

Supply, Demand and Government Policies

Chapter 6

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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.**

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

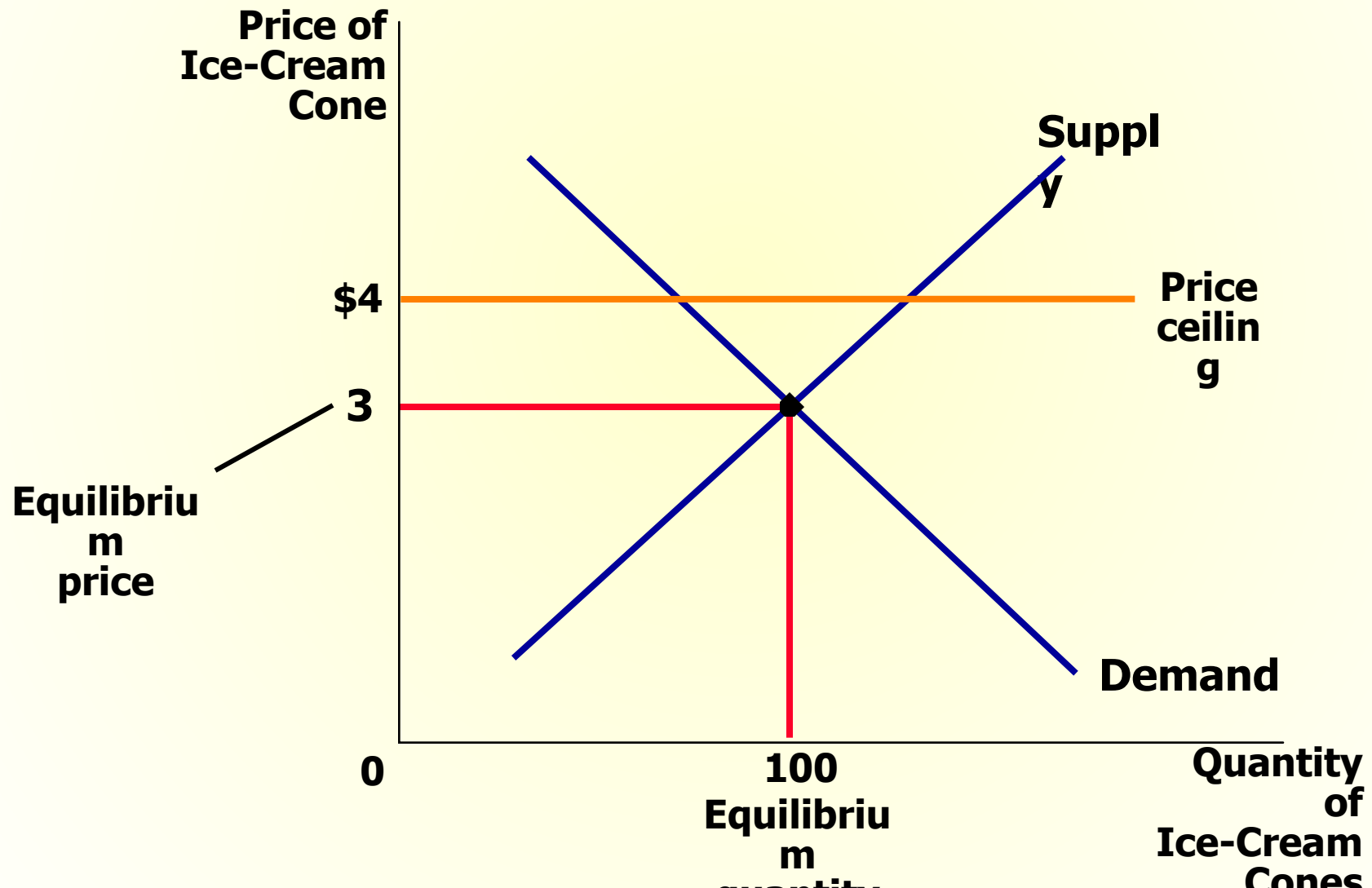
- A legally established minimum price at which a good can be sold.

Price Ceilings

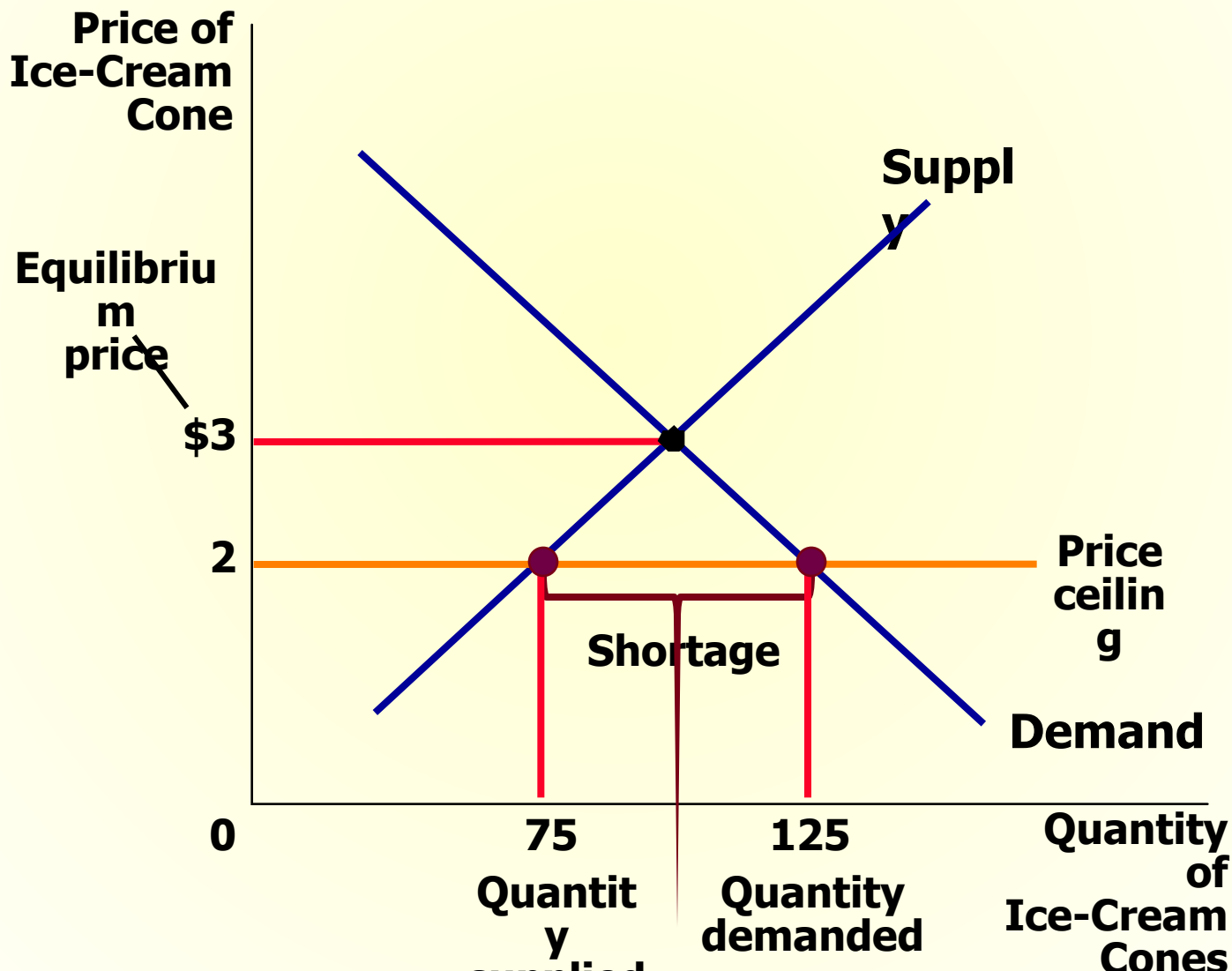
Two outcomes are possible when the government imposes a price ceiling:

- 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**

Lines at the Gas Pump

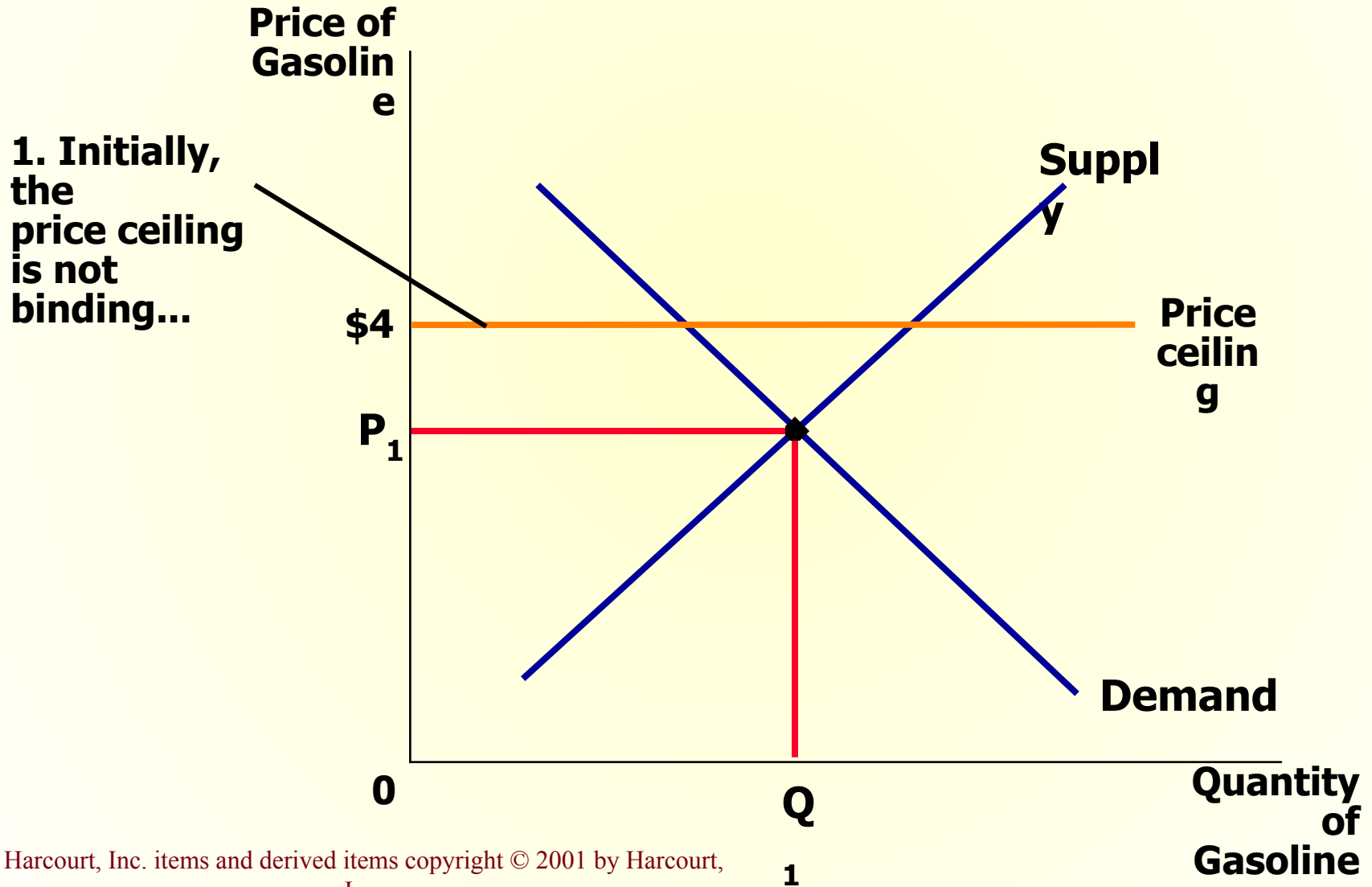
In 1973 OPEC raised the price of crude oil in world markets. Because crude oil is the major input used to make gasoline, the higher oil prices reduced the supply of gasoline.



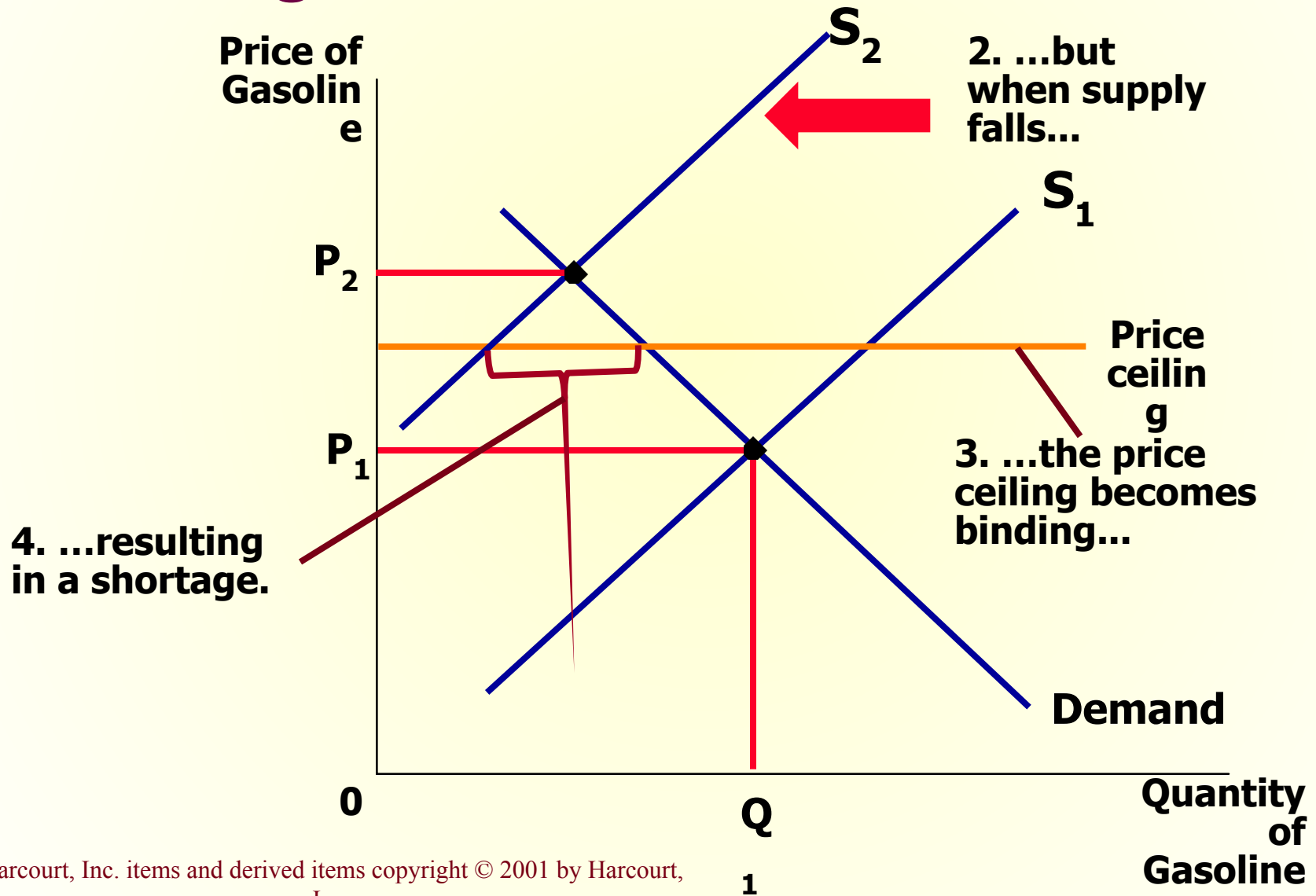
What was responsible for the long gas lines?

