



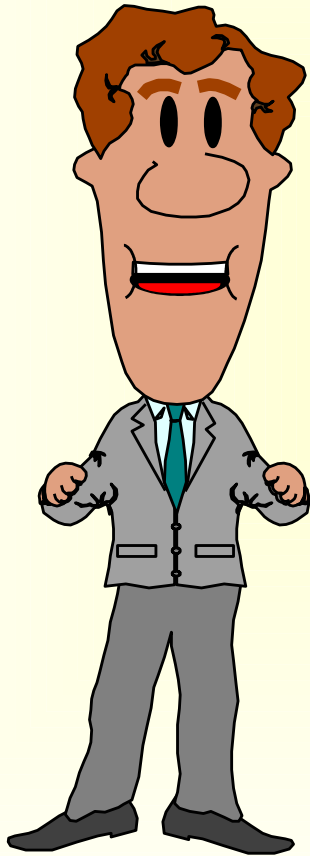
第八章 Chapter 8

应用： 税收的代价

Application: The
Costs of Taxation

税收的代价

The Costs of Taxation



向买者征税和向卖者征税是无关的。当征税时，买者支付的价格上升，而卖者得到的价格下降。

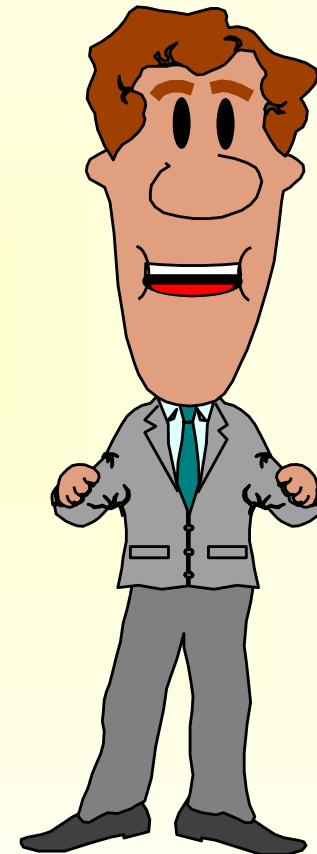
It does not matter whether a tax on a good is levied on buyers or sellers of the good...the price paid by buyers rises, and the price received by sellers falls.

税收的代价

The Costs of Taxation

税收如何影响市场参与者的福利？

How do taxes
affect the economic
well-being of market
participants?



税收的代价

The Costs of Taxation

乍看起来，政府征税得到的收入是以消费者和生产者的支付为代价的（转移支付）

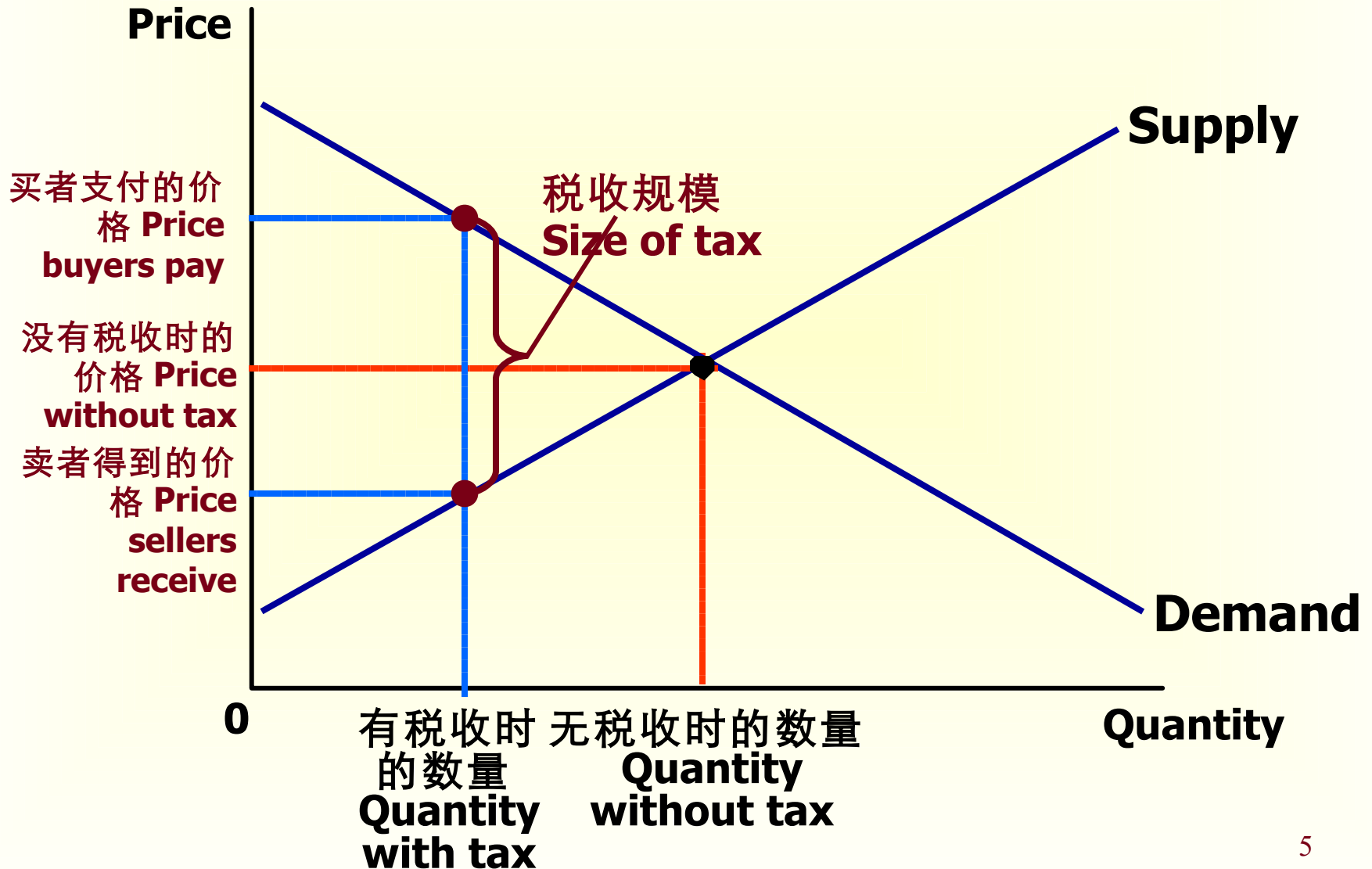
At first glance, the government enacts taxes to raise revenue at the expense of consumers and producers



但分析表明，税收对于买卖双方的成本超过了政府的税收收入（效率损失）。
But the analysis will show that the cost of taxes to buyers and sellers *exceeds* the revenue raised by the government.

税收的影响

The Effects of a Tax...



税收的影响

The Effects of a Tax

☞ 税收在买者支付的价格和卖者得到的价格之间加入一个楔子。

A tax places a wedge between the price buyers pay and the price sellers receive.

☞ 由于这个楔子，卖出的数量低于如果没有税收时的数量。

Because of this tax wedge, the quantity sold falls below the level that would be sold without a tax.

☞ 市场规模因此而缩小。

The size of the market for that good shrinks.

