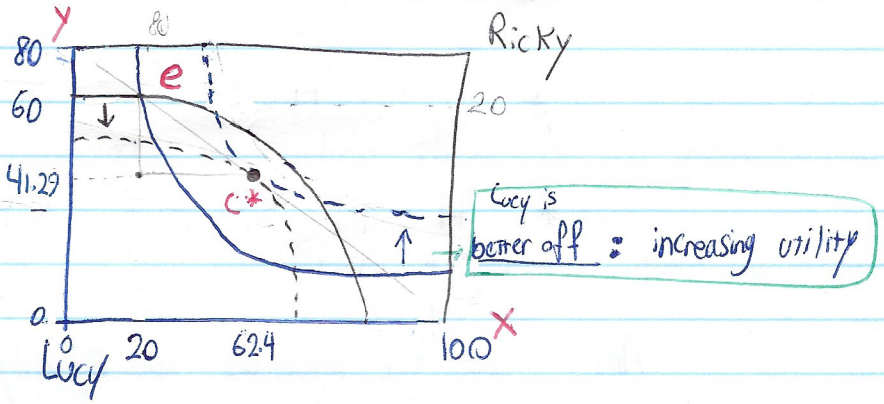
Chapter 3. Equilibrium

Price Ratio: $\frac{P_x}{P_y}$

General Equilibrium (Pareto Optimum) → best for both



Pareto Optimum: C^* : $(MRS_{Lucy} = MRS_{Ricky}) \Leftrightarrow \frac{P_x}{P_y} = \frac{\text{Rise}}{\text{Run}} = 0.4411$

Hypotenuse

The First Welfare Theorem of Economics

CE → PO

Pareto Optimum

Competitive Equilibrium

↓

Pure Competition: No oligopoly, No monopoly

* If you have a competitive market, Market's eq. is also the Pareto Optimum.

⇝ C^* exists and its in market eq.

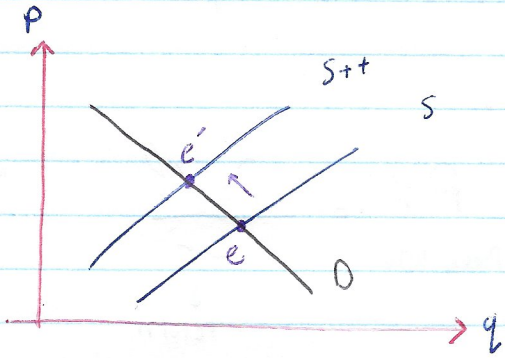
* e : $MRS_L > MRS_R$
  C^* : $MRS_L = MRS_R$

Marginal Rate of Substitution

Economic Freedom

Low Taxes – Protection of Private Property

Freedom of Contract – Free Trade – Monetary Stability

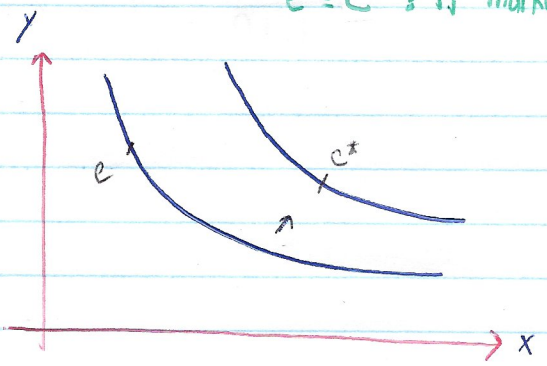


Examples:

Supply and demand

- for a product
- for all products in a market

$\dot{e} = C^*$: if market is purely competitive



Examples:

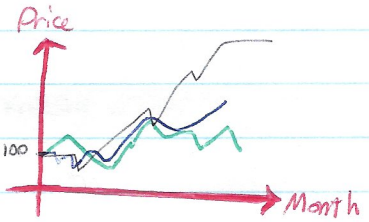
Distribution of Income

Growth of Economy

Chapter 4. Information

The Efficient Markets Hypothesis

If Prices reflect all relevant information about future cash flow, there is no pattern to predict price or value changes.



$$PV = \frac{\text{Payoff}}{1 + r}$$

PV: Present Value; r: return

$$= \frac{100}{1.10} \simeq \$90.91$$