

Econ 30010
Intermediate Microeconomic Theory
Oligopoly Summary and Outline

When a monopolist sets its price and output level, it need only worry about its costs and customer demand. This ability to set price gives the monopolist market power which usually translates into positive economic profits. However, the ability to earn positive economic profit also provides an incentive for other firms to enter the monopolist's market. Once entry occurs strategic issues arise because each firm's profit is now affected by the production and pricing decisions of its competitors. The choice of whether to compete in quantities, in prices, or both has different implications for firm choices, firm profits, and consumer surplus.

Outline

I. **Best response functions** - When competitors have several options, a firm needs to develop a contingency plan before committing to any one action.

II. Quantity Competition - In this form of competition, firms set quantities and let the market set price.

A. **Cournot** - simultaneous quantity choices

B. **Stackelberg** - sequential quantity choices, leader/follower markets

III. Price Competition - In this form of competition, firms set prices and let the market allocate quantity.

A. **Bertrand** - simultaneous price setting with homogeneous goods and constant marginal cost

B. Differentiated product price competition

Key Concepts and Ideas

- Under quantity competition, each firm produces more than half of the monopoly output. The profit destruction effect causes total market profits to be lower with two firms than with a monopolist.
- Price competition in a homogeneous product duopoly results in marginal cost pricing and zero economic profits.
- The degree of product differentiation and the nature of competition in a strategic setting determines the extent to which firms can earn positive economic profits.

Important Skills

- Derive firm reaction functions and calculate Bertrand and Cournot equilibria with undifferentiated products and with differentiated products.
- Be able to reconcile the different predictions of the Bertrand and Cournot models.