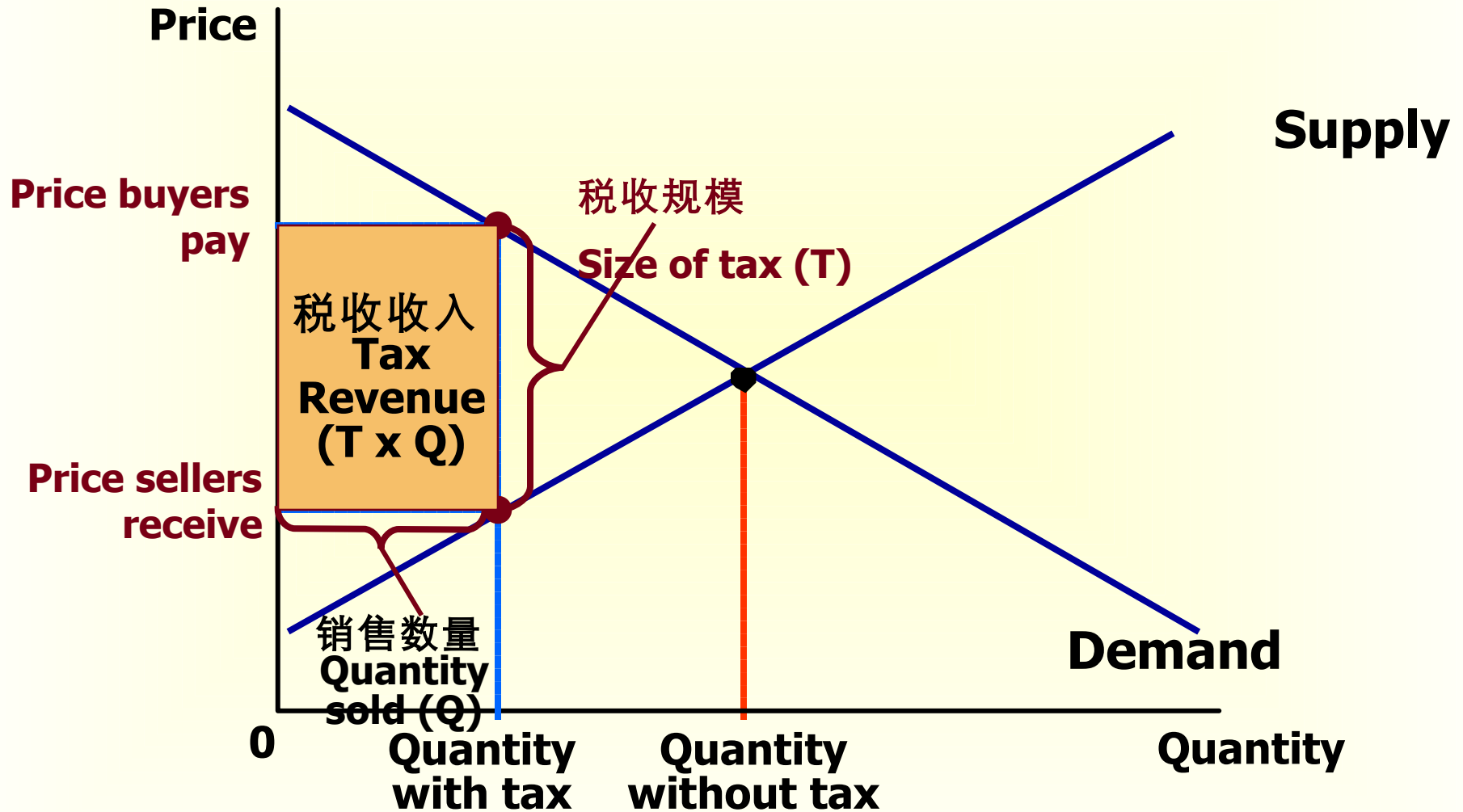
税收收入 Tax Revenue

T = 税收规模 the size of the tax

Q = 销售量 the quantity of the good sold

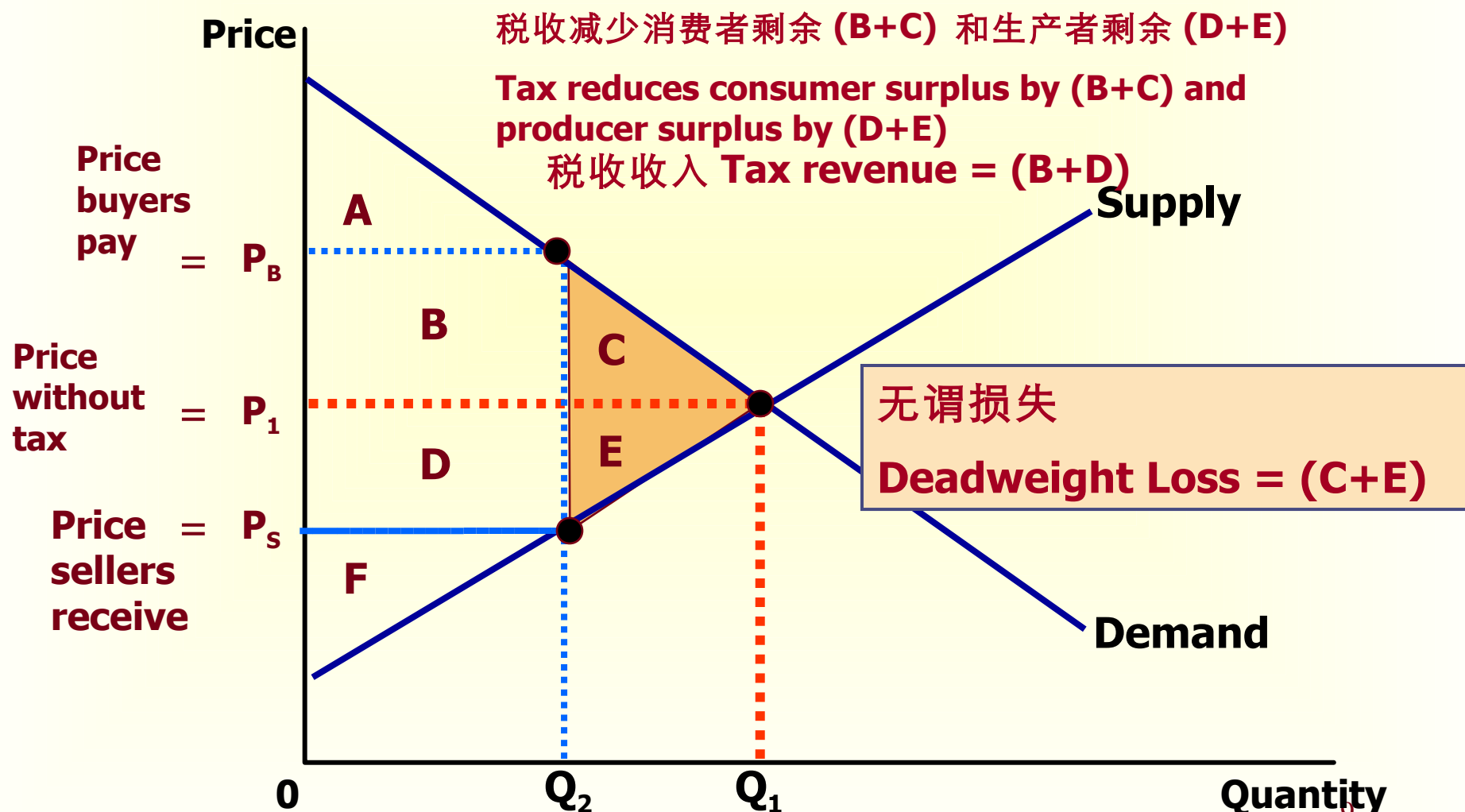
$T \times Q$ = 政府税收收入
the government's tax revenue

税收收入 *Tax Revenue...*



税收如何影响福利

How a Tax Affects Welfare...