Economists blame government regulations that limited the price oil companies could charge for gasoline.

The Price Ceiling on Gasoline Is Not Binding...



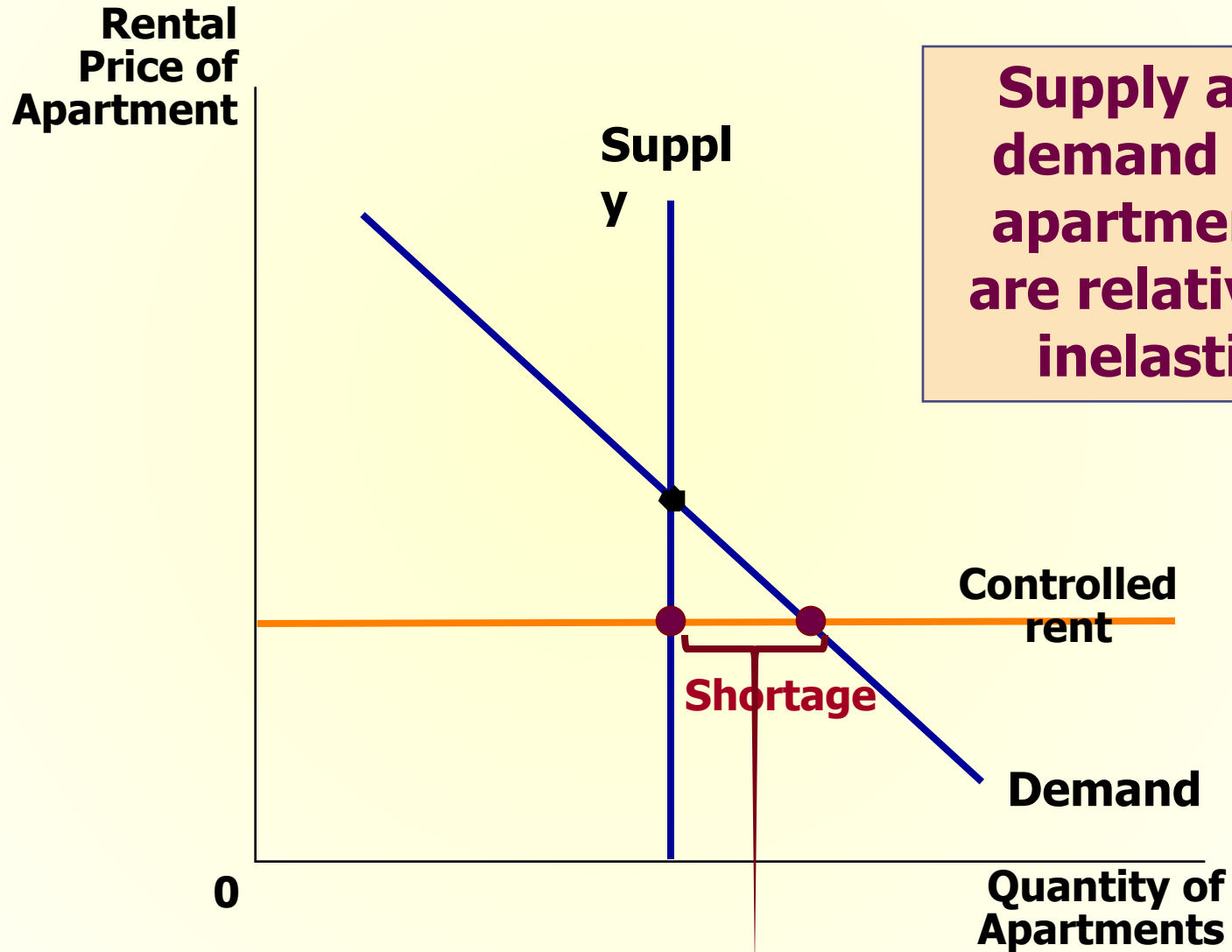
The Price Ceiling on Gasoline Is Binding...



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...

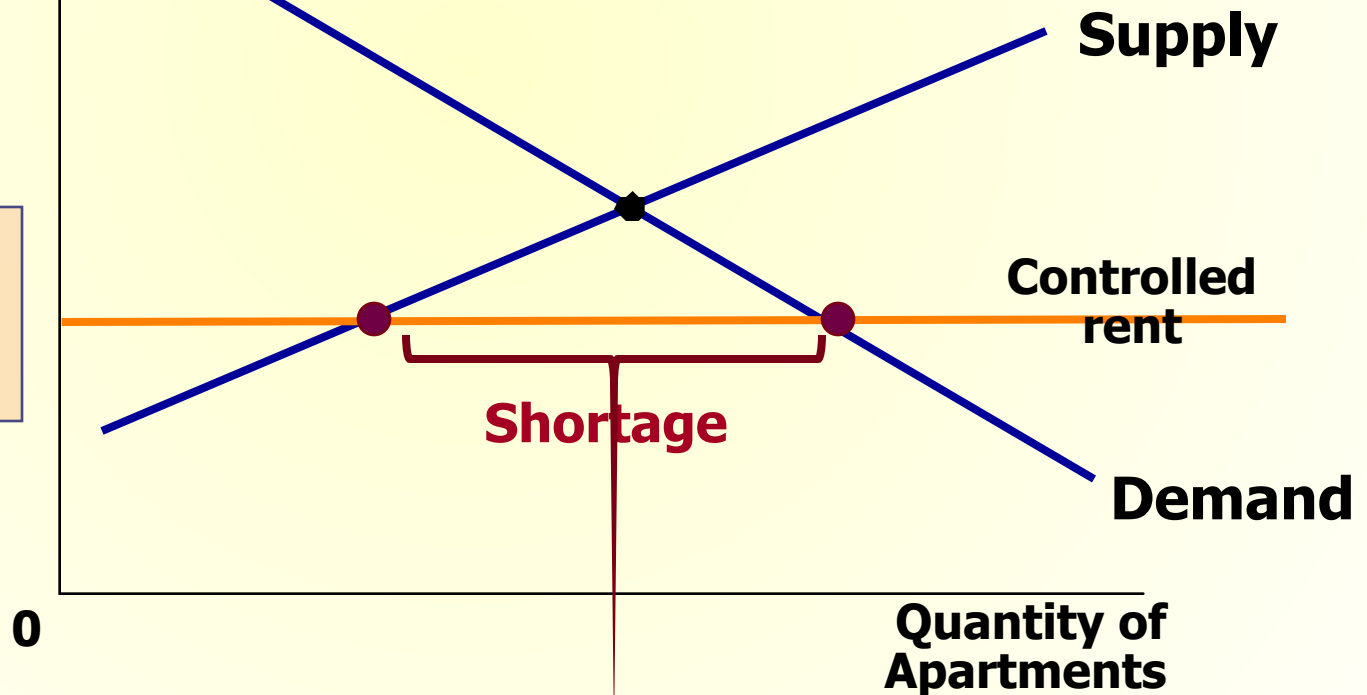


Rent Control in the Long Run...

Rental
Price of
Apartment

Because the
supply and
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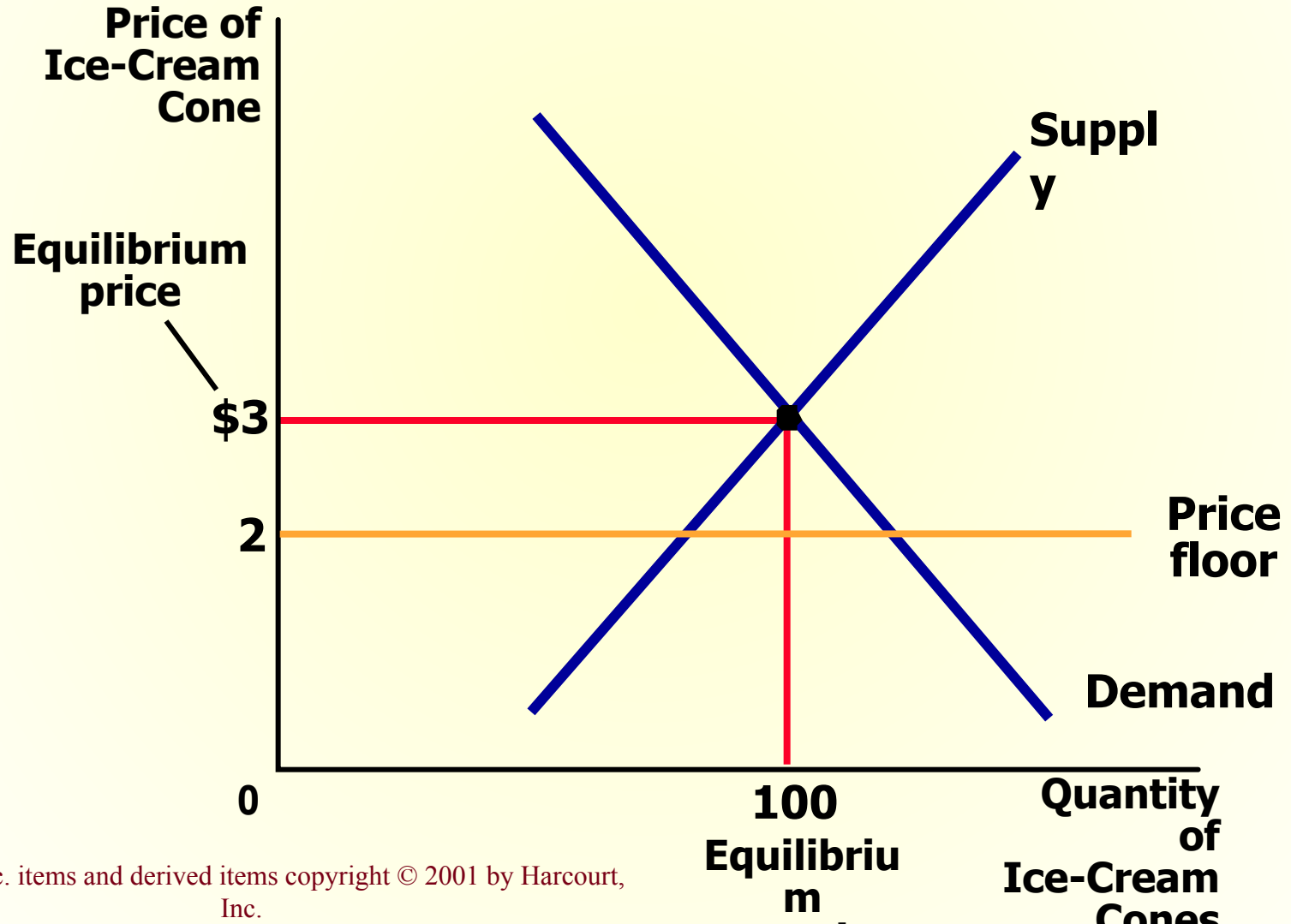


Price Floors

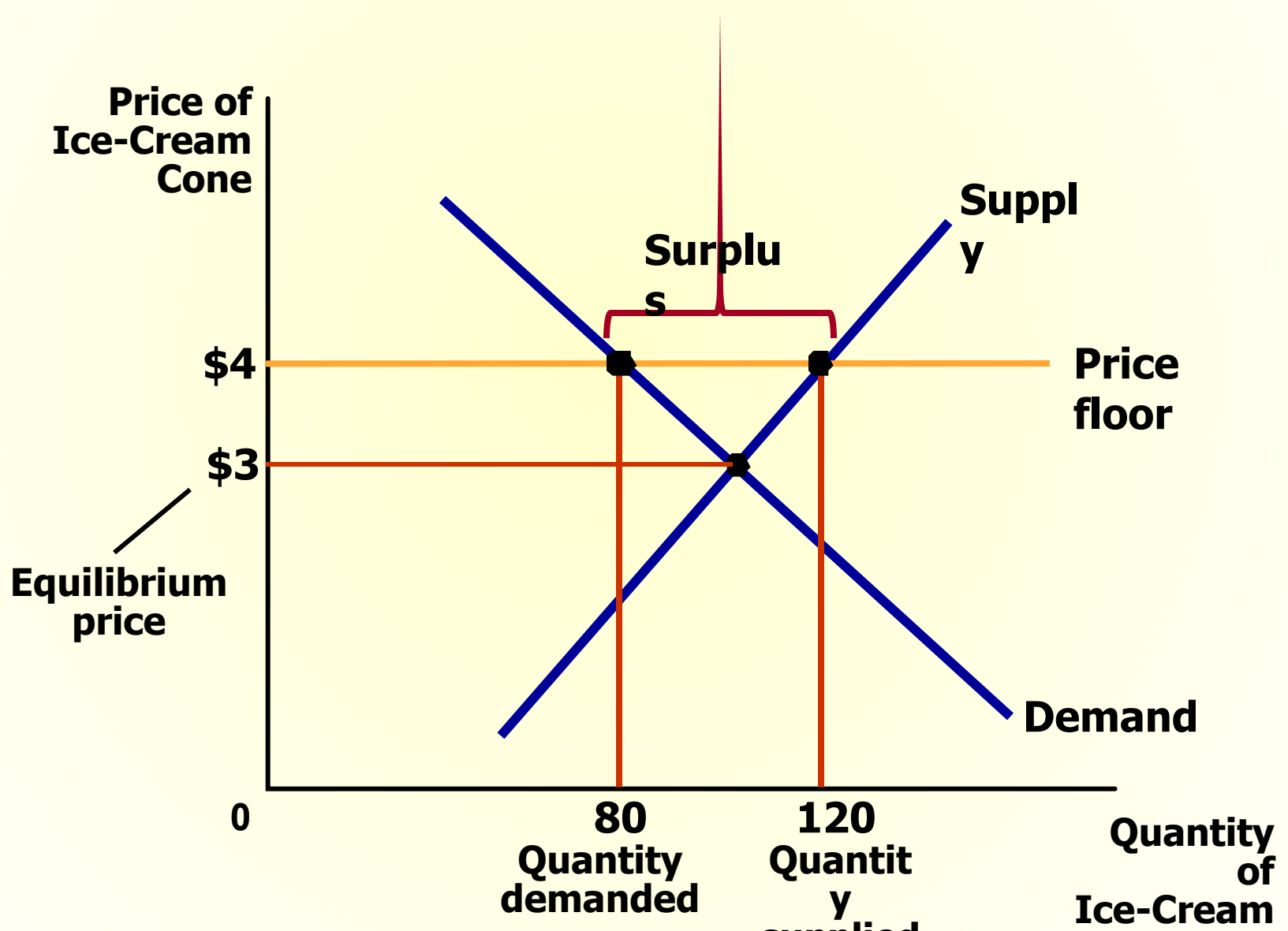
When the government imposes a price floor, two outcomes are possible.

