North-North Trade

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International Commerce and the World Economy

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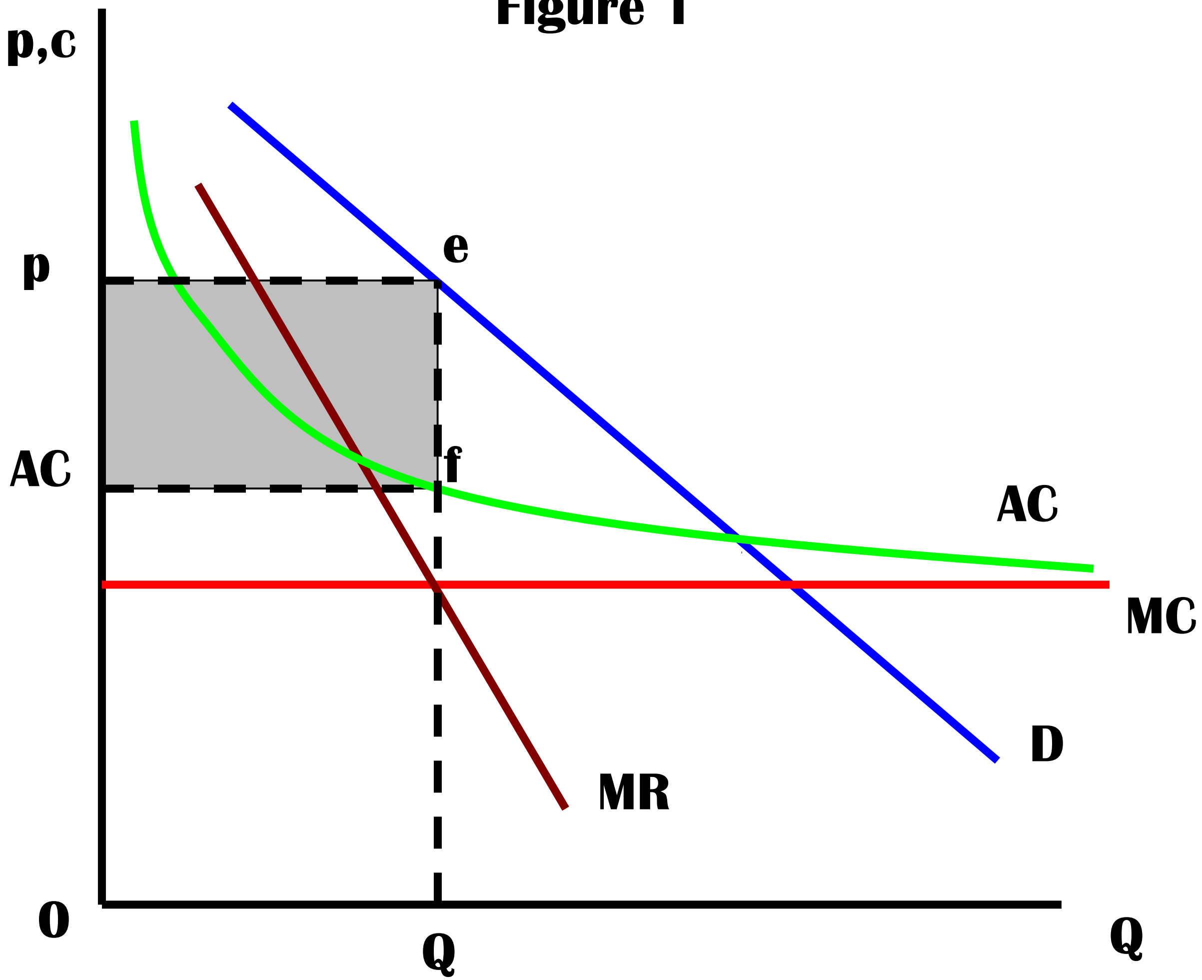
North-North Trade

- For North-North trade, observe countries with similar endowments and technology trading similar products – *intra-industry* trade
- Cannot be explained by Heckscher-Ohlin model which predicts trade in different products – *inter-industry* trade
- North-North trade characterized by imperfectly competitive firms, realizing scale economies, and selling differentiated products
- Suppose a firm's technology is one where total production costs consist of fixed costs and constant marginal costs (see Figure 1)