税收导致的福利变化

Changes in Welfare from a Tax

	没有税收时 Without Tax	有税收时 With Tax	变化 Change
消费者剩余 Consumer Surplus	$A + B + C$	A	$-(B + C)$
生产者剩余 Producer Surplus	$D + E + F$	F	$-(D + E)$
税收收入 Tax Revenue	none	$B + D$	$+(B + D)$
总剩余 Total Surplus	$A + B + C + D + E + F$	$A + B + D + F$	$-(C + E)$

面积 $C+E$ 衡量了总剩余的减少，它是税收的**无谓损失** The area $C+E$ shows the fall in total surplus and is the **deadweight loss** of the tax.

税收如何影响福利

How a Tax Affects Welfare

总福利的变化包括 The change in total welfare includes:

消费者剩余的变化 The change in consumer surplus

生产者剩余的变化 The change in producer surplus

税收收入的变化 The change in tax revenue.

买者和卖者的损失超过政府的税收收入。

The losses to buyers and sellers exceed the revenue raised by the government.

这种总剩余的下降被称为**无谓损失**，这是效率的损失
This fall in total surplus is called the deadweight loss.

这被称为**税收扭曲**。

This is called **tax distortion** .

无谓损失和贸易的好处

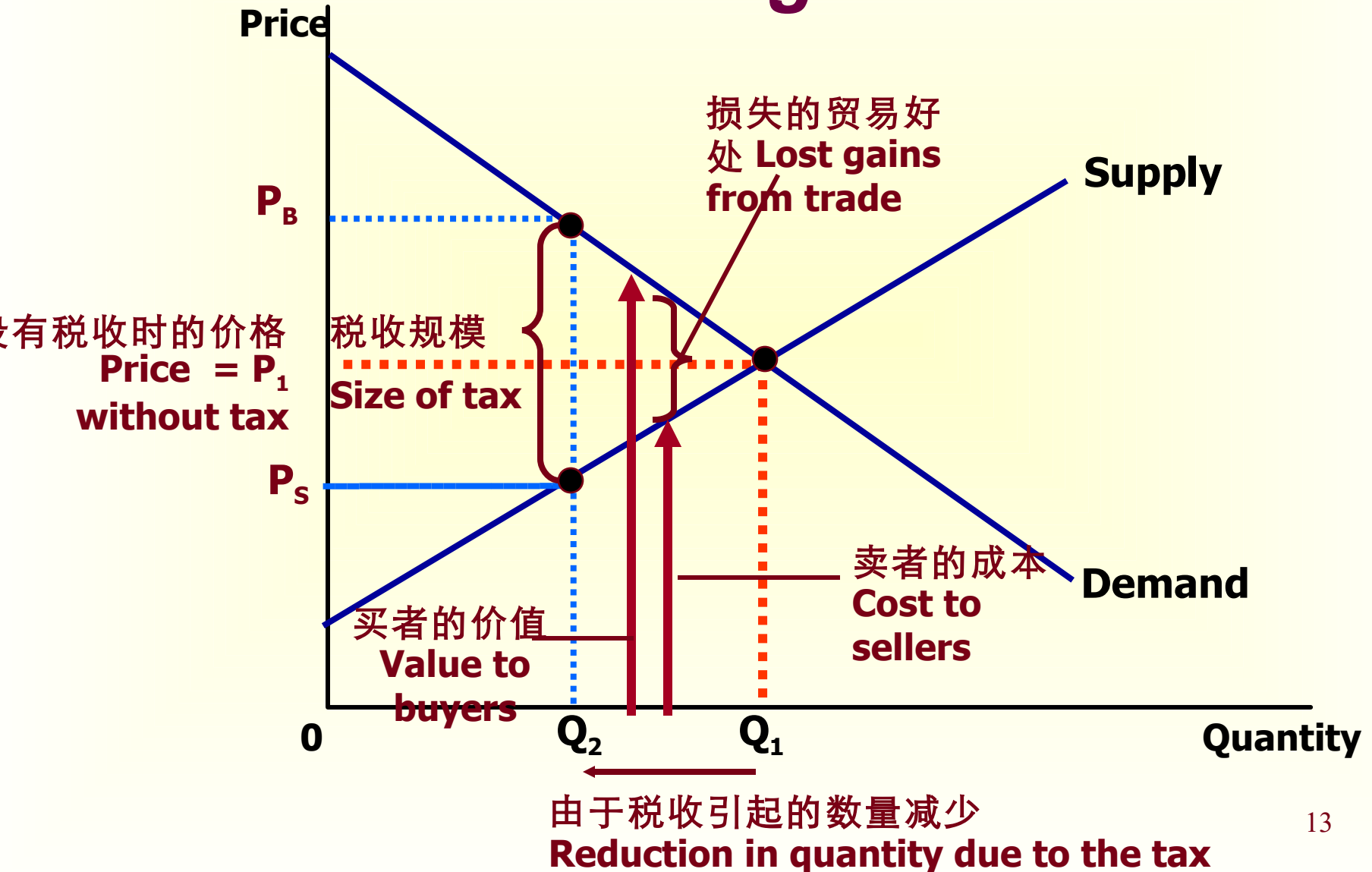
Deadweight Losses and the Gains from Trade

税收引起的无谓损失是因为它使买者和卖者不能实现某些贸易的好处。

Taxes cause deadweight losses because they prevent buyers and sellers from realizing some of the gains from trade.

无谓损失

The Deadweight Loss...



无谓损失的決定因素

Determinants of Deadweight Loss

(给定税收规模) 什么因素决定税收的无谓损失是大还是小?

What determines whether the deadweight loss from a tax is large or small?

无谓损失的大小取决于供给量和需求量对价格变动的反应程度。

The magnitude of the deadweight loss depends on how much the quantity supplied and quantity demanded respond to changes in the price.