- 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.

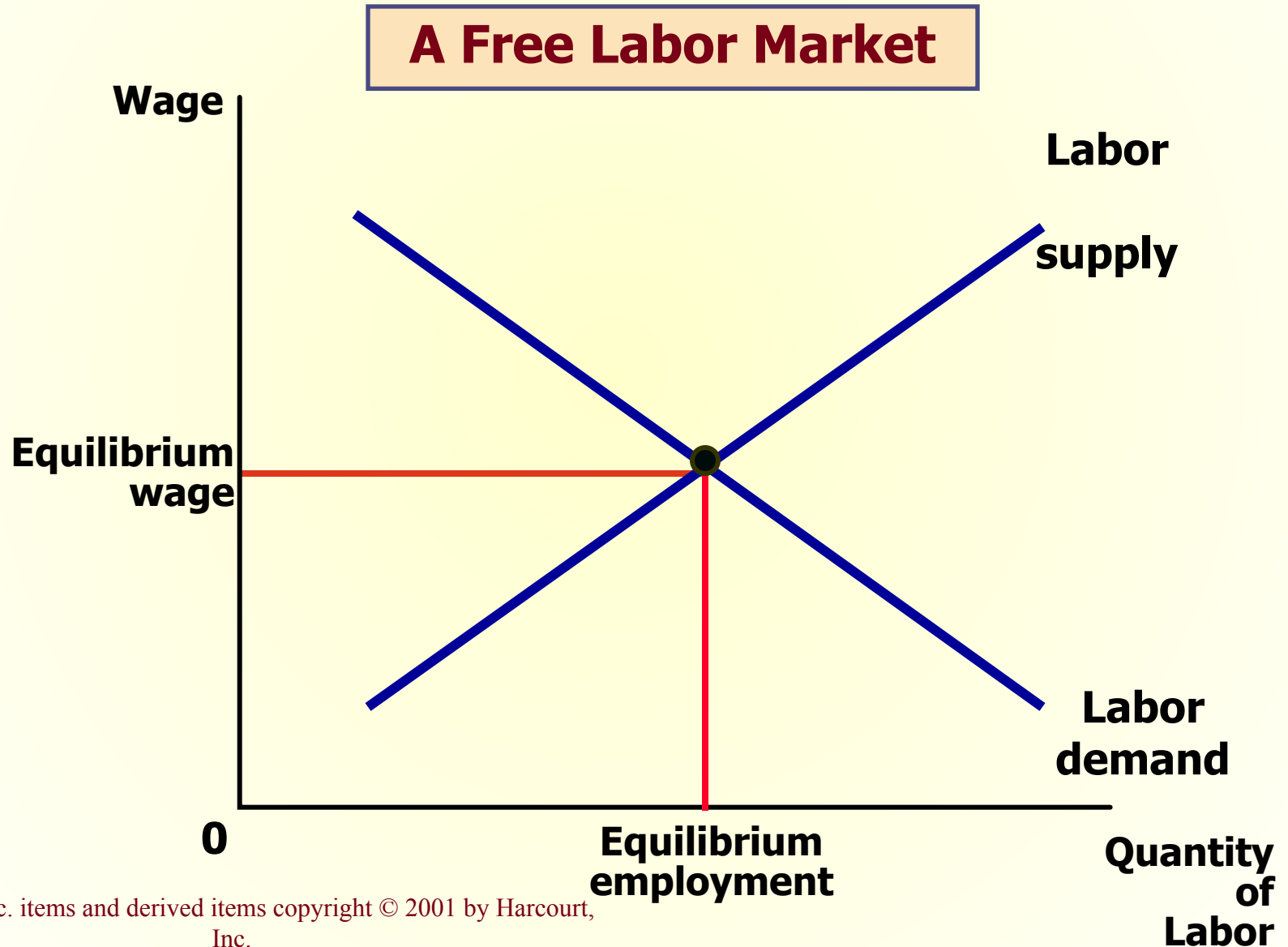
- **Examples: The minimum wage, Agricultural price supports**

The Minimum Wage

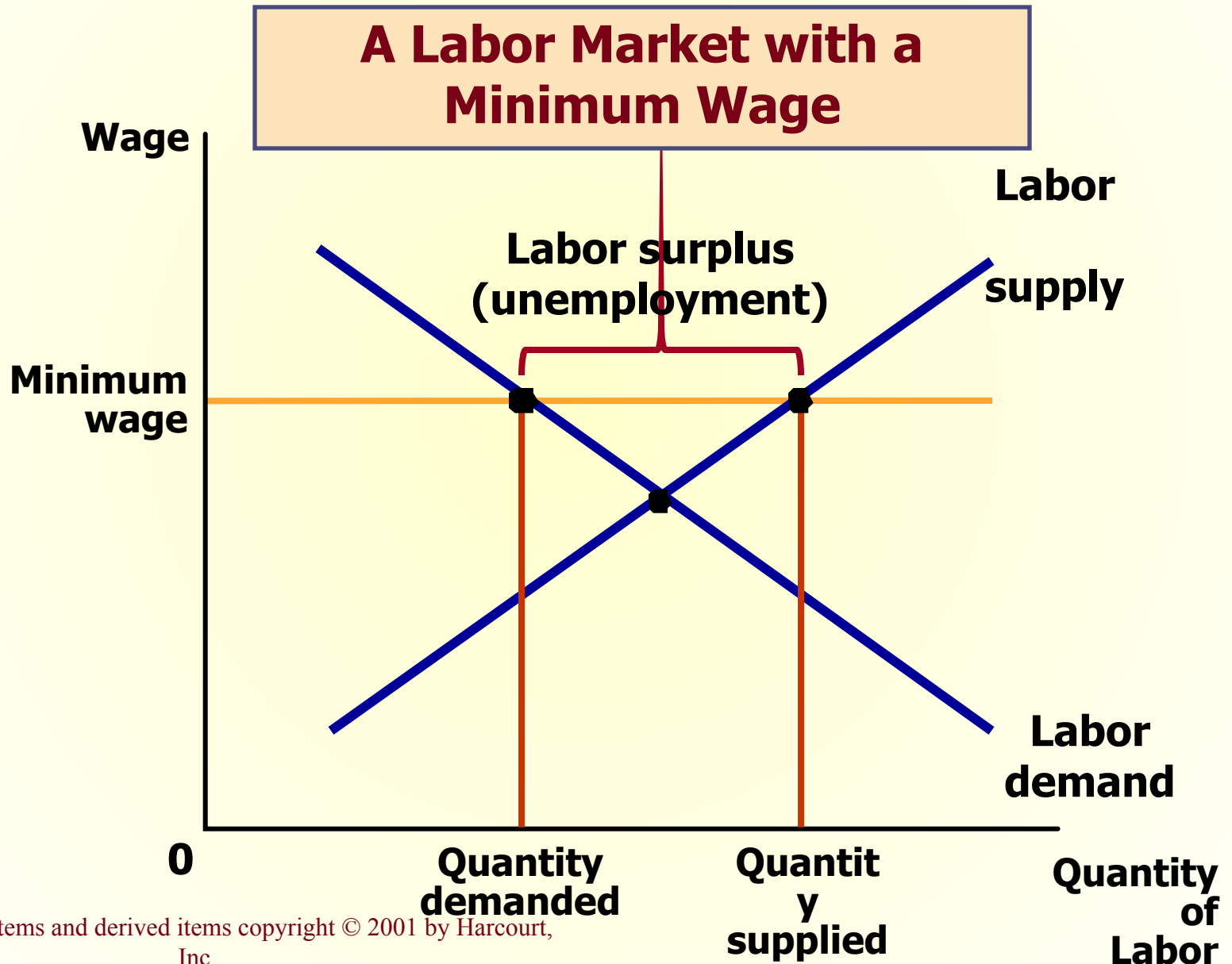
An important example of a price floor is the minimum wage. Minimum wage laws dictate the lowest price possible for labor that any employer may pay.



The Minimum Wage



The Minimum Wage



Taxes

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

What are some potential impacts of taxes?

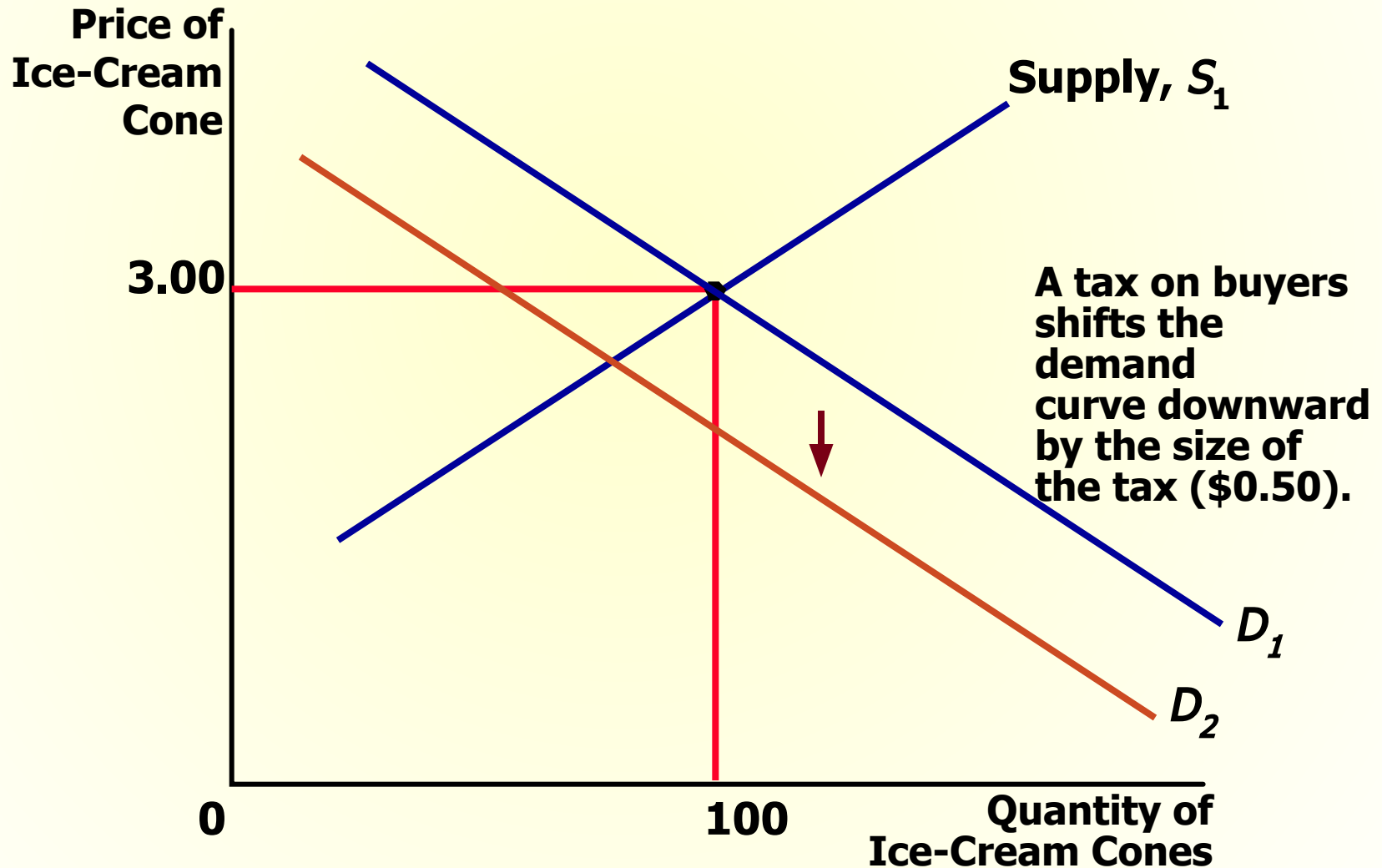


- Taxes discourage market activity.
- When a good is taxed, the quantity sold is smaller.
- Buyers and sellers share the tax burden.

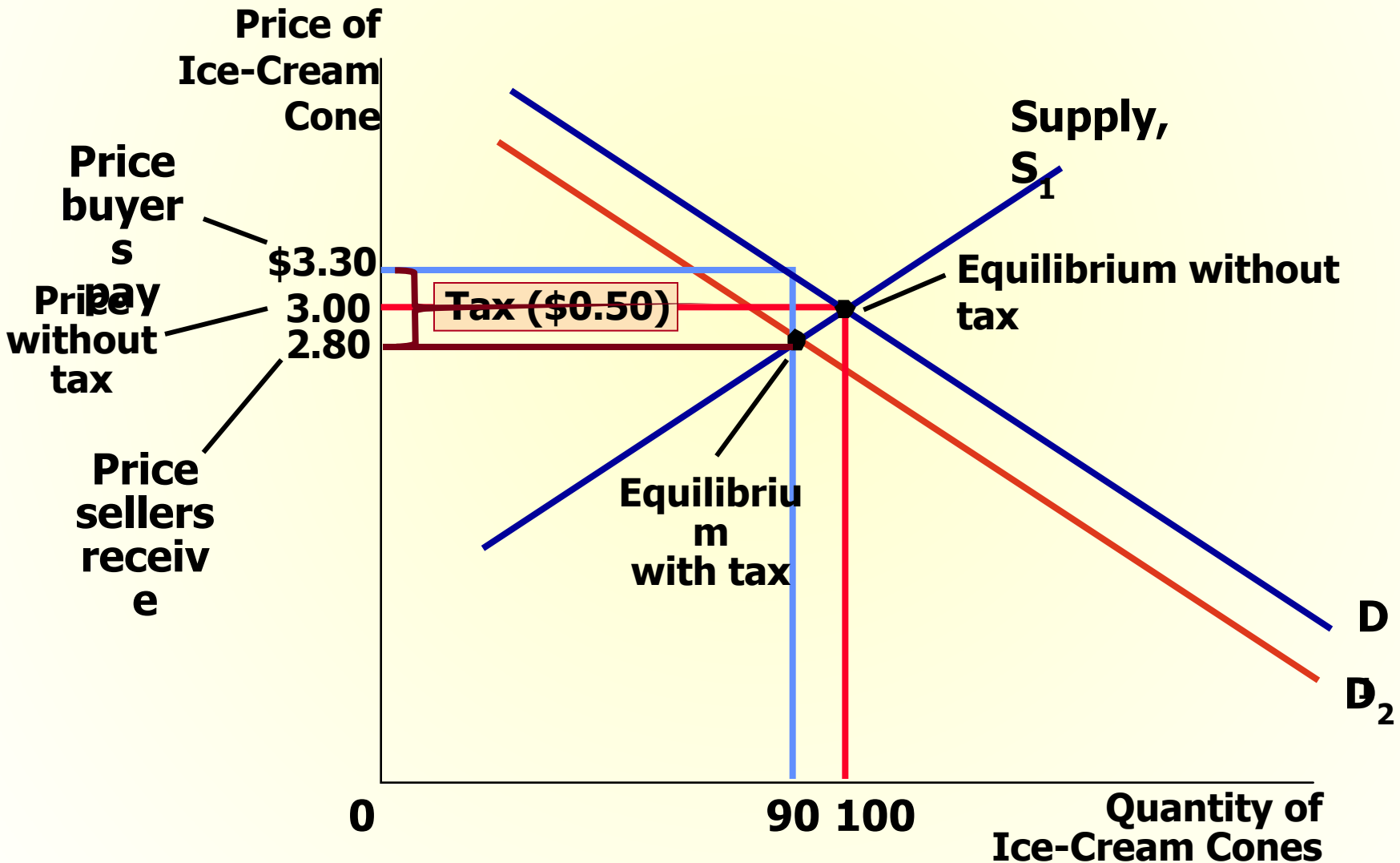
Taxes

- **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 50¢ Tax Levied on Buyers...



