

MODULE

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4 Demand

5 Supply and Equilibrium

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# Why Governments Control Prices

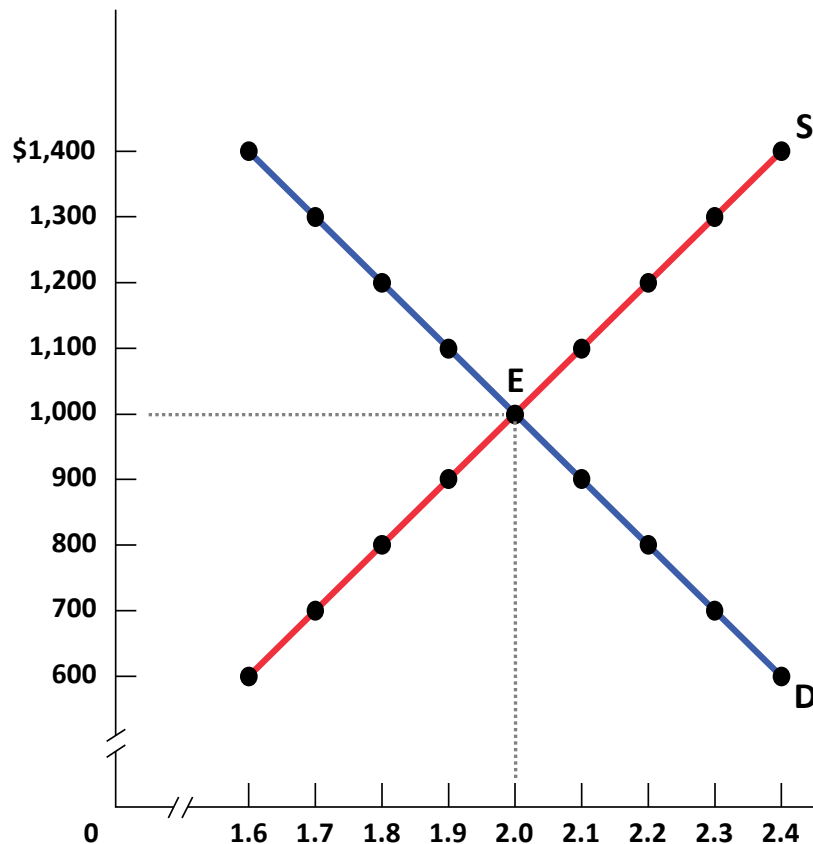
- The market price moves to make the quantity supplied equal the quantity demanded.
- BUT this equilibrium price does not necessarily please buyers or sellers.
- Therefore, the government intervenes to regulate prices by imposing **price controls**, which are legal restrictions on how high or low a market price may go.
- Controls can be **price ceilings** or **price floors**.

# Price Ceilings

- Price ceilings are a maximum level the price can go.
- They are typically imposed during crises—wars, harvest failures, natural disasters—because these events often lead to sudden price increases that hurt many people but can produce big gains for a lucky few.
- Examples
  - Rent controls in NYC
  - Salary cap in the NBA