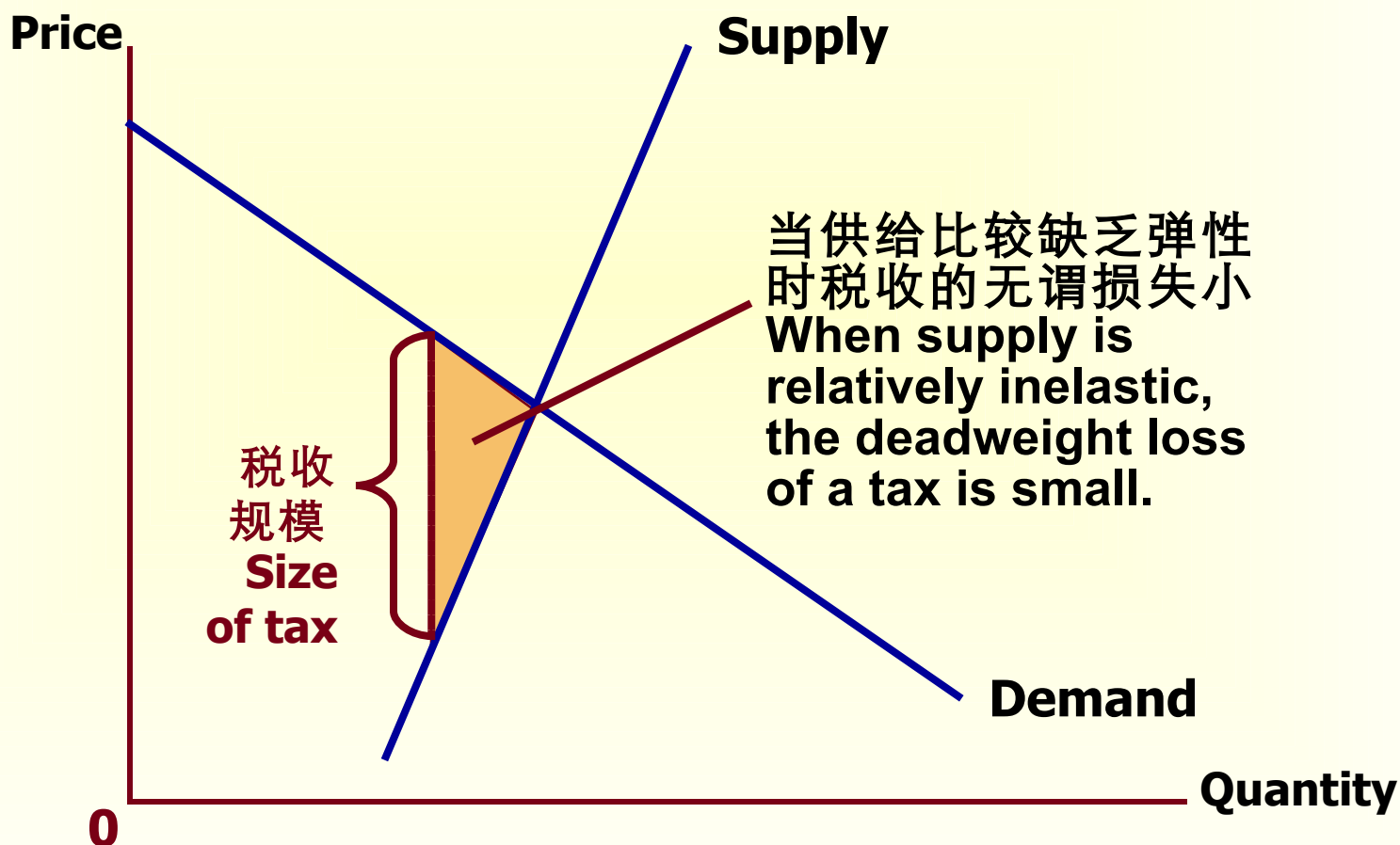
它又取决于供给和需求的**价格弹性**。

That, in turn, depends on the **price elasticities** of supply and demand.