Impact of a 50¢ Tax Levied on Buyers...

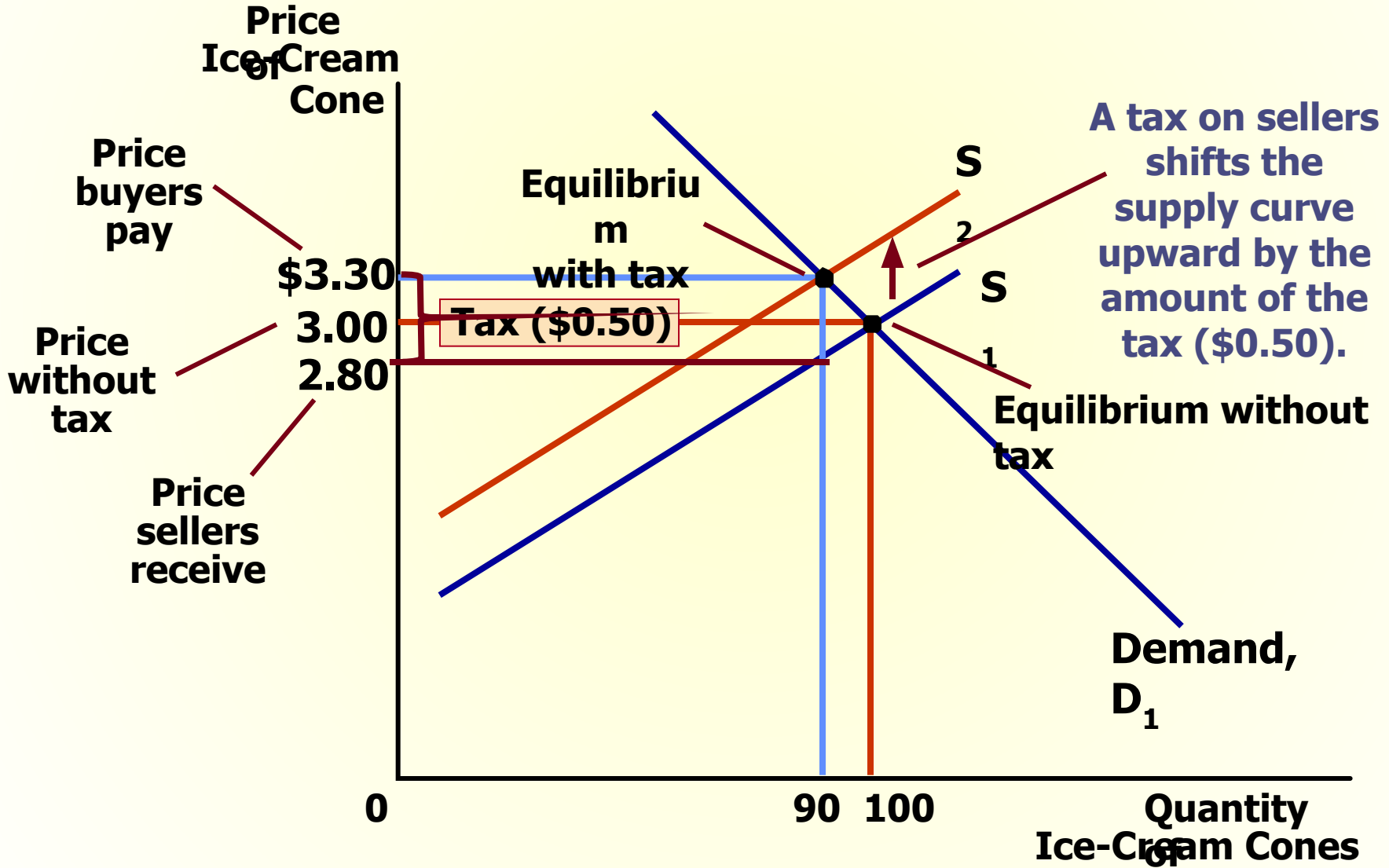


What was the impact of tax?

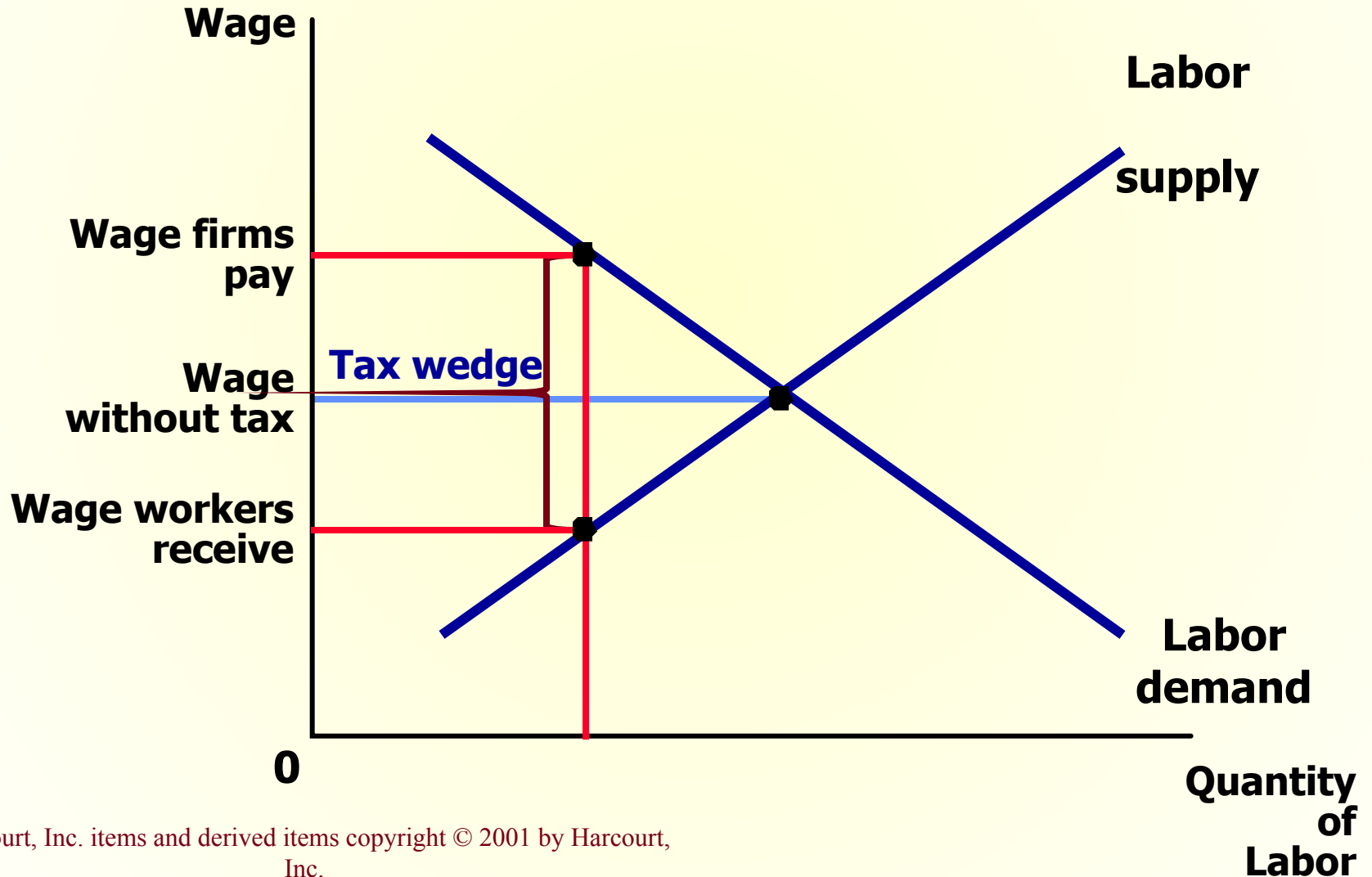


- Taxes discourage market activity.
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Impact of a 50¢ Tax on Sellers...



