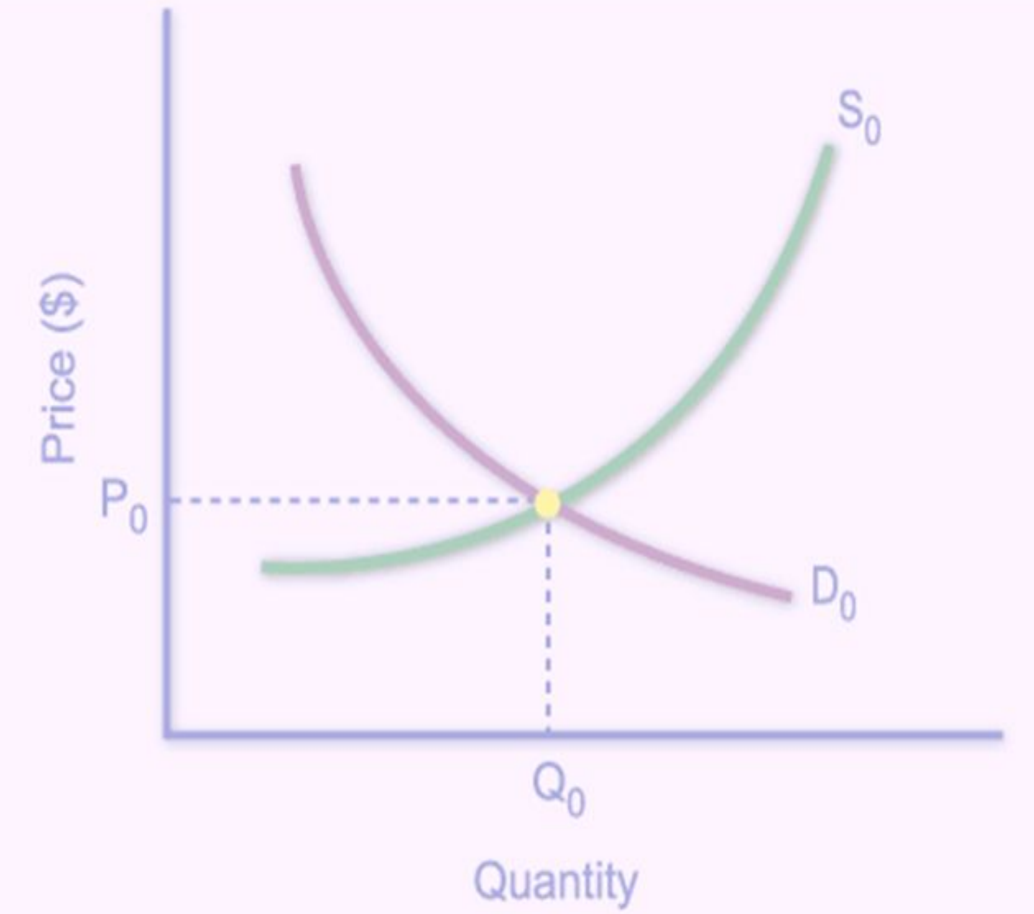
Lecture 8: Market Equilibrium

ECO101: Introduction to microeconomics
BRAC University

Market Equilibrium

The *market equilibrium price* is the price at which the quantity demanded equals the quantity supplied.