# The Market for Apartments in the Absence of Government Controls

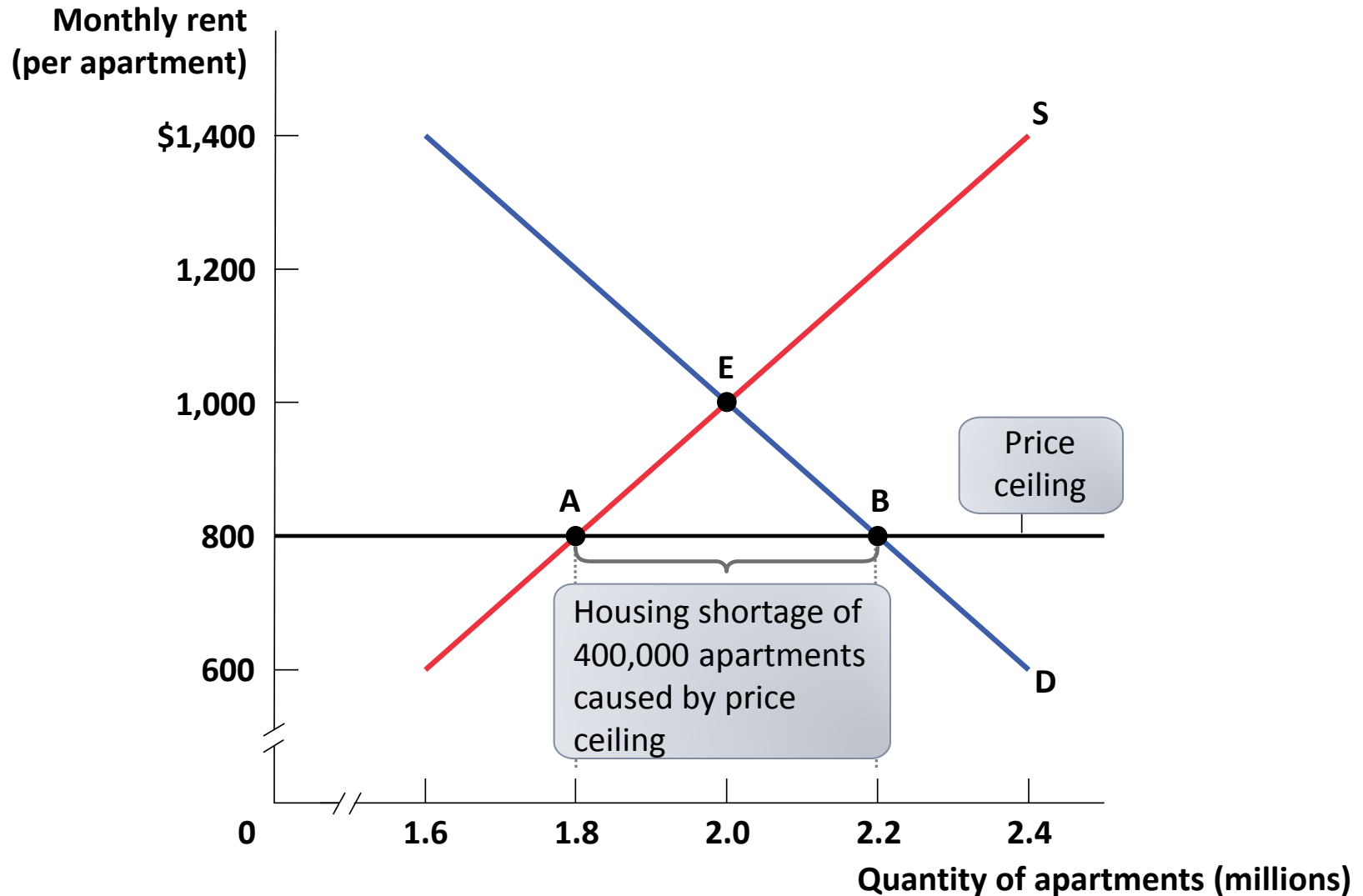
Monthly rent  
(per apartment)



Monthly rent (per apartment)	Quantity of apartments (millions)	
	Quantity demanded	Quantity supplied
\$1,400	1.6	2.4
1,300	1.7	2.3
1,200	1.8	2.2
1,100	1.9	2.1
1,000	2.0	2.0
900	2.1	1.9
800	2.2	1.8
700	2.3	1.7
600	2.4	1.6

Quantity of apartments (millions)