A Payroll Tax

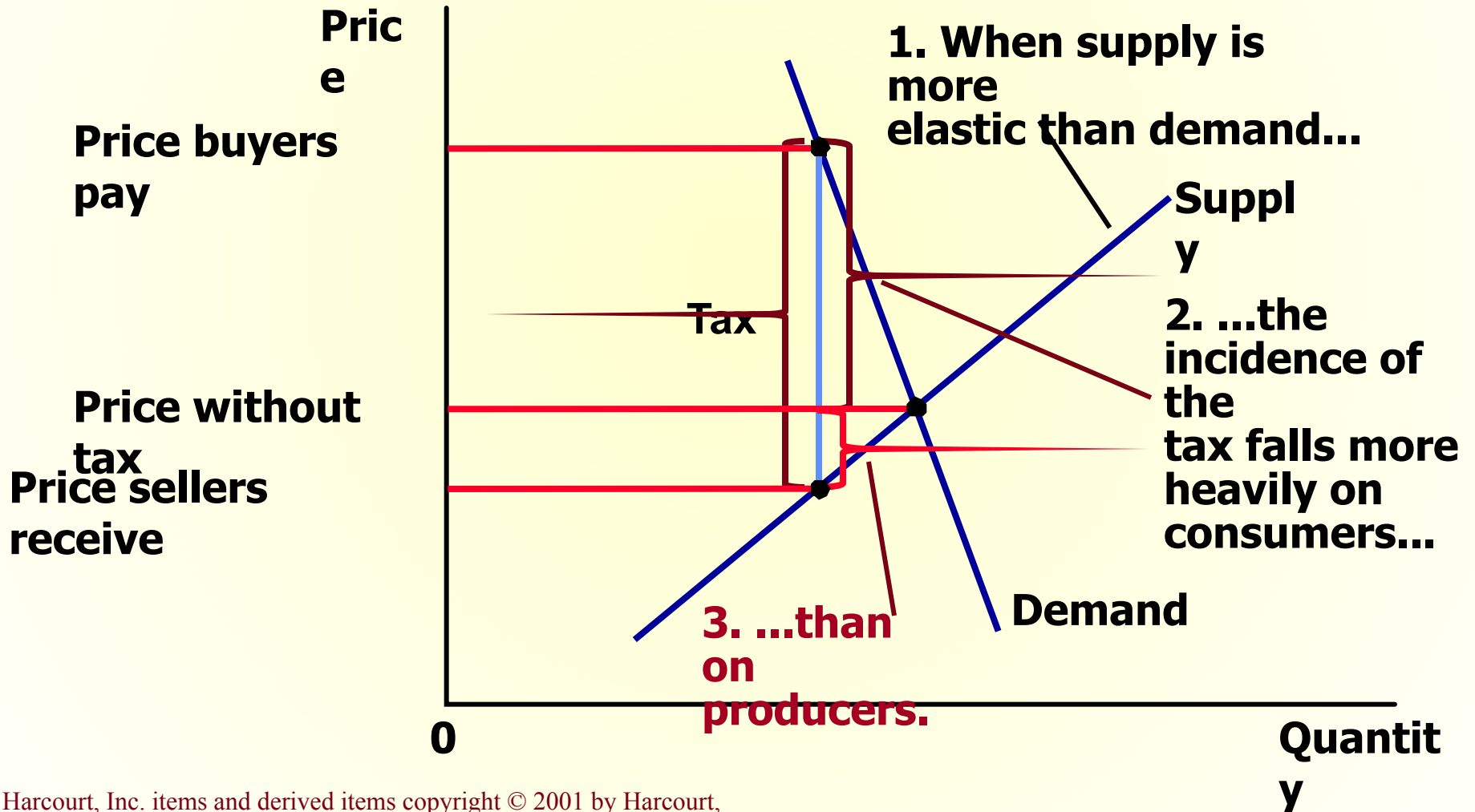


The Incidence of Tax

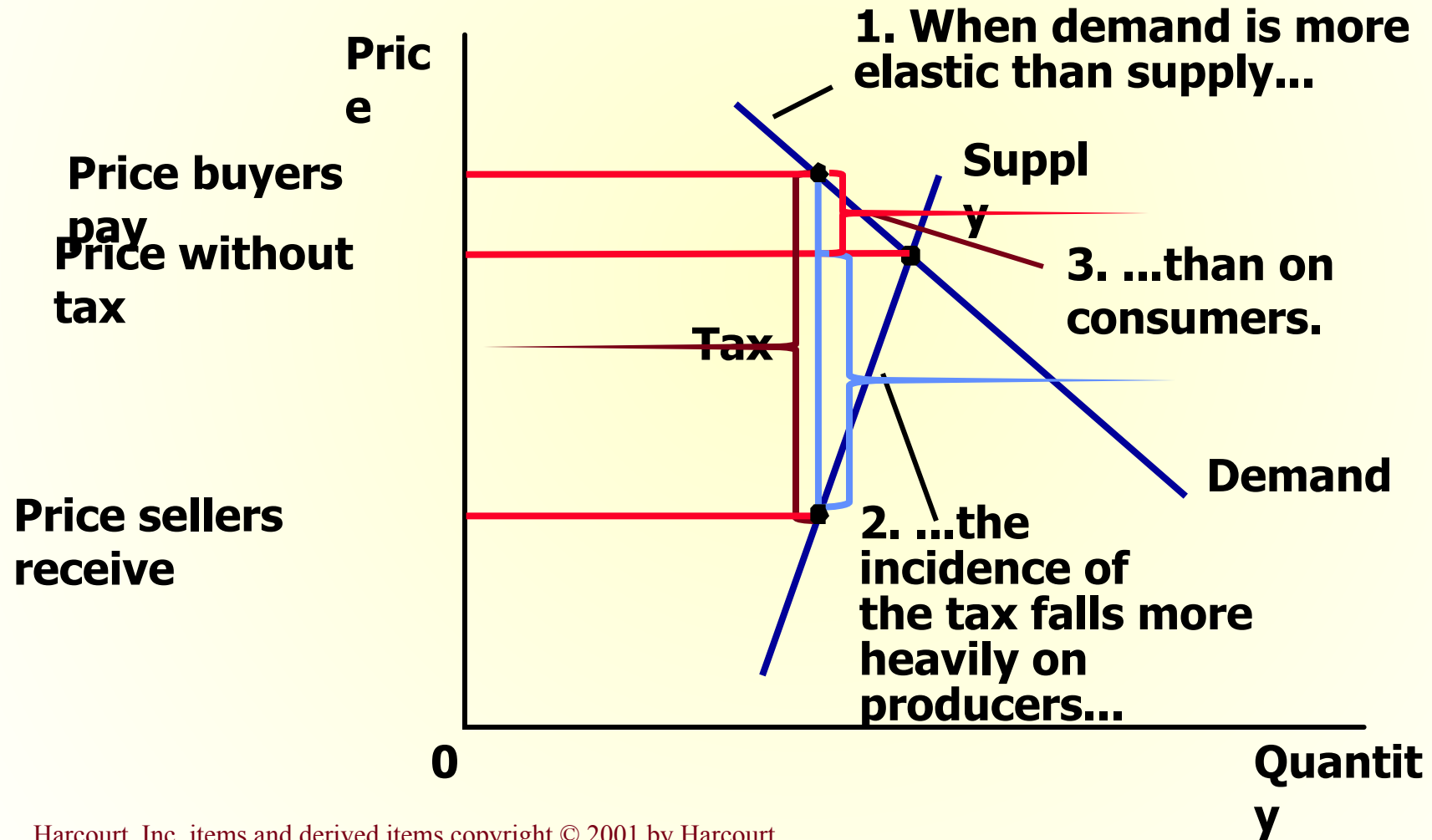
- In what proportions is the burden of the tax divided?
- How do the effects of taxes on sellers compare to those levied on buyers?

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

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.**

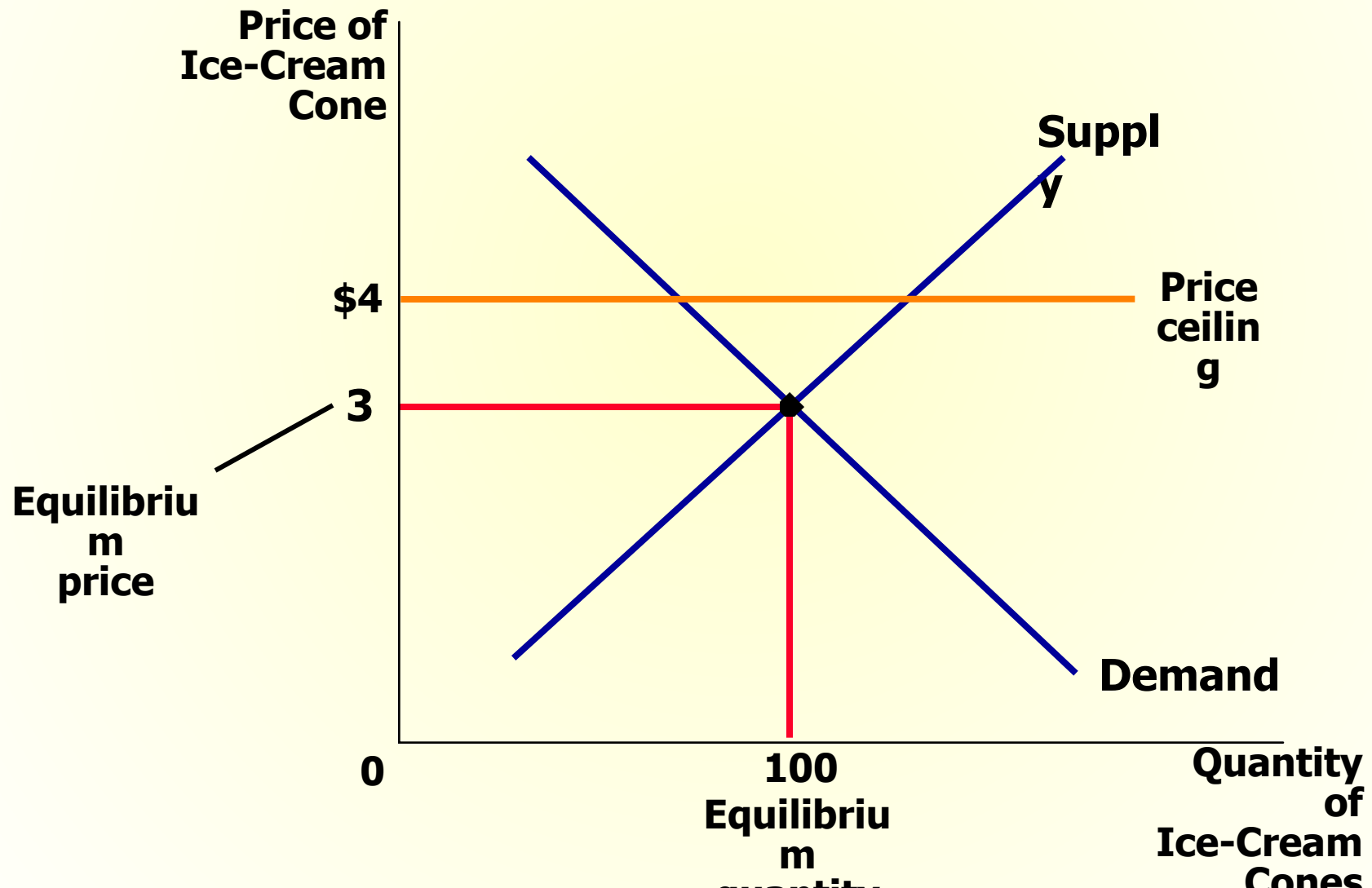
Summary

- **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.**

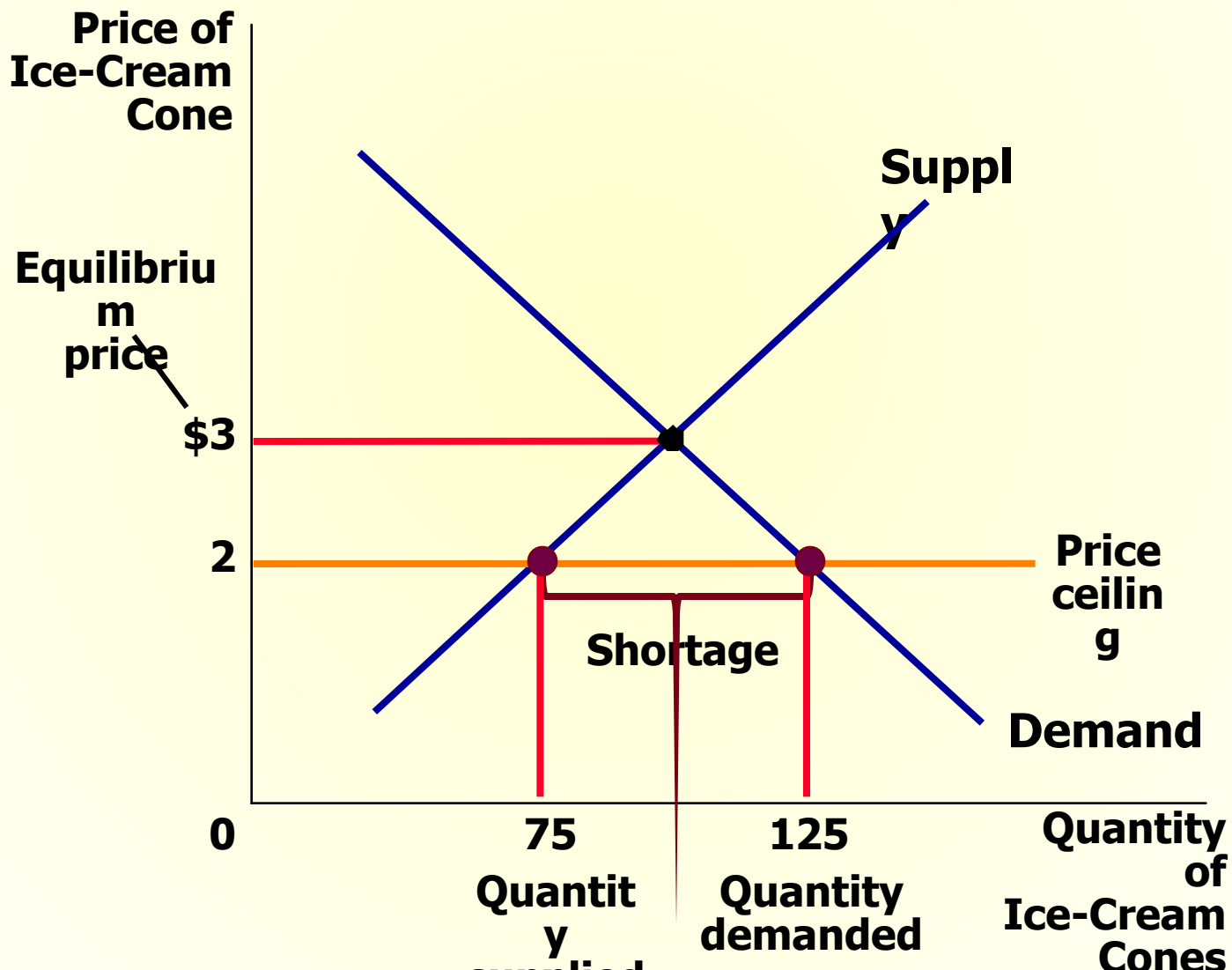


Graphical Review

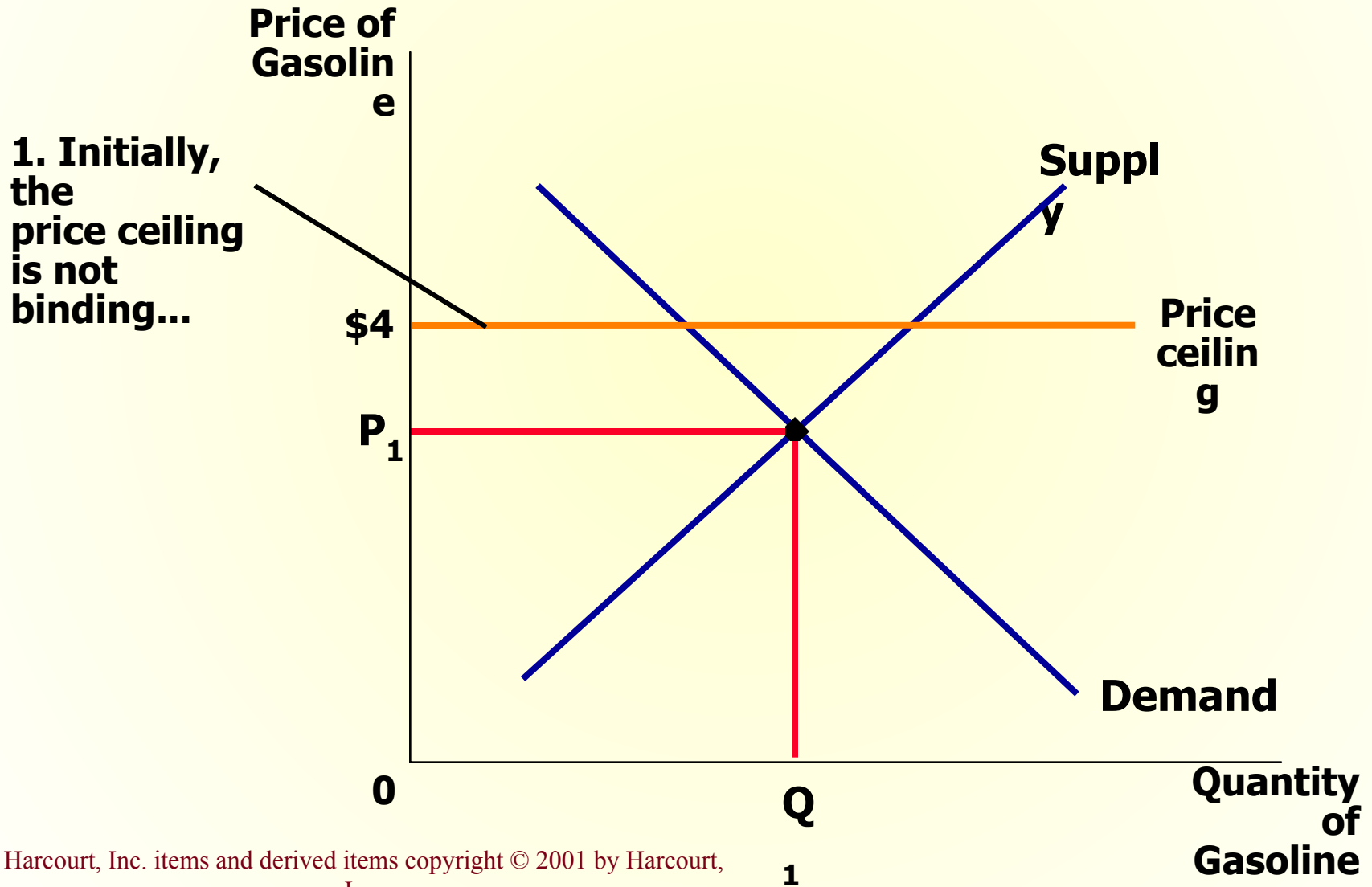
A Price Ceiling That Is Not Binding...



