International Economics
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Problem Set 3 - Monopolistic Competition

Exercise 1:
New trade theories of trade make a substantial step toward reality. Countries can engage in international trade even in absence of a comparative advantage (in terms of either production or resources).

a. Describe the major differences between *OLD* and *NEW* trade theory.
   - Assumptions
   - Outcomes

b. What are the implications of trade for firm size and number?

c. What are the (theoretical) distributional impacts form intra-industry trade?

Exercise 2: Measuring Intra-Industry Trade

Consider Barduba, a hypothetical tropical country that only trades 3 goods. Its import/exports pattern is represented in the table below

Good	Exports	Imports
Phosphates	1000	100
Spices	150	80
Vegetable Oil	300	400

a. What index captures the extent of intra-industry trade?

b. Compute the index for Barduba.

c. Interpret the computed numbers.

Exercise 3: Monopolistic Competition and Trade

Assume two countries: Home and Foreign. None of them has a particular advantage in terms of factor endowment. Also, both countries have access to similar technology.

a. According to Old trade theory, what would be the result of trade? Why?

b. Assume the following setting:

$$\begin{array}{lllr}
F & = & FixedCosts & = & 750,000,000US\$ \\
S_h & = & Homemarketsize & = & 900,000units \\
S_f & = & Foreignmarketsize & = & 1,600,000units \\
S_{f2} & = & ThirdCountryMarketsize & = & 3,750,000units \\
c & = & MarginalCost & = & 5,000US\$ \\
\beta & = & Firm's Market Sensibility to price & = & 1/30,000
\end{array}$$

Determine n, Q, $\bar{p}$

c. What would happen if one more firms steps into the market, attracted by the extra-profit π? Show graphically the intuition.