税收扭曲和弹性

Tax Distortions and Elasticities

(a) 缺乏弹性的供给
Inelastic Supply

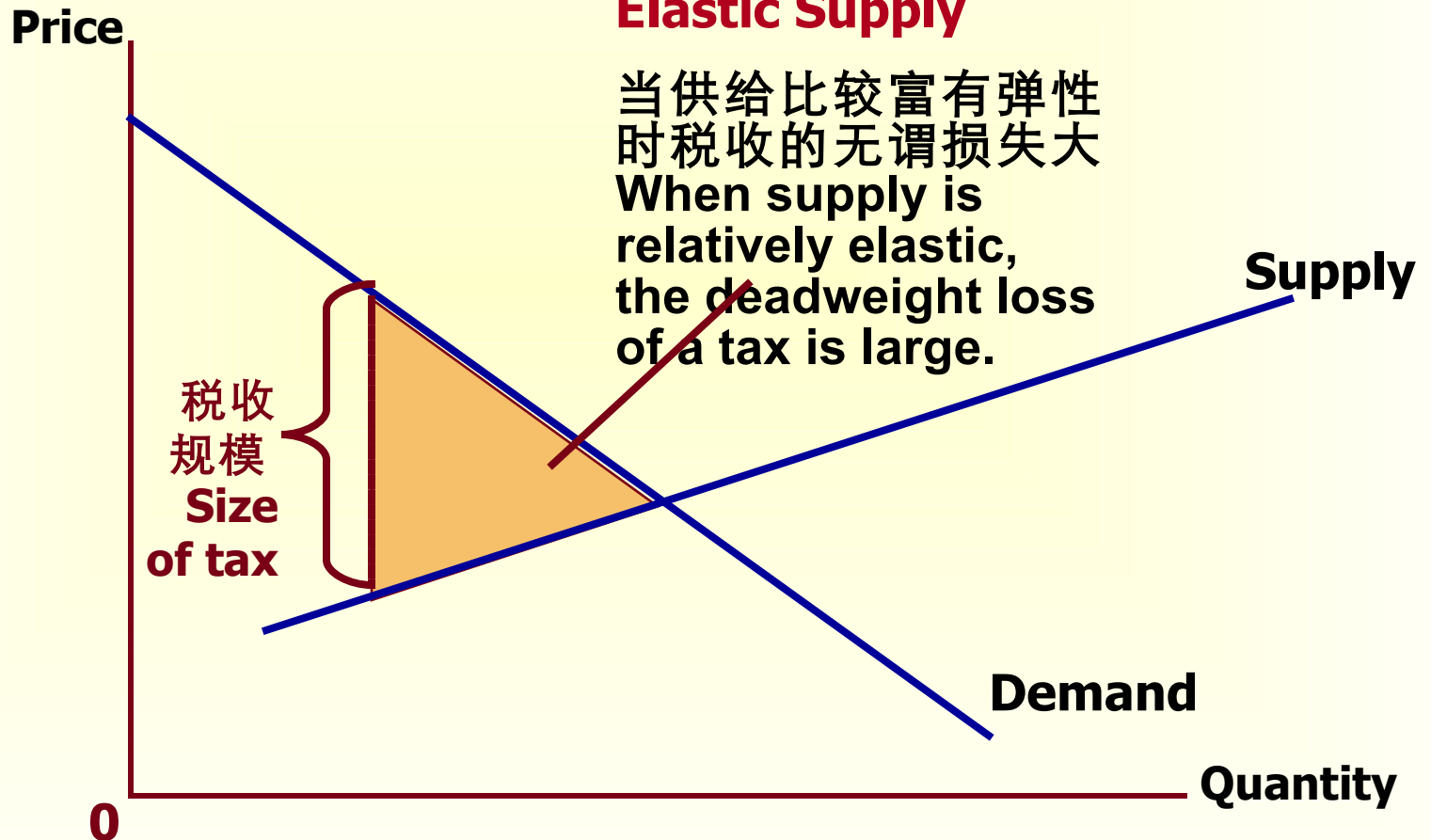


税收扭曲和弹性

Tax Distortions and Elasticities

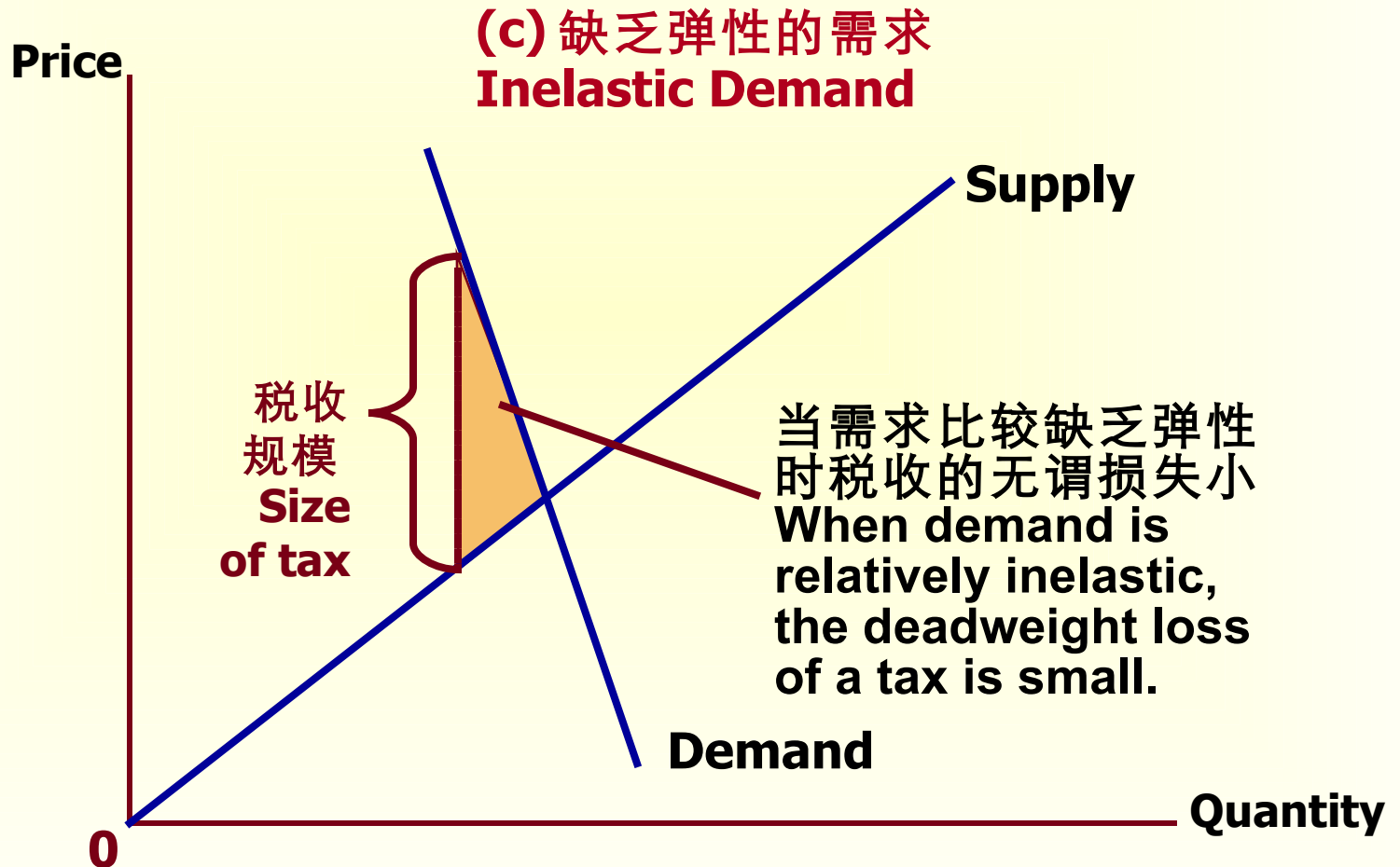
(b) 富有弹性的供给 Elastic Supply

当供给比较富有弹性
时税收的无谓损失大
When supply is
relatively elastic,
the deadweight loss
of a tax is large.



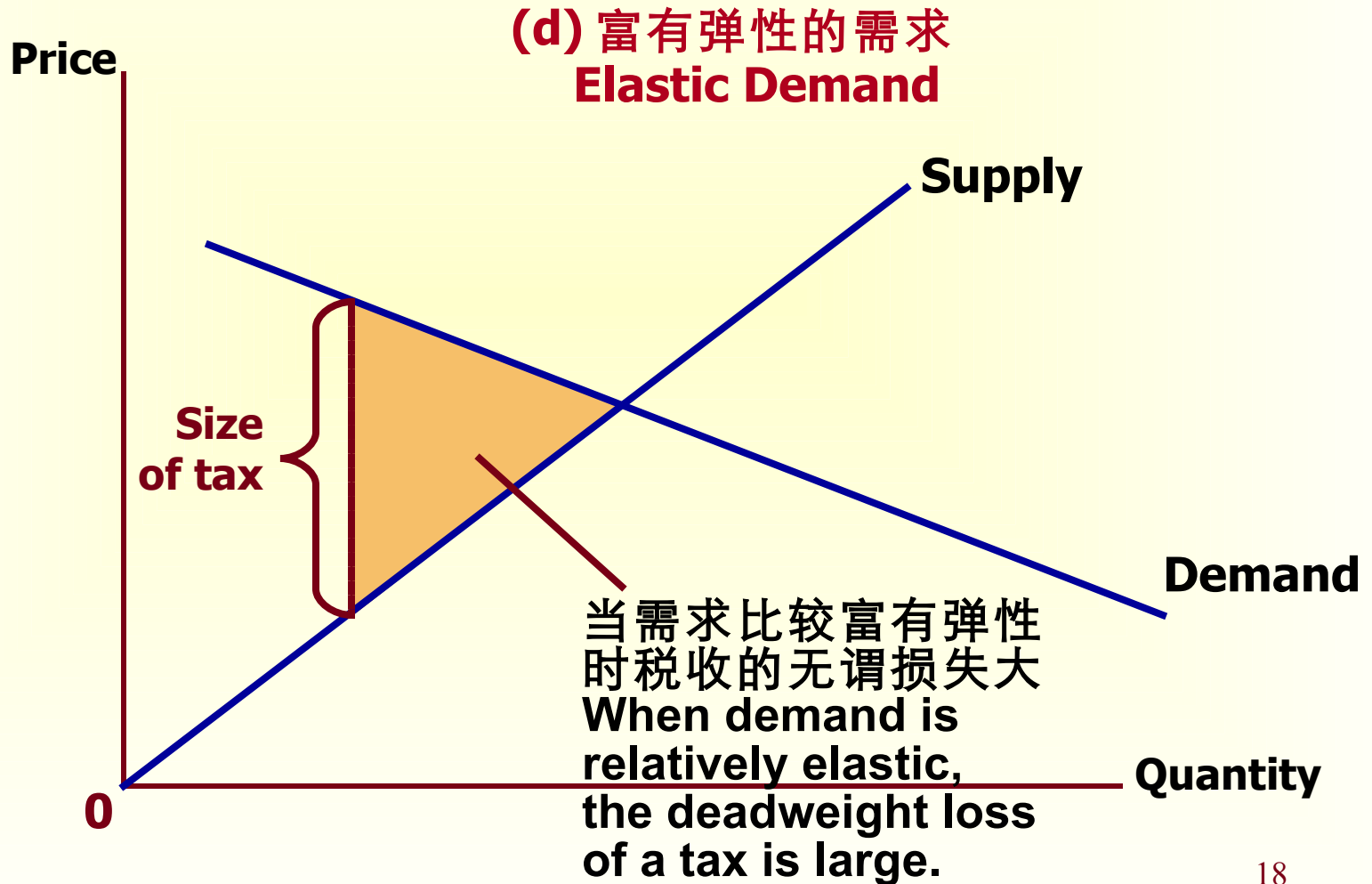
税收扭曲和弹性

Tax Distortions and Elasticities



税收扭曲和弹性

Tax Distortions and Elasticities



无谓损失的决定因素

Determinants of Deadweight Loss

需求和供给的弹性越大：

The greater the elasticities of demand and supply:

ㄎ 均衡数量的减少就越大，
the larger will be the decline in equilibrium quantity and,

ㄎ 税收的无谓损失就越大。
the greater the deadweight loss of a tax.