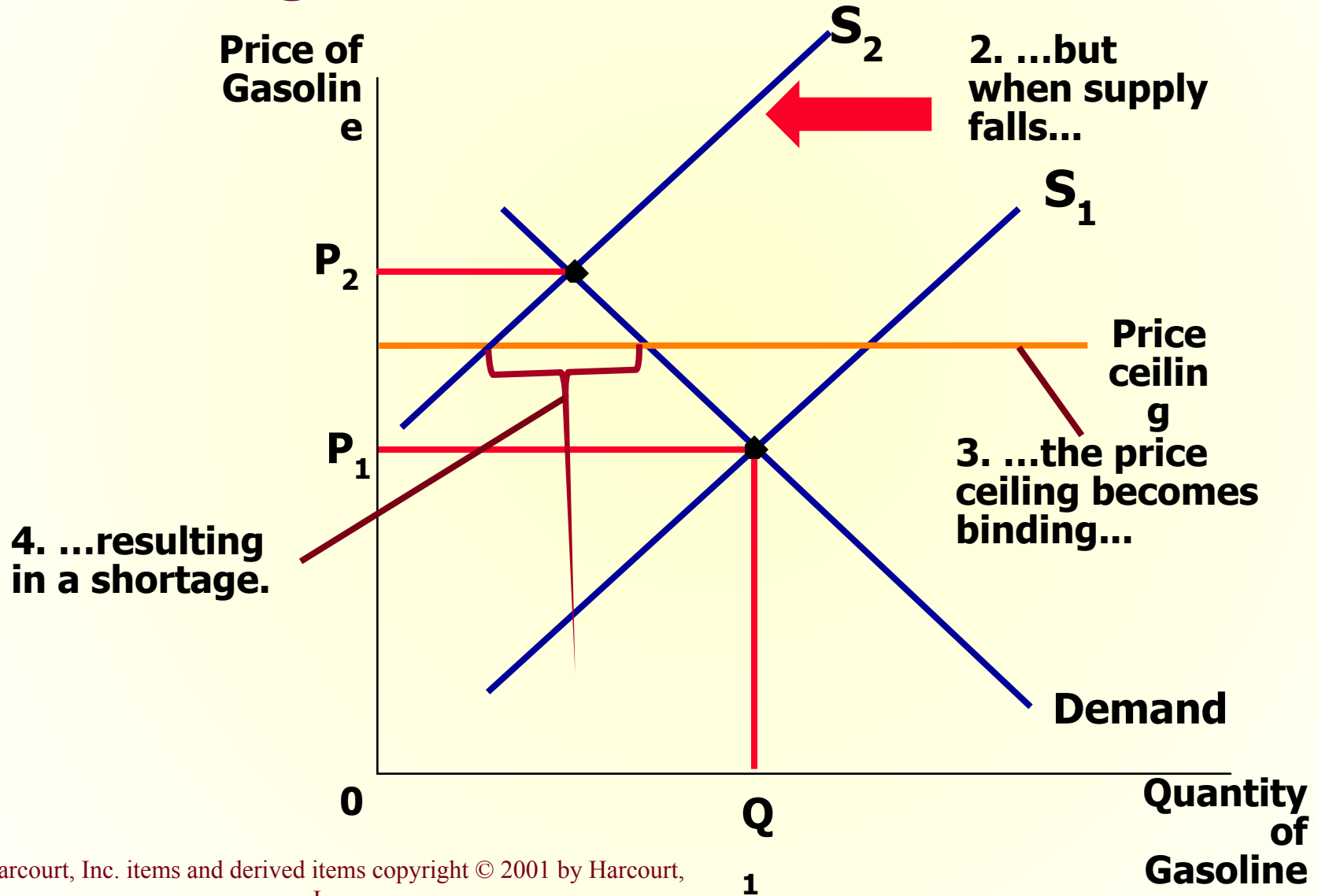
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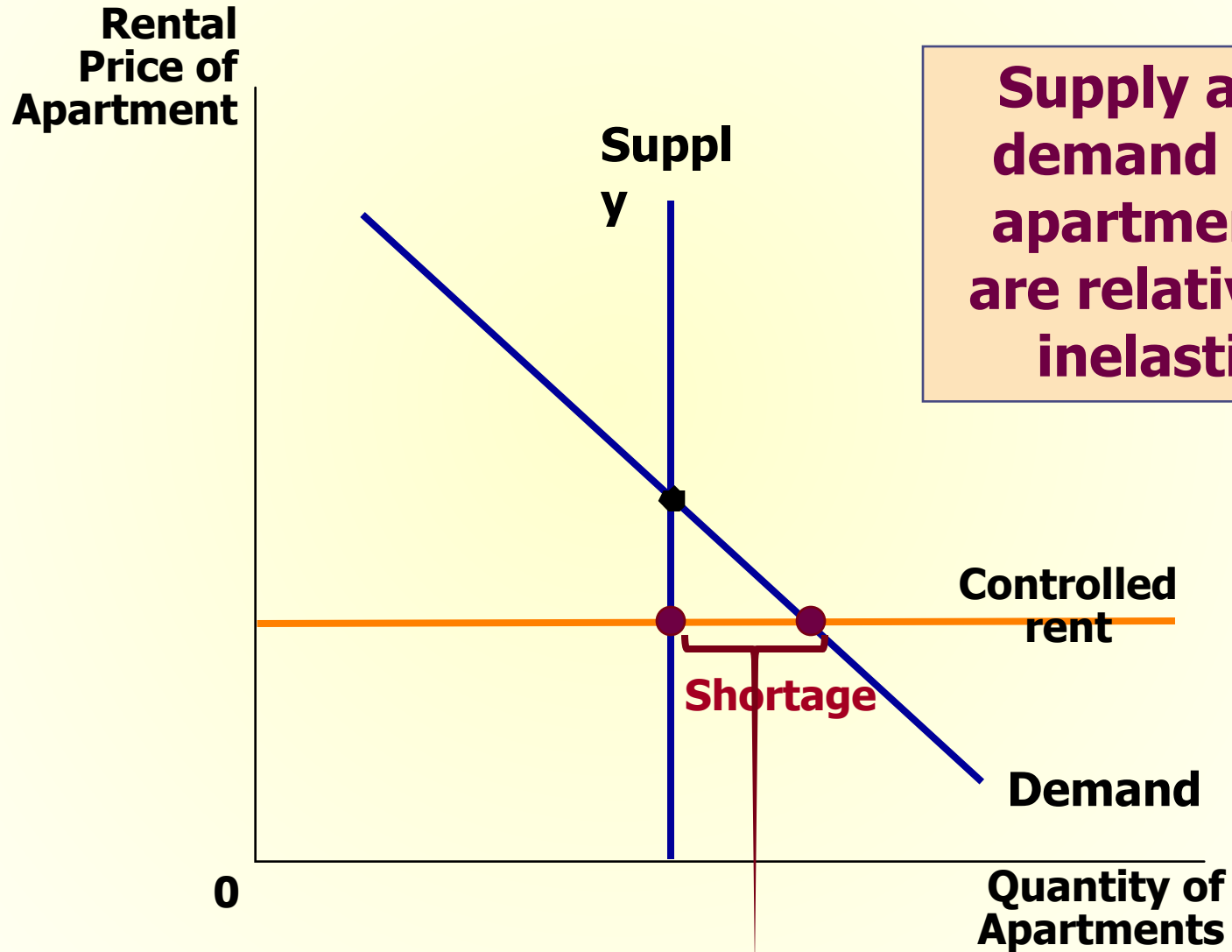
The Price Ceiling on Gasoline Is Not Binding...



The Price Ceiling on Gasoline Is Binding...



Rent Control in the Short Run...

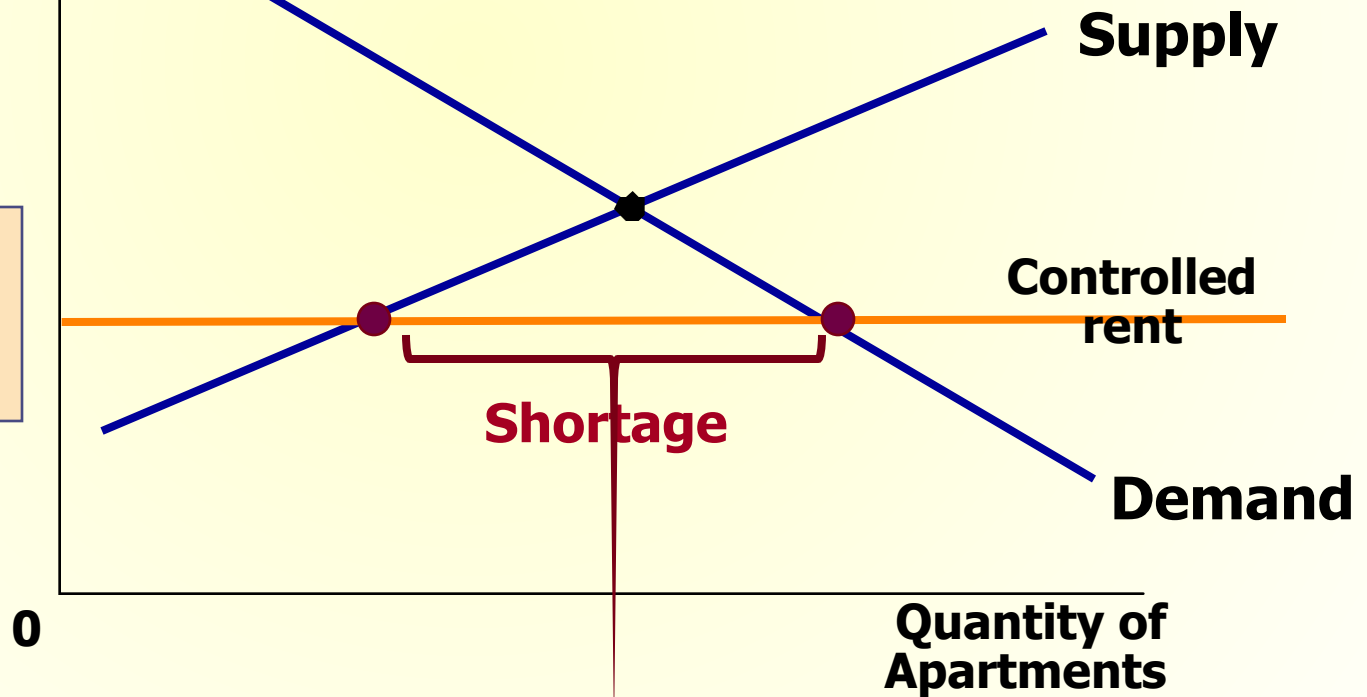


Rent Control in the Long Run...

