AS.180.102 (04): Elements of Microeconomics

Chapter 6 - Supply, Demand , and Government Policies

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Outline

Main Takeaway

We can control prices directly (price ceilings and price floors) or indirectly (taxes and subsidies). The incidence of indirect price controls will depend on price elasticities of supply and demand.

Price Ceilings

Price Ceiling

A legal maximum price at which a good can be sold

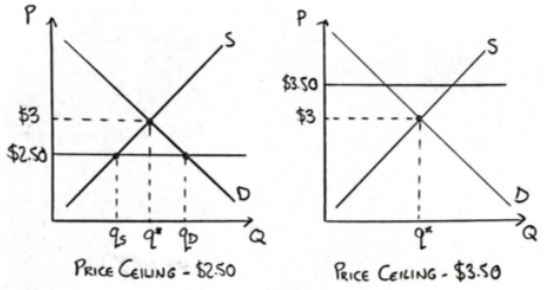
Consider a market for coffee in which there is a market equilibrium at a price of $3 and quantity demanded of 100.

Consider two price ceilings:

- At $2.50
- At $3.50

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?

Price Floors



$2.50 price ceiling	$3.50 price ceiling
$q_S \downarrow$, $q_D \uparrow$	q_S and q_D unchanged
Shortage	Unchanged
Binding policy	Non-binding policy

Price Floors

Price Floor

A legal minimum price at which a good can be sold

Consider the same market for coffee as before.

Consider two price floors:

- At $2.50
- At $3.50

1. What happens to the new quantity demanded and supplied?
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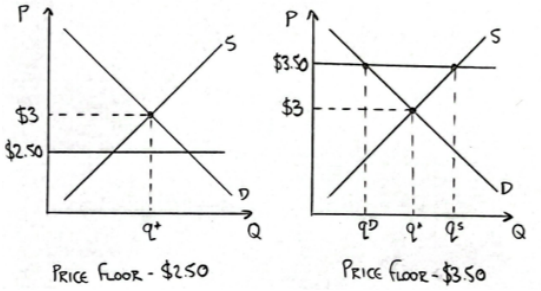
Price Floors



$2.50 price floor	$3.50 price floor
q_S and q_D unchanged	$q_S \uparrow$, $q_D \downarrow$
Unchanged	Surplus
Non-binding policy	Binding policy

Short-run vs. long-run effects

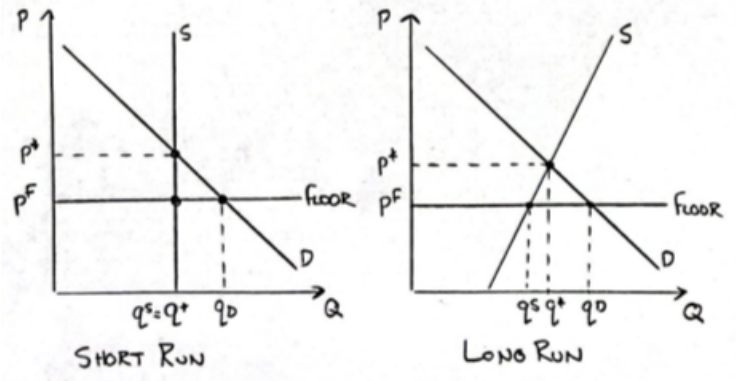
Consider the market for Orioles tickets. Recall that the supply side for sports tickets in the short run is perfectly inelastic. In the long run however, we may add seats to the stadium or downsize making the supply side more elastic.

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?

Short-run vs. long-run effects

The shortage will be larger in the long run when supply is not perfectly inelastic.



Tax on Suppliers

Consider the coffee market again. Assume that we impose a tax of \$0.50 per cup on **suppliers**.

Assume that the supply of coffee is far more elastic than demand.

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?

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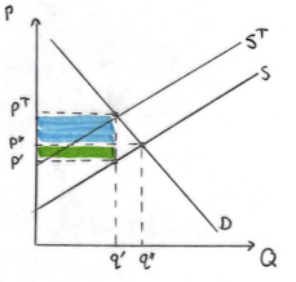

Tax on Suppliers

How would the incidence of the tax change if the price elasticity of demand is more elastic than the price elasticity of supply?

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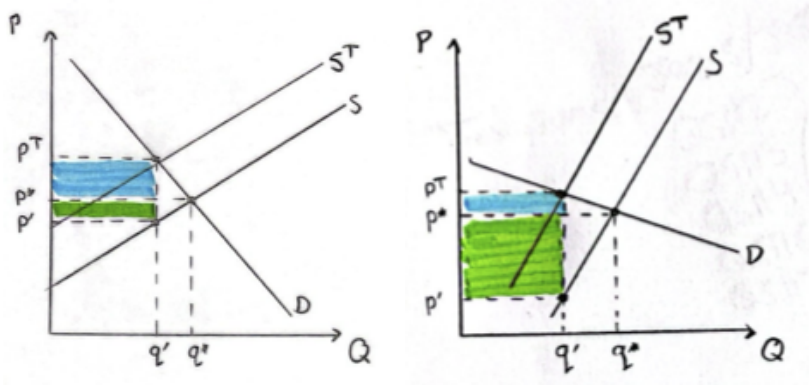

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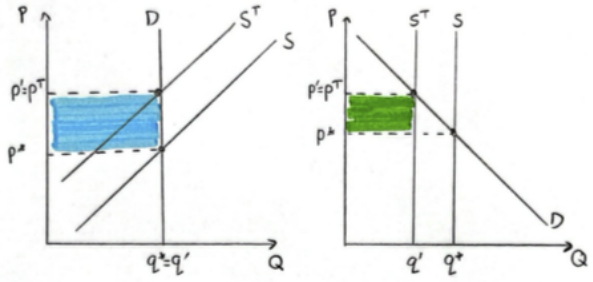

Intuitively perfectly inelastic demand means that consumers are willing to consume the same amount of the good no matter the cost. Therefore, the suppliers can pass all the tax incidence through to the consumers without having to change the quantity they are supplying.

Tax on Consumers

Now assume that we impose a tax of $0.50 per cup on **consumers**.

Assume that the supply of coffee is far more elastic than demand.

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? (Does this differ from when the tax os on the suppliers?)

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