# The Effects of a Price Ceiling



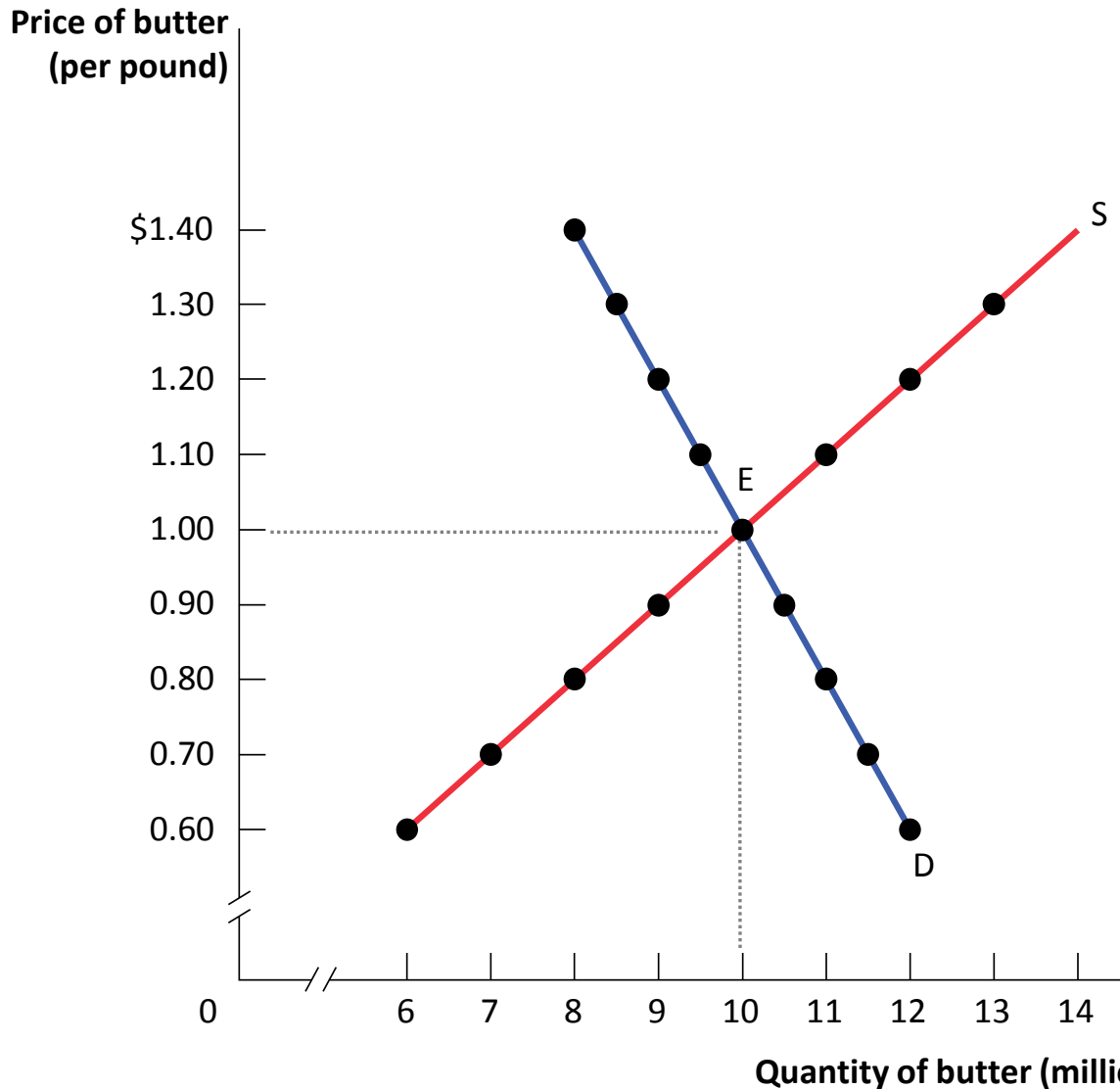
# How Price Ceilings Cause Inefficiency

- Inefficient Allocation to Customers
- Wasted Resources
- Inefficiently Low Quality
- Black Markets

# Price Floors

- Sometimes governments intervene to push market prices up instead of down.
- The **minimum wage** is a legal floor on the wage rate, which is the market price of labor.
- Just like price ceilings, price floors are intended to help some people but generate predictable and undesirable side effects.