无谓损失的争论

The Deadweight Loss Debate

美国经济中最重要的税是对劳动的征税：社会保障税、医疗税以及联邦所得税都是劳动税。

The most important tax in the U.S. economy is the tax on labor: The Social Security tax, the Medicare tax, and, to a large extent, the federal income tax are labor taxes.

劳动收入的边际税率——最后 1 美元的税收——对许多工人来说，几乎是 50 %。

The *marginal tax rate* on labor income – the tax on the last dollar of earnings – is almost 50 percent for many workers.

无谓损失的争论

The Deadweight Loss Debate

一些经济学家认为劳动税是严重扭曲的，因为他们相信劳动供给较为富有弹性。

Some economists
argue that labor taxes are highly
distorting and believe that labor
supply is more elastic.

无谓损失的争论

The Deadweight Loss Debate

工人对激励反应较大的例子：

Some examples of workers who may respond more to incentives:

工人可以调整他们工作的时间

Workers who can adjust the number of hours they work

家庭有第二个赚钱的人

Families with second earners

老年人可以选择何时退休

Elderly who can choose when to retire

考虑从事地下经济

Workers in the underground economy

亨利·乔治与土地税

Henry George and the Land Tax

- 📖 在 1879 年出版的《进步与贫困》一书中，亨利·乔治提出政府只应该征收一种税——土地税：它既是公平的，也是有效率的。
In his 1879 book *Progress and Poverty*, Henry George argued that the government should raise all its revenue from a tax on land: This “single tax” can be both equitable and efficient.
- 📖 因为土地的供给弹性等于零，更加富裕的地主承担了所有税负；而且没有无谓损失。
Since the elasticity of land supply is zero, richer landowners bear the entire burden of the tax; and there is no deadweight loss.
- 📖 不过，与生地的供给不同，土地改良的供给弹性大于零。
However, unlike the supply of raw land, the supply of improvements has an elasticity greater than zero.
- 📖 如果土地税加在了改良上面，将会导致激励扭曲。
If a land tax were imposed on improvements, it would distort incentives.

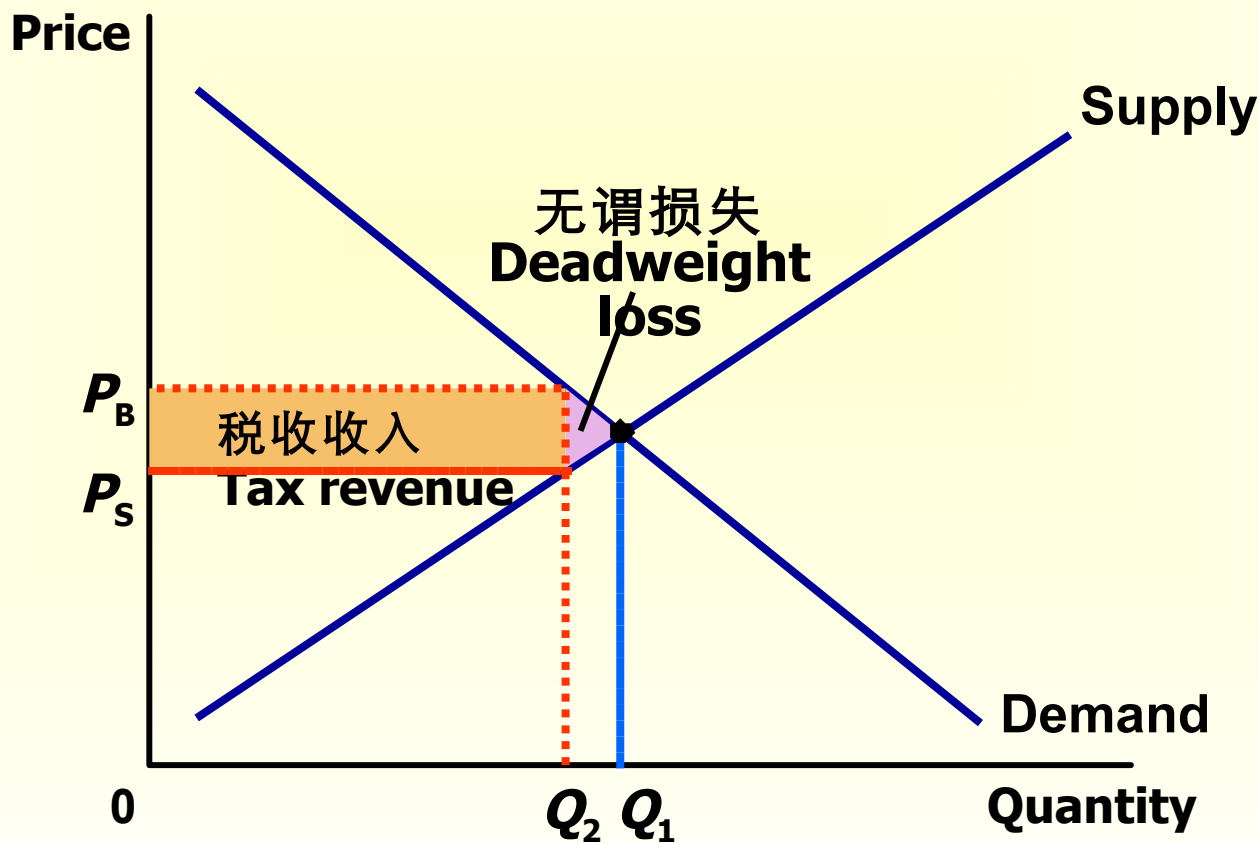
税收变动时的无谓损失和税收收入

Deadweight Loss and Tax Revenue as Taxes Vary

当税收规模（税率）变动时，
无谓损失和税收收入如何变动？
What happens to
the deadweight loss and tax
revenue when the *size of a tax*
changes?

