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**储蓄、投资和金融体系**

**Saving, Investment, and the Financial  
System**



# **储蓄、投资与金融体系**

## **Saving, Investment and the Financial System**

- **储蓄与投资是 GDP 与生活水平长期增长的重要因素。**

**Saving and Investment are important determinants of long-run growth in GDP and living standards.**



# 金融体系

## The Financial System

- **金融体系**由这样一些金融机构组成，它们促使一个人的储蓄与另一个人的投资相匹配。

The **financial system** consists of institutions that help to match one person's saving with another person's investment.

- 他将经济中的稀缺资源从储蓄者转移给借用者。

It moves the economy's scarce resources from savers to borrowers.



# **美国经济中的金融机构**

## **Financial Institutions in the U.S. Economy**

- **金融体系由金融机构组成，金融机构协调储蓄者和借用者的行为。**

**The financial system is made up of financial institutions that coordinate the actions of savers and borrowers.**

- **金融机构可以归入两种不同类型：金融市场和金融中介机构。**

**Financial institutions can be grouped into two different categories: financial markets and financial intermediaries.**



# **美国经济中的金融机构**

## **Financial Institutions**

### **in the U.S. Economy**

- **金融市场 Financial Markets**
  - **股票市场 Stock Market**
  - **债券市场 Bond Market**
- **金融中介 Financial Intermediaries**
  - **银行 Banks**
  - **基金 Mutual Funds**



# 美国经济中的金融机构

## Financial Institutions in the U.S. Economy

- **金融市场**是储蓄者直接向借用者提供资金的机构。

**Financial markets** are the institutions through which savers can directly provide funds to borrowers.

- **金融中介机构**是储蓄者间接向借用者提供资金的金融机构。

**Financial intermediaries** are financial institutions through which savers can indirectly provide funds to borrowers.

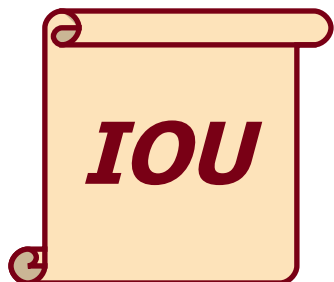


# 债券市场

## The Bond Market

**债券**是一种债务证明书，  
它规定了借用者对债券持  
有者的义务。

A **bond** is a  
certificate of indebtedness  
that specifies obligations of  
the borrower to the holder of  
the bond.





# 债券的特征

## Characteristics of a Bond

- **期限：**截至债券到期时的时间长度。  
**Term:** The length of time until the bond matures.
- **信用风险：**借用者未能支付某些利息或本金的可能性。  
**Credit Risk:** The probability that the borrower will fail to pay some of the interest or principal.
- **税务处理：**税务法规处理债券利息的方式。  
**Tax Treatment:** The way in which the tax laws treat the interest on the bond.
  - 市政债券是免联邦税的。  
Municipal bonds are federal tax exempt.





# 股票市场

## The Stock Market

- 出售股票来融资称为**股本筹资**（而出售债券融资称为**债务融资**）。

The sale of stock to raise money is called **equity financing**, whereas the sale of bond is called **debt finance**.

- **股票**代表在一个企业中的所有权，从而也代表了对企业所获利润的要求权。

**Stock** represents ownership in a firm and is therefore, a claim to the profits that the firm makes.

- 与债券相比，股票提供了更高的风险和潜在的更高的收益。

Compared to bonds, stocks offer both higher risk and potentially higher returns.

# 股票市场

## The Stock Market

美国经济中最重要的股票交易（场所）是纽约证券交易所，美国股票交易所和纳斯达克（NASDAQ，全国证券交易商协会自动报价系统）

The most important stock exchanges in the United States are the New York Stock Exchange, the American Stock Exchange, and NASDAQ.

中国：上海证券交易所，深圳证券交易所。

# 股票市场

## The Stock Market

大多数报纸的股票行情表提供下列信息

**Most newspaper stock tables provide the following information:**

- **（每股） 价格 Price (of a share)**
- **交易量（股票售出数量） Volume (number of shares sold)**
- **股息或红利（支付给股东的利润） Dividend (profits paid to stockholders)**
- **价格－收益比（市盈率） Price-earnings ratio**

# 股票市场

## The Stock Market

- 股票市场上股票交易的价格由这些公司股票供求状况决定。

The **price** at which share trade on stock exchanges are determined by the supply and demand for the stock in these companies.