Monopoly equilibrium

Figure 1

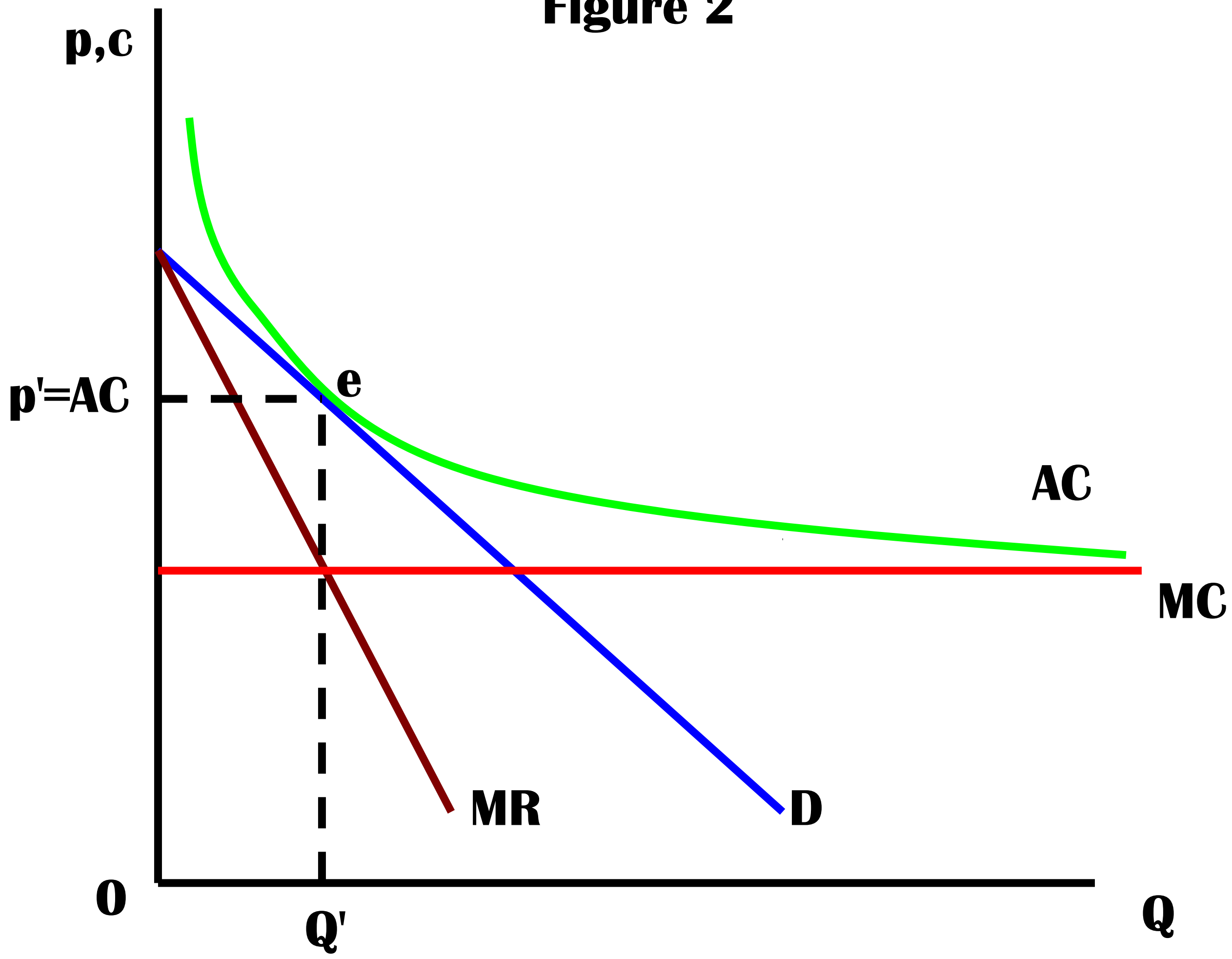


Product differentiation

- **Initially, a single firm produces with this technology, setting output where marginal revenue is equal to marginal cost**
- **Firm makes monopoly profits of area pefAC**
- **Unlikely monopoly profits will go uncontested, so assume other firms with same technology enter industry selling differentiated products**
- **Firms continue to enter until p'=AC in equilibrium – *monopolistic competition***
- **Each firm sells Q' of differentiated product (see Figure 2)**