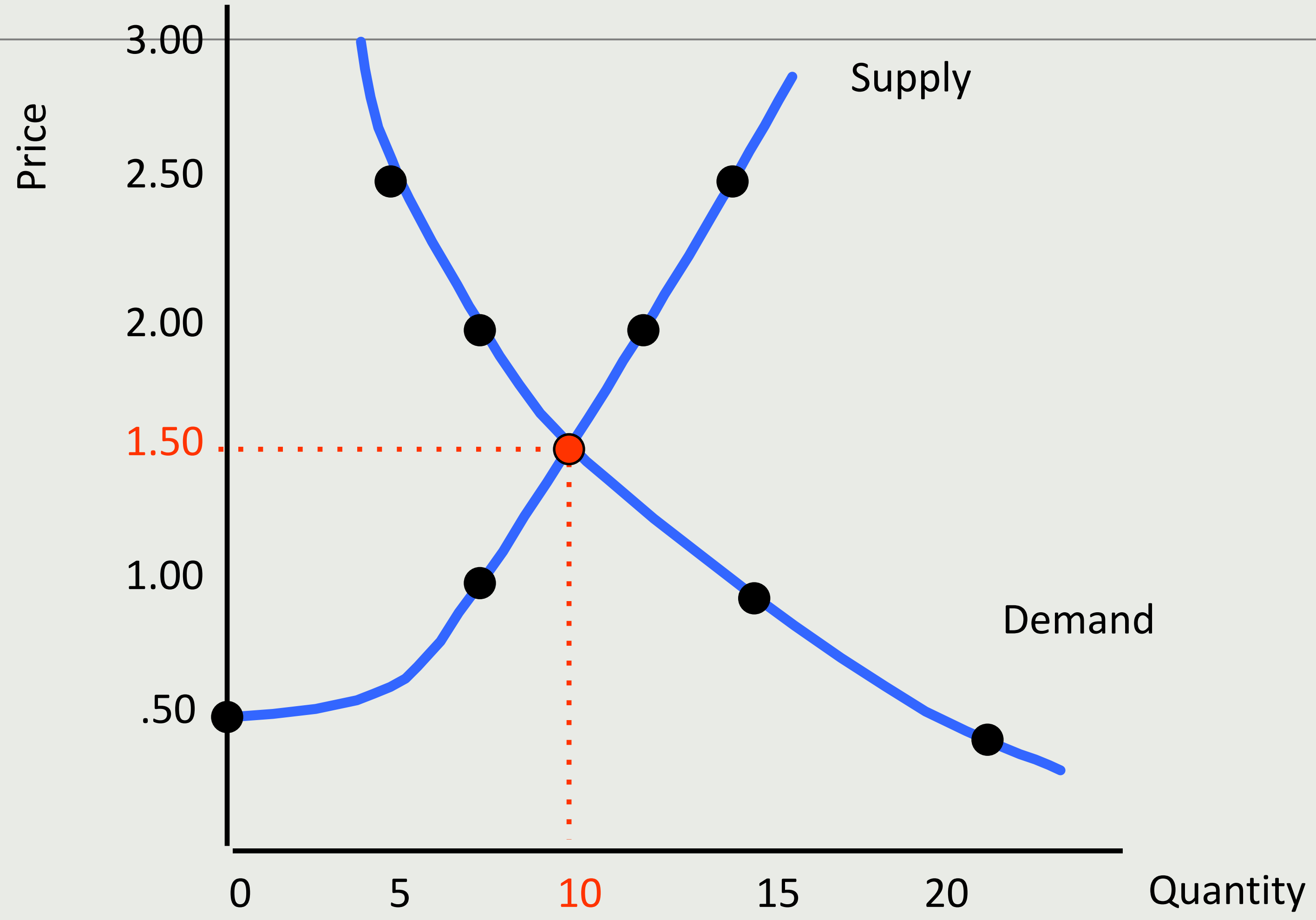
The *market equilibrium quantity* is the quantity bought and sold at the equilibrium price.



Market Equilibrium

Price (dollars of bars)	Quantity demanded	Quantity supplied	Shortage(–) or surplus(+)
	(millions of bars per week)		
0.50	22	0	–22
1.00	15	6	–9
1.50	10	10	0
2.00	7	13	+6
2.50	5	15	+10

