

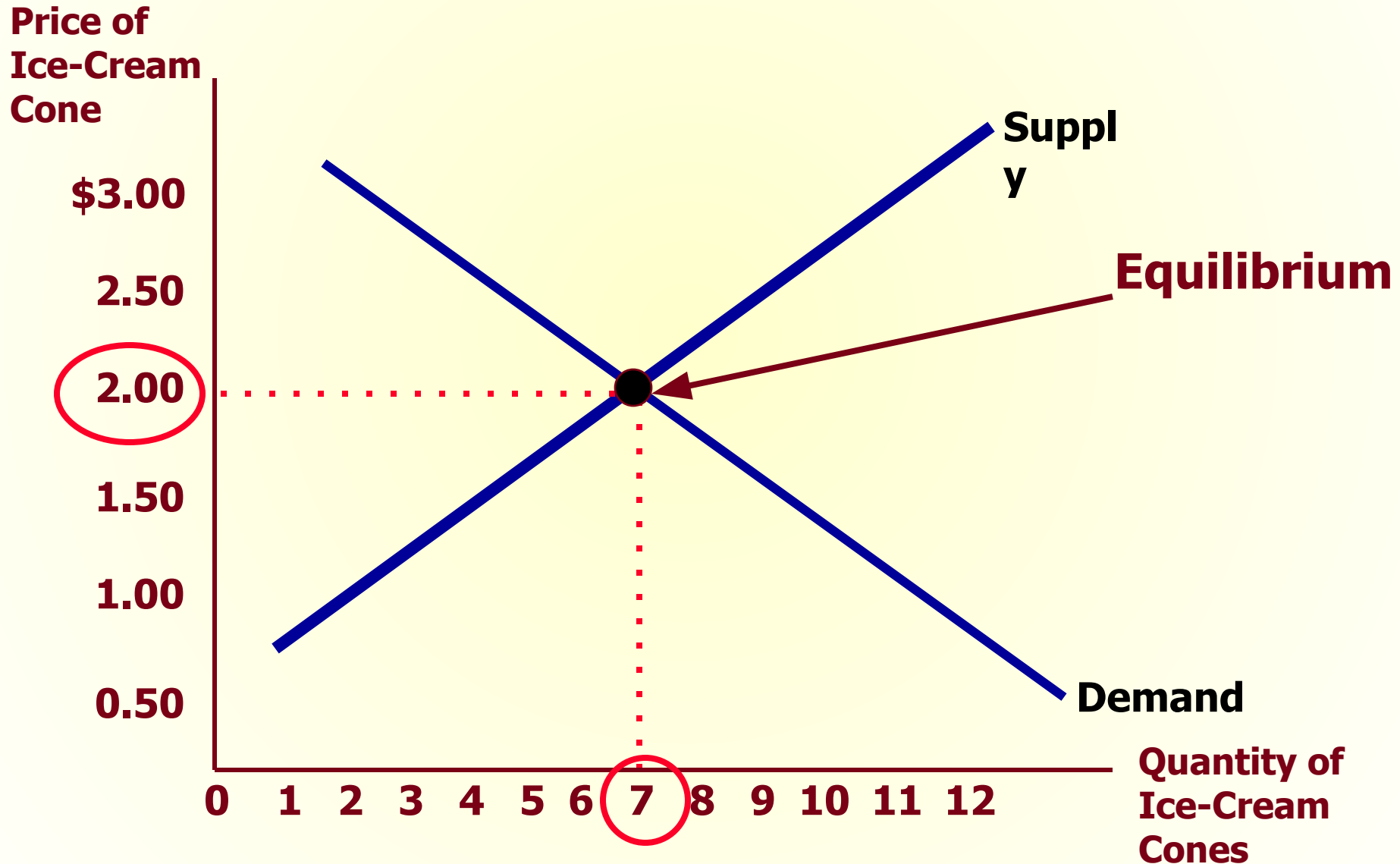
# **Supply, Demand and Government Policies**

## **Chapter 6**

# Supply, Demand, and Government Policies

- In a free, unregulated market system, market forces establish equilibrium prices and exchange quantities.
- While equilibrium conditions may be efficient, it may be true that not everyone is satisfied.
- One of the roles of economists is to use their theories to assist in the development of policies.

# Market Equilibrium



# Price Controls...

- Are usually enacted when policymakers believe the market price is unfair to buyers or sellers.
- Result in government-created **price ceilings and floors.**

# Price Ceilings & Price Floors

## Price Ceiling

- A legally established maximum price at which a good can be sold.

## Price Floor

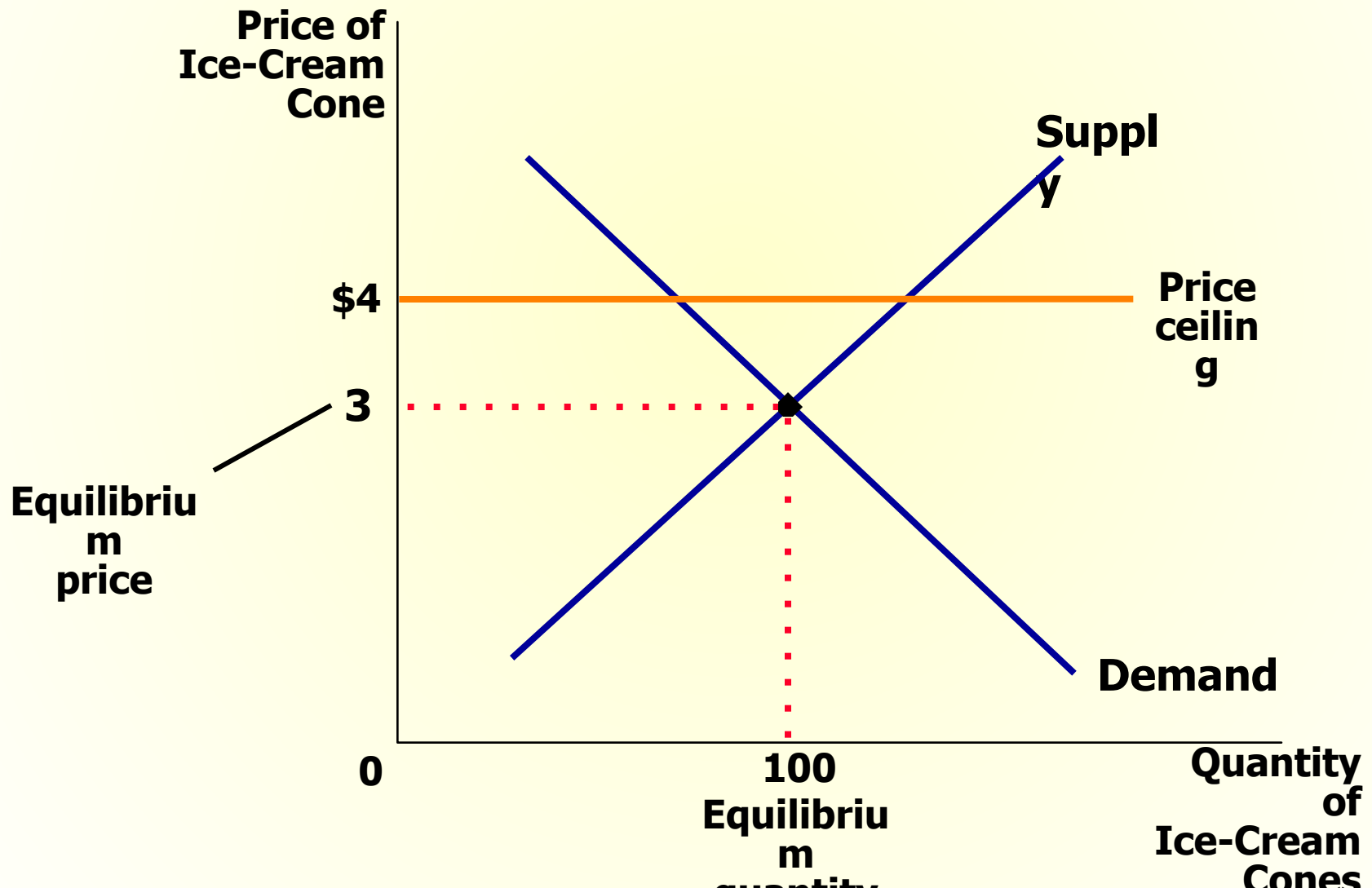
- A legally established minimum price at which a good can be sold.

