

In-Class Problems, Lecture 5

1. Putting Together Indifference Curves and Budget Constraints

(a) Suppose that the US passes a universal basic income policy, which increases income for low-income individuals. Using the logic of budget constraints and utility maximization, explain what you predict should happen to demand for McDonald's. Explain whether this prediction comes from changes in the utility function or changes in the budget constraint.

(b) Suppose that tariffs on Chinese goods hit some consumer goods (call these goods X) and not on other consumer goods (call these goods Y). Use our utility maximization framework to predict what happens to consumption of X and Y if the two goods are complements, and if they are substitutes.

2. GLS Chapter 5, Question 11 (Second edition: Question 9)

3. Market Demand

Imagine a world with 10 boys and 10 girls. Both girls and boys like kazoos. Boys' demand for kazoos is $P = 1000 - 5Q_b$. Girls' demand for kazoos is $P = 500 - 2Q_g$.

(a) What is the total demand by girls only? And total demand by boys only?

(b) What is the total market demand of both boys and girls?