



# THE ECONOMIC WAY OF THINKING

Thirteenth Edition

PAUL HEYNE | PETER BOETTKE | DAVID PRYCHITKO

## **Chapter 3**

### **Substitutes Everywhere: The Concept of Demand**

（无所不在的替代：  
需求的概念）

# Learning Objectives （学习目标）

- Establish the argument that there are substitutes for all scarce goods （确立论点：所有稀缺品都有替代品）
- Introduce the insight that choices are made at the margin （介绍洞见：选择都是在边际上做出的）
- Introduce and explain the law of demand （介绍并解释需求法则）
- Clearly distinguish between demand and quantity demanded （清楚区分需求和需求量）
- Investigate the factors that shift the demand curve （探究影响需求曲线的因素）
- Develop and apply the price elasticity of demand （发展并运用需求的价格弹性）

# Chapter Outline（本章大纲）

- On the Notion of “Needs”（关于所谓的“需要”）
- Marginal Values（边际价值）
- Everyday Choices Are Marginal Choices（日常选择就是边际选择）
- The Demand Curve（需求曲线）
- The Law of Demand（需求法则）
- Demand and Quantity Demanded（需求和需求量）
- Demand Itself Can Change（需求自身也会变）
- Everything Depends on Everything Else（事物都依赖于其他事物）

# Chapter Outline（本章大纲）

- Misperceptions Caused by Inflation（通货膨胀导致的错觉）
- Time Is on Our Side（时间站在我们这一边）
- Price Elasticity of Demand（需求的价格弹性）
- The Myth of Vertical Demand（垂直需求的误区）
- What Role Should Demand Play?（需求扮演什么角色？）
- Is Money All That Matters? Money Costs, Other Costs, and Economic Calculation（钱就这么重要吗？货币成本、其他成本和经济核算）

# On the Notion of “Needs”（关于“需要”）

- Higher prices (sacrifices) lead people to seek **substitutes**（较高的价格（牺牲）导致人们寻找替代品）
- The fact that goods and services are scarce entails **trade-offs** ... the sacrifice of other goods and services we value（商品和服务稀缺这一事实意味着权衡，即牺牲我们认为有价值的其他商品和服务）

# On the Notion of “Needs”（关于“需要”）

- Consider these four statements...
  - The average person needs eight glasses of water per day to maintain optimal health（普通人平均每天需要喝8杯水以维持最佳健康状态）
  - All citizens should be able to obtain the medical care they need regardless of their ability to pay（所有公民都应该得到他们需要的医疗服务，无论是否付得起钱）
  - A diabetic needs insulin（糖尿病人需要胰岛素）
  - You need to read your economics textbook（你需要读经济学教材）

# Marginal Values (边际价值)

- The Diamond-Water Paradox (钻石与水悖论)
  - Which is more valuable, water or diamonds? (水和钻石相比, 哪一个更有价值?)
  - Which is more valuable, a glass of water or a glass of diamonds? (一杯水和一杯钻石相比, 哪一个更有价值?)

# Marginal Values (边际价值)

## ■ Implications (含义)

- The values that matter are marginal values (要紧的是边际价值)
- Marginal means “additional” or extra (边际意味着“附加”或者“额外”)
- So in economics, we make decisions based on expected marginal **benefits** versus marginal **costs**. (在经济学中，人们是通过比较期望的边际收益和边际成本做出决策的)



# Everyday Choices Are Marginal Choices（日常选择是边际选择）

## ■ *The Economic Way of Thinking...*

- Rejects the all-or-nothing approach（拒绝非此即彼的方法）
- Favors attention to
  - More of A and less of B *versus* more of B and less of A（多一些A，少一些B，还是多一些B，少一些A？）

# Demand (需求)

- People do have needs. (人确实有一些需要)
- But, in a world of scarcity individuals incur trade-offs.  
(在一个充满稀缺性的世界里，人们要权衡利弊)
- Economists developed the idea of “demand (需求)”. (经济学家发展出“需求”的概念)
  - It relates amounts people want to obtain to the sacrifices they must make to obtain these amount. (需求概念把人们想获得某种东西的数量与他们为了得到这些数量要付出的代价联系在一起.)

