

What is competitiveness?

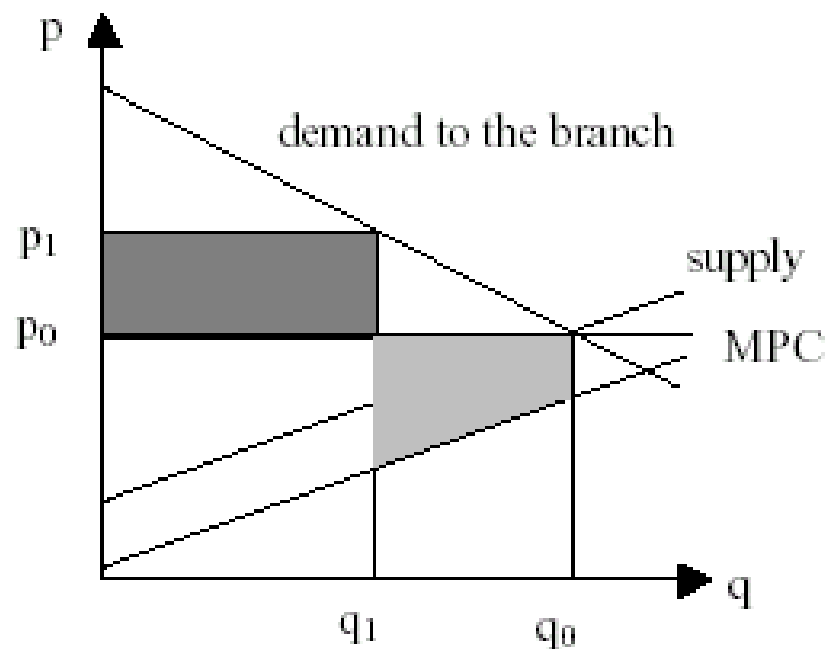
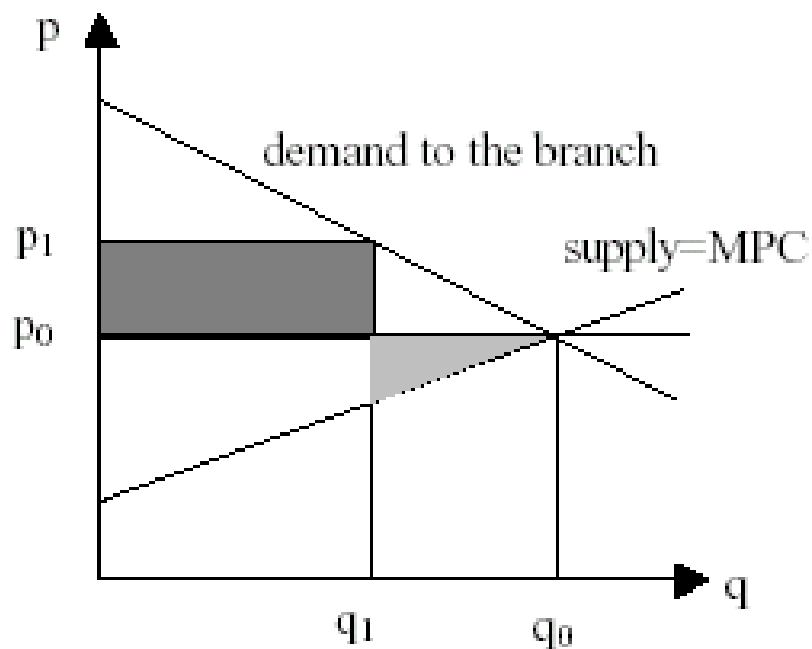
- Macroeconomic: meaningless (Krugman)
- Sectoral: 2 meanings:
 - 1. (here) loss in market share, production, relocation, carbon leakage
 - 2. loss in profit and stock value
- Different instruments => different impact on 1 and 2!

Features of the model

- Explicit technology
- Trade features: infinite elasticity => single world price
 - Most other models: Armington elasticities
 - Here: huge impact on production
 - Compatible with past evolution, e.g., exchange rate swaps?
- No policy assumed outside the iron and steel sector
 - Otherwise, price elasticity < 0.2 ?

How to model loss in profit and stock value?

- Market structure is implicit. Perfect competition? Decreasing returns?



Impact on production in Europe (tax of 20 euros/t CO₂)

Elasticities	Low (-1)		High (-8)	
	Markal	Primes	Markal	Primes
Isoelastic	-0.5	-0.5	-3.7	-3.9
Linear	-0.2	-0.2	-1.7	-1.8
Isoelastic, opt-out	-1.5	-1.6	-4.7	-4.9
Isoelastic, output-based	-0.02	-0.05	-0.1	-0.4