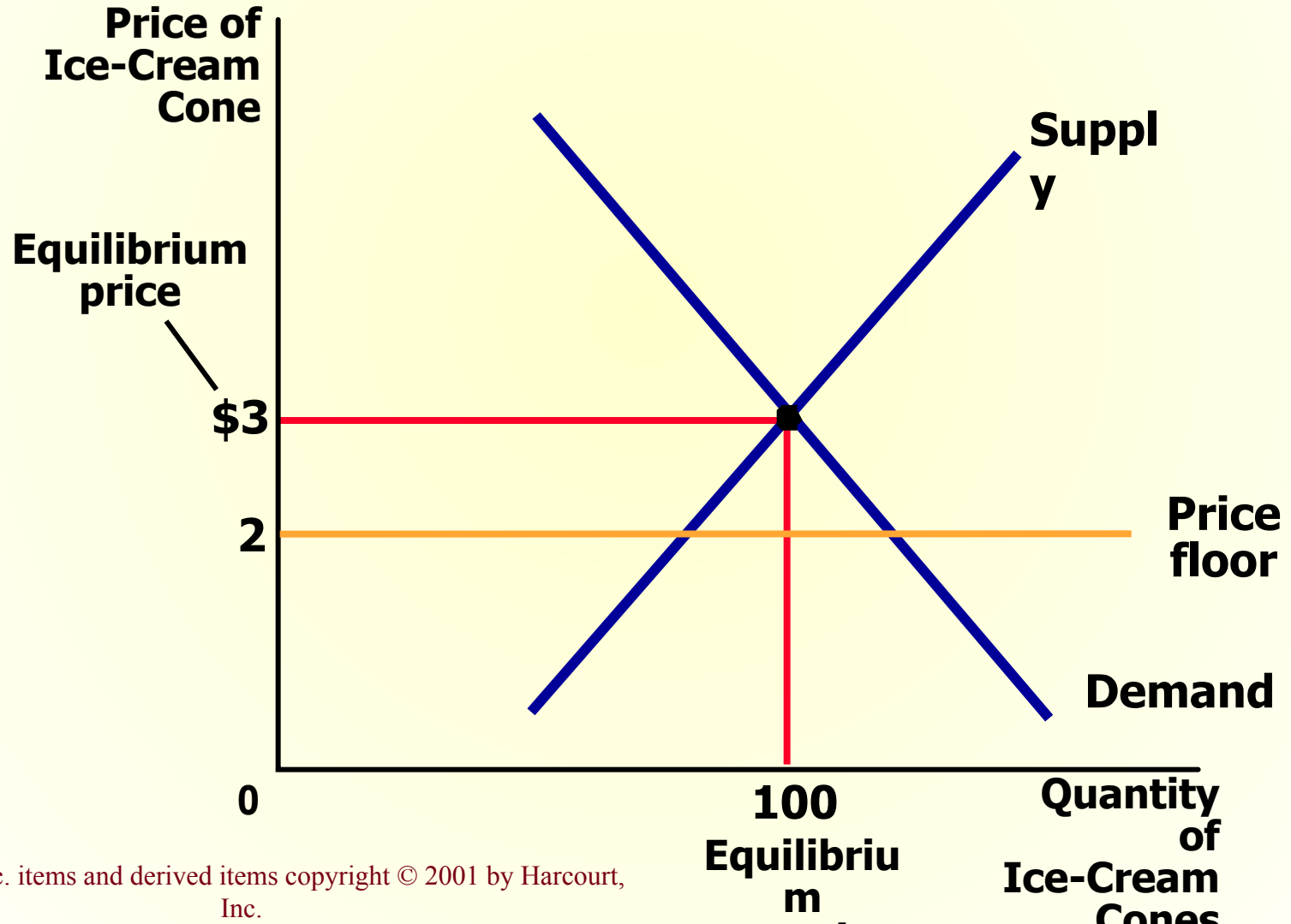
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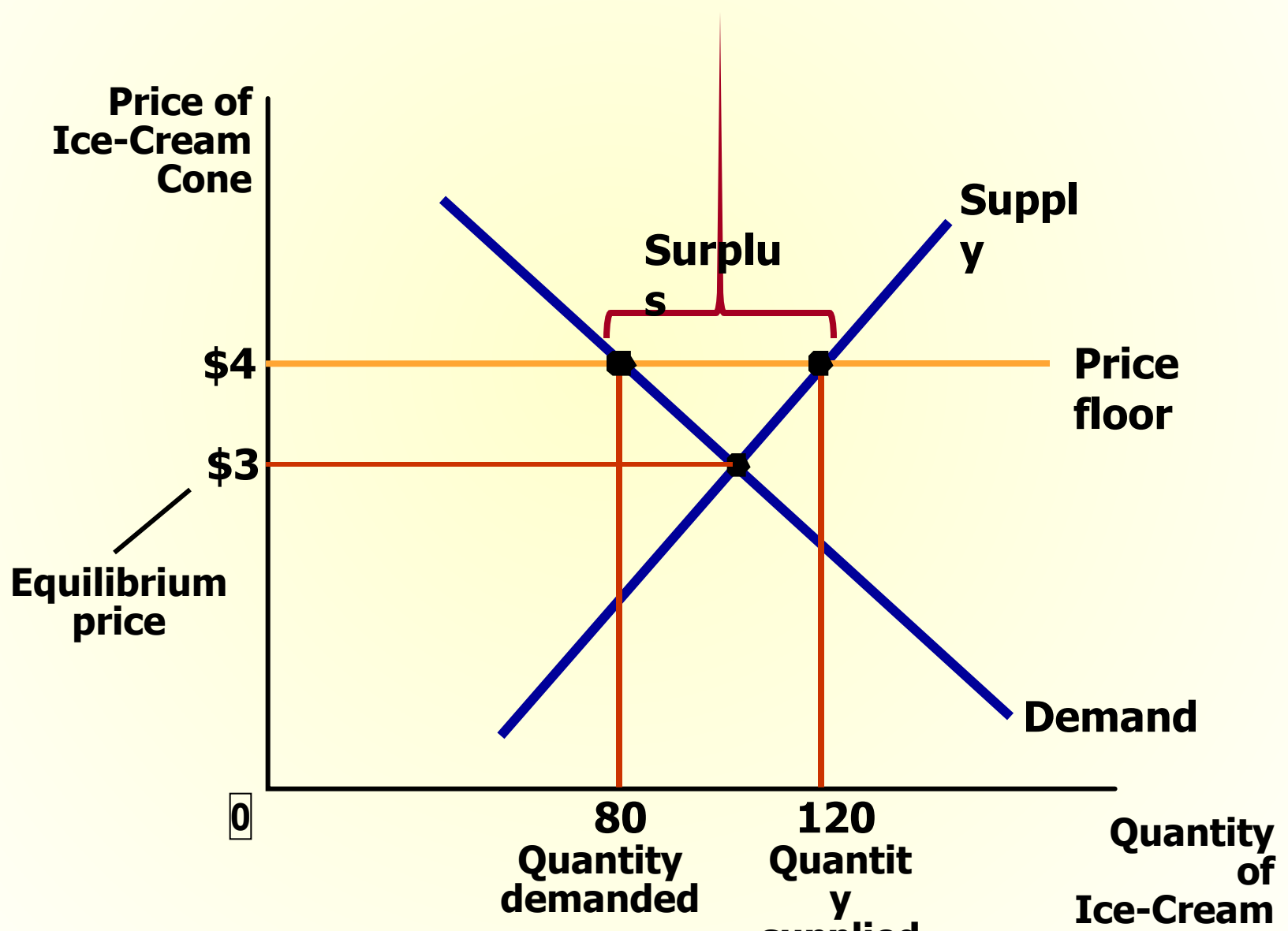
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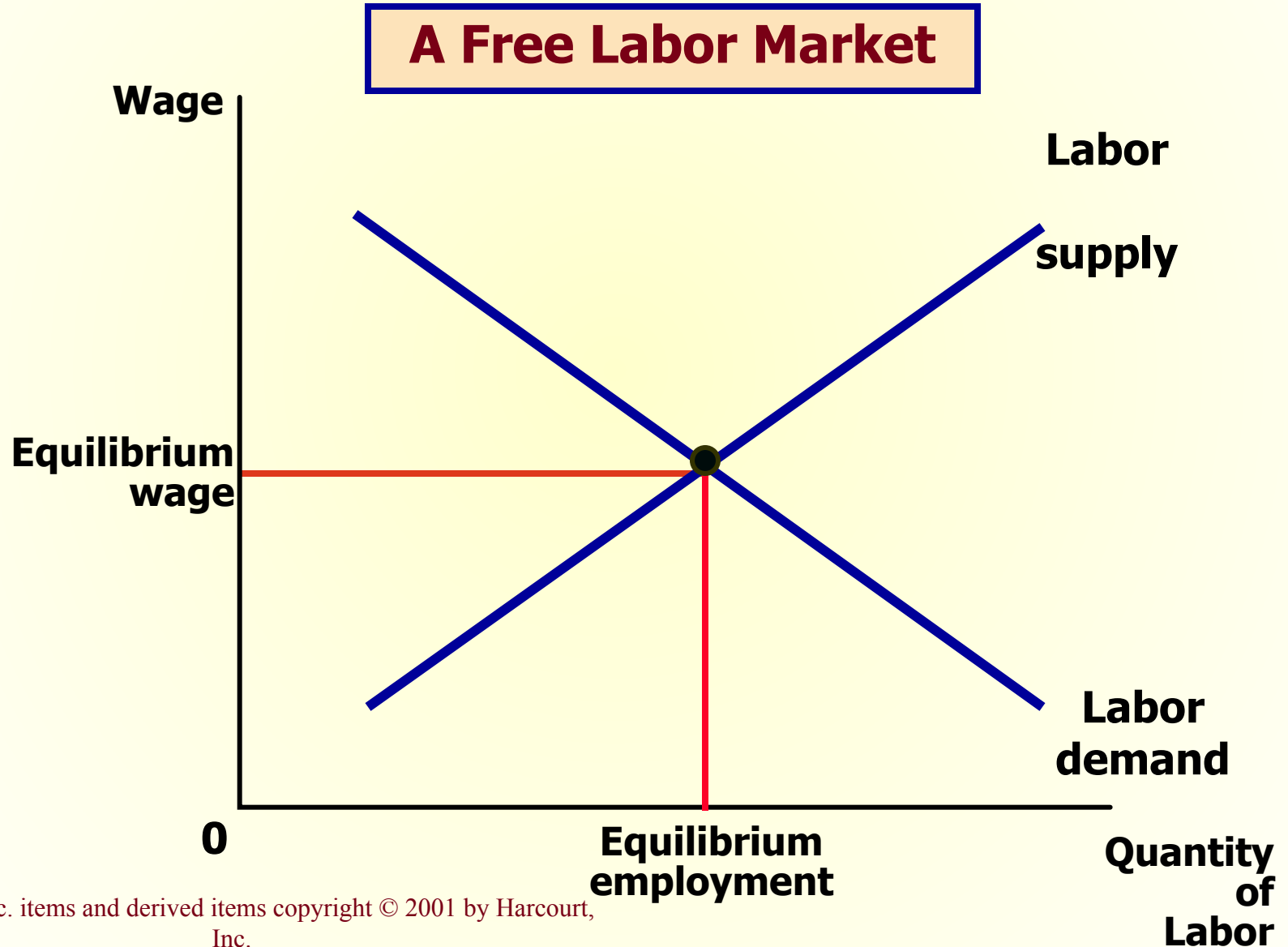
A Price Floor That Is Not Binding...



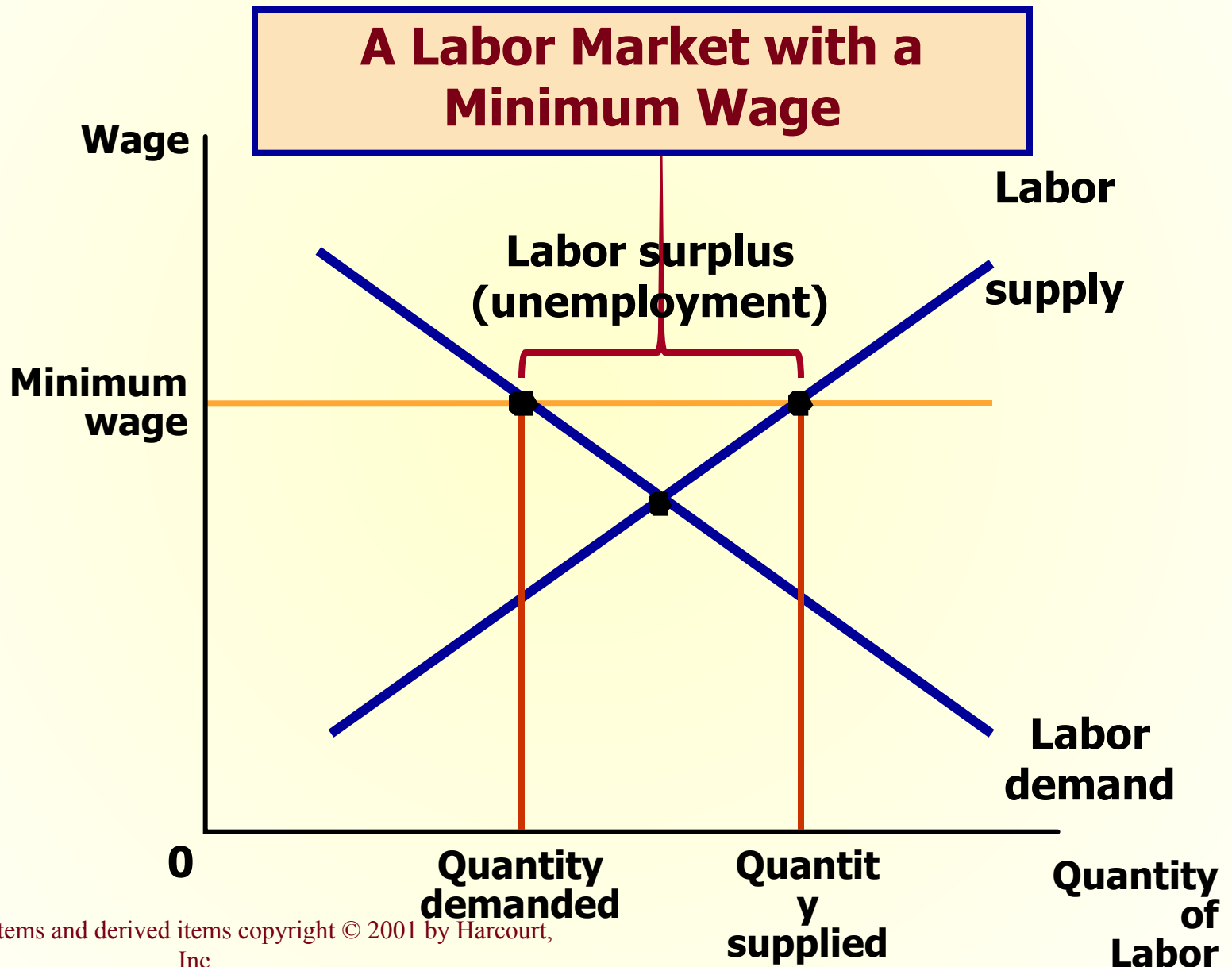
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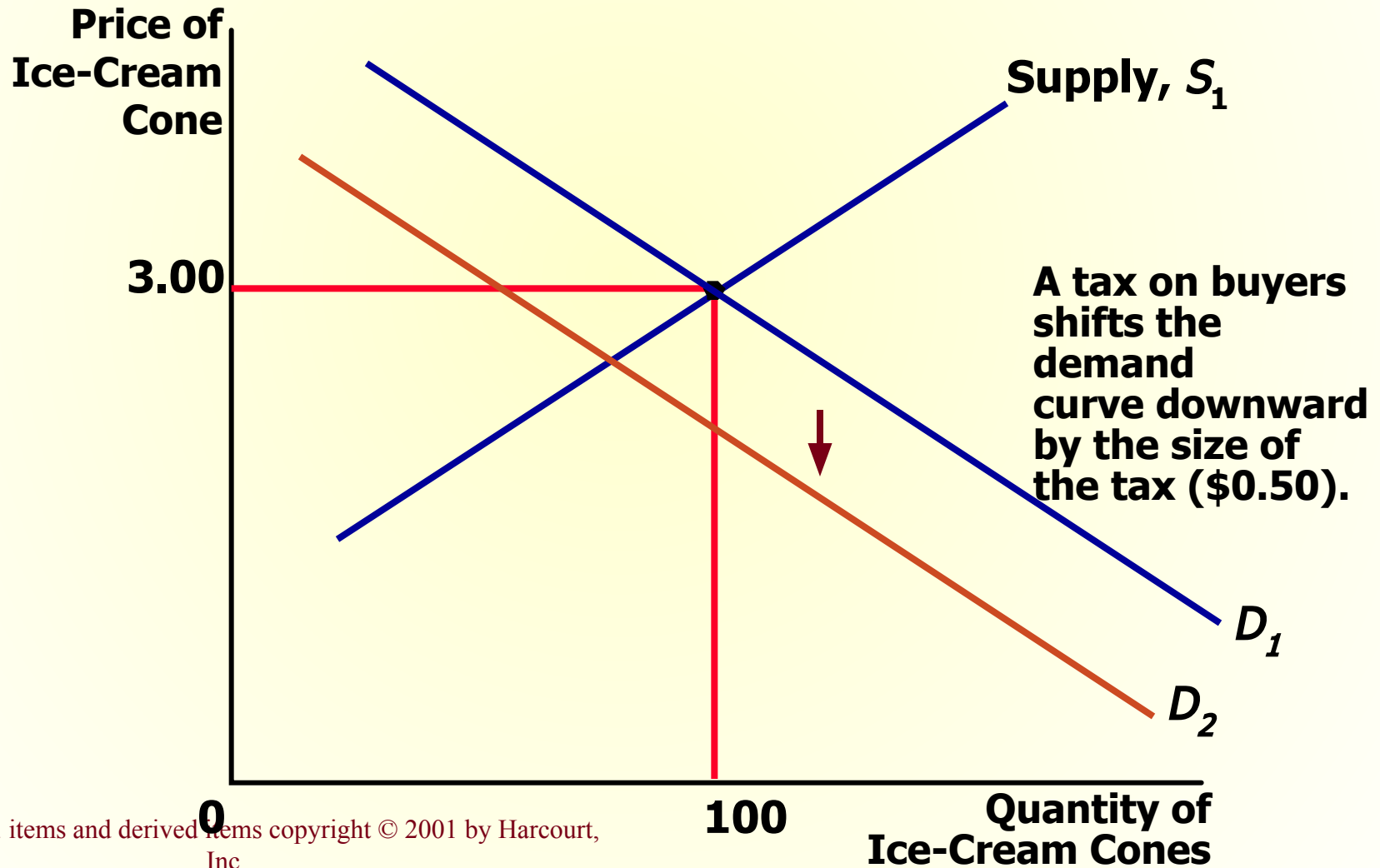
The Minimum Wage



