Law & Economics of Competition Law Part 1 – Economic Concepts

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Economic Analysis of Law

Economic Approach

to

Analysis of Law

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Competition – Market Economy

- Market – many sellers and buyers
- Market elements
  - Sellers / Producers
  - Buyers / Consumers
  - Goods

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Market Economy Contd.

- Self interest
  - Producer's interest → Price Maximization
  - Consumer's interest → Utility Maximization (better product, lower price)
- Market enables exchanges of goods, services, information
- Market transactions → maximize value for producer and also consumer

  → generate surplus for producers and consumers

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Perfect Competition Spectrum

For free market economy → concept of perfect competition

Perfect Competition ⟵ Oligopoly ⟵ Duopoly ⟵ Monopoly / no competition

Buyer's monopoly = Monopsony

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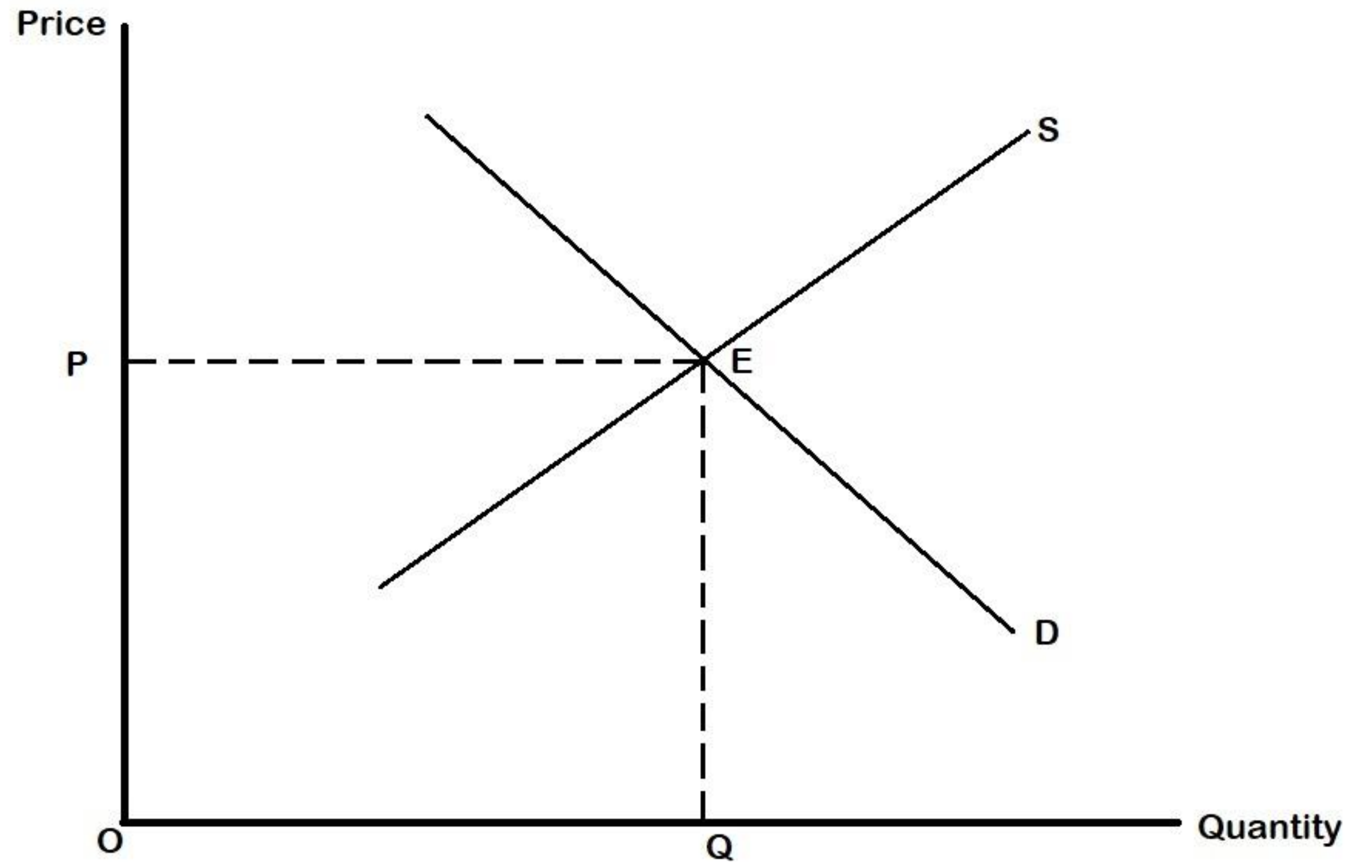
Demand & Supply Curve