Monopolistic competition

Figure 2

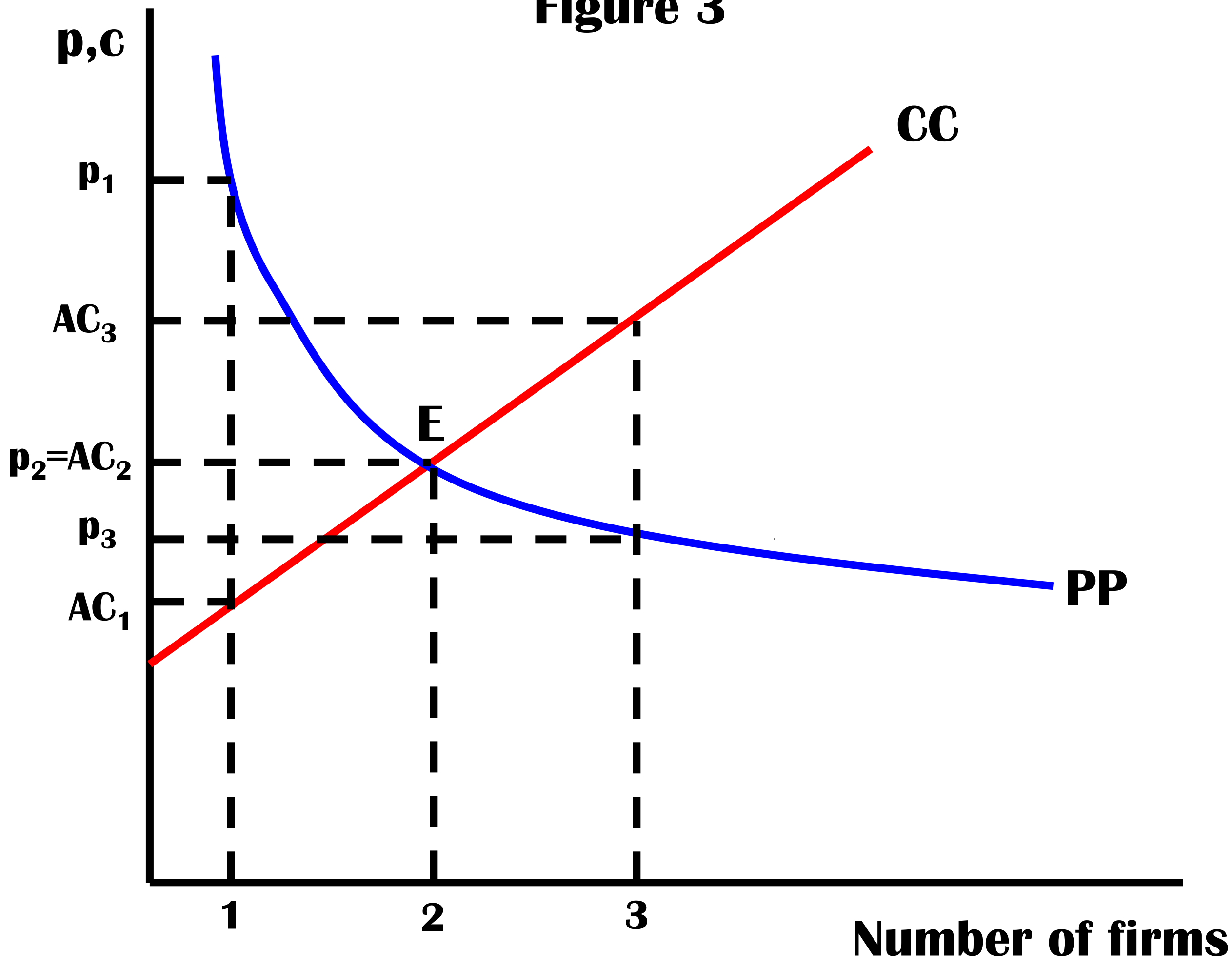


Industry equilibrium - autarky

- Number of firms in market and prices they charge determined by two relationships:
  - the more firms in industry, the more intense is competition and hence the lower the price (PP)
  - the more firms there are, the less each firm sells, and hence the higher is industry average cost (CC)
- In equilibrium, two firms enter under autarky, each selling a differentiated product (Figure 3)