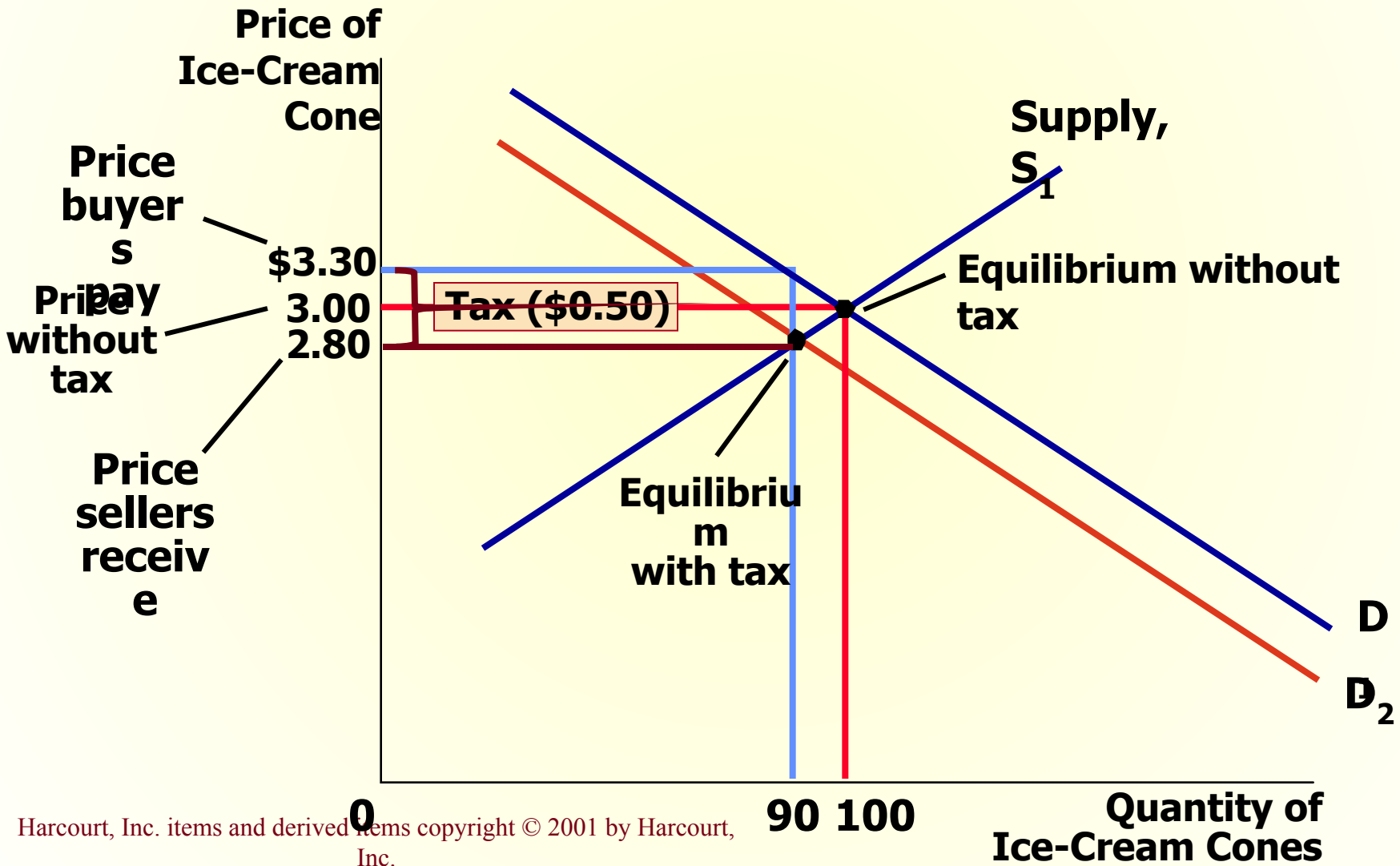
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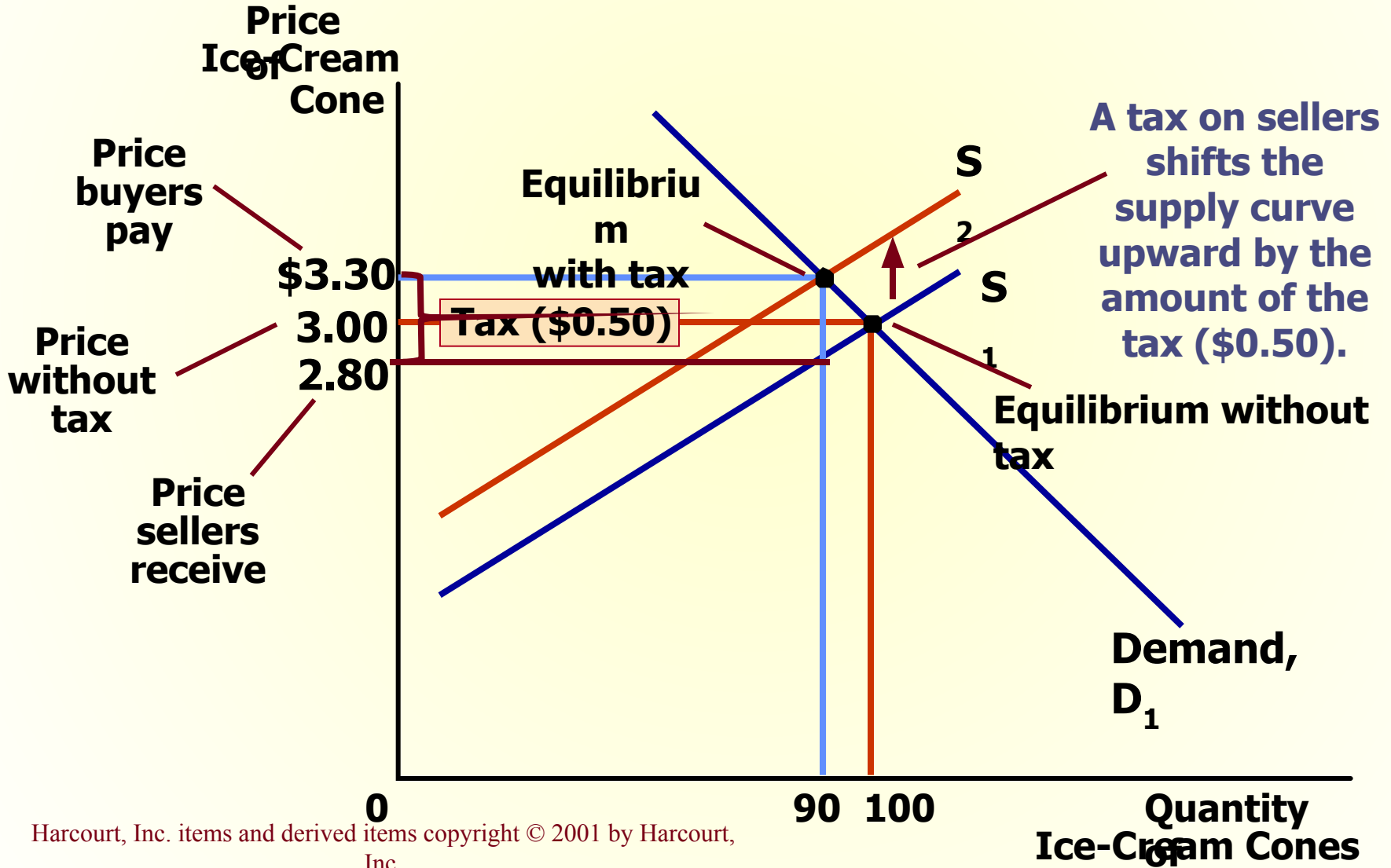
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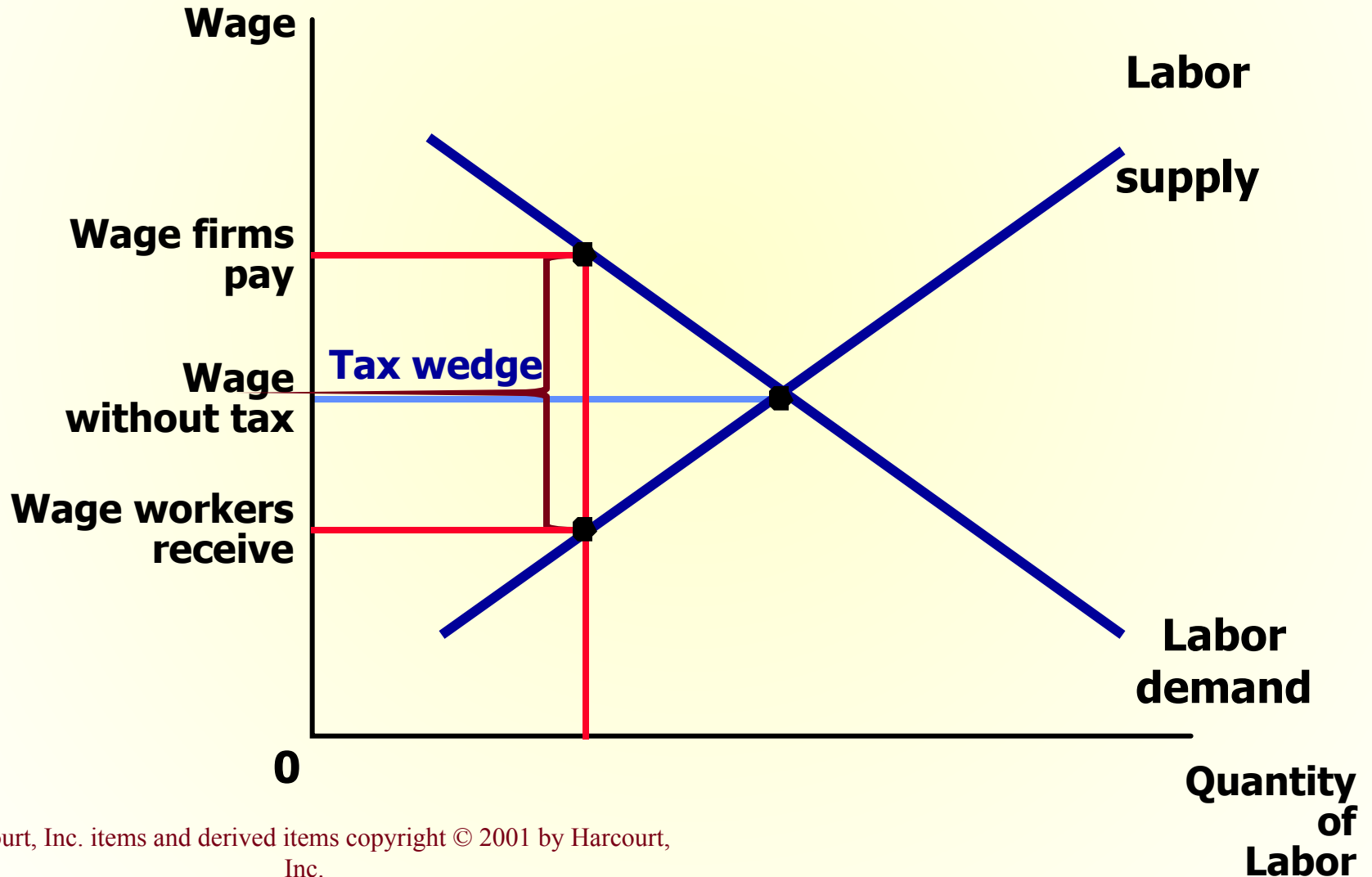
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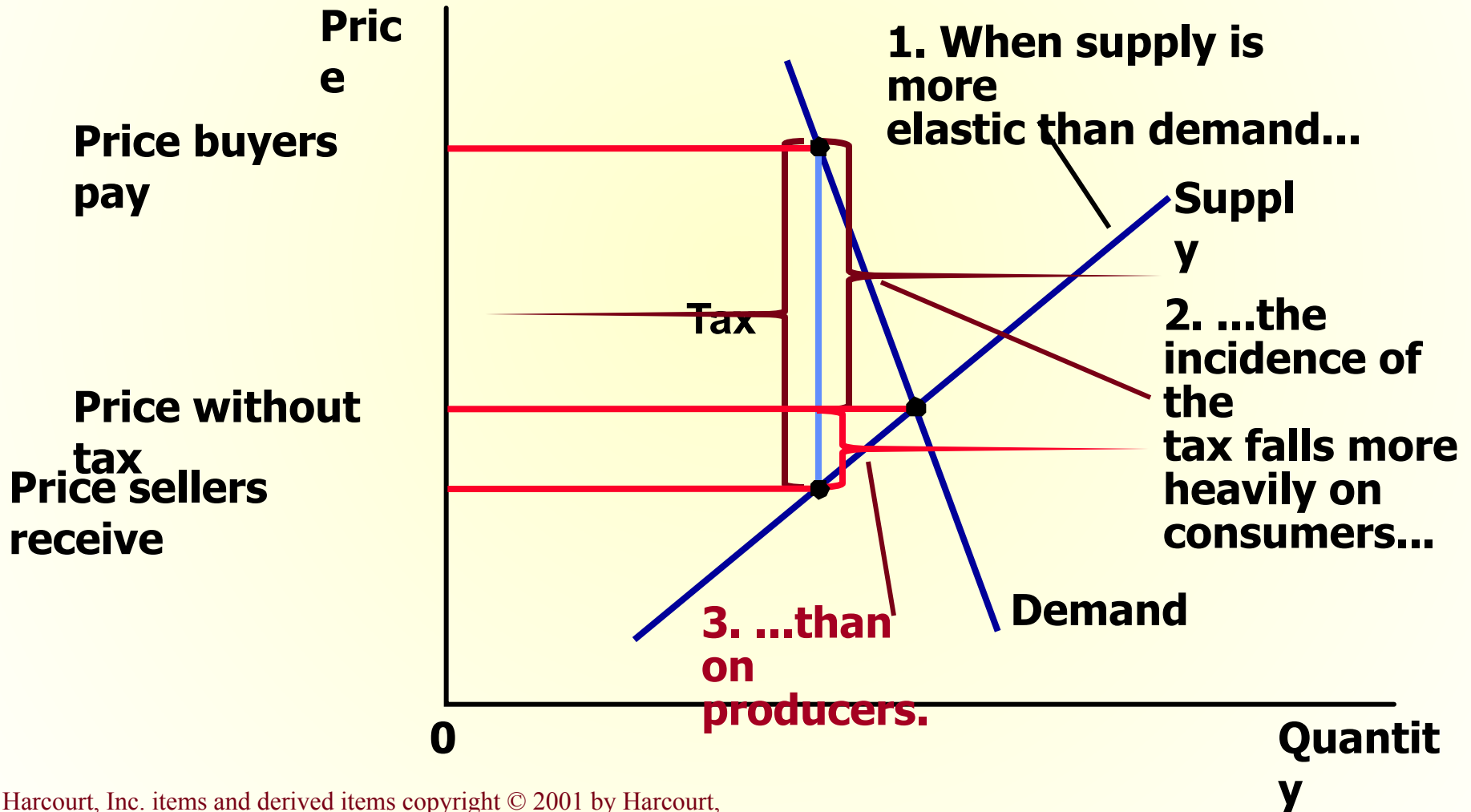
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A Payroll Tax



Elastic Supply, Inelastic Demand...



Inelastic Supply, Elastic Demand...