## Demand: Consumption Table (需求表)

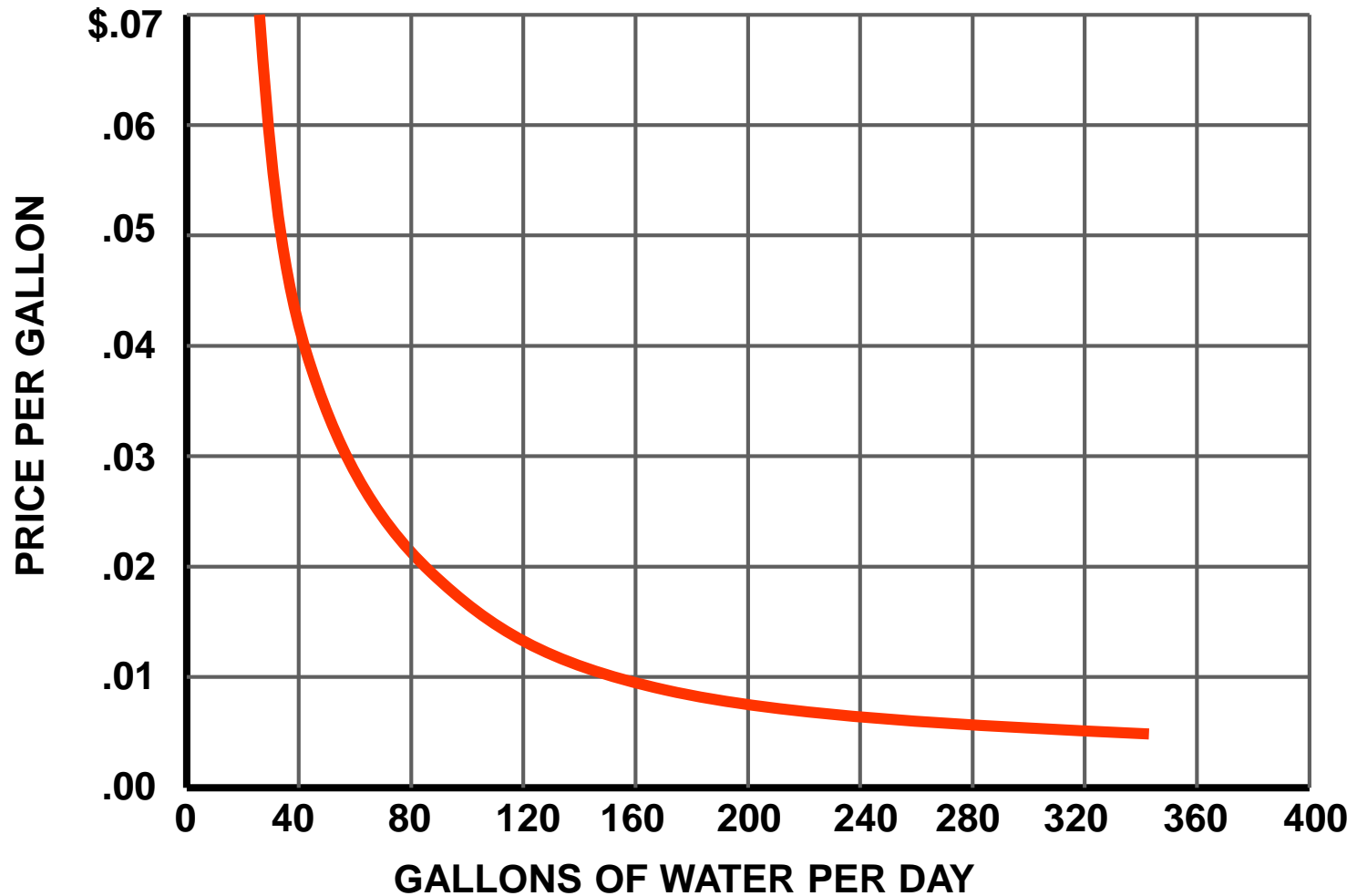
<u>Price per Gallon</u>	<u>Gallons per Day</u>
<b>\$.07</b>	<b>23</b>
<b>.04</b>	<b>40</b>
<b>.02</b>	<b>80</b>
<b>.01</b>	<b>160</b>
<b>.005</b>	<b>320</b>

Table 3-1 Consumption of water in a typical American town

# The Demand Curve（需求曲线）

- **Vertical Axis（纵轴）** – possible prices that might be charged.（可能的水价）
- **Horizontal Axis（横轴）** – quantity purchased at those prices.（人们在不同的价格下计划购买的水量）
- Economists call that **a Demand Curve.**

# The Demand Curve (需求曲线)



# The Demand Curve（需求曲线）

- A **demand curve** illustrates the amount of a good that consumers plan to purchase at any given price.（需求曲线表示了消费者在任意给定的价格下计划购买的数量）
- **Quantity Demanded（需求量）**：
  - Read a demand curve by taking a price and finding corresponding quantity.（选取一个特定的价格，需求曲线横轴上对应的数量）

# The Demand Curve（需求曲线）

- The illustration of the demand curve for water offers a rather underappreciated insight: *the economist's emphasis on marginal analysis.*（用水需求曲线的图示提供了一个相当不被重视的洞见：经济学家强调边际分析）
  - Consumers make marginal adjustments to changes in the price of water.（消费者对水价的变化进行了边际调整。）
  - They don't normally engage in all-or-nothing trade-offs.（他们通常不会进行全有或全无的权衡）