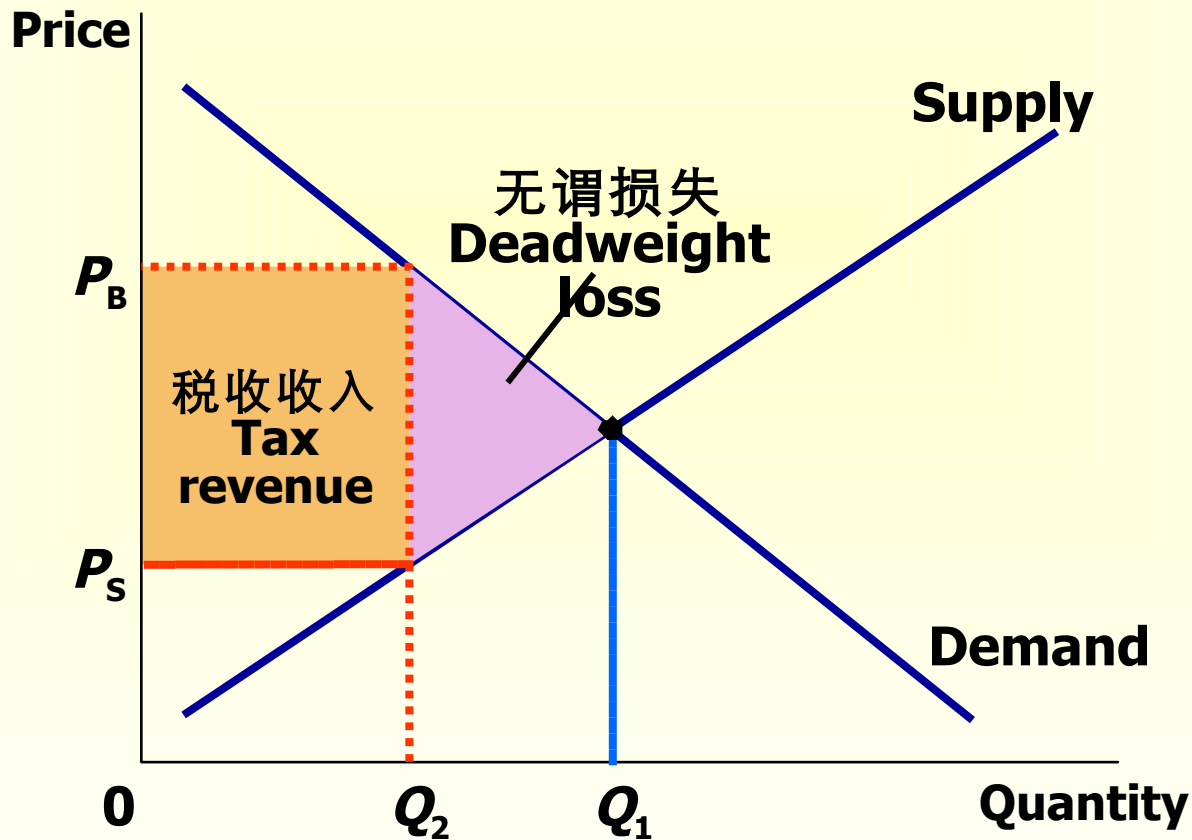
无谓损失和税收收入 Deadweight Loss and Tax Revenue...

(a) 小额税 Small Tax



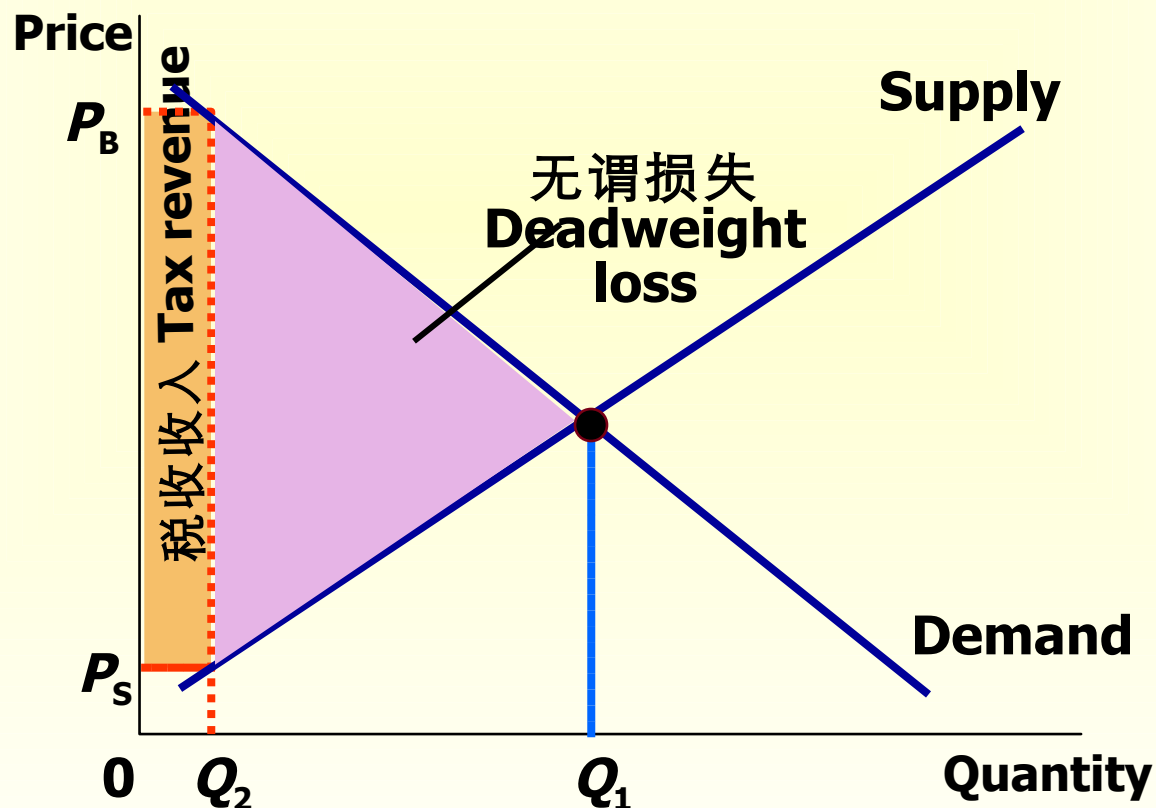
无谓损失和税收收入 Deadweight Loss and Tax Revenue...

(b) 中额税 Medium Tax



无谓损失和税收收入 *Deadweight Loss and Tax Revenue...*

(c) 大额税 Large Tax



无谓损失和税收收入

Deadweight Loss and Tax Revenue

随着税收规模的增大，无谓损失增大。
The deadweight loss grows as the size of a tax rises.

当小额税时，税收收入小。
For the small tax, tax revenue is small.

当税收规模增加时，税收收入增加。
As the size of the tax rises, tax revenue grows.

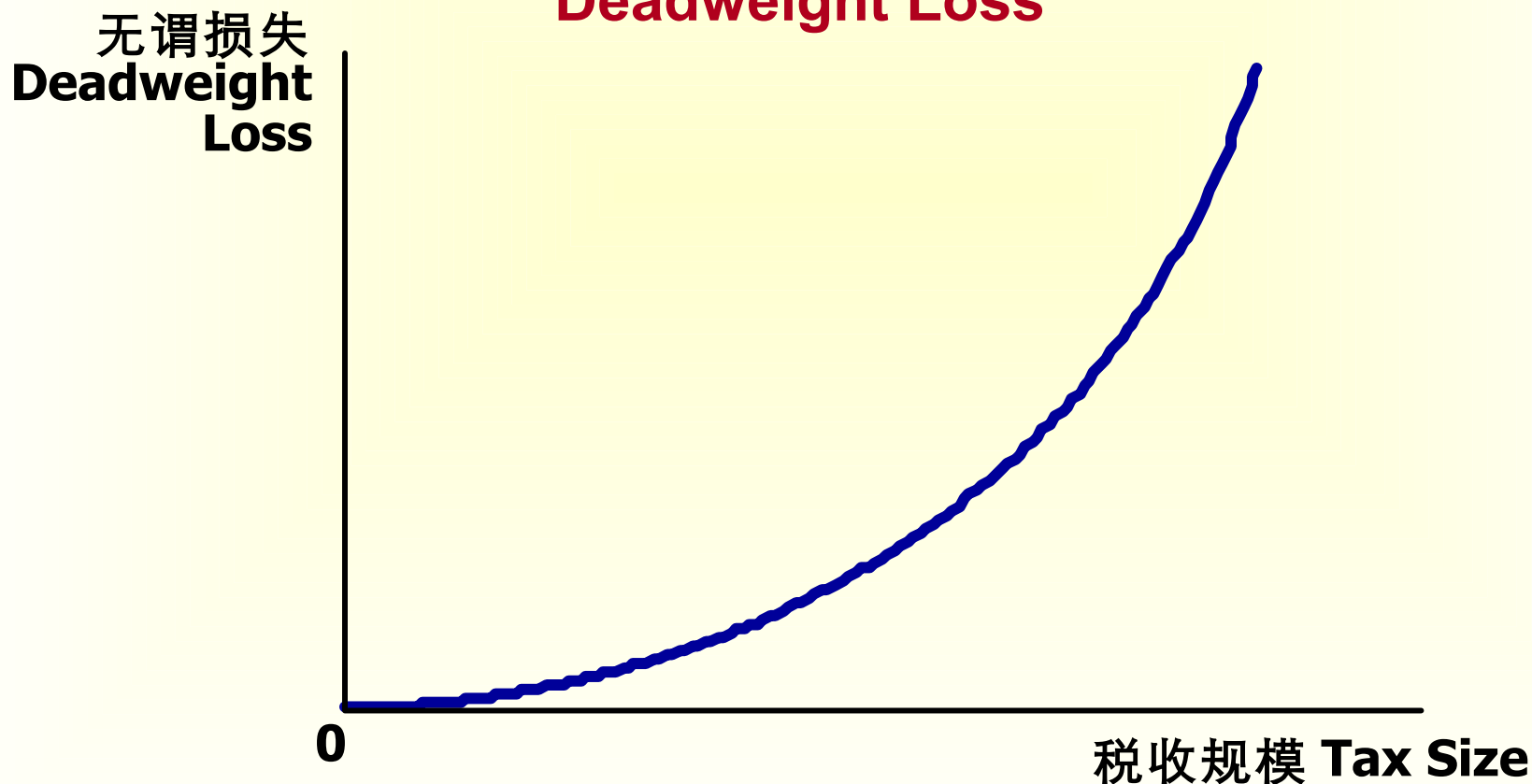
但是当税收规模继续增加时，税收收入减少，因为高税率减小市场的规模。
But as the size of the tax continues to rise, tax revenue falls because the higher tax reduces the size of the