- 因为股票代表了对一个公司的所有权，股票的需求（因而其价格）就反映了人们对于公司未来盈利性的判断。

Because stock represents ownership in a corporation, the demand for a stock (and thus its price) reflects people's perception of the corporation's future profitability.

- 各种**股票价格指数**，即计算出来的一组股票价格的平均数，用于监测整体股票价格水平。

Various **stock indexes**, computed as averages of a group of stock prices, are used to monitor the overall level of stock prices

- 股票价格指数作为未来经济状况的可能指标而备受关注。

These stock indexes are watched closely as possible indicators of

# 股票市场

## The Stock Market

- 一个公司的**收益**（或利润）是按照会计标准衡量到的从出售产品中获得销售额与生产成本之差。

A corporation's **earnings**, or profit, is the amount of revenue it receives for the sale of its product minus its costs of production as measured by its accountants.

- **价格 - 收益比**，简称 **P/E 值**，是过去一年公司的股票价格除以每股收益额（包括股息和未分配利润）。

The **price-earnings ratio**, often called the **P/E**, is the price of a corporation's stock divided by the amount the corporation earned per share over the past year.

- 历史上，典型的 P/E 值约为 15（中国：2011 年新股发行市盈率为 20-40。）

Historically, the typical price-earnings ratio is about 15.

- 高的 P/E 值表明着公司的股票相对于它的近期收益来说是昂贵的。这既有可能表明人们预期未来的收益增加；也可能表明股票被高估了。

A higher P/E indicates that a corporation's stock is expensive relative to its recent earnings; this might indicate either that people expect



# 金融中介机构：银行

## Financial Intermediaries:

### Banks

- 银行从想要储蓄的人那里得到存款，用这些储蓄向想要借钱的人发放贷款。

**Banks take deposits from people who want to save and use the deposits to make loans to people who want to borrow.**

- 银行向储户支付存款利息，并向贷款人收取稍高一些的利息。

**Banks pay depositors interest on their deposits and charge borrowers slightly higher interest on their loans.**

# 银行 Banks

- 银行通过允许人们依据储蓄来开支票，帮助创造了一种**交易媒介**。

Banks help create a **medium of exchange** by allowing people to write checks against their deposits.

- 交易媒介是人们用来方便地从事交易的一种东西。

A medium of exchanges is an item that people can easily use to engage in transactions.

- 它便利了物品和服务的购买。

This facilitates the purchases of goods and services.





# 金融中介机构：基金

## Financial Intermediaries: Mutual Funds

- **基金**是向公共出售股份，并用得来的收益购买各种股票和（或）债券的一个组合的机构。

A **mutual fund** is an institution that sells shares to the public and uses the proceeds to buy a selection, or portfolio, of various types of stocks, bonds, or both.

- 它们允许人们以较小的金额轻而易举地进行多样化（投资）。

They allow people with small amounts of money to easily diversify.

- 他们使普通人获得专业资金管理者的技能服务。  
They give ordinary people access to the skills of professional money manager.

# 金融中介机构：基金

## Financial Intermediaries: Mutual Funds

- 由于成千上万的资金管理者密切注视着每个公司的前景，一个公司的股票价格通常很好地反映了其真实价值。

With thousands of money managers paying close attention to each company's prospects, the price of a company's stock is usually a good reflection of the company's true value.

- 其结果是，通过买入好股票和卖出坏股票来“打败市场”是非常困难的（有效市场假说）。

As a result, it is hard to “beat the market” by buying good stocks and selling bad ones (Efficient Market Hypothesis, EMH).

- 实际上，一种名为**指数基金**的共同基金，即购买某一种股票指数包含的所有股票，其业绩平均而言比利用专业资金管理者进行积极管理的共同基金还好一些。

In fact, mutual funds called **index fund**, which buy all the stocks in a given stock index, perform somewhat better on average than mutual funds that take advantage of active management by professional money managers.