# Price Ceilings

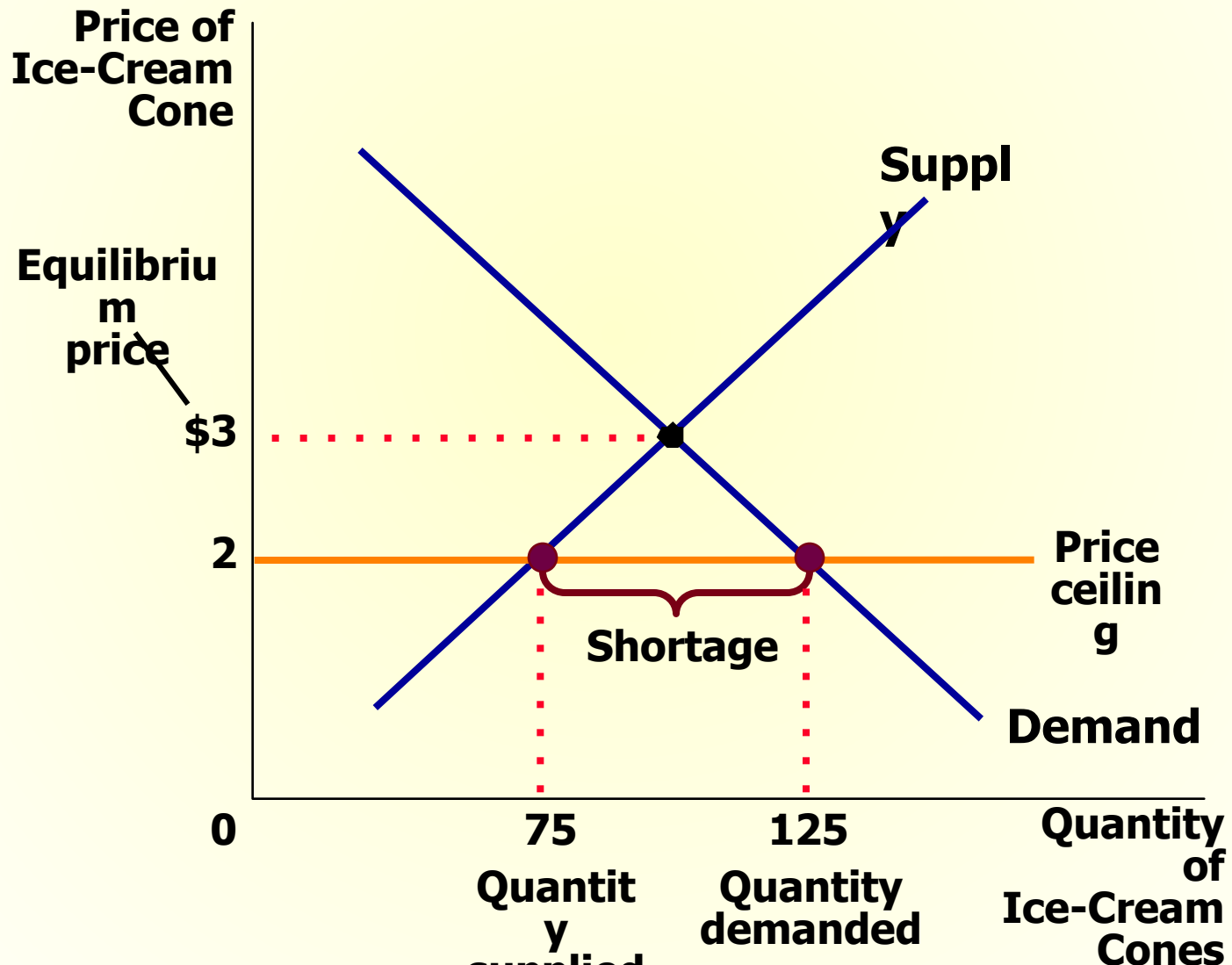
Two outcomes are possible when the government imposes a price ceiling:

- The price ceiling *is not* binding if set *above* the equilibrium price.
- The price ceiling *is* binding if set *below* the equilibrium price, leading to a shortage.