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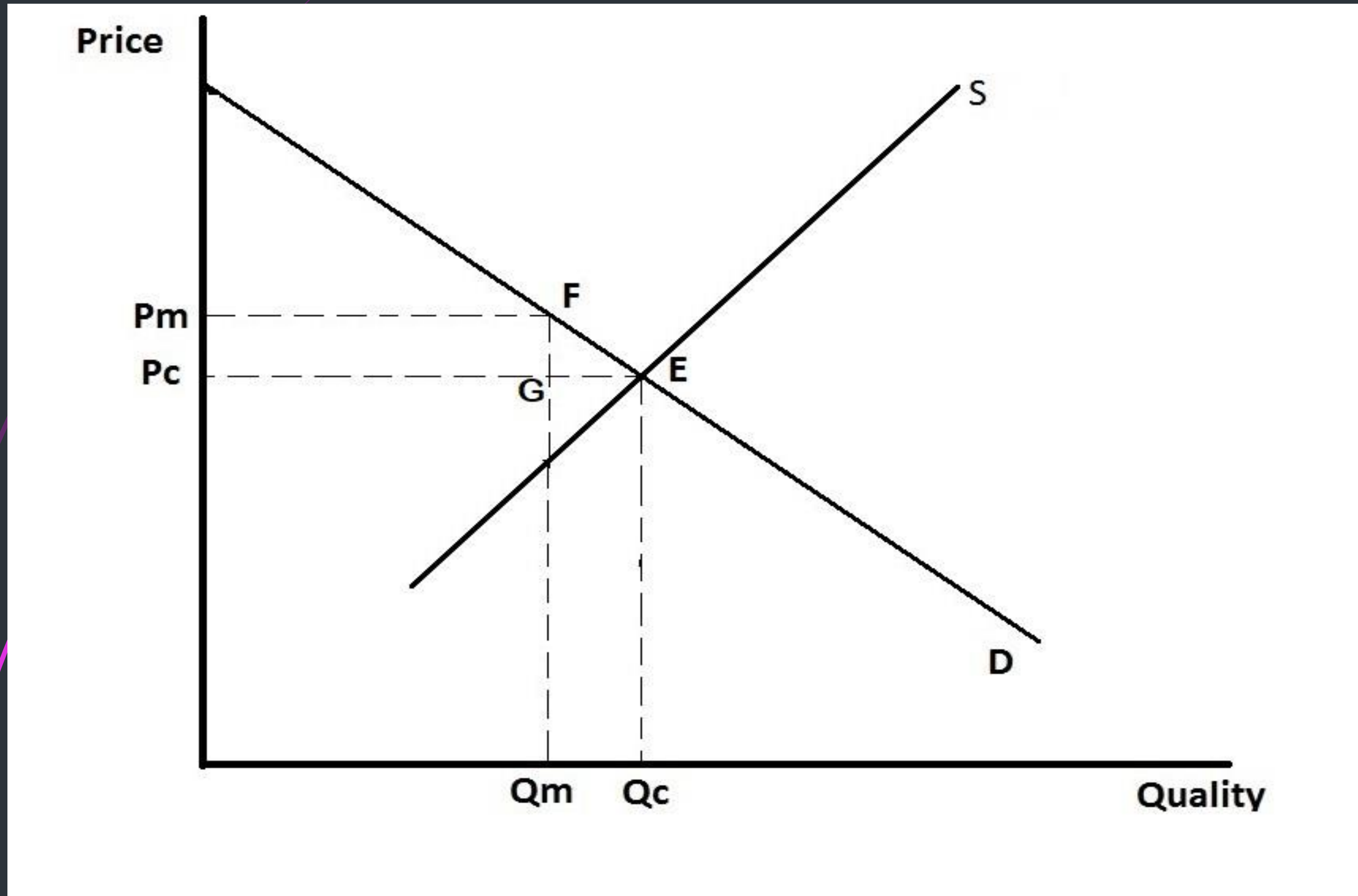
Consumer & Producer Surplus & dead weight loss



