This hand-out gives an overview of the main market structures including perfect competition, monopoly, monopolistic competition, and oligopoly.

### Summary Chart

<table>
<thead>
<tr>
<th></th>
<th>Perfect Competition</th>
<th>Monopoly</th>
<th>Oligopoly</th>
<th>Monopolistic Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong># of firms</strong></td>
<td>Many</td>
<td>One</td>
<td>2 or more</td>
<td>Many</td>
</tr>
<tr>
<td>Average size of firms</td>
<td>Small</td>
<td>Very large</td>
<td>Large</td>
<td>Small to medium</td>
</tr>
<tr>
<td>Nature of product</td>
<td>Same</td>
<td>Unique</td>
<td>Identical/ differentiated</td>
<td>Differentiated</td>
</tr>
<tr>
<td>Barriers to entry</td>
<td>None</td>
<td>Significant</td>
<td>Significant</td>
<td>Few</td>
</tr>
<tr>
<td>Government intervention</td>
<td>No</td>
<td>Yes</td>
<td>Some</td>
<td>No</td>
</tr>
<tr>
<td>Output decisions</td>
<td>No output restriction</td>
<td>Most output restriction</td>
<td>Output restricted</td>
<td>Output restricted</td>
</tr>
<tr>
<td>Interdependence</td>
<td>Each firm is independent</td>
<td>No competitors</td>
<td>Interdependent decisions</td>
<td>Each firm is independent</td>
</tr>
<tr>
<td>Profit making possibility</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Price and Marginal Cost</td>
<td>P = MC</td>
<td>P &gt; MC</td>
<td>P &gt; MC</td>
<td>P &gt; MC</td>
</tr>
<tr>
<td>Implication for Demand Curve</td>
<td>Horizontal</td>
<td>Downward sloping; inelastic</td>
<td>Kinked/Downward sloping; inelastic</td>
<td>Downward sloping; elastic</td>
</tr>
<tr>
<td>Pricing decisions</td>
<td>MC = MR = P</td>
<td>MC = MR</td>
<td>Strategic pricing</td>
<td>MC = MR</td>
</tr>
</tbody>
</table>

(Note: P = price; MC = marginal cost; MR = marginal revenue)
**Perfect Competition**

Perfect competition is a market in which:
- There is generally a large number of buyers and sellers.
- Buyers and sellers sell identical products (there is no need for advertising).
- Each buyer and seller acts independently.
- Sellers and buyers are reasonably well-informed about products and prices.
- Competitors are free to enter into the market, conduct business or leave the market.
- Examples: local vegetable farmers, dry cleaning businesses, grocery retailers, plumbing, etc.

Perfect competition markets are highly competitive markets in which many sellers are competing to sell their product. Each seller produces a product that has no unique characteristics so buyers “don’t care” about which seller’s product to buy.

Other notes:
- Firms cannot influence the market price because the individual firm’s production is an insignificant part of the total market. Firms are “price-takers.”
- Market demand and market supply determine the market price and quantity.
- The demand for a firm’s product is perfectly elastic (i.e. one firm’s product is a perfect substitute for another firm’s product).
- **In perfect competition, the firm’s marginal revenue equals the market price.**
- If \( MR = MC \), economic profit is maximized.
Monopoly

Monopoly is a market in which:
- there is one seller of a particular product
- there are barriers to entry of the market to prevent competition
- Examples: Toronto Hydro (has monopoly over electric services in the GTA); LCBO (has monopoly over alcohol sales in Ontario).

Types of Monopolies
1. **Natural Monopoly** – market situation where the costs of production are minimized by having a single firm produce the product (e.g. public utility companies, oil pipeline in Alaska)
2. **Geographic Monopoly** – based on absence of other sellers in a certain geographic area (e.g. gas station or drugstore in small town)
3. **Technological Monopoly** – based on ownership or control of a manufacturing method, process or other scientific advance (e.g. certain pharmaceutical drugs)
   a. **Patent** – exclusive right to manufacture, use or sell invention (usually good for 20 years).
   b. **Copyright** – authors, art (good for their lifetime plus 50 years)
4. **Government Monopoly** - monopoly owned and operated by the government (e.g. military, water and sewage)

A monopoly maximizes profit by producing output when \( MR = MC \) and by charging **maximum price** that consumers are willing to pay for that output.
Monopolistic Competition

Monopolistic competition is a market in which:

- A large number of firms compete.
- Each firm produces a differentiated product.
- Firms compete on product quality, price and marketing.
- Firms are free to enter and exit the industry.

Other notes:
- All conditions of perfect competition are met except products are NOT identical.
- **Product differentiation** – real or perceived differences between competing products in same industry (e.g. Pure life Water vs. Dasani Water, Crest toothpaste vs. Colgate).
- **Nonprice competition** – use of advertising, giveaways, or other promotions designed to convince buyers that a product is unique (e.g. Coke vs. Pepsi).
- Profit is maximized by producing output when $MC = MR$. 

![Economic Profit in Monopolistic Competition](image)
**Oligopoly**

Oligopoly is a market in which:

- Few very large sellers dominate the industry and compete with one another.
- Examples: Burger King, McDonald's and Wendy's.
- When one firm acts, the others tend to follow (e.g. selling chicken nuggets)
- Firms are “price-makers.”

Other notes:

- **Collusion** is formal agreement between sellers to set specific prices or to otherwise behave in a cooperative manner (For example, OPEC = Organization of the Petroleum Exporting Countries).
- **Price-fixing** is a form of collusion where firms establish the price of a product or service, rather than allowing it to be determined naturally through free market forces.
- The demand curve below is kinked. At higher prices the demand is elastic because if you raise your price, other firms will *not* match it. At lower prices, the demand curve becomes inelastic; if you lower your price, other firms *will* match it.