# *A Price Ceiling That Is Not Binding...*



# *A Price Ceiling That Is Binding...*



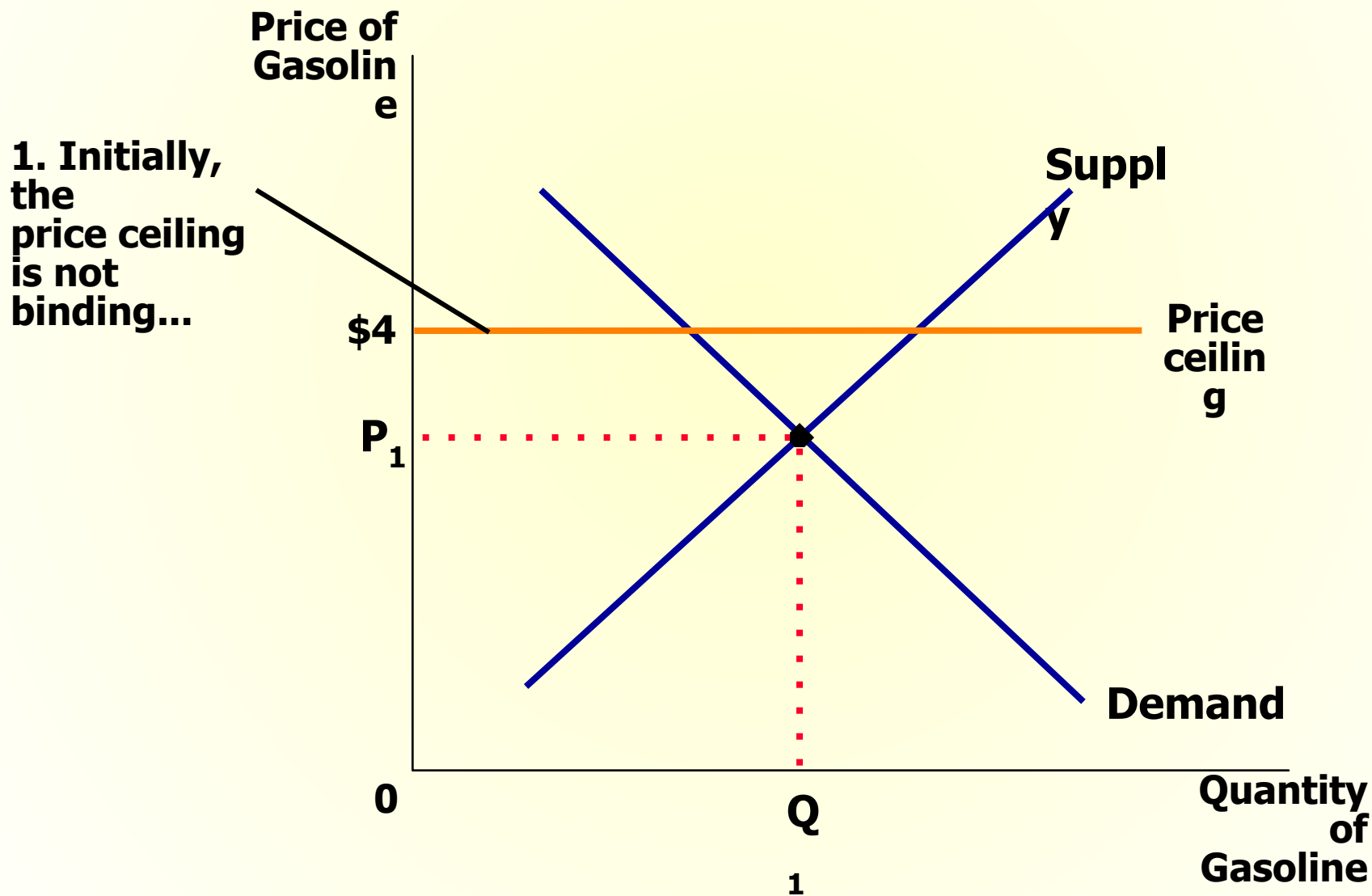


# Effects of Price Ceilings

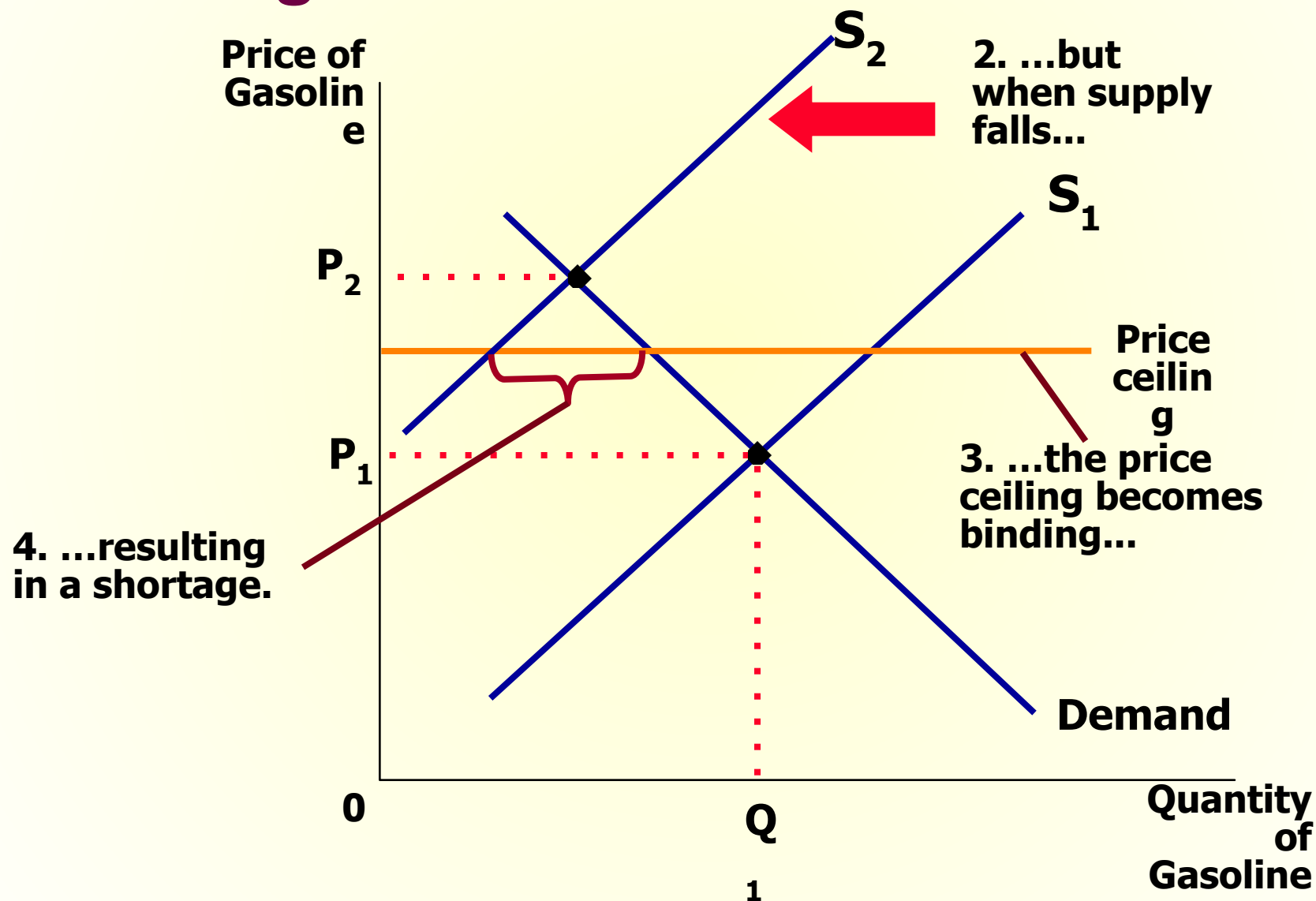
A binding price ceiling creates ...

- ... shortages because  $Q_D > Q_S$ .
  - Example: Gasoline shortage of the 1970s
- ... nonprice rationing
  - Examples: Long lines, Discrimination by sellers

# *The Price Ceiling on Gasoline Is Not Binding...*



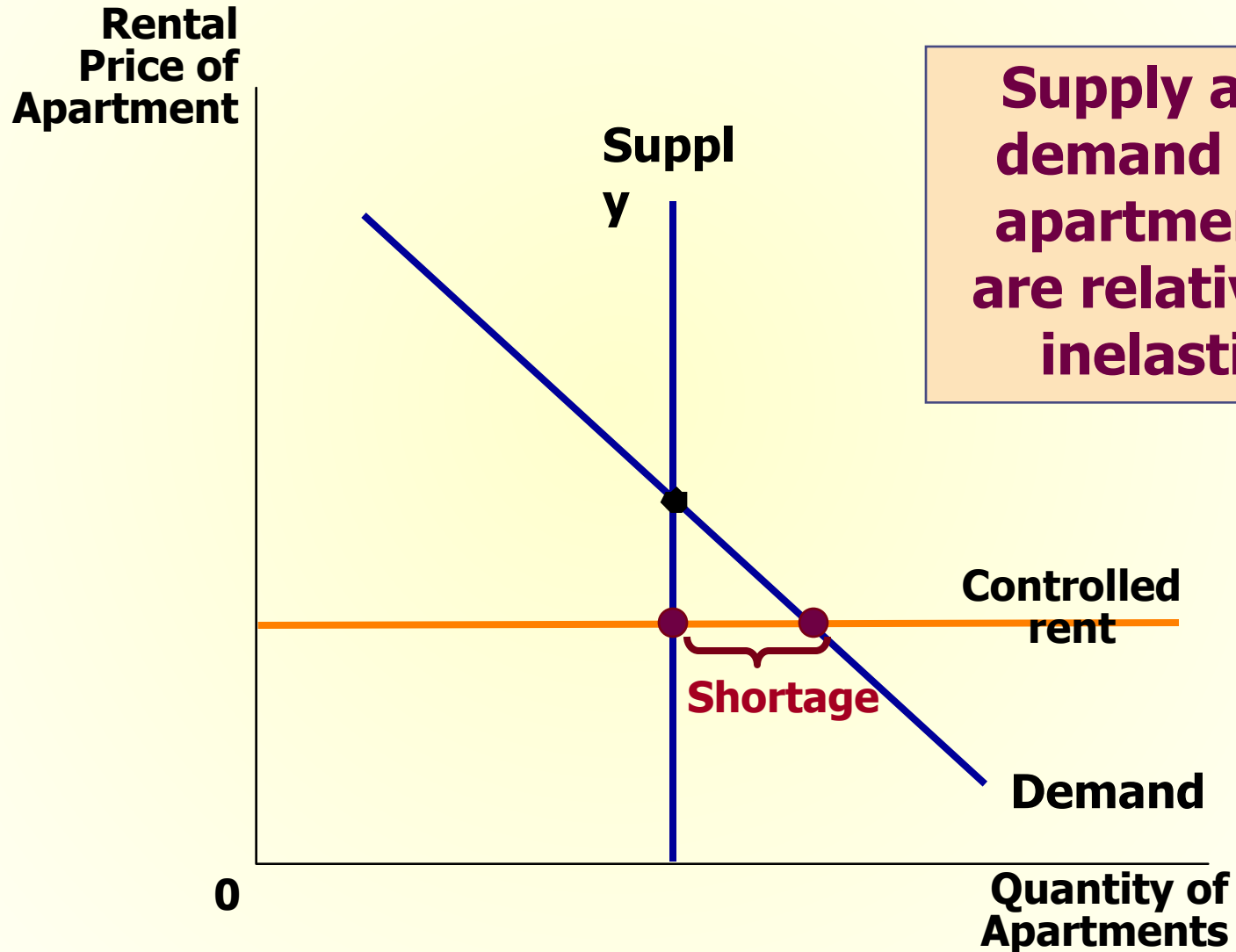
# *The Price Ceiling on Gasoline Is Binding...*



# Rent Control

- Rent controls are ceilings placed on the rents that landlords may charge their tenants.
- The goal of rent control policy is to help the poor by making housing more affordable.
- One economist called rent control “the best way to destroy a city, other than bombing.”