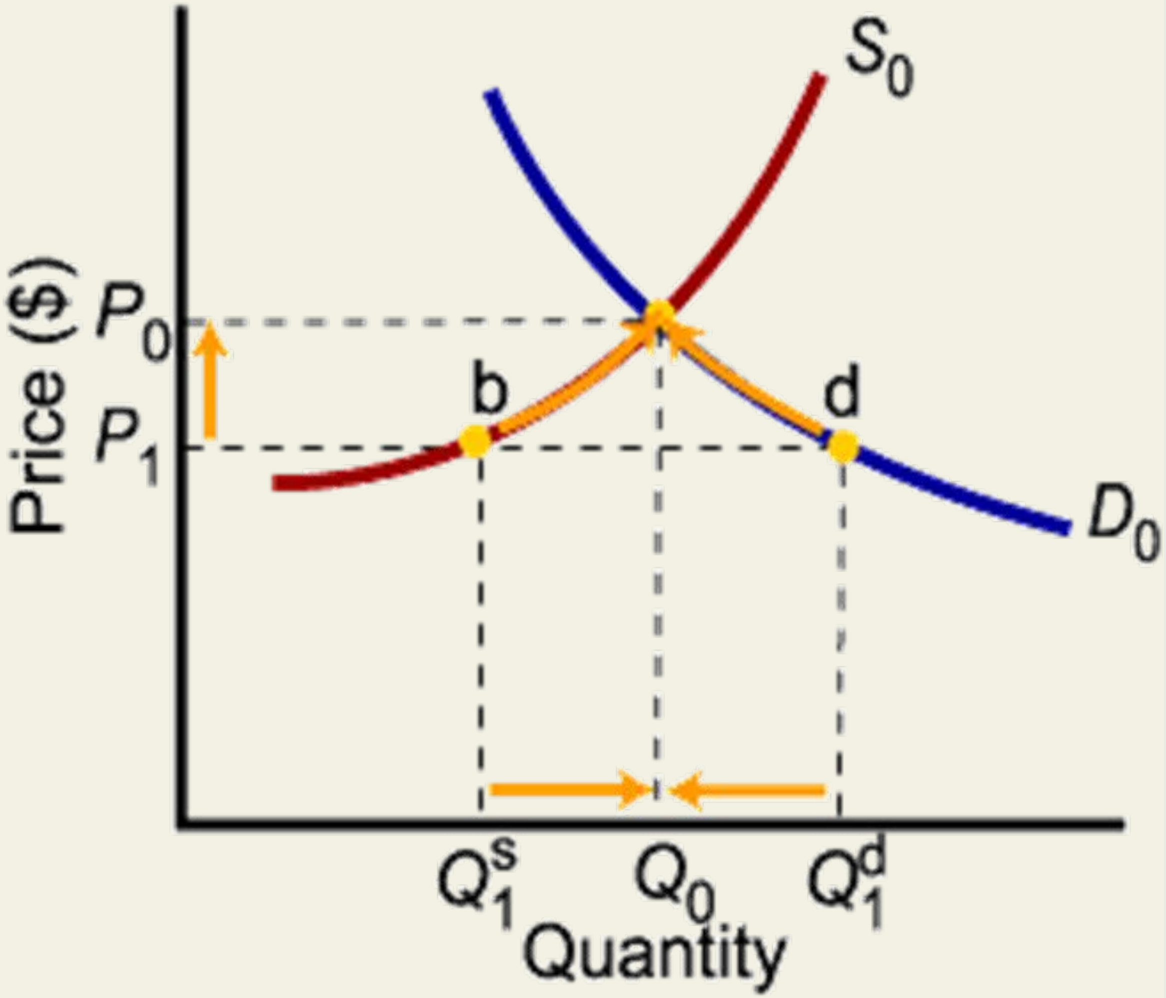
Market Equilibrium



Market Disequilibria: Shortages

If the price is too low, the quantity demanded exceeds the quantity supplied. People are willing to pay more for the good.

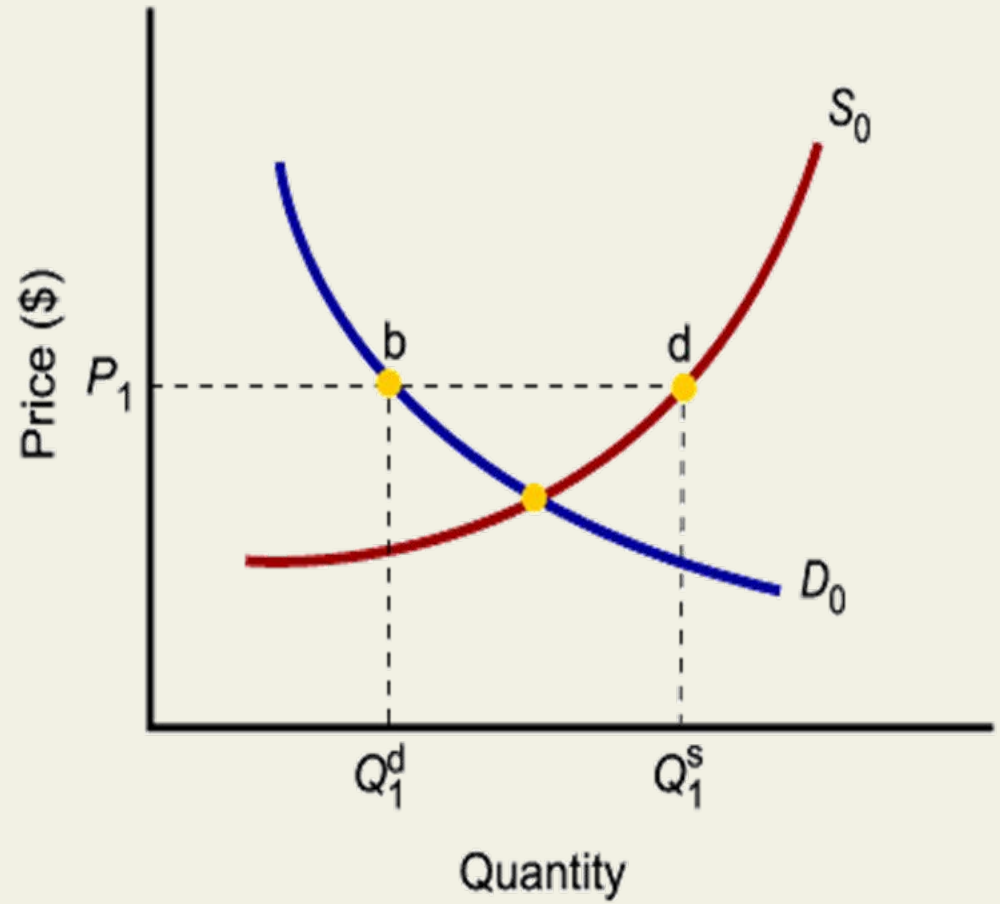
To eliminate this *shortage*, sellers will raise the price, increasing the quantity supplied and reducing the quantity demanded.