# The Law of Demand (需求法则)

## ■ “**Law of Demand**” (需求法则) :

- If the price of a good increases, **holding other things constant**, the quantity demanded will decrease. (如果物品价格上涨, 在其他条件不变的情况下, 需求量将减少)
- If the price of a good decreases, **holding other things constant**, the quantity demanded will increase. (如果物品价格下跌, 在其他条件不变的情况下, 需求量将增加)
- **ceteris paribus** ['setəris'pæribəs] :拉丁语, 其他条件不变



# Demand and Quantity Demanded（需求和需求量）

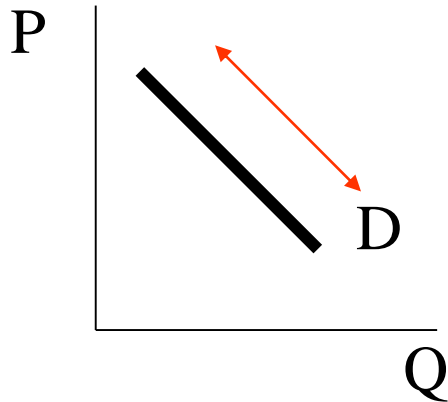
- ***A change in demand  $\neq$  change in quantity demanded***  
（需求的变化与需求量的变化不是一回事）
  - **A change in quantity demanded** is a movement from one point on a demand curve to another point on the same curve due to price（需求量的变化是在同一条需求曲线上由于价格变化而从一个点移动到另一个点）

# Demand and Quantity Demanded（需求和需求量）

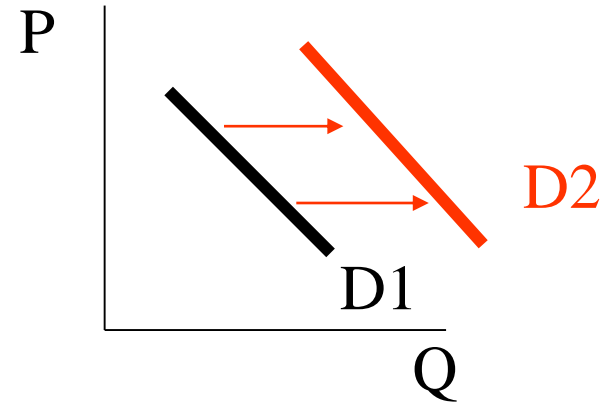
- **A change in demand** is a shift in the entire curve itself and results from some *non-price factor* that makes households buy more or less at each price（需求的变化是整个曲线的变化，是由一些非价格因素导致的，该因素使家庭在每个价格上购买更多或者更少）