# *Rent Control in the Short Run...*

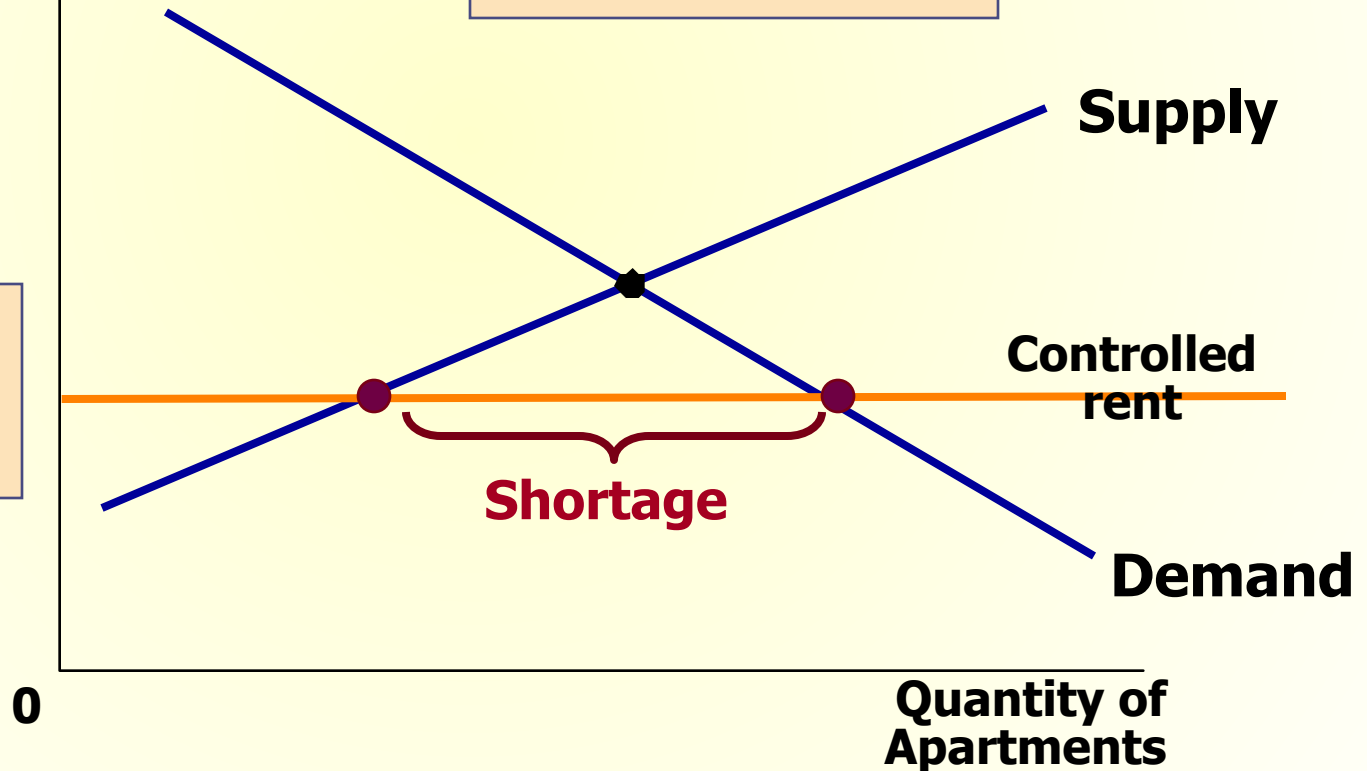


# *Rent Control in the Long Run...*

Rental  
Price of  
Apartment

Because the  
supply and  
demand for  
apartments are  
more elastic...

...rent control  
causes a large  
shortage

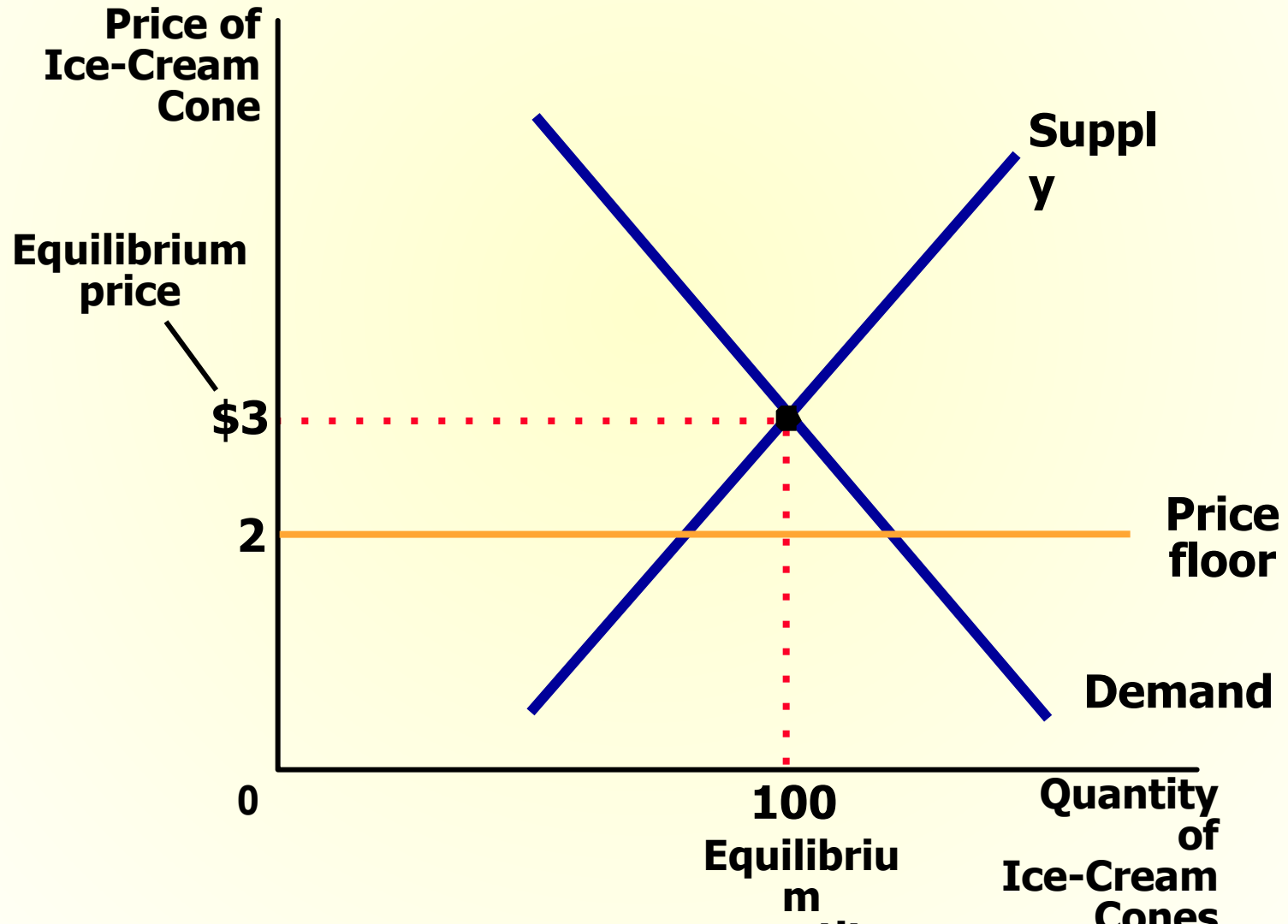


# Price Floors

When the government imposes a price floor, two outcomes are possible.

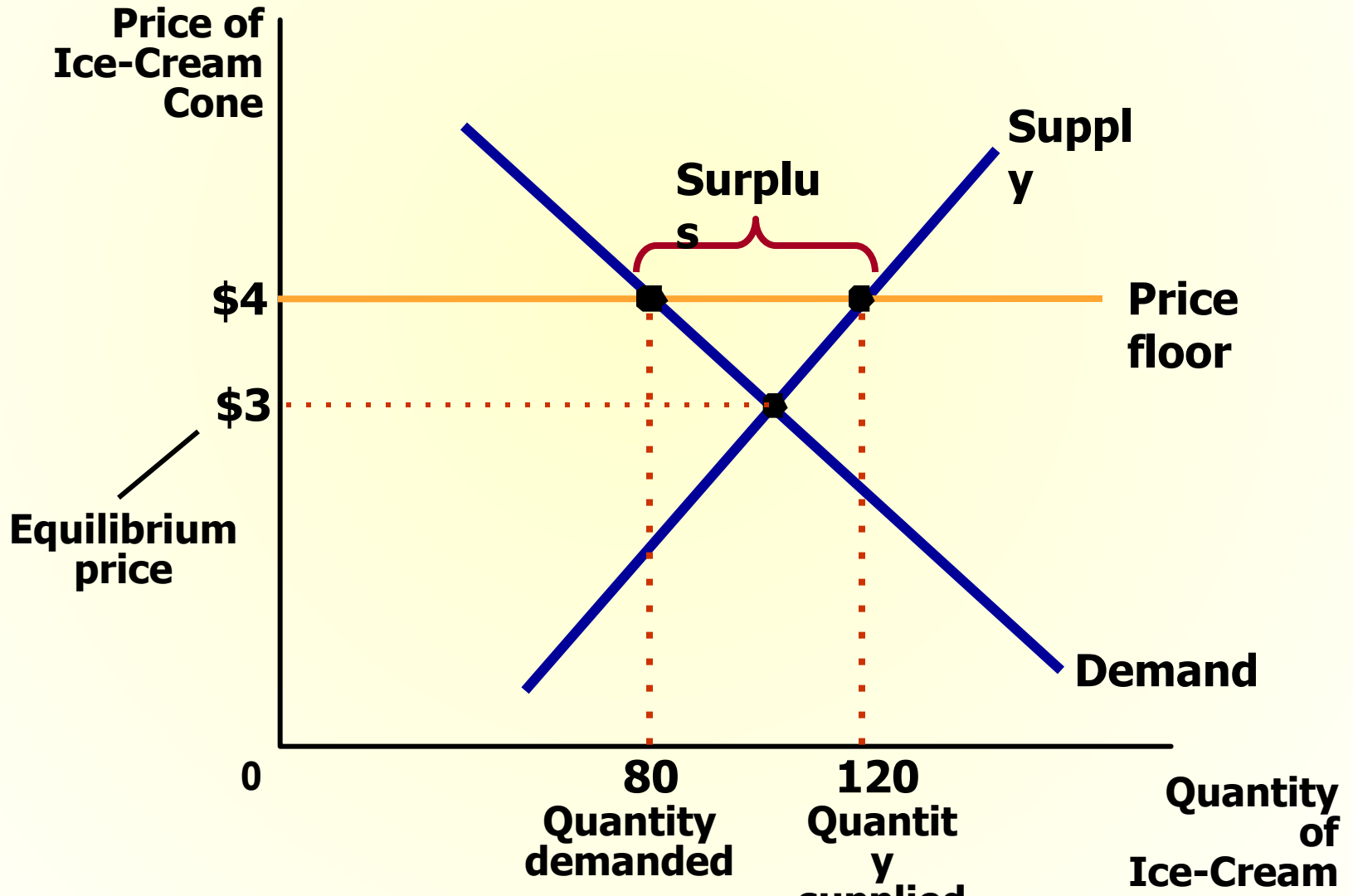
- The price floor is not binding if set below the equilibrium price.
- The price floor is binding if set above the equilibrium price, leading to a surplus.