Market Disequilibria: Surpluses

If the price is too high, the quantity supplied exceeds the quantity demand. Inventories pile up.

To eliminate this *surplus*, sellers will lower the price, reducing quantity supplied and increasing quantity demanded.



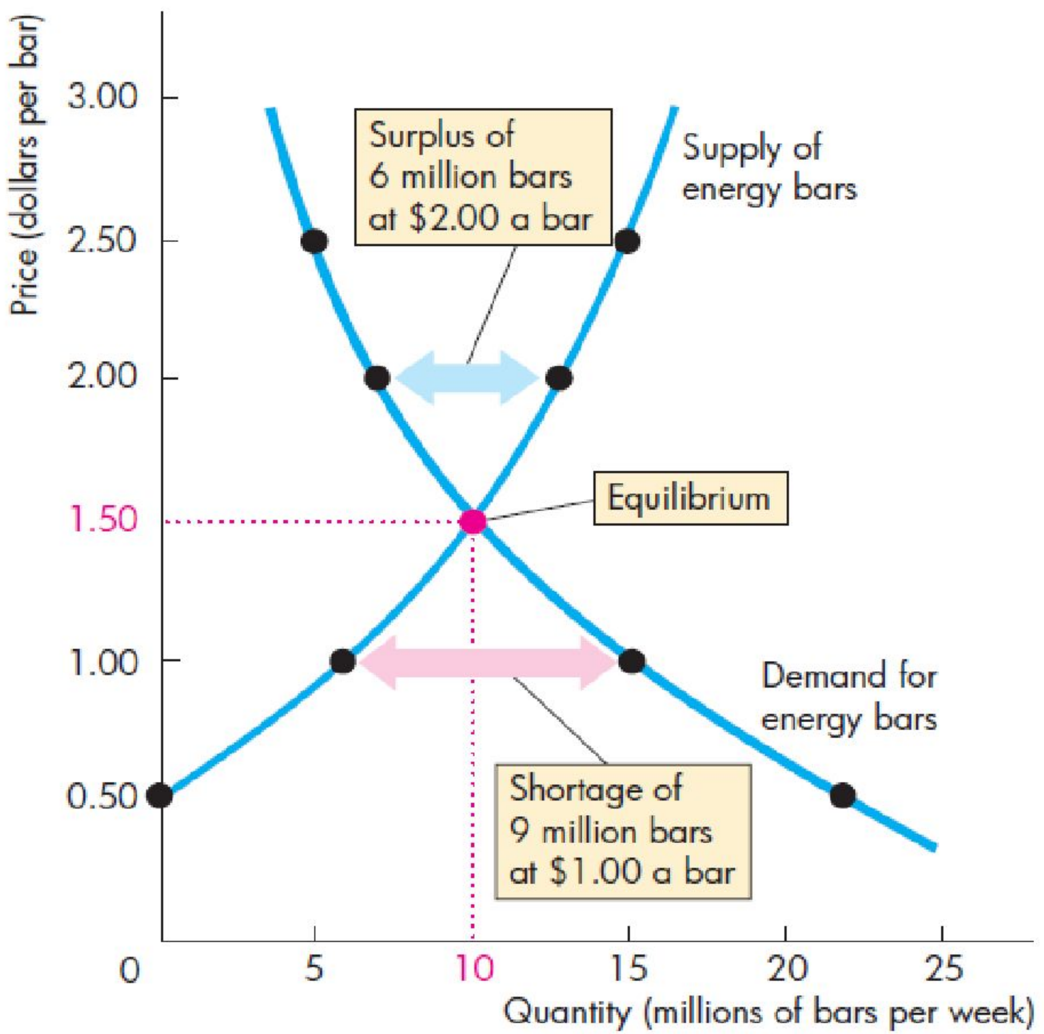
A Shortage Forces the Price Up

- If demand exceeds supply, sellers will raise price, decreasing quantity demanded.

A Surplus Forces the Price Down

- If supply exceeds demand, sellers will see their inventories of unsold goods piling up and will cut price to sell them.

FIGURE 3.7 Equilibrium



Price controls

Price controls are legal restrictions on how high or low a market price may go.

2 kinds of price controls:

1. **Price Ceilings**: a maximum price sellers are allowed to charge for a good.It's an upper limit for the price.
2. **Price Floors**: a minimum price buyers are required to pay for a good.I'ts a lower limit for the price.

