PUBLIC POLICY

AND MONOPOLY

Professor Ian Sheldon
Having indicated why monopoly is not Pareto efficient, and what the loss is from monopoly, what is public policy towards the monopoly issue?

**US Anti-Trust Laws**

- In the US, public policy towards market power comes under the heading of *anti-trust* laws - most economists see this set of laws as being designed to promote *competition*, and, hence, *economic efficiency*

- The major anti-trust statute in the US is the *Sherman Act* passed in 1890 - it represents the political reaction to the widespread growth of large firms (*trusts*) formed in the 1880s.

  - Essentially, two parts to the Sherman Act:

    **Section 1:** Prohibits contracts and conspiracies that would constitute a restraint of trade

    **Section 2:** This is designed to prohibit monopolization of industries, the relevant wording of the act is:
“Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of trade or commerce among the several states, or with foreign nations, shall be deemed guilty of a felony.”

As well as the Sherman Act, *Clayton Act* was enacted in 1914 - act clarified what is considered to be an anti-competitive act

The act outlawed activities such as:

- price discrimination
- exclusive territories
- exclusive dealing
- mergers

Such practices only illegal when they:

“substantially lessen competition or tend to create a monopoly”

These acts comprise framework of US anti-trust policy. The language of the acts, however, is very general, and basically interpretation of the laws is left to the courts
Three types of sanction in antitrust cases:

- **criminal penalties** – offenses under Sherman Act are felonies, while those under Clayton Act are not – in practice Department of Justice (DOJ) only seeks criminal penalties for overt price fixing.

- **equitable relief** – involves undoing wrongdoing, e.g., divestiture of a merger already consummated, or preventing merger in first place.

  Both DOJ and private parties can sue in federal courts for equitable relief for violations of either Sherman or Clayton Acts.

- **monetary damages** – if case proved in court, affected parties can recover treble damages.

State Attorney Generals are also able to use individual states’ antitrust laws to assess anti-competitive practices such as mergers.
Important to recognize here the law forbids *the act of monopolizing*, and not the monopoly itself. In other words, a monopoly or dominant firm position may come about because:

- a firm is more efficient
- firm develops technologies/products that it has been able to patent
- the firm has a *natural monopoly*

These situations have to be distinguished from those where firm becomes a monopoly because of *predatory actions*

**Example 1: Horizontal Mergers**

- Central issue in horizontal mergers is need to balance reductions in competition against productivity improvements from merger
- So-called “Williamson tradeoff” (1968) highlights this possibility
Suppose an industry is initially competitive where price is equal to c (see next figure)

After merger, marginal cost of production falls to c', while price rises to p'

Prior to merger social surplus is area ABC, but after merger it is area ADEF

Which is larger involves comparison of deadweight loss triangle FGC due to post-merger price increase and rectangle BGED the merger-induced cost savings

Williamson’s key point was that it does not take a very large decrease in costs for area of rectangle to exceed area of triangle

However, argument depends on pre-merger price being competitive and equal to marginal cost c
MERGER UNDER COMPETITION

Diagram showing a demand curve with points labeled A, B, C, D, E, F, G, and p, c, p', c', y', y.
Suppose an industry is initially one where the pre-merger price \( p \) exceeds pre-merger costs of \( c \).

Instead of comparing a rectangle and a triangle, comparing a rectangle and a trapezoid (see next figure).

Pre-merger equilibrium where price \( p > c \), output being \( y \) – such that consumer surplus is area ABC, and industry profits are BCDE.

Post-merger, price rises to \( p' \), while costs decrease to \( c' \), and output is at \( y' \).

Loss from merger is trapezoid FCDH, made up of deadweight loss triangle FGC and lost profits GCDH, which compares to gain from merger of EHIJ due to cost decrease.

Now likely that small increase in price post-merger might cause significant reductions in economic welfare.
MERGER UNDER IMPERFECT COMPETITION
Example 2: Natural Monopoly

- It would seem logical for the government to force a monopoly to set price equal to marginal cost

- In the case of a natural monopoly, this would result in the firm making economic losses

- Suppose that a firm’s minimum point of average cost lies to the right of its demand curve, and intersection of marginal revenue and marginal cost lies under the average cost curve (See next figure)

- If the government (regulator) forced the firm to set output at $y_c$, the firm would make losses of area $(pca+bd)$, and it would prefer to go out of business

- Such a situation is common where an industry’s technology exhibits high fixed costs, and small marginal costs - e.g. public utilities such as gas, electricity and cable companies
NATURAL MONOPOLY

The diagram illustrates the concept of a natural monopoly with the following labeled points and lines:

- **MC** (Marginal Cost) and **AC** (Average Cost) curves, indicating the cost structure for different levels of output.
- **Demand** curve showing the relationship between price and quantity demanded.
- The point **b** represents the price and quantity output where the marginal cost equals the marginal revenue, typically the profit-maximizing point for a monopoly.
- The area between the demand curve and the cost curves from 0 to **y^c** represents the economic profit of the monopolist.
- The shaded area enclosed by the marginal cost and demand curves at **y^ac** is the deadweight loss imposed on society due to the monopoly's pricing and output decisions.
If the natural monopoly is to be regulated, how should the regulator set prices?

- If prices are set to marginal cost, a subsidy would have to be paid to cover the losses.

- The “second-best” pricing policy would be to set prices at average cost, i.e. firm operates at output of $y^{ac}$, with a price of $p^{ac}$

- At this price, firm just covers its costs, and it provides a service to those willing to pay for it, but the level of output is still below the Pareto efficient level.

- The problem for the regulator is to determine the costs of the public utility - in the US, regulatory boards, known as public utility commissions have the responsibility of setting prices for electricity and gas so that costs are covered.