# *A Price Floor That Is Not Binding...*





# *A Price Floor That Is Binding...*



# Effects of a Price Floor

- A price floor prevents supply and demand from moving toward the equilibrium price and quantity.
- When the market price hits the floor, it can fall no further, and the market price equals the floor price.

# Effects of a Price Floor

A binding price floor causes . . .

... a surplus because  $Q_S > Q_D$ .

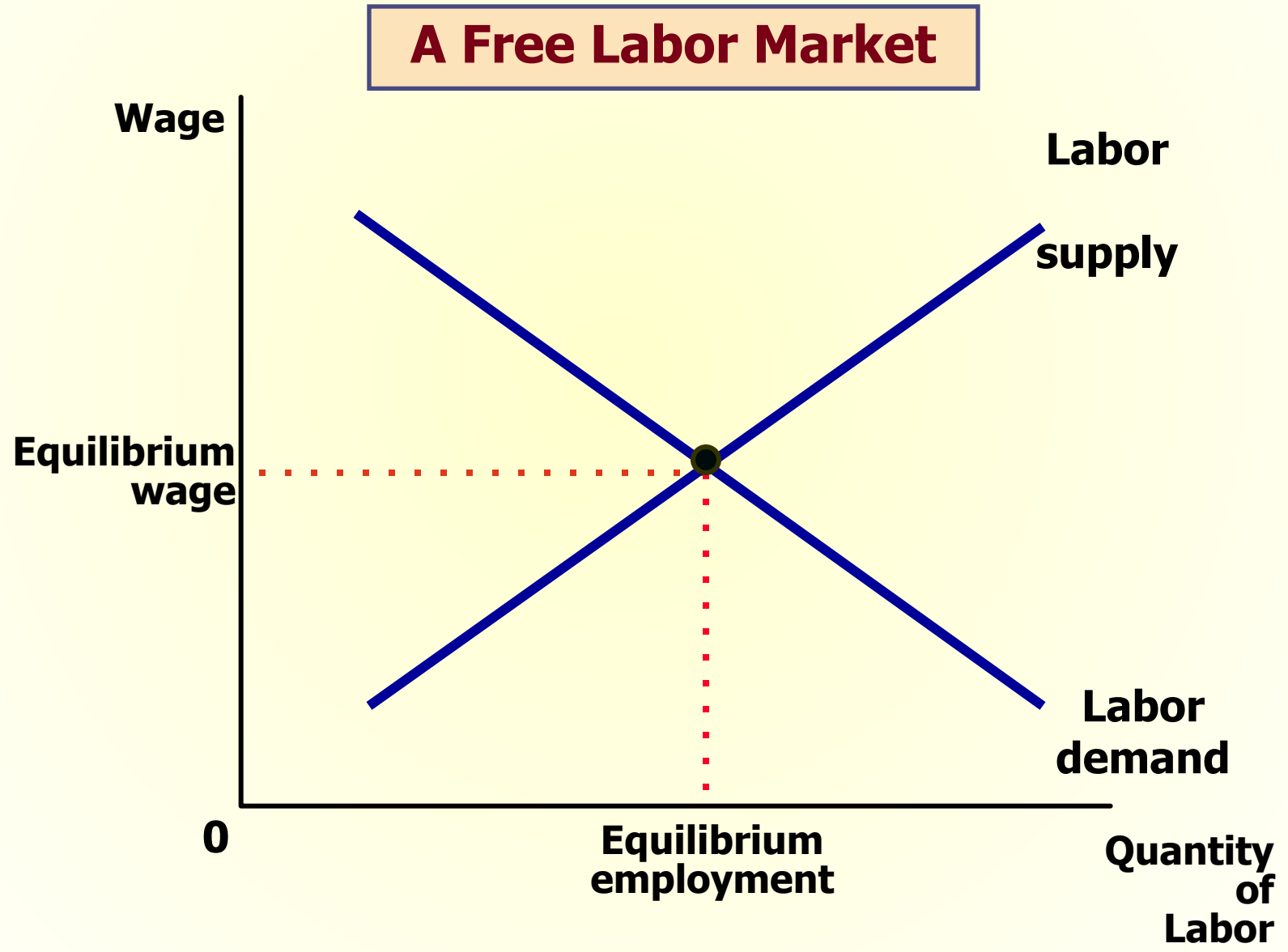
... nonprice rationing is an alternative mechanism for rationing the good, using discrimination criteria.

- **Examples: The minimum wage, Agricultural price supports**

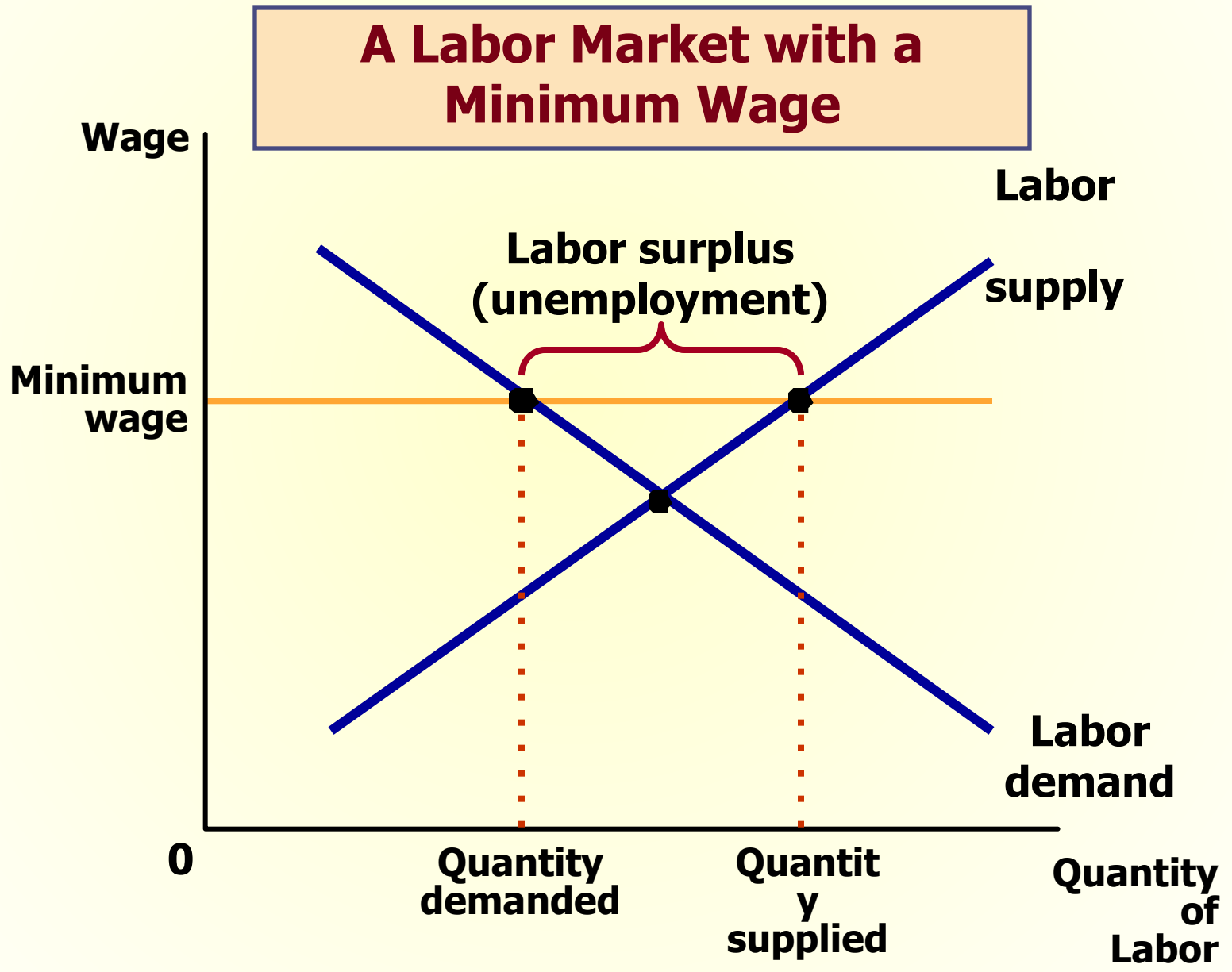
# **The Minimum Wage**

**An important example of a price floor is the minimum wage. Minimum wage laws dictate the lowest price possible for labor that any employer may pay.**

