

# Elements of Microeconomics

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Week 5

# Review Session and Exam

- Review session: **October 3rd, 7:30-9:30 Mudd 26**
- Exam 1: **October 5th, 2023** (i.e. next Thursday)

# Rubber Meets the Road

- So far in this course we have primarily discussed theory in a vacuum. There have been some applications such as trade but, our discussions on this have been limited.
- Chapter 6 puts the first 5 chapters together and delivers some tangible policy discussions to further our intuition.
- A third actor will be joining our discussion of markets, **the government**.
- We will examine the topics of producer and consumer surplus as they relate to policy interventions.

# Government Policies

- In this course we will not discuss the nuances of how policies are passed etc., rather simply their outcomes according to the tools you have been given so far.
- This course focuses on a few specific policies:
  - 1 **Price controls:** price floors and price ceilings
  - 2 **Taxes:** these can be levied on consumers and suppliers (we will discuss these later in the course)
  - 3 **Subsidies:** these have been discussed in the supply and demand chapter

# Price Controls

## ① price ceiling:

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- 2 **price floor**: a legal minimum on the price at which a good can be sold.



# Price Controls

- ① **price ceiling**: a legal maximum on the price at which a good can be sold.
  - ② **price floor**: a legal minimum on the price at which a good can be sold.
- Both of these controls can either be *binding* or *nonbinding*.
  - We will explore what this means and its implications.

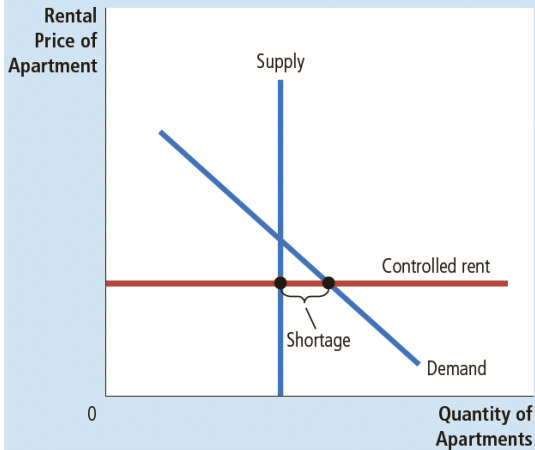
# What Does it Mean to be Binding?

- If a floor or ceiling is binding it simply means that it restricts the market from reaching equilibrium.

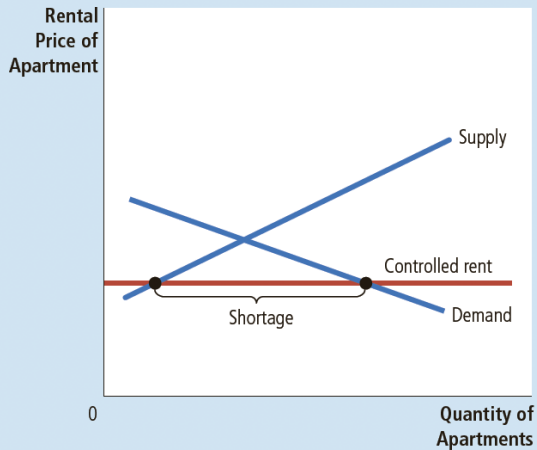
Control	Binding	Not Binding
Floor	Above Eq	Below Eq
Ceiling	Below Eq	Above Eq

# Price Ceiling Graphically

(a) Rent Control in the Short Run  
(supply and demand are inelastic)

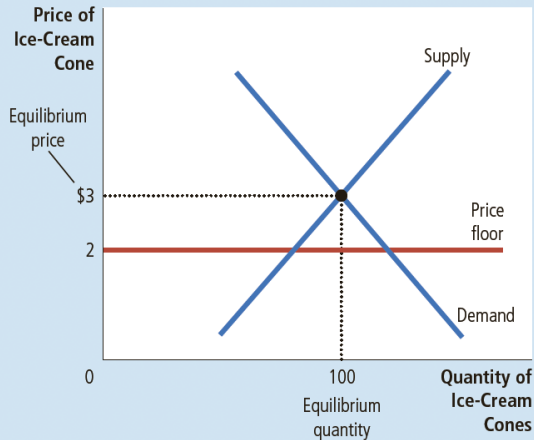


(b) Rent Control in the Long Run  
(supply and demand are elastic)

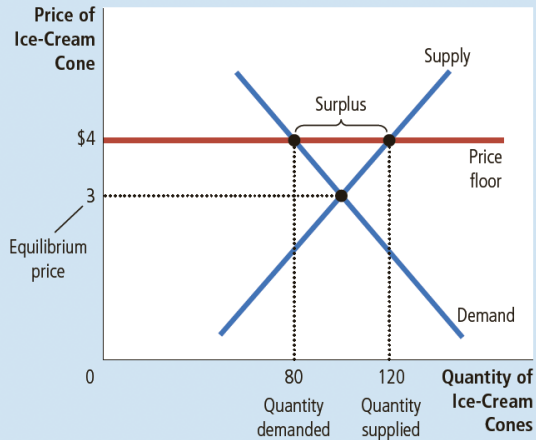


# Price Floor Graphically

(a) A Price Floor That Is Not Binding



(b) A Price Floor That Is Binding



# Consumer Surplus

- Every consumer in the market has a price that they are willing to buy at. You and I may have different prices we are willing to pay for good and services for many reasons that are not covered in this course but, that you'll encounter later on.
- This max price that someone is willing to pay is often labeled *willingness to pay*.
- Consider for a moment the demand curve, as price increases the  $Q_d$  decreases, this illustrates that there are still individuals in the market willing to pay this high price. It does not necessarily that you concede to it.

## Consumer Surplus

CS is the amount a buyer(s) are willing to pay minus the amount the buyer actually pays for it.

# Producer Surplus

- Similar to consumers, suppliers have a price that they are willing to supply at. These may differ across supplies.
- However, unlike consumers we must consider an extra element to a suppliers decision to bestow goods upon the market, **cost**.
- Here cost should be considered the painters opportunity cost: out-of-pocket *as well as the value they place on their own time*.
- This cost is the **willingness to sell** for a producer. Remember that one is indifferent if the gain from work and the value of outside options are the same.

## Producer Surplus

PS is the amount a seller is paid for a good minus the seller's cost of providing it.

# CS and PS Graphically