# Demand and Quantity Demanded（需求和需求量）

**Change in Quantity demanded**  
（需求量的变化）



**Change in demand**  
（需求的变化）

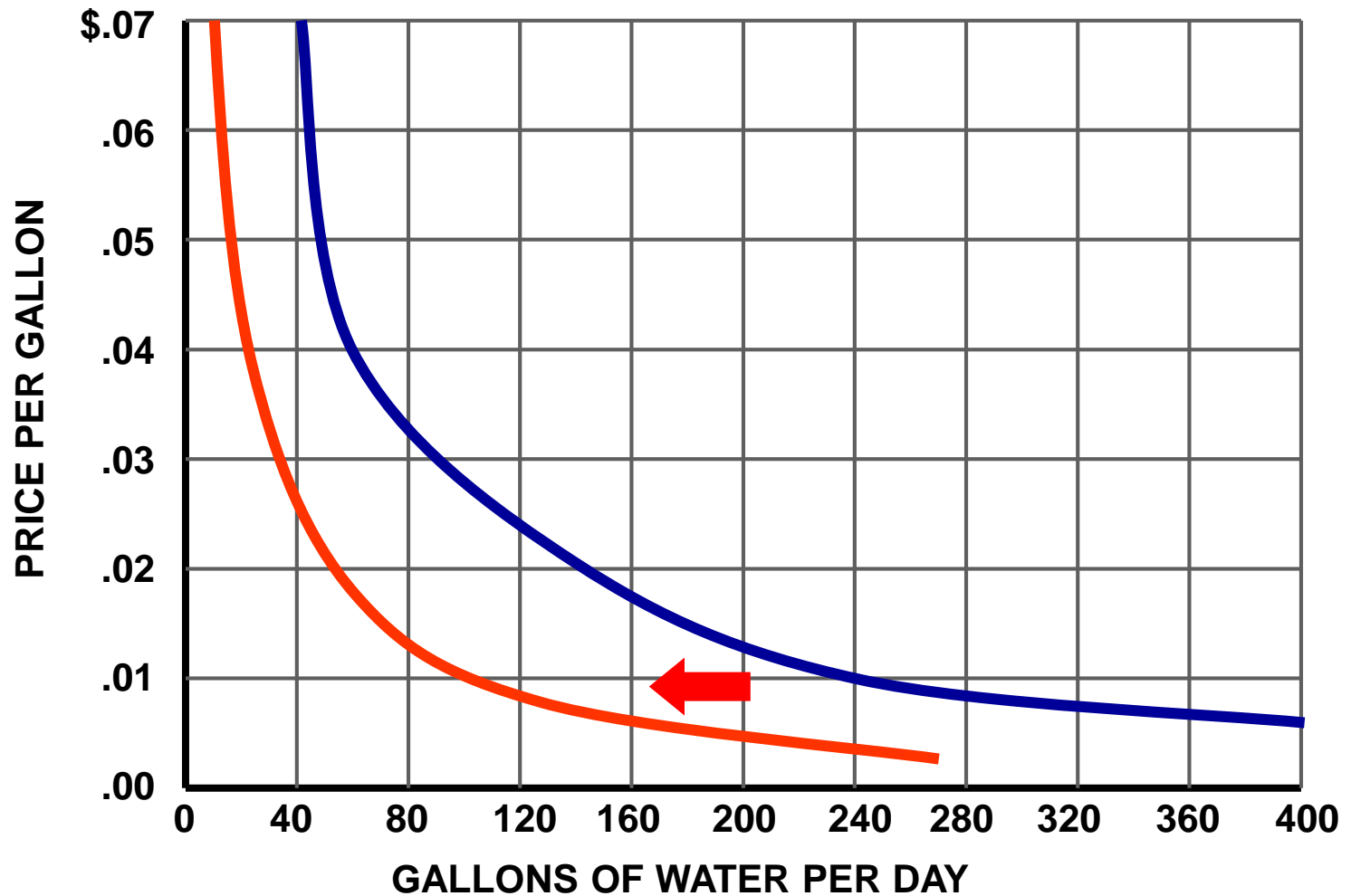


# Demand Itself Can Change (需求自身也会变)

<u>Price per Gallon</u>	<u>Original Gallons/Day</u>	<u>New Gallons/Day</u>
<b>\$.07</b>	<b>40</b>	<b>15</b>
<b>.04</b>	<b>60</b>	<b>25</b>
<b>.02</b>	<b>140</b>	<b>55</b>
<b>.01</b>	<b>240</b>	<b>100</b>
<b>.005</b>	<b>400</b>	<b>200</b>

Table 3-2

# Demand Itself Can Change (需求自身也会变)



# Everything Depends Upon Everything Else（任何事物都依赖于其他事物）

- Influences that can cause a change in the demand for a good:（能导致需求变动的因素）
  - change in the number of customers（消费者数量的变化）
  - change in customer tastes（消费者口味和偏好的变化）
  - change in income（收入的变化）
    - 经济学家根据消费者对收入变化的反应如何来区分正常品(normal goods)和低档品(inferior goods)

# Everything Depends Upon Everything Else（任何事物都依赖于其他事物）

- ❑ change in price of a substitute（替代品价格的变化）
- ❑ change in price of a complementary good  
（互补品价格的变化）
- ❑ change in the expected future price（预期未来价格的变化）

# Misperceptions Caused by Inflation（通货膨胀导致的错觉）

- Inflation is **usually defined as** *an increase in the average money price of goods*.（通货膨胀通常被定义为物品平均货币价格的上涨）
  - In a period of rapid inflation, most apparent price increases are not real price increases. (在通货膨胀严重的时期，很多**表面上的**价格上升未必是**真正的**价格上涨)
  - Inflation seriously distorts our perception of relative price and cost changes.(通货膨胀严重扭曲了我们对**相对价格和成本**变动的感知)



# Misperceptions Caused by Inflation（通货膨胀导致的错觉）

- If the money prices of all goods (including labor) increase equally, then no good (except money) will have changed in **real price**（如果所有物品（包括劳动力）的货币价格都加倍，那么除了钱，其他所有东西的真实价格都没变）
- If we want to examine the effect of a particular price increase, we must first abstract from the effects of a general increase in prices. (如果我们想要考察某一种物品价格上涨的影响，首先得剔除价格普遍上涨的影响.)