- P_c – competitive price
- P_m – Monopolist's price
- Q_c – Quantity at equilibrium
- Q_m – Quantity by monopolist

- Below P_cE – Producer's surplus
- Above P_cE - Consumer's surplus
- Monopolist shifts this line to P_mF
- Consumer surplus reduced by P_mP_cEF
- P_mP_cGF - Transfer to Producer
- FGE – deadweight loss

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Perfect Competition Characteristics

- Main Characteristics
  - Large no. of buyers & sellers
  - Homogenous products
  - Every firm is ‘price taker’
  - No entry or exit barrier
  - Consumer is fully informed

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Perfect Competitive Market

- Economically optimal
- Sellers produce right amount of good → Allocative Efficiency
- Sellers produce at lowest cost → Productive Efficiency
- Sellers compete by betterment of product with innovation →Dynamic/Technological Efficiency

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Imperfect Markets

- Markets in reality are imperfect
- But they are self correcting (government intervention not needed)
- But if distortions are deliberate → need to regulate/ intervene
- Monopolist's anti competitive conduct to be curbed
- As they abuse it for gaining/ maintaining monopoly
- Additional gains by 'Rent Seeking' - used to maintain monopoly by unfair means
- Easy money makes monopolist inefficient
- No need for - reducing production cost or innovation or betterment of product

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Market Structure

- Number of firms and their share
- Market share = proportionate to total quantity
- Market concentration
  1) Use of concentration ratios (CR) – Share of top ‘n’ sellers
  2) Herfindahl-Hirschman Index (HHI)

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Herfindahl-Hirschman Index (HHI)

- It is the sum of squares of market share of the participants in the market
  - Monopolist - Market share 100% therefore HHI = $100^2 = 10{,}000$
  - Two firms - Market share 90% & 10%

    therefore HHI = $90^2 + 10^2 = 8100 + 100 = 8200$
  - Ten firms - Each with 10% market share

    therefore HHI = $10^2 + 10^2 + \ldots\ldots$.(10 times) = 1000

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Product

- Homogeneous, but in reality not same, similar
- Substitutability
- Elasticity = how responsive seller and buyer are to price change?
- Own price elasticity → same product

  (shoes of different companies;)
- Cross elasticity = responsiveness of one good when price of another good changes →two substitutable products

  (kerosene, coal; sugar, jaggery)

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Costs

- In production cost, normal profit is included
- Fixed cost
- Variable coast
- Average variable cost (AVC) proxy for marginal cost
- Average Total Cost (ATC)
- Marginal Cost – extra cost for producing one extra unit
- Marginal Revenue – extra revenue by selling one extra unit