# The Minimum Wage



# The Minimum Wage



# **Taxes**

**Governments levy taxes to  
raise revenue for public  
projects.**

# **What are some potential impacts of taxes?**

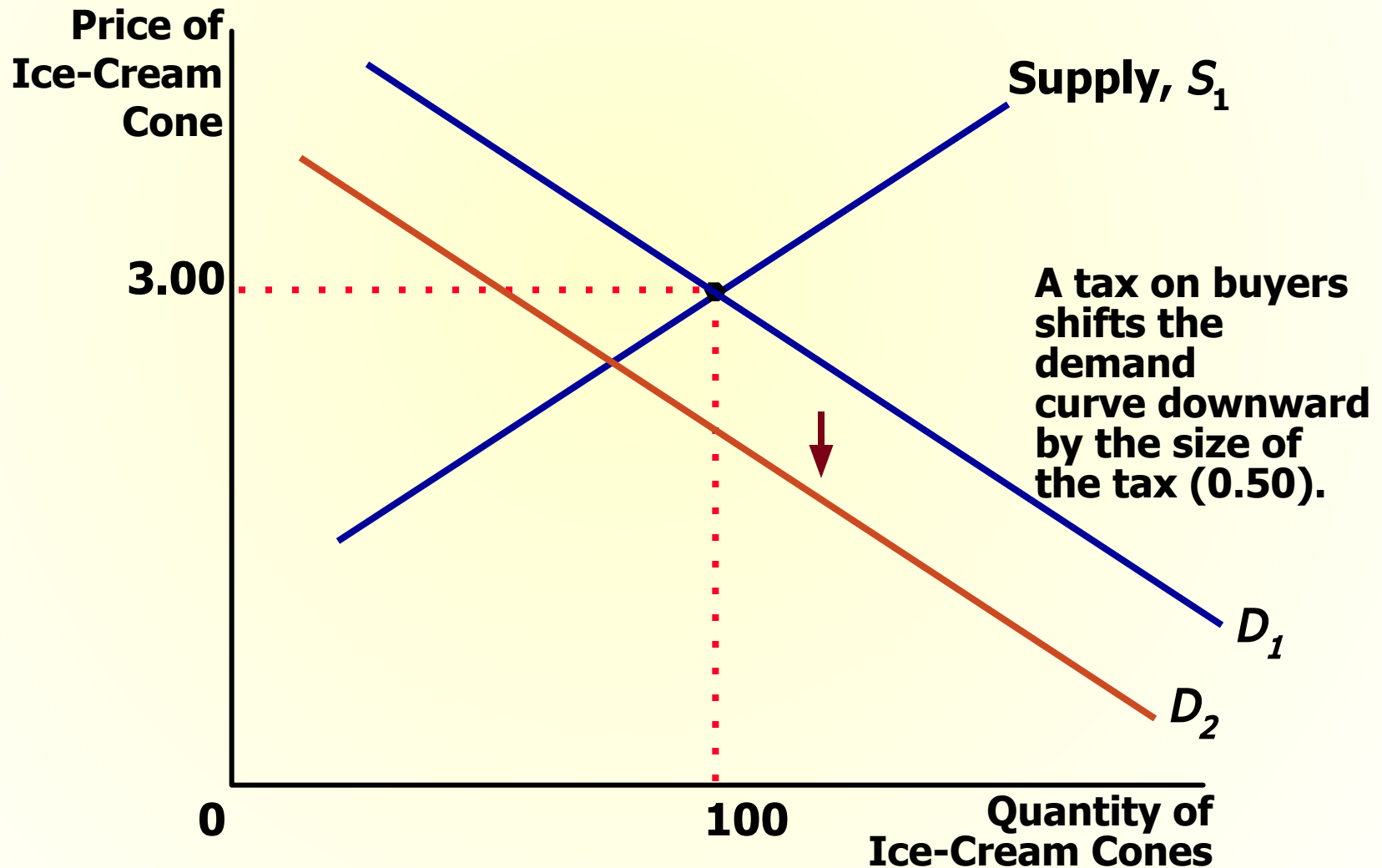
- **Taxes discourage market activity.**
- **When a good is taxed, the quantity sold is smaller.**
- **Buyers and sellers share the tax burden.**



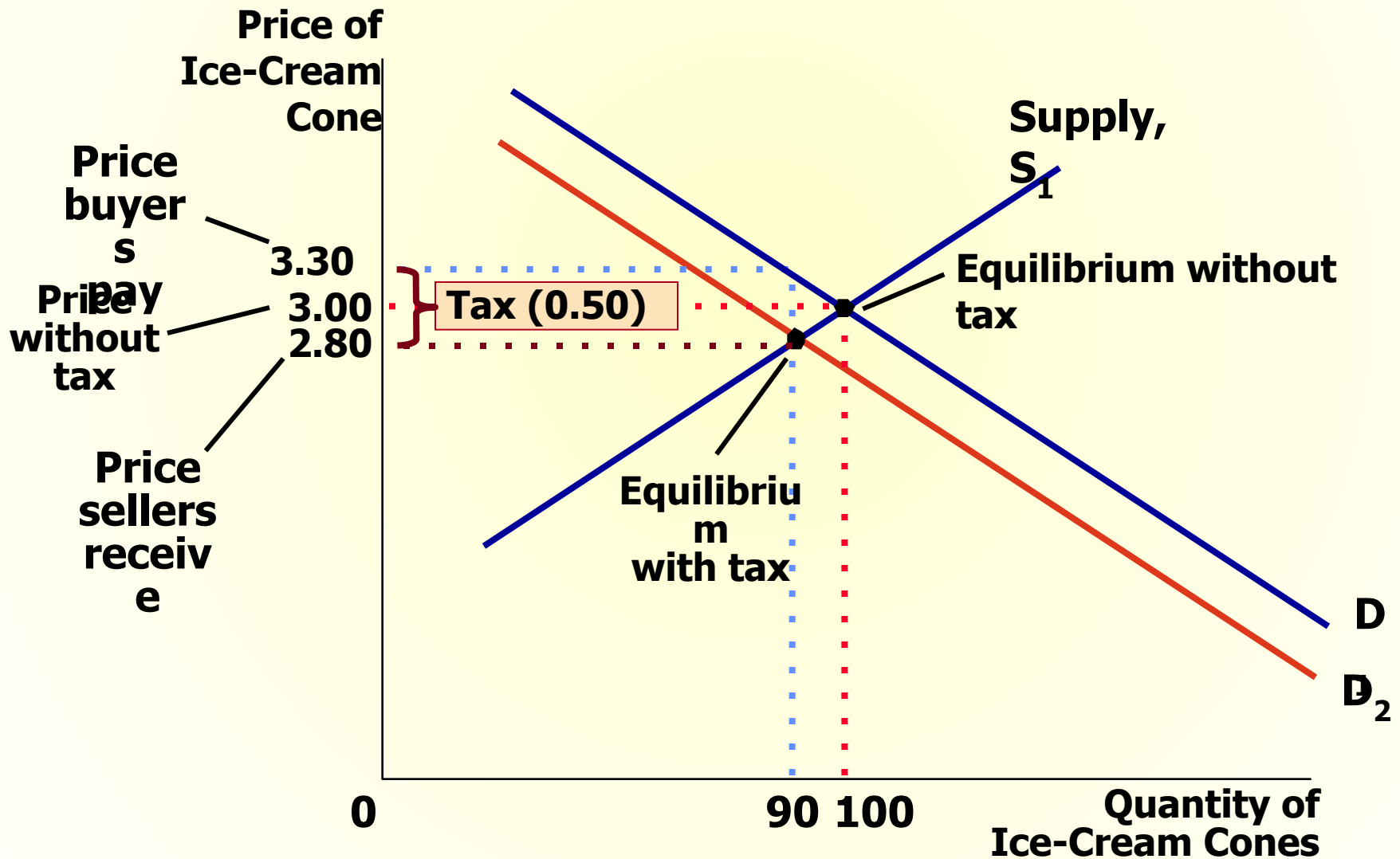
# Taxes

- **Tax incidence** is the study of who bears the burden of a tax.
- Taxes result in a change in market equilibrium.
- Buyers pay more and sellers receive less, regardless of whom the tax is levied on.