无谓损失和税收收入随税收规模的变动

Deadweight Loss and Tax Revenue

Vary with the Size of the Tax...

(a) 无谓损失
Deadweight Loss



无谓损失和税收收入随税收规模的变动

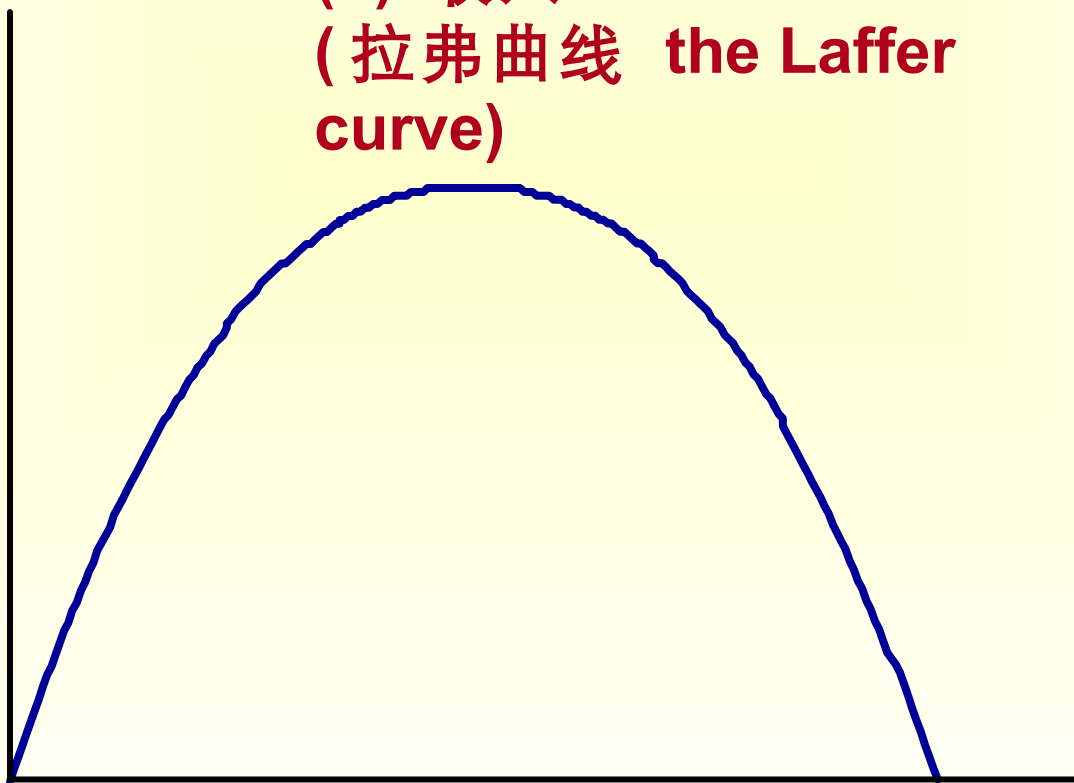
Deadweight Loss and Tax Revenue Vary with the Size of the Tax...

税收收入
Tax
Revenue

(b) 收入 Revenue
(拉弗曲线 the Laffer
curve)

0

税收规模 Tax Size ³⁰



无谓损失和税收收入随税收变动而变动

Deadweight Loss and Tax Revenue

Vary with the Size of the Tax

随着税收规模提高，税收的无谓损失迅速扩大 As the size of a tax increases, its deadweight loss quickly gets larger.

与此相比，随着税收规模提高，税收收入先增加，然后随着税收规模越来越大，市场收缩非常之大，以至于税收收入开始减小。 By contrast, tax revenue first rises with the size of a tax; but then, as the tax gets larger, the market shrinks so much that tax revenue starts to fall.

拉弗曲线和供应学派经济学

The Laffer Curve and Supply-Side Economics

✧ 拉弗曲线描述了税率和税收收入之间的关系 The Laffer curve depicts the relationship between tax rates and tax revenue.

✧ 供应学派经济学指的是里根和拉弗的观点，他们提出减税会鼓励更多的人工作，由此有可能增加税收。

Supply-side economics refers to the views of Reagan and Laffer who proposed that a tax cut would induce more people to work and thereby have the potential to increase tax revenues.

总结

Summary

❧ 一种物品的税收减少了该物品买者与卖者的福利，而且，消费者和生产者剩余的减少通常超过了政府筹集到的收入。

A tax on a good reduces the welfare of buyers and sellers of the good. And the reduction in consumer and producer surplus usually exceeds the revenues raised by the government.

总结

Summary

总剩余—— 消费者剩余、生产者剩余和税收收入之和——的减少被称为税收的无谓损失。

The fall in total surplus – the sum of consumer surplus, producer surplus, and tax revenue – is called the deadweight loss of the tax.

总结

Summary

§ 税收有无谓损失是因为它引起买者少消费和卖者少生产。

Taxes have a deadweight loss because they cause buyers to consume less and sellers to produce less.

§ 这一行为的变动使市场规模缩小到使总剩余最大化的水平之下。

This change in behavior shrinks the size of the market below the level that maximizes total surplus.

总结

Summary

☞ 税收增加越多，它对激励的扭曲越大，而且，无谓损失增加也越大。

As a tax grows larger, it distorts incentives more, and its deadweight loss grows larger.

☞ 税收收入起初随税收规模扩大而增加。

Tax revenue first rises with the size of a tax.

☞ 但是，最终由于高税收减少市场规模，也就减少了税收收入。

Eventually, however, a larger tax reduces tax revenue because it reduces the size of the market.