell a computer one needs many other transactions.

Transactions Costs: List 1

- Holdup and asset specificity
  - Renegotiate prices after specific investment.
  - Undermines incentives to invest.
  - Problem: lack of commitment.
  - Note: This can be one– or two–sided.
- Coordination costs
  - Different divisions need to coordinate activities.
  - Need to agree of common parts.
  - Need to share information.
- Motivation and incentive costs (week 13)
  - Tradeoff: incentives vs. risk
  - Need to measure performance.
  - Monitoring costs.

Transactions Costs: List 2

- Information acquisition costs
  - "Free" information is costly to collect.
  - Information costly to extract from employees who have individual interests.
- Information processing costs
  - Large data systems costly.
  - Example: When Exxon and Mobil merged, they delivered 100 million pages of information to FTC.
  - If processing is easy, why go to school?
- Contracting costs
  - Cost of writing contracts.

Transactions Costs: List 3

- Search costs
  - Cost of finding employees, suppliers and customers.
- Enforcement costs
  - If contract is breached, enforcement is costly.
- Bargaining costs (week 2)
  - Negotiation is costly and takes time.
- Measurement costs
  - Outputs and inputs need to be measured.

The Firm as a Nexus of Contracts

- Alchian and Demsetz: A nexus of contracts.
  - Firms are made up of lots of agents
  - Have standardised contracts between firm and agents, rather than between all agents
- Example: University of Toronto
  - Could have contract between each student and professor, between professor and dean, between student and administrator...
  - Or could have standardised "student contract", "professor contract", "dean contract" etc.

The Firm as a Monitor

- Teams are crucial in firms
  - Problem: Agents have incentive to free ride and shirk
  - Solution: Get principal to monitor agents
  - Need to give principal right incentives: make them residual claimant.
- Hence firm viewed as "residual claimant" of agents' effort.
- Criticism
  - How explain GM?
  - Managers often monitors, but have low powered incentives.
  - Other mechanisms: can get agents to monitor each other.

Firm as Ownership Unit

- What is Ownership?
  - Residual rights of control
  - Contracts are incomplete. Owner controls what's not in contract.
- Ownership allocated to minimise the holdup problem.
- Holdup problem
  - Two parties, A and B, wish to trade.
  - A can make investment to increase value of trade.
  - After investment B can hold up A and capture some of gain of investment.
  - Hence A doesn't have enough incentives to invest.

Hold–Up: Examples

- Fast Food Franchises
  - A franchise costs $50–250k.
  - Company can raise price of inputs
  - Company can sell more franchises (see durable–goods, above)
- Electric Utilities
  - Electric power plants are often built next to coal mines
  - But then the coal mine can increase its prices.
- When is this a problem?
  - Whenever investment is specialised (asset specificity).
- For whom is this a problem?
  - Supplier, buyers and complimentors

Allocating Ownership

- Two stage game between printer A and publisher B,
  1. A and B make investments I_A and I_B, costing $\psi(I_A)$ and $\psi(I_B)$.
  2. Publisher has valuation $v(I_B)$ and printer has costs $c(I_A)$.
- Efficient investments $v'(I_B) = \psi'(I_B)$ and $-c'(I_A) = \psi'(I_A)$
- Printer and publisher separate. Assumer printer and publisher split value of trade 50:50. Equilibrium investments solve

$$v'(I_B)/2 = \psi'(I_B) \quad \text{and} \quad -c'(I_A)/2 = \psi'(I_A)$$

- Publisher owns printer. Printer cannot refuse to print and gets no bargaining surplus. Hence they make no investment. Equilibrium investments solve

$$v'(I_B) = \psi'(I_B) \quad \text{and} \quad 0 = \psi'(I_A)$$

The Firm as a Reputation

- Within firms many contracts are incomplete (e.g. unforseen contingencies)
  - Creates possibility for holdup.
  - Firm can solve with by developing a reputation.
- How decide if firm keeps promises?
  - Firm develops principle to apply to unforseen consequences.
  - The apply principle even when not really applicable so as to preserve reputation.
  - Employees promoted on basis of sticking with the principle.
  - Interpret principle as *corporate culture*.

Influence Costs

- Why not have one giant firm?
  - Why is selective intervention not possible?
- After merger a decision maker has the *power* to intervene
  - But doesn't know exactly how to intervene.
- Agents try to influence the principal's decision.
  - Direct cost of influence activities (time, ingenuity).
  - Cost of wrong decisions.
  - Cost of reorganising firm to minimise influence costs.

Tennaco and Houston Oil

- In 1980, Tennaco acquired Houston Oil and Minerals.
- Houston
  - Discovered oil and minerals.
  - Aggressive, risk–taking, entrepreneurial.
- Tennaco planned to run Houston as separate firm.
  - Keep high–powered incentives.
- Problem
  - Tennaco's 100,000 employees were jealous.
  - Pressure to increase equity.
  - 1/3 of Houston's managers left firm.

General Motors vs. Ford

- In 1921, Alfred Sloan was appointed to head GM.
- General Motors. 11% of U.S. market.
  - Collection of car companies (Cadillac, Buick, Olds etc.).
  - No central direction.
  - No coordination on parts: high costs.
  - Firms competed heavily with each other.
  - Inventory costs not assigned to division, so huge inventories during 1920 recession.
- Ford. 45% of U.S. market.
  - Single product: Model T. Very low costs.
  - "People can have the Model T in any colour - so long as it's black".
  - Hierarchical Unitary structure (U–form).

General Motors vs. Ford cont.

- Sloan's Plan
  - Design different cars for different segments.
  - Cadillac at the top, Chevrolet at the bottom.
- Problems
  - Variety: new designs, new delearships, new factories.
  - Coordination: reduce competition between divisions, share ideas, coordinate R&D, agree on common parts.
- The Multidivisional firm
  - Central office: plan overall strategy, audit divisions. Also responsible for research, legal and financial roles.
  - Divisions: autonomy on day–to–day activities. Make and sell car targeted at allotted segment.
- In 1940, Ford had 16% market share. GM had 45%.

The Multidivisional Firm

- Based on divisions
  - Product divisions. e.g. Dupont has explosives, chemicals etc.
  - Customer divisions. e.g. GM.
  - Geographical divisions.
- How set transfer prices?
- Marginal cost
  - Buying firm makes right purchase decision.
  - But fixed costs mean supplier makes loss.
  - Selling firm makes suboptimal investment choice.
- Average cost pricing

The Multidivisional Firm cont.

- Each firm profit maximises
  - Double marginalisation
- Price equal to outside market price
  - Need outside market to exist.
  - Incentives OK, if can buy from outsiders.
  - If forced to buy inside firm, seller's quality declines.
- Investment and the partnership problem
  - Both divisions can't have right incentives.
- Why did divisions integrate in first place?
  - Often because market didn't work!

Assignment

- Read "Blue Skies Thinking", The Economist, 18th August 2005.
- How has new technology helped the design of terminal 5?
- What financial innovation has BAA introduced?
- How has this affected the way contractors work?
- What type of projects might this scheme be useful for?