Preferences

- How do consumers choose which bundle in the budget set to consume?
- In the rational choice model, we assume that consumers are able to rank alternative bundles
- Given the choice between any two bundles, our consumers must be able to say which they'd prefer

Notation

Consumption bundles

$(x_1, x_2) = X$

or $(y_1, y_2) = Y$

or $(x_1', x_2') = X'$

big letters mean bundles

x_1: quantity of good 1

x_2: quantity of good 2

- We say that X is strictly preferred to Y if a consumer chooses X over Y when both are available

- $X \succ Y$

↑ this is not a "greater than" sign

- We say that X is indifferent to Y if the consumer doesn't care if they get X or Y

  $X \sim Y$

- If a consumer either strictly prefers X to Y or they are indifferent, we write:

  $X \succsim Y$

Relationship between $\succ, \sim, \succsim$

- Suppose $X \succsim Y$ and $Y \succsim X$. Then: $X \sim Y$
- Suppose $X \succsim Y$ and Y is not $\succsim X$. Then: $X \succ Y$
- Strict preference and indifference can both be described in terms of $\succsim$

Rationality assumptions

1. Preferences are complete
2. Preference are reflexive
3. Preferences are transtive

1. Completeness

Preferences are complete if for any bundles X and Y

Either: ⓐ $X \succsim Y$ ⓑ $Y \succ X$ ⓒ $Y \sim X$

ⓐ $X \succsim Y$
ⓑ $Y \succsim X$
ⓒ Both

- Consumers can rank any two alternatives

2. Reflexivity

Preferences are reflexive if $X \succsim X$ $(X \sim X)$

- Consumers are indifferent between bundles that are identical to one another