Price controls

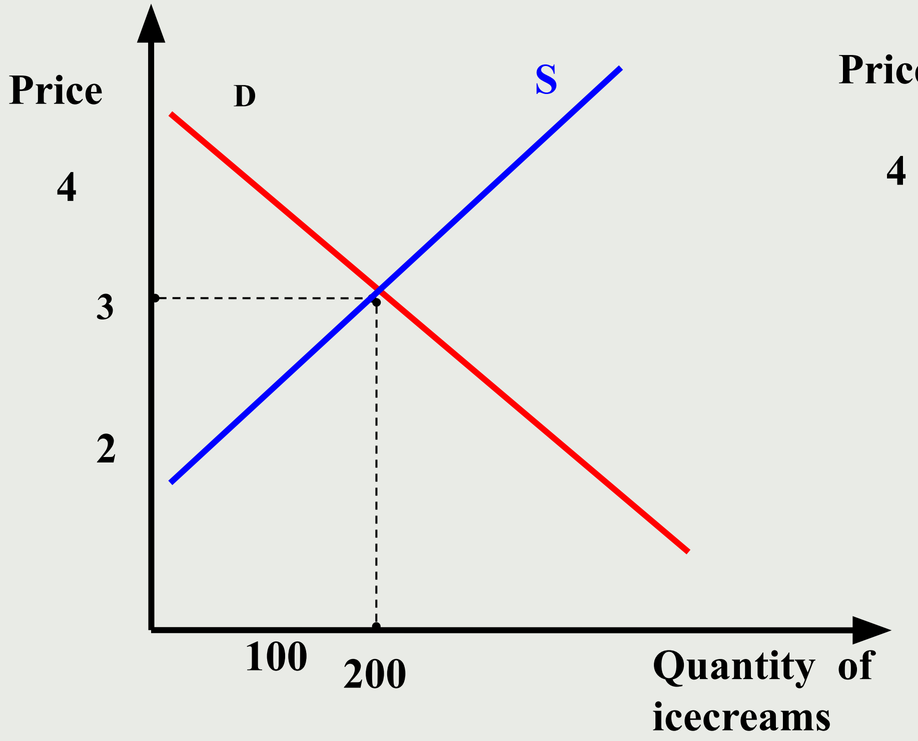
Why Price controls?

During crisis times, emergencies or wars the government wants to protect the consumers from rapidly increasing prices.

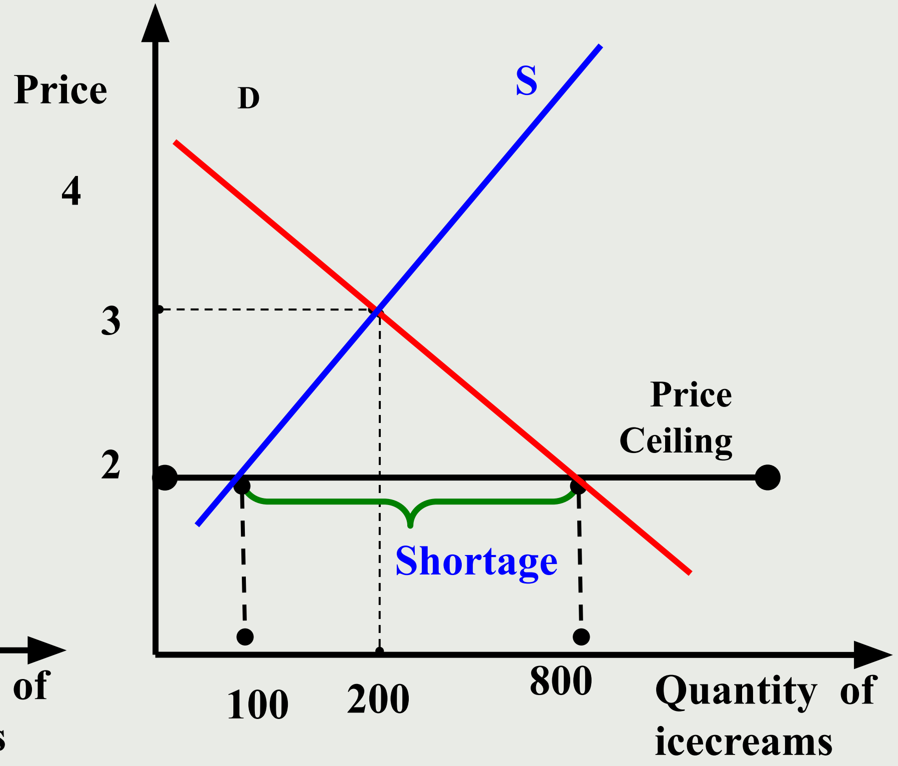
If the equilibrium wage given by supply and demand for low skilled workers is below poverty level, the government can set a minimum wage.