# Time Is On Our Side（时间因素）

- Changes in the quantity demanded take **time**（需求量的变化需要时间）
  - it takes time for customers to find and begin to use substitutes（对顾客来说，发现并开始使用替代品需要时间）
  - it takes time for producers to devise, produce, and publicize substitutes（生产者也需要时间来开发、生产和推广替代品）
  - These changes will be greater the longer the time period allowed for adjustment（允许调整的时间段越长，这些变化将越大）

# Price Elasticity of Demand（需求的价格弹性）

- **Price elasticity of demand** is the percentage change in the quantity demanded divided by the percentage change in price.（需求的价格弹性等于需求量变化的百分比除以价格变化的百分比）
  - it measures consumer responsiveness to price changes.（衡量了消费者对价格变化的反应）

$$\text{Price elasticity of demand} = \frac{\% \text{ change in } Q}{\% \text{ change in } P}$$

# Price Elasticity of Demand（需求的价格弹性）

- Elastic Demand（弹性需求）
  - Absolute value of price elasticity（价格弹性的绝对值）  $> 1$
- Inelastic Demand（无弹性需求）
  - Absolute value of price elasticity  $< 1$
- Unit Elastic（单位弹性）
  - Absolute value of price elasticity  $= 1$

# Price Elasticity of Demand（需求的价格弹性）

- A product's elasticity is influenced by:（弹性受影响）
  - time（时间）
    - all products become more elastic with time（随着时间的推移，所有产品都变得更有弹性）
  - availability of substitutes（替代品的可获得性）
    - the more substitutes a product has, the more elastic（替代品越多，弹性越大）
  - proportion of one's budget spent on a good（预算中被用于某种东西的比例）
    - the more a product takes of your budget, the more elastic（一种产品占预算越多，则越有弹性）

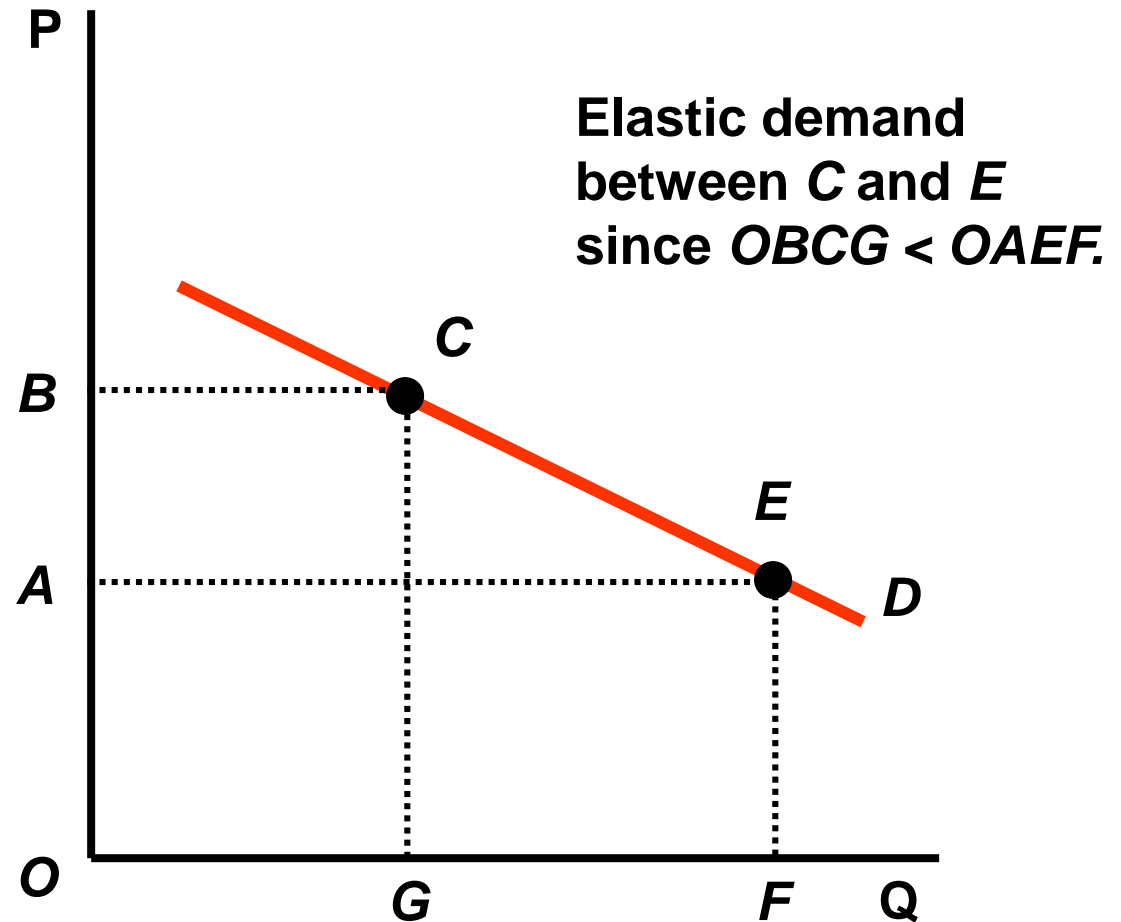
# Elasticity and Total Receipts （弹性与总收入）

- *“The university’s total receipts from tuition would actually increase if tuition rates were cut by 20 percent.”* （如果大学的学费标准降低 20%，那么大学的学费总额就会上升）
  - The 20 percent cut in prices must cause quantity demanded to increase by more than 20 percent. （学费降低20% 必须使得入学人数有比20%更大的增长）
  - *Elastic demand* （需求是有弹性的）

