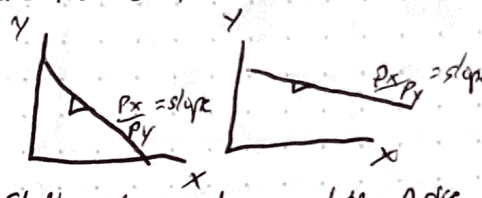
1.1

1.2 Division of labor, specialization, extent of market, creative destruction

1.3 Comparative advantage, PPF, MRT, relative price ranges
Equations



flatter slope = lower relative price of X (comp. advtg. in X)

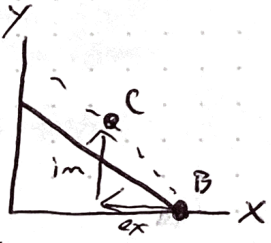
1.4 Ricardian One-Factor Model

$L_X X + L_Y Y = \bar{L}$

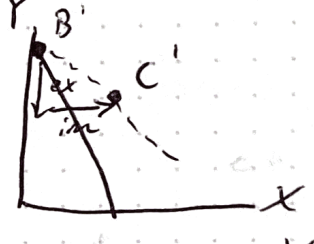
Absolute advantage (lower L_X or L_Y)
Comparative advantage
$\frac{L_X}{L_Y}$ (lower → comp. advtg in X; higher → " " in Y)

Constant costs

- Specialization at BB'
  - produce C.A. good only
- Relative prices equalize across countries
  - same slope dashed line
- Trade triangles (ex, im)



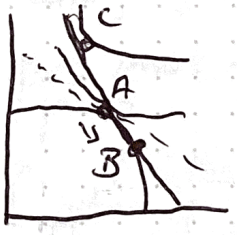
comp. advtg in X



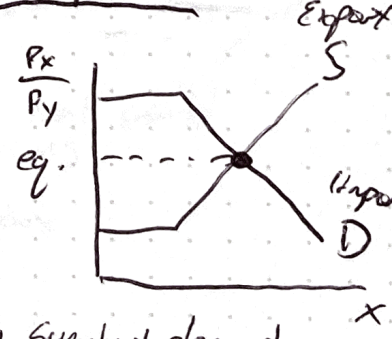
comp advtg in Y

1.6 Standard Trade Model

- increasing costs (concave PPFs)
- start with different relative prices in autarky (A, A')
- with trade, relative price of country's exports ↑ imports ↓
  - until relative prices equalize across countries
  - specialize at (B, B')
  - trade to (C, C') at higher indifference curve



Relative Price of X starts out
- high in country w/ comp. disadvantage in X, then falls (import demand)
- low in country w/ comp. advantage in X, then rises (export supply)
- to equilibrium relative prices



Relative supply + demand of X

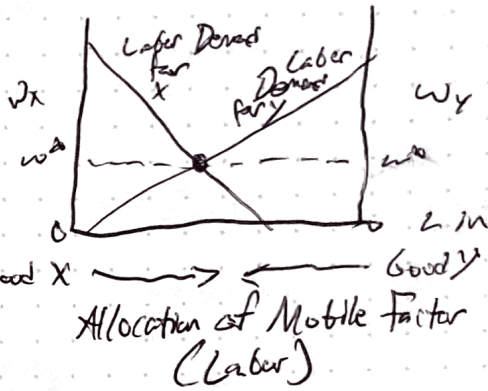
1.7 Terms of Trade changes

$TOT = \frac{P_{export}}{P_{import}}$ for each country

Economic growth

Biased growth

1.8 Specific Factors Model



- Some factors are specific to producing only 1 good (CL, K, T)
- Factor specific to industry whose relative price ↑ gains from trade (exports)
- Factor specific to industry whose relative price ↓ loses from trade (imports)
- Mobile factor (CL) gains nor loses clearly (real wages ↑ ↓) in terms of one good / in terms of the other

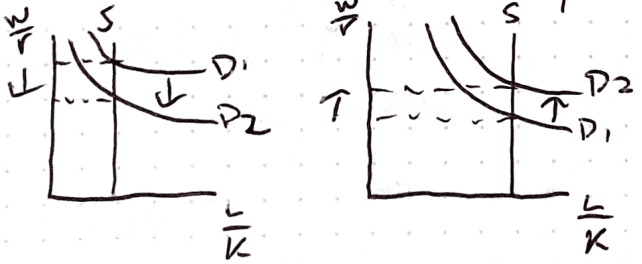
Changes in trade fall mainly on the specific factor (T or ↓)

1.9 H-O Model

1.10 H-O Theorem: countries export good requiring relatively intensive use of country's relatively abundant factor, and vice-versa

FPE Theorem: not only do relative goods prices equalize across countries, but also factor prices

Stolper-Samuelson Theorem: in Long Run, ↑ relative price ↑ real income of factor used intensively in production of that good (exports) and vice versa



- Limitations in real world to these theorems
- Leontief paradox & responses

1.11 New Trade Theory

1.12

- Trade puzzles, intra-industry trade
- Gravity Model
  - larger countries trade more
  - closer countries trade more

$$GLI = 1 - \frac{|X-M|}{X+M}$$

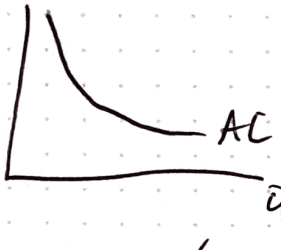
$$T_{1,2} = A \frac{M_1 M_2}{(d_{1,2})^n}$$

- Classical world of trade vs. "new paradigm" of world trade

New Trade Theory

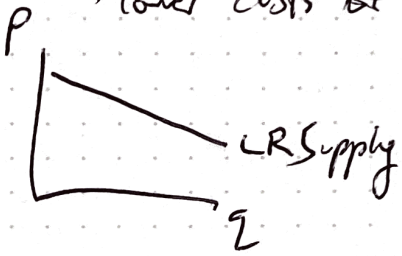
- increasing returns / economies of scale

Internal EOS (single firm)

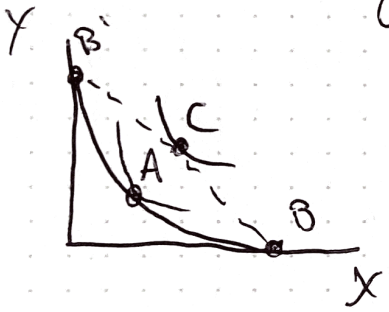


External EOS

- lower costs of all firms
- geographic clusters



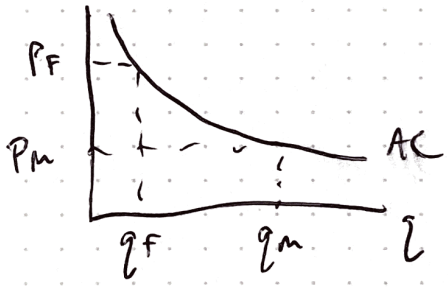
PPF w/ decreasing costs



Argument against free trade, when IRS present

Trade & Variety

- tradeoff between varieties & cost



F = few varieties
M = many varieties

Monopolistic Competition

- LR $\pi = 0$, $P = AC$
  $P > MC$

- $n < n^* < 2n$
  n^* varieties (firms) after trade