Price controls: price ceilings

Equilibrium



Price ceiling

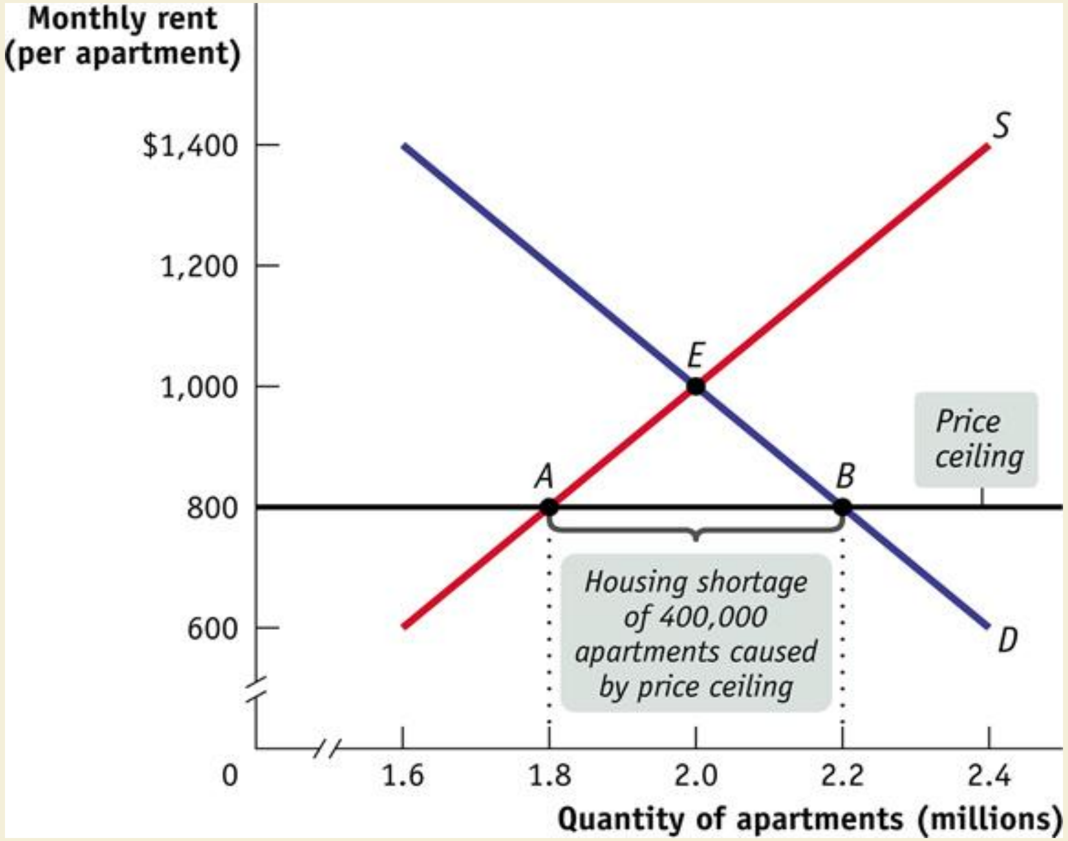


Price controls: Price Celings in Apartments

Figure 4-2

The Effects of a Price Ceiling

The dark horizontal line represents the government-imposed price ceiling on rents of $800 per month. This price ceiling reduces the quantity of apartments supplied to 1.8 million, point *A*, and increases the quantity demanded to 2.2 million, point *B*. This creates a persistent shortage of 400,000 units: 400,000 people who want apartments at the legal rent of $800 but cannot get them.



Price controls: price ceilings

Because of these ceilings, we are faced with a shortage.

The shortage will lead to inefficiencies:

A market or an economy is **inefficient** if there are missed opportunities: some people could be made better off without making other people worse off.

Price controls: price ceilings

Let’s take a look at the different possible inefficiencies:

1. Inefficient Allocation to Consumers
2. Wasted Resources
3. Inefficiently Low Quality
4. Black Markets

Price controls: price ceilings

Inefficient Allocation to Consumers

Price ceilings can lead to inefficiency in the form of **inefficient allocation to consumers**: people who really want the good and are willing to pay a high price don’t get it, and those who are not so interested in the good and are only willing to pay a low price do get it.

Example: rent control. In such case people get the appartment usually through luck or personal connections.

Price controls: price ceilings

Wasted Resources

Price ceilings typically lead to inefficiency in the form of **wasted resources**: people spend money, time and expend effort in order to deal with the shortages caused by the price ceiling.

You waste a lot of time looking for a good (e.g. an appartment) in case of shortage, the time has it’s value! You can work or just rest, do something better than look for a good you’ can’t find.

Price controls: price ceilings

Inefficiently Low Quality

Price ceilings often lead to inefficiency in that the goods being offered are of **inefficiently low quality**

In case of rent controls, the landlords will not improve the conditions of the appartments, there is no incentive since the rental fee is low but the main reason is that since there is a shortage, people are willing to rent the apartment as it is, even in bad condition!