# *Impact of a Rs0.50 Tax Levied on Buyers...*



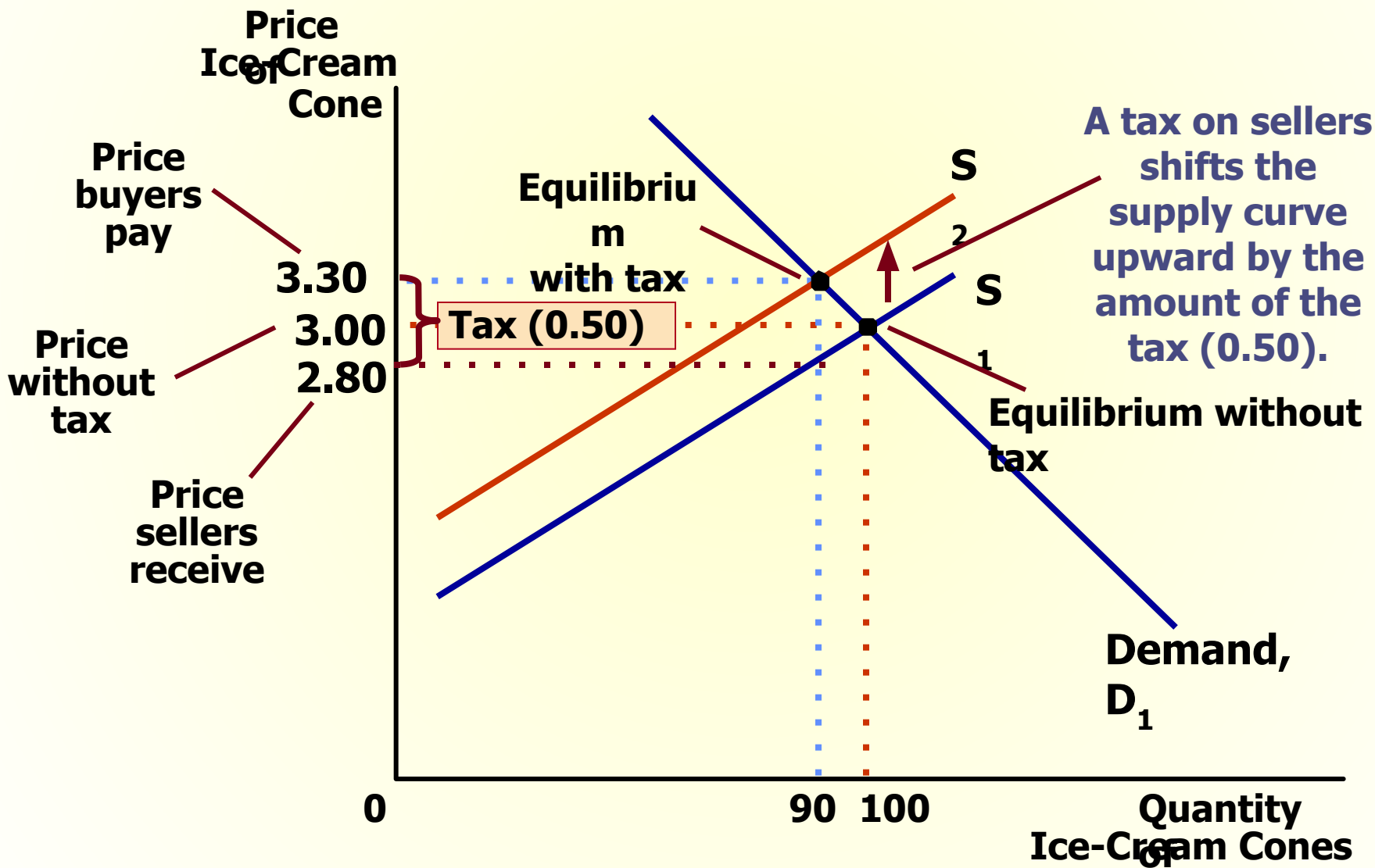
# Impact of a 50 paise Tax Levied on Buyers...



# What was the impact of tax?

- Taxes discourage market activity.
- When a good is taxed, the quantity sold is smaller.
- Buyers and sellers share the tax burden.