# Elasticity and Total Receipts (弹性与总收入)

## ■ **Elastic Demand**

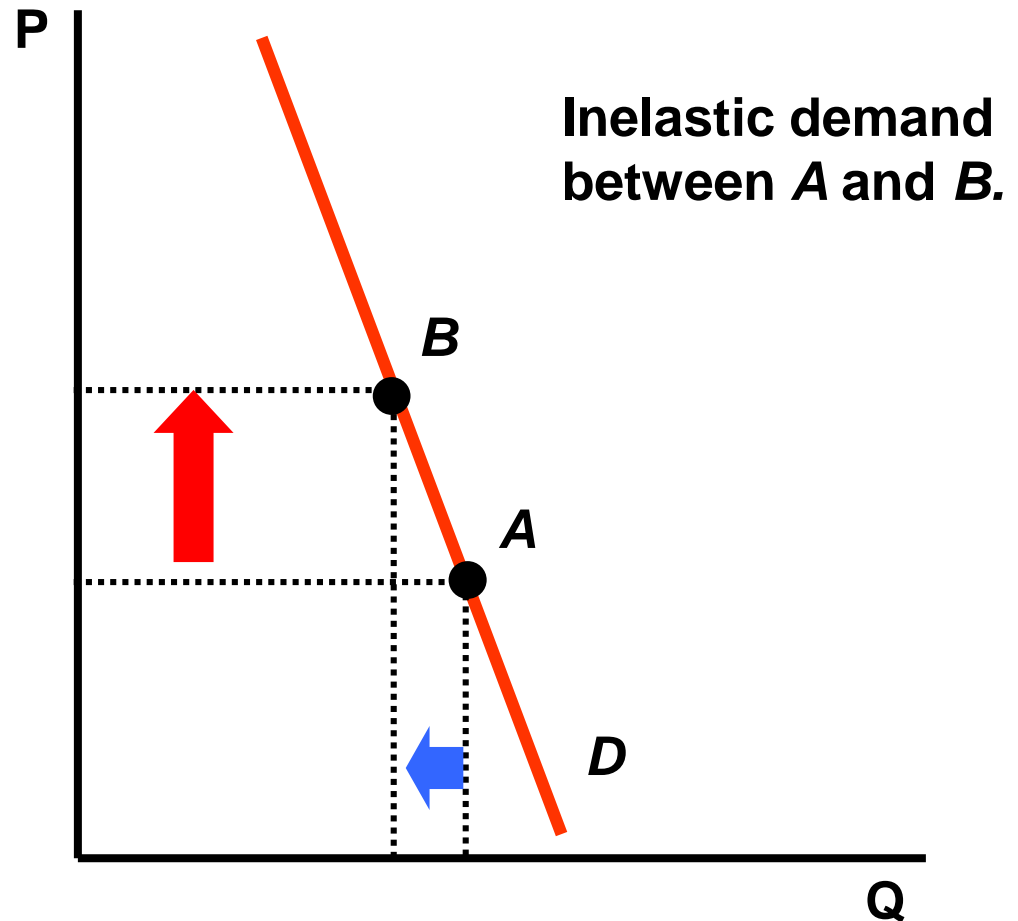
- Prices and total receipts move in opposite directions.



# Elasticity and Total Receipts (弹性与总收入)

## ■ *Inelastic Demand*

- Prices and total receipts move in the same direction.