Price controls: price ceilings

Black Markets

A **black market** is a market in which goods or services are bought and sold illegally—either because it is illegal to sell them at all or because the prices charged are legally prohibited by a price ceiling.

If someone for example bribes (gives extra money) to the apartment owners he will get the apartment, but the honest people that don’t break the law will never find one this way!

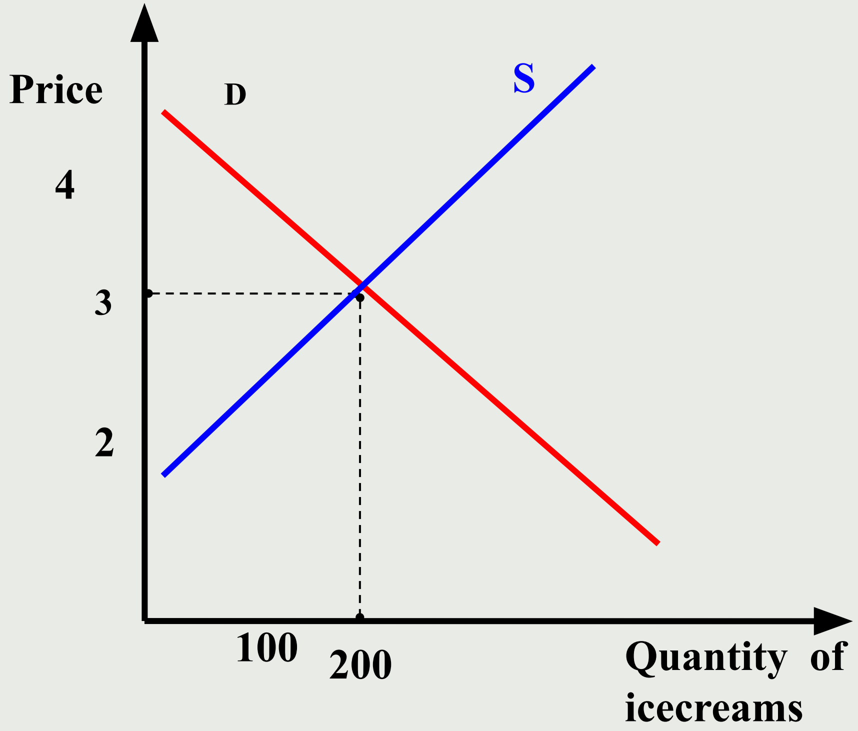
Price controls: price floors

Price Floors: a minimum price buyers are required to pay for a good.I’ts a lower limit for the price.

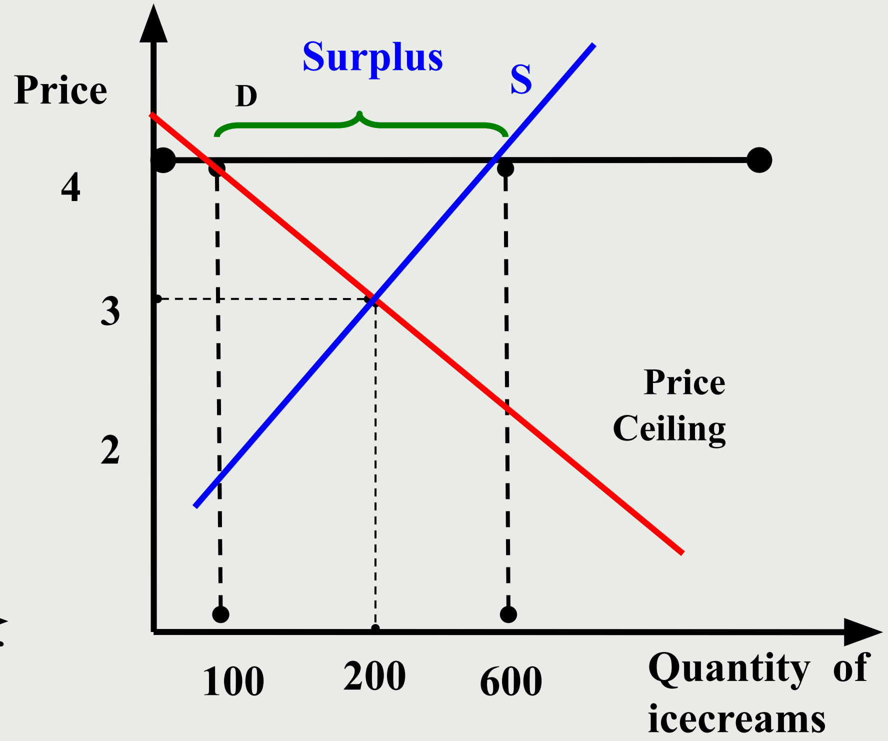
The **minimum wage** is a legal floor on the wage rate, which is the market price of labor.