# Impact of a 50 paise Tax on Sellers...

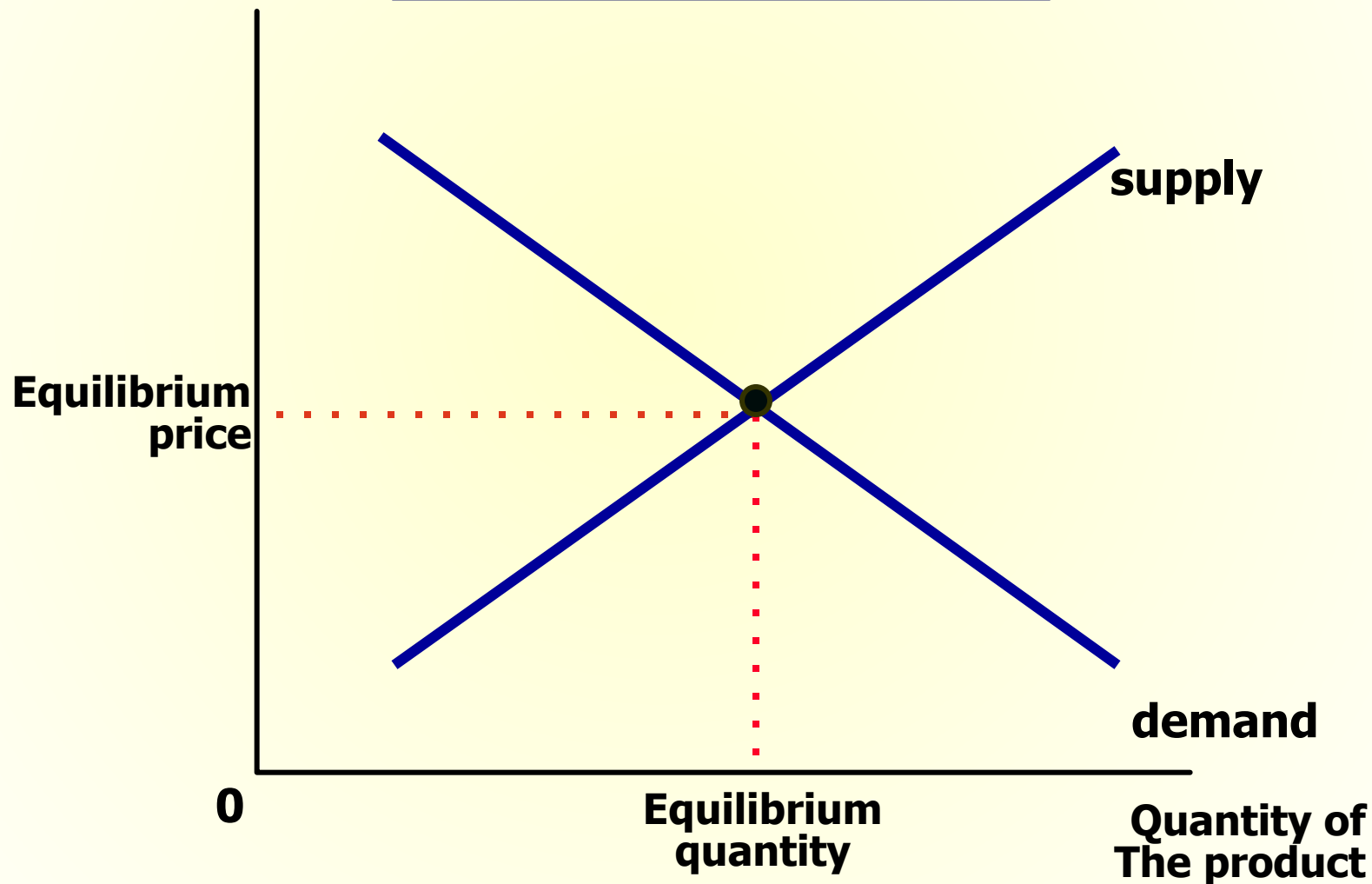


# The Incidence of Tax

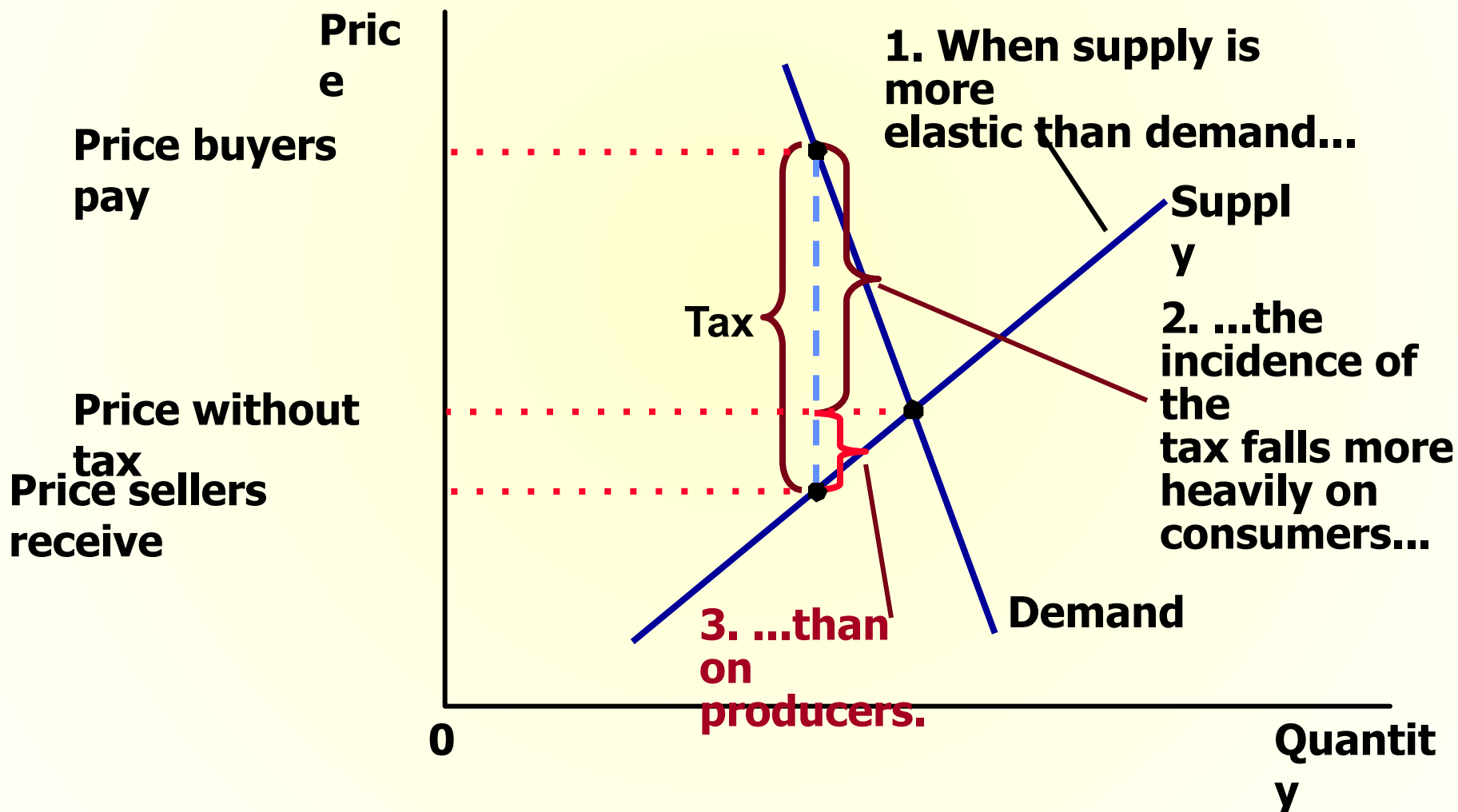
- In what proportions is the burden of the tax divided?
- How do the effects of taxes on sellers compare to those levied on buyers?

The answers to these questions depend on the **elasticity of demand** and the **elasticity of supply**.

## Market of a product

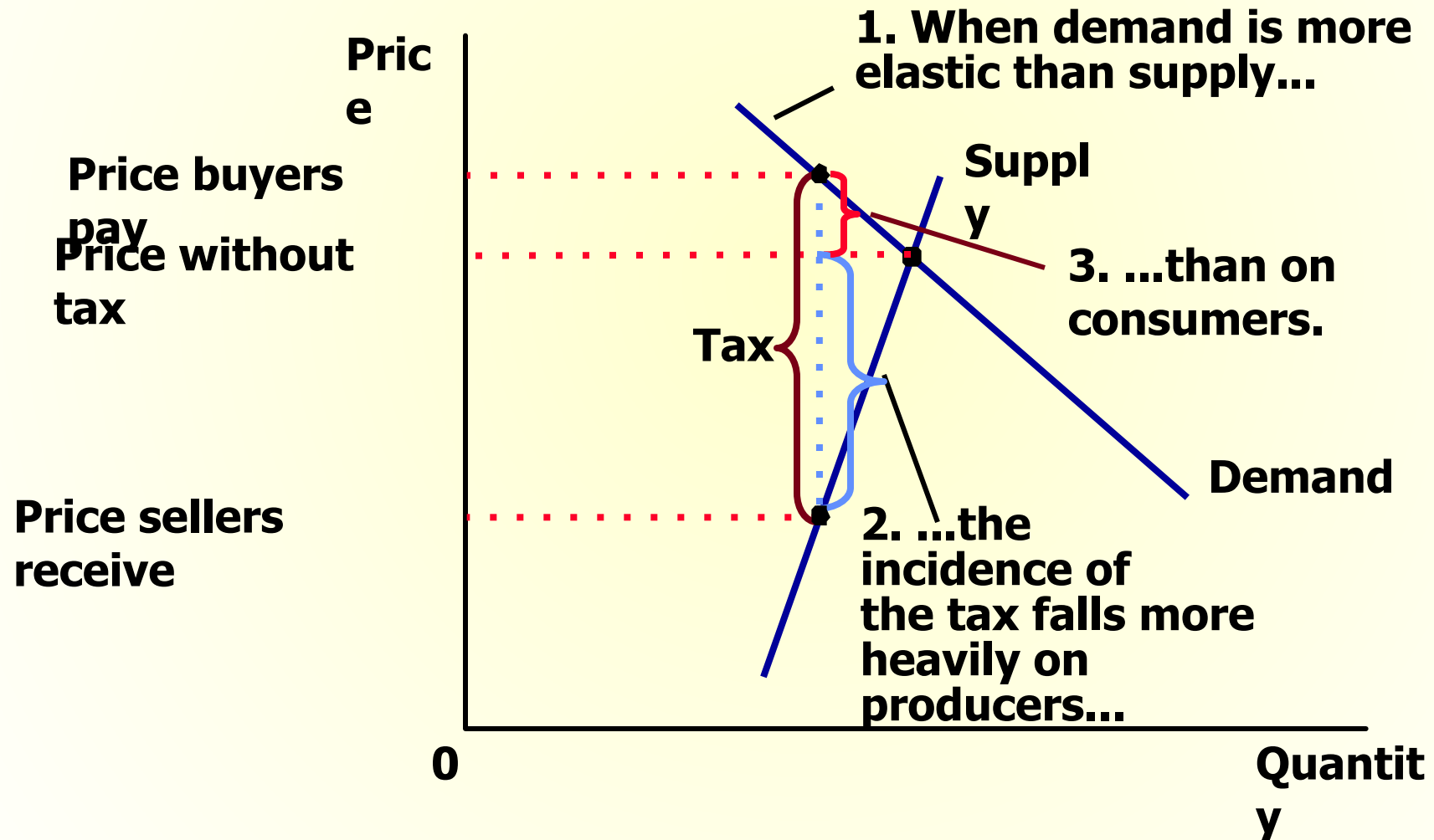


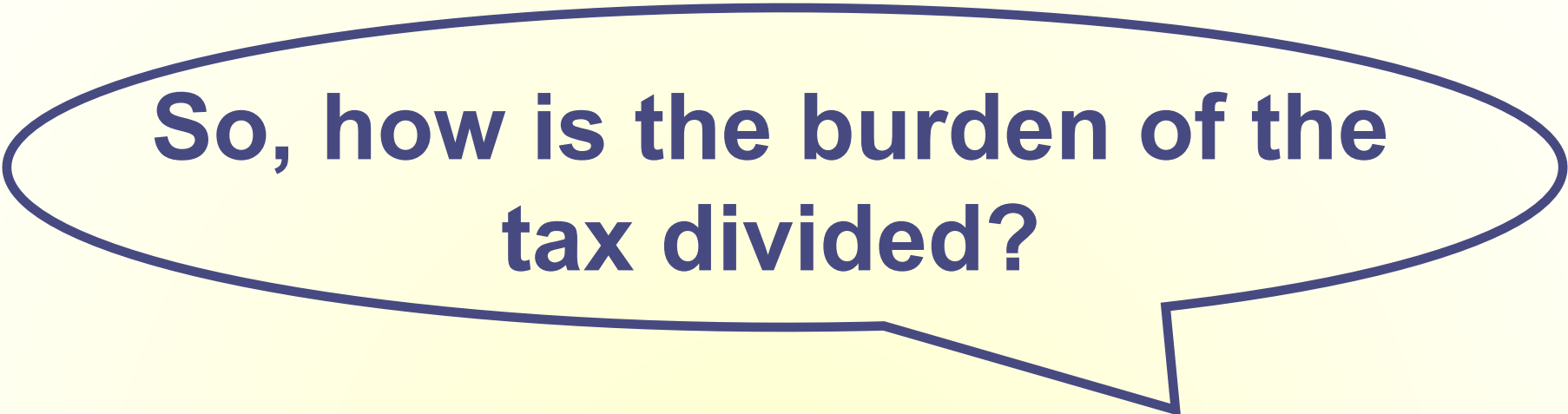
# *Elastic Supply, Inelastic Demand...*





# *Inelastic Supply, Elastic Demand...*





**So, how is the burden of the  
tax divided?**

**The burden of a tax falls more  
heavily on the side of the  
market that is less elastic.**

# Summary

- Price controls include price ceilings and price floors.
- A price ceiling is a legal maximum on the price of a good or service. An example is rent control.
- A price floor is a legal minimum on the price of a good or a service. An example is the minimum wage.

# Summary

- Taxes are used to raise revenue for public purposes.
- When the government levies a tax on a good, the equilibrium quantity of the good falls.
- A tax on a good places a wedge between the price paid by buyers and the price received by sellers.

# Summary

- The incidence of a tax refers to who bears the burden of a tax.
- The incidence of a tax does not depend on whether the tax is levied on buyers or sellers.
- The incidence of the tax depends on the price elasticities of supply and demand.