Industry equilibrium - autarky

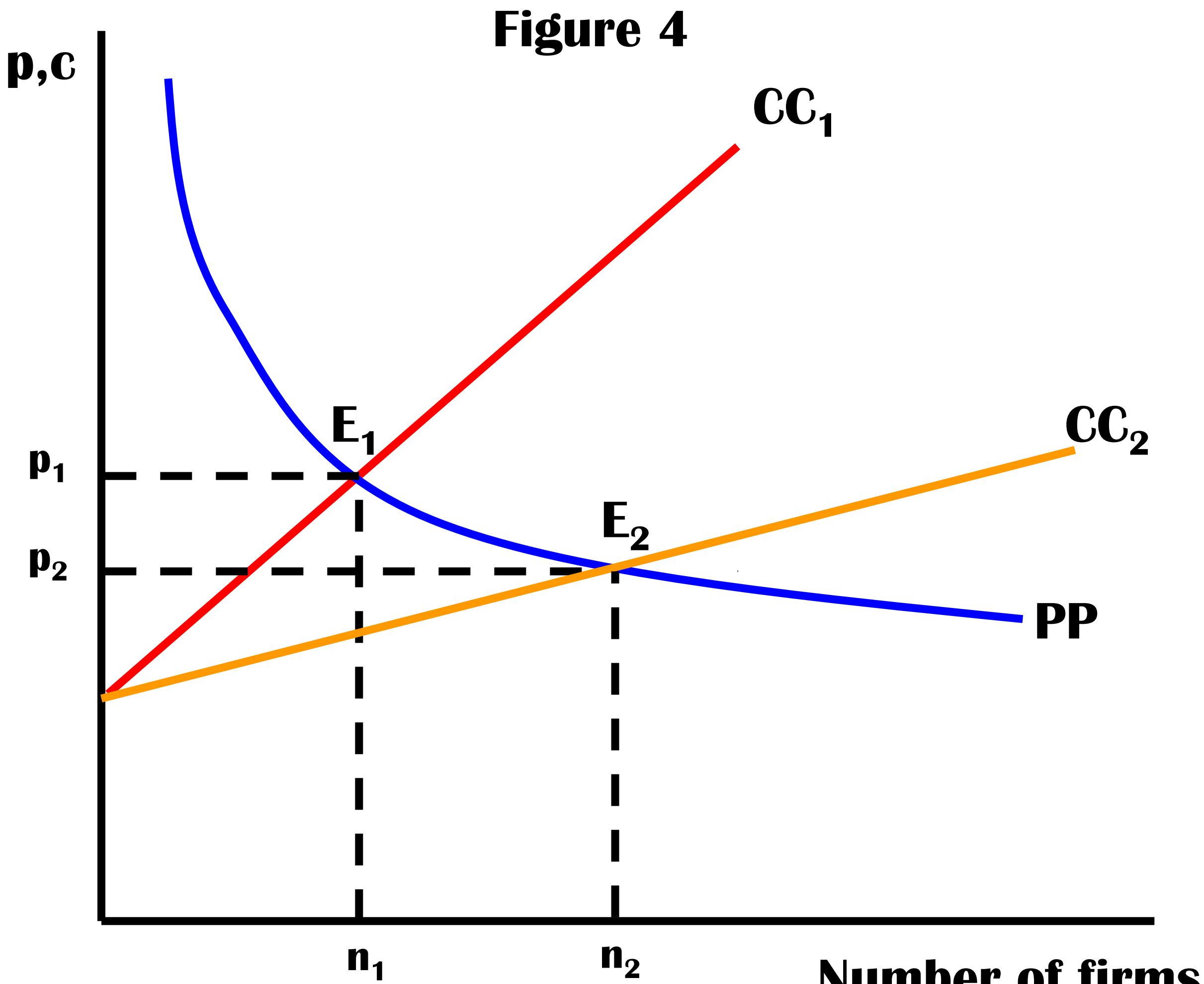
Figure 3



Industry equilibrium - trade

- Suppose two countries in North have the same technology under autarky, but one country has a larger market than the other
- If countries integrate through trade, size of market increases, allowing firms to produce more at lower average cost – CC_1 shifts to CC_2
- End result is increase in number of firms from n_1 to n_2, and fall in prices, p_1 to p_2 (Figure 4)
- One can imagine some firms based in one country, and some in the other, all producing for their home and the foreign market

Industry equilibrium - trade



Industry equilibrium - trade

- **Intra-industry trade occurs, benefits being more product varieties, sold at lower prices and produced at lower average cost**
- **Model does good job of explaining why we observe two-way trade in automobiles between Germany and France**
- **However, model assumes firms are symmetric, and so says nothing about which firms may survive after markets integrated through trade**
- **Important question: why do some firms trade?**