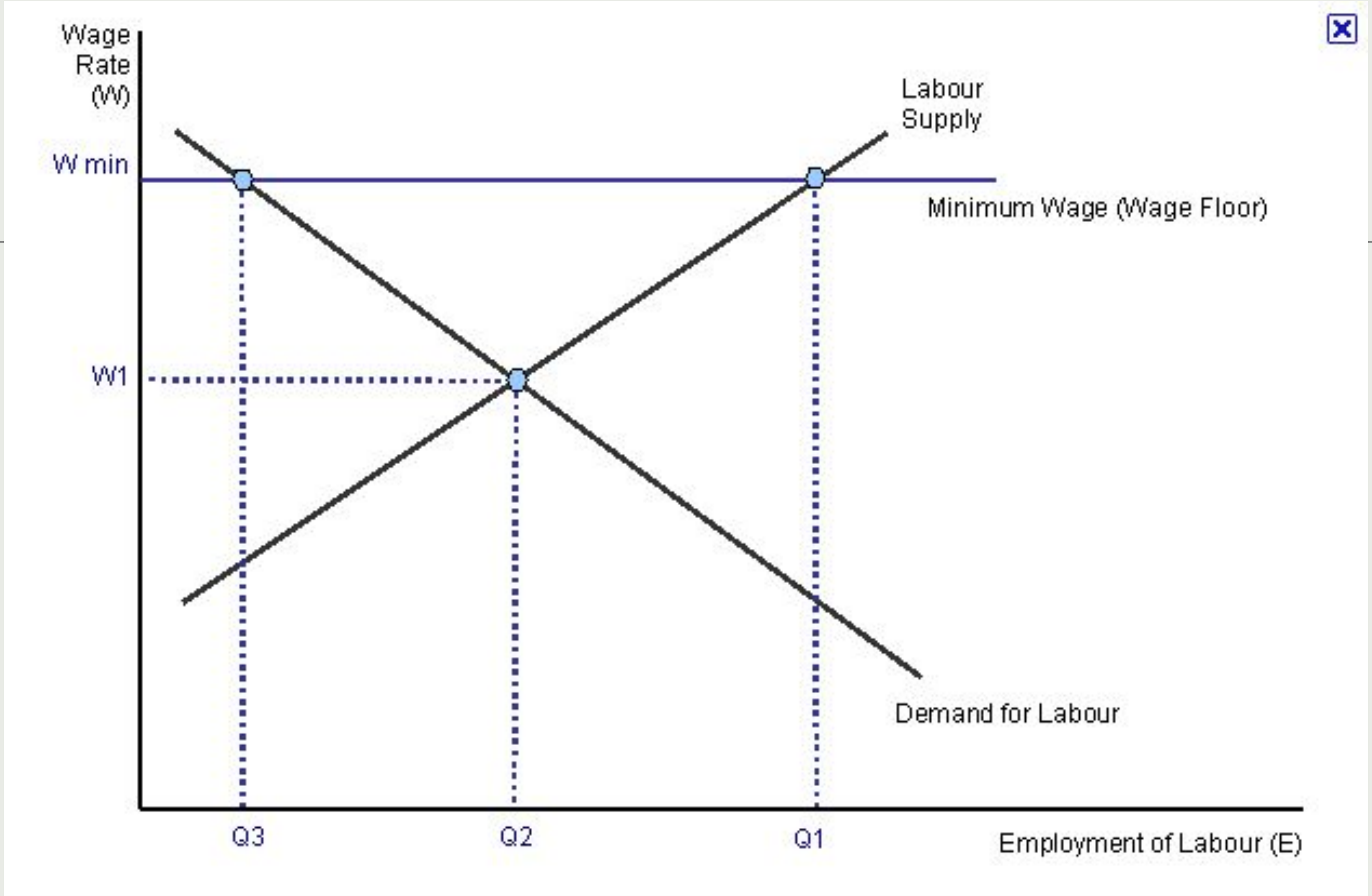
Price controls: price floors

Equilibrium



Price floor




Wage Rate (W)
W min
W1
Labour Supply
Minimum Wage (Wage Floor)
Demand for Labour
Q3
Q2
Q1
Employment of Labour (E)

Nobel Prize in economics explodes minimum wage and jobs myth

The prize was awarded to David Card, Joshua Angrist and Guido Imbens for real-world research in the 1990s that demonstrated, empirically, that the idea touted by conservative economists that higher minimum wages mean fewer jobs is not based on fact.

Oct 13, 2021

Price controls: price floors

Why a Price Floor Causes Inefficiency

Inefficient Allocation of Sales Among Sellers

Price floors lead to **inefficient allocation of sales among sellers**: those who would be willing to sell the good at the lowest price are not always those who actually manage to sell it. Example: Farm Subsidies

Wasted Resources

Like a price ceiling, a price floor generates inefficiency by *wasting resources*.