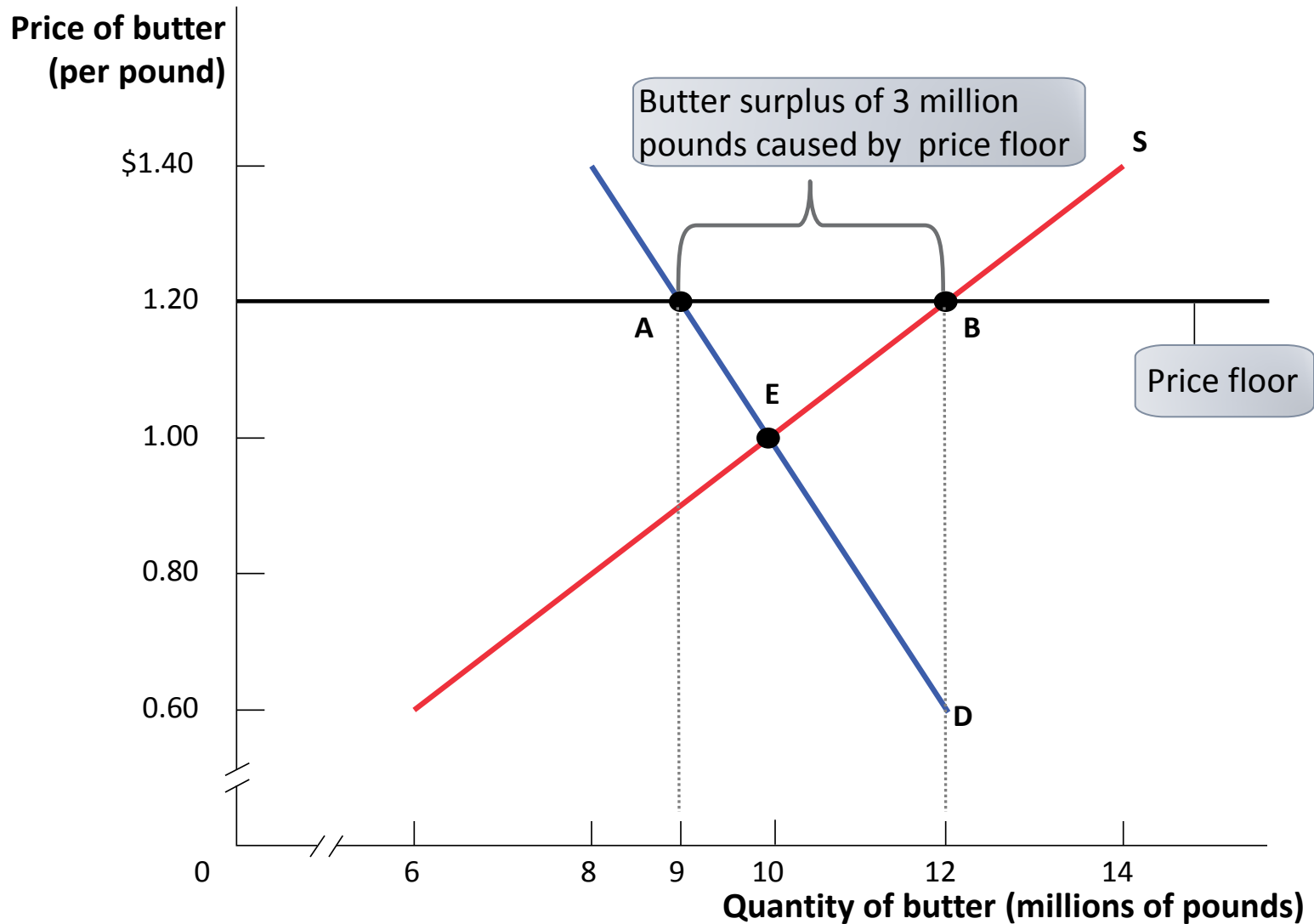
# The Market for Butter without Price Controls