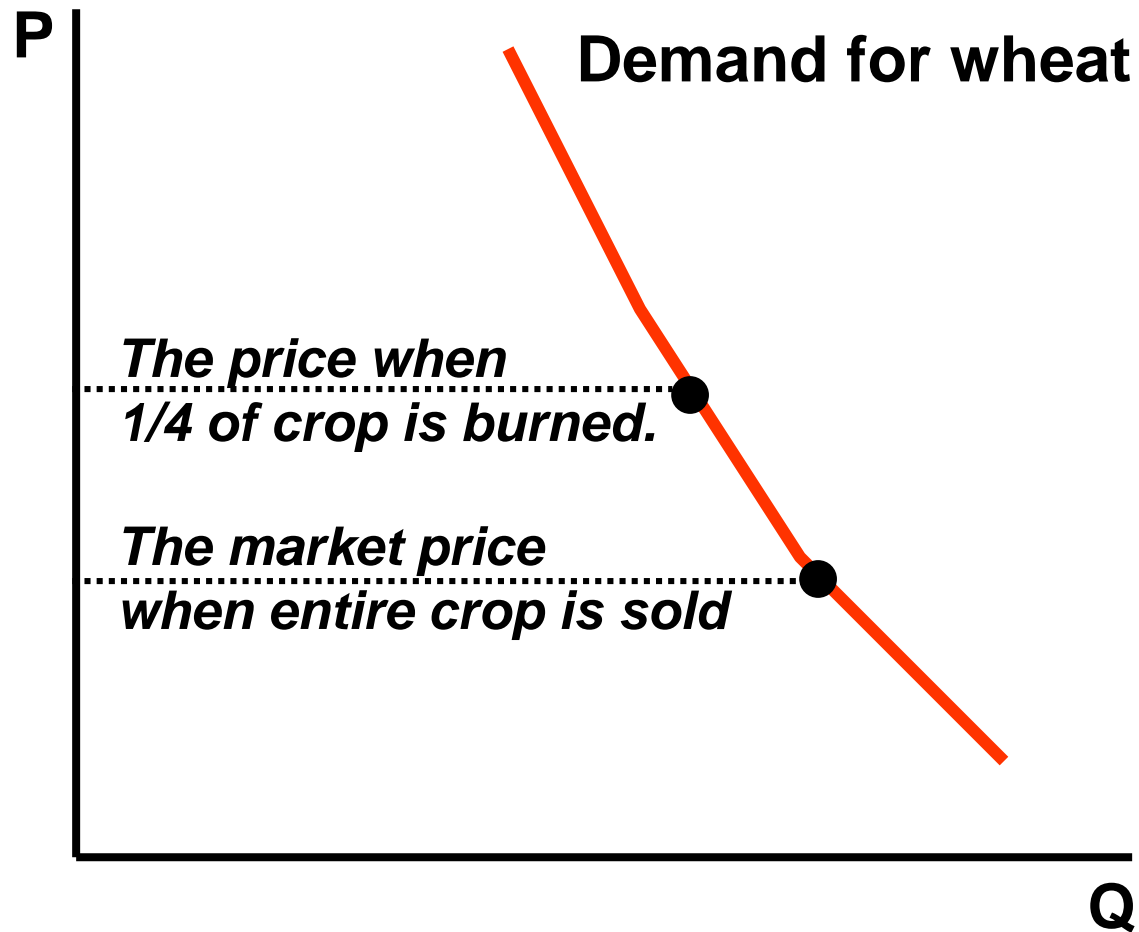
# Elasticity and Total Receipts （弹性与总收入）

- *E.g.*

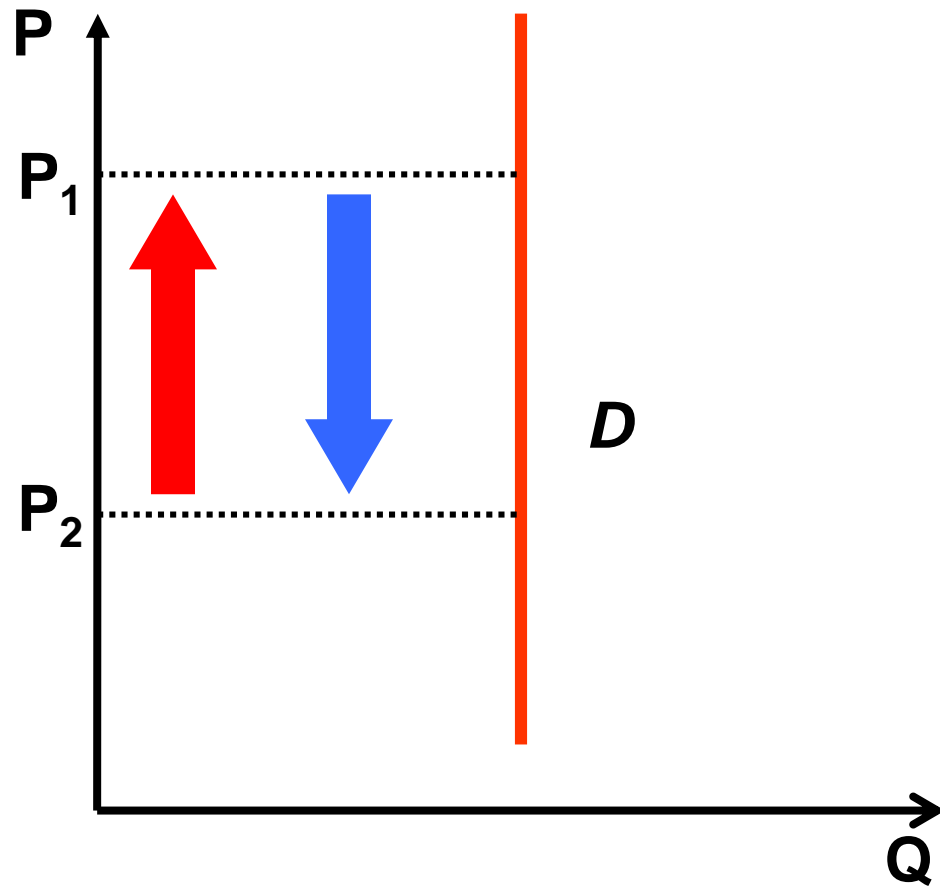
- 叶圣陶：“多收了三五斗”
- “谷贱伤农”、“菜贱伤农”！

- *“It’s odd but true. Wheat farmers would gross more money if they all got together and burned one-quarter of this year’s crop.”*

