Chapter 6 Practice Problems

Elements of Microeconomics - Section 4

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Question 1

This question will consider a market for coffee. Draw a graph of supply and demand in the market in which there is a market equilibrium at a price of $3 and quantity demanded of 100. In this example, assume price elasticity of supply is more elastic than price elasticity of demand.

Part A

Consider two price ceilings:

- At $2.50
- At $3.50

In both of these cases depict graphically the new market outcome, and answer:

1. What happens to the new quantity demanded and supplied?
2. Does the policy cause a shortage or a surplus?
3. Is the policy binding? Why or why not?

Part B

Repeat the same exercise but for a price *floor* at $2.5 and $3.5.

Question 2

Part A

Consider the market for Orioles tickets. Draw two graphs illustrating how the market may look in the short-run and in the long-run. Think about:

1. Which side of the market is elastic?
2. Which side of the market is inelastic?
3. What might be different with elasticities in the short run and the long run?

Part B

Suppose Baltimore City imposes a *binding* price floor on tickets:

1. What is the impact in the short-run?
2. What is the impact in the long-run?
3. Is the impact larger in the short-run or long-run? Why?

Question 3

Let's consider the coffee market from Question 1 again. Instead of price controls (rare in advanced economies), consider a tax of $0.50 per cup applied to **suppliers**:

1. Does this shift supply or demand curves?
2. What will happen to equilibrium price and quantity?
3. What portion falls on consumers and what falls on suppliers?

Draw a graph to illustrate the intuition behind your answers (We are not looking for specific numbers since you are not provided with functions). Make sure to draw the tax wedge, labeling the portion falling on consumers and on suppliers. (Recall that we are assuming that price elasticity of supply is more elastic than price elasticity of demand.)

Part B

How would the incidence of the tax change if the price elasticity of demand is more elastic than the price elasticity of supply? Draw a graph to illustrate.

Part C

Draw two graphs to illustrate the same tax when demand is perfectly inelastic, and when supply is perfectly inelastic. Explain the intuition for who bears the tax burden and why.

Part D

Repeat this exercise, but considering the tax as levied on consumers rather than producers. Does the tax burden depend on how the tax is imposed?