Price of butter (per pound)	Quantity of butter (millions of pounds)	
	Quantity demanded	Quantity supplied
\$1.40	8.0	14.0
1.30	8.5	13.0
1.20	9.0	12.0
1.10	9.5	11.0
1.00	10.0	10.0
0.90	10.5	9.0
0.80	11.0	8.0
0.70	11.5	7.0
0.60	12.0	6.0



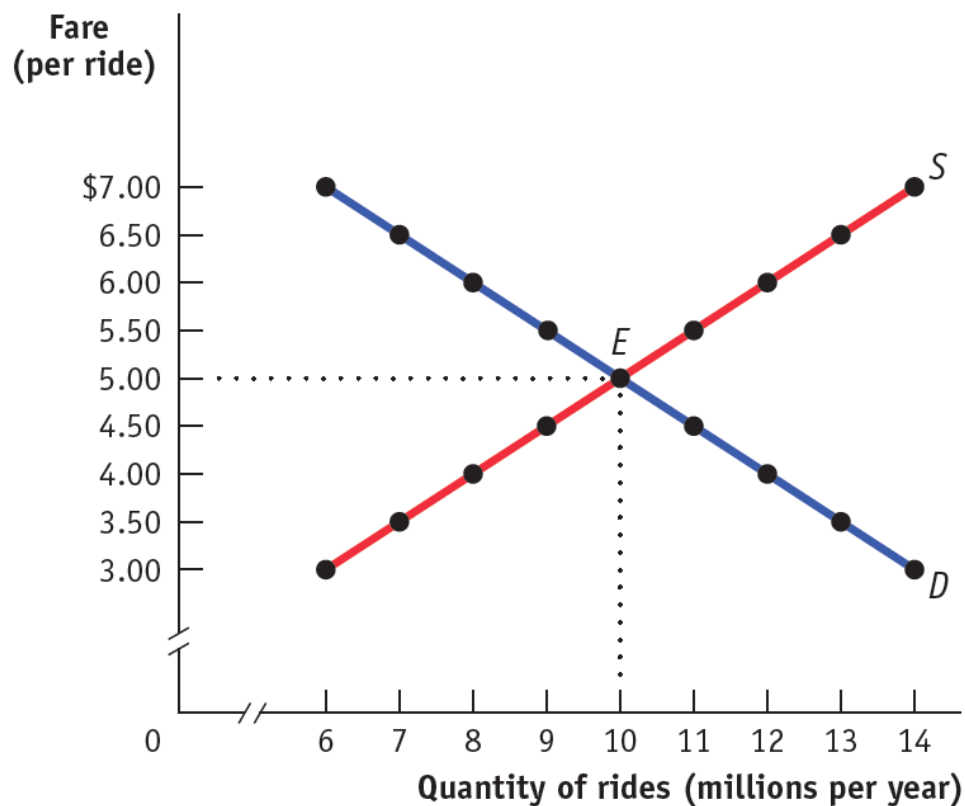
# The Effects of a Price Floor



# Quantity Controls

- The New York taxi medallion system is a form of **quantity control**, also known as a quota, limiting the number of taxis in the city.
- The **demand price** is the price at which consumers want to buy a given quantity.
- The **supply price** is the price at which producers will supply a given quantity.

# The Market for Taxi Rides in the Absence of Government Controls



Fare (per ride)	Quantity of rides (millions per year)	
	Quantity demanded	Quantity supplied
\$7.00	6	14
6.50	7	13
6.00	8	12
5.50	9	11
5.00	10	10
4.50	11	9
4.00	12	8
3.50	13	7
3.00	14	6

Without government intervention, the market reaches equilibrium with 10 million rides taken per year at a fare of \$5 per ride.

# Quantity Controls and their Costs

- Let's say the NYC government limits the number of taxi cabs so there are only 8 million rides.
- The **wedge** between the supply price and the demand price for taxi rides has allowed a market for medallions.
- The wedge is also called **quota rent**.
- Quantity controls create **deadweight loss** inefficiency because of lost mutually beneficial transactions.