# Elasticity and Total Receipts (弹性与总收入)



# The Myth of Vertical Demand (垂直需求的误区)



# The Myth of Vertical Demand（垂直需求的误区）

## ■ Question

- Does a perfectly inelastic demand curve exist?（是否存在完全无弹性的需求曲线？）
- Will consumers buy the same quantity at all prices?（消费者会在任意价格下购买相同数量的物品吗？）

# The Myth of Vertical Demand（垂直需求的误区）

## ■ No

- A perfectly inelastic demand curve means there are no substitutes for the goods considered. (完全无弹性的需求曲线意味着一种物品不存在替代品)

# The Myth of Vertical Demand（垂直需求的误区）

- The law of demand can now be expressed in the language of elasticity:（需求定律可以用弹性语言表述）
  - There is no such thing as a completely inelastic demand over the entire range of possible prices. (对全部价格区间而言，不存在需求完全无弹性的东西.)

# What Role Should Demand Play? (需求应当扮演何种角色)

- All scarce goods must be **rationed** somehow (稀缺品必须进行分配)
- Market prices and willingness to pay are our primary **criteria for *rationing*** goods and services.

# What Role Should Demand Play? (需求应当扮演何种角色)

## ■ Other ways to ration (其他分配方式) :

- “rationing according to need” (按需分配)
- “Fist come, first served” (先到先得)
- lottery (抽签)
- equal shares for all (平均分配)
- “might makes right” (强权就是公理)
- merit (美德)



# What Role Should Demand Play? (需求应当扮演何种角色)

- Each of these rationing systems has advantages and disadvantages when considered as a **general system** for allocating scarce goods. (如果作为分配稀缺品的一般机制，上述每一种分配机制都优点和缺点.)
- Rationing by price is **the only rationing criterion without waste!** (按价分配是唯一的没有浪费的分配准则！)

# What Role Should Demand Play? (需求应当扮演何种角色)

- Taking the supply issue into consideration, (如果将供给问题考虑在内)
  - a system for rationing scarce goods *that does not produce appropriate rewards for those whose decisions create the goods will eventually collapse.* (如果一种分配稀缺品的方式不能让生产这些物品的人得到适当的回报，那么这种分配方式最终一定会崩溃.)

# What Role Should Demand Play? (需求应当扮演何种角色)

- When the price of a good rises, users find it in their own interest to economize. (当物品价格上涨时, 用户会发现进行节约符合自己的利益)
- Since individuals know their own circumstances far better than anyone else does, they are in the best position to pick and choose among the ways to economize. (既然人们远比别人更清楚自己的状况, 他们自己最适合挑选适合自身的节约方式.)

# What Role Should Demand Play? (需求应当扮演何种角色)

- E.g. 油价上涨时，人们有很多方式来节约汽油！
  - 多走路、坐公共汽车、骑自行车、几个人合开一辆车（“拼车”）、搬到离单位近一点的地方住、在高速公路上开慢点、调节发动机、不出去兜风、更周密地计划、把几次旅行合并到一起、不去离家太远的地方度假，或者买一辆小点的、更省油的车.....

# Is Money All That Matters? （只有钱重要吗？）

- People compare the expected additional benefit against the expected additional cost, *in whatever way that cost is conceived*. （人们会比较预期的边际收益与边际成本，以任何方式设想的成本）
- The price in money that must be paid for something is **not necessarily** a complete measure of its cost to the purchaser. （必须为某物支付的货币价格未必完整衡量了购买者的成本）

# Is Money All That Matters? （只有钱重要吗？）

- In a market economy, money is a common denominator  
（在市场经济中，货币是一个共同标准）
  - Money allows individuals to calculate relative costs and benefits  
（货币使个人能够计算相对成本和收益）
- Changes in money prices are useful signals that coordinate people's consumption and production plans.  
（货币价格的变化是协调消费和生产计划的有用信号。）

# Once Over Lightly（简短回顾）

- Trade-offs（权衡）
- Needs（需求）
- Law of demand（需求法则）
- Demand curve（需求曲线）
- Quantity demanded（需求量）
- Dependence（依赖关系）

# Once Over Lightly（简短回顾）

- Inflation（通货膨胀）
- Time（时间）
- Price elasticity of demand（需求的价格弹性）
- Elasticity and receipts（弹性与收入）
- Rationed goods（分配物品）
- Money costs（货币成本）
- Economic calculation（经济核算，算经济账）