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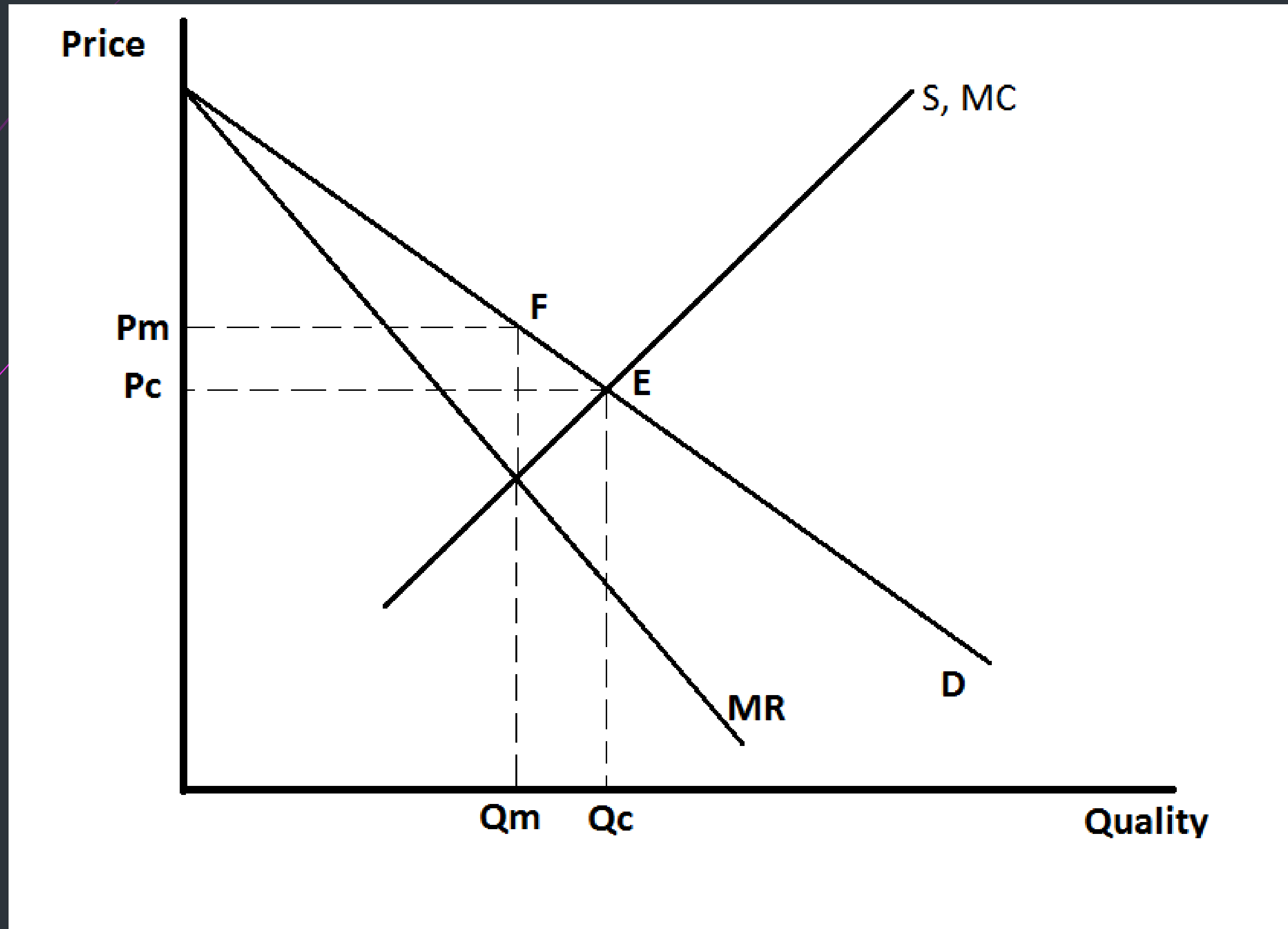
Monopolists's price & output decision



- guided by marginal cost and marginal revenue curves & their intersection.
- 'S' in competitive market
- 'MC' in monopoly

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Lerner Index For Market Power

- L = (P - MC) / P

  L – Lerner Index

  P – Firm's price at firm's profit maximizing output

  MC – Firm's marginal cost at firm's profit maximizing output

- L is zero means no market power
- L is one means monopoly

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Other Models

- Cournot competition – response by changing output – compete on quantity
- Bertrand competition – firms choose process than output
- Stakelberg leadership model – leader moves first, knows competitor’s output level

  - others follow, decide quantity

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