## **其他金融机构**

### **Other Financial Institutions**

- **信用合作社 Credit unions**
- **养老基金 Pension funds**
- **保险公司 Insurance companies**
- **放高利贷者 Loan sharks**

# 中国居民金融资产分布

## China Households' Financial Assets Distribution

表 6-2 我国居民金融资产结构

单位：%

	2004	2005	2006	2007	2008	2009	2010 年 第三季度末
本币通货	9.9	9.5	8.9	7.5	8.3	7.8	7.2
存款	71.8	72.0	68.3	54.2	66.6	65.4	64.0
证券	8.4	6.9	9.5	17.4	7.3	12.2	12.5
国债	3.5	3.1	2.8	2.0	1.5	0.6	0.6
股票	4.9	3.8	6.8	15.4	5.9	11.5	11.9
证券投资基金份额	1.1	1.2	2.2	8.9	5.0	2.0	1.6
客户交易结算资金	0.7	0.7	1.2	3.0	1.4	1.4	0.9
保险准备金	7.8	8.8	9.0	8.1	11.0	11.3	11.3
金融机构理财产品	—	—	—	—	—	—	2.7

数据来源：《中国金融稳定报告（2011）》，中国人民银行。



# 储蓄 Saving

- 回忆 GDP 既是经济中的总收入，也是花在经济中产品和服务的总产出上的总支出。

Recall that GDP is both total income in an economy and total expenditure on the economy's output of goods and services:

$$Y = C + I + G + NX$$

(income) (expenditure)

整体经济是如何决定将其总收入（Y）分配到不同的支出（消费 C，投资 I 等）上的？

How does an economy as a whole decide to allocate its total income to different expenditures?

# 储蓄 Saving

假定有一个封闭经济——一个不从事国际贸易的经济。

**Assume a closed economy –  
one that does not engage in  
international trade:**

$$***Y = C + I + G***$$

# 储蓄 Saving

- 现在，从等式两边同时减去 C 和 G  
Now, subtract C and G from both sides of the equation:

$$Y - C - G = I$$

- 等式左边就是经济中支付消费和政府购买之后的总收入，称为**国民储蓄**，或简称**储蓄 (S)** The left side of the equation is the total income in the economy after paying for consumption and government purchases and is called **national saving**, or just **saving (S)**.

$$S \equiv Y - C - G$$





# 储蓄 Saving

- 国民储蓄（或储蓄）等于：

National saving, or saving, is equal to:

$$S \equiv Y - C - G$$

$$S \equiv (Y - T - C) + (T - G)$$

- 特例：没有政府，  $G = T = 0$  ，  $S \equiv Y - C$



# 私人储蓄 Private Saving

- 私人储蓄是支付了税收和消费之后余下的家庭收入。

**Private saving** is the amount of income that households have left after paying their taxes and paying for their consumption.

$$\textit{Private saving} \equiv (Y - T - C)$$



# 公共储蓄

## Public Saving

- **公共储蓄**是政府支付了其支出之后的税收收入。

**Public saving** is the amount of tax revenue that the government has left after paying for its spending.

$$\textit{Public saving} \equiv (T - G)$$

# 公共储蓄

## Public Saving

- 如果  $T > G$ ，政府有**预算盈余**，因为其得到的钱多于其花掉的钱。

If  $T > G$ , the government runs a **budget surplus** because it receives more money than it spends.

- 盈余  $T - G$  代表**公共储蓄**。

The surplus of  $T - G$  represents **public saving**.

- 如果  $G > T$ ，政府有**预算赤字**，因为其花掉的钱多于其得到的税收收入。

If  $G > T$ , the government runs a **budget deficit** because it spends more money than it receives in tax revenue.



# 储蓄与投资

## Saving and Investment

- 以  $S$  代替  $Y-C-G$ ，等式可以写成  
Substituting  **$S$**  for  **$Y-C-G$** , the equation  
can be written as:

$$**$S = I$**$$

# 储蓄与投资

## Saving and Investment

- 这个等式背后的机制是什么？

**What mechanism lie behind this equality?**

- 谁来协调储蓄者与投资者？

**What coordinates savers and investors?**

- 回答：金融体系。

**Answer: The financial system.**



# 可贷资金市场

## The Market for Loanable Funds

- 金融市场（体系）协调经济中可贷资金市场上的储蓄和投资。

Financial markets coordinate the economy's saving and investment in the market for loanable funds.

- 通过假设经济当中只有单一的市场，我们集中精力来解释金融市场如何协调整体经济的储蓄与投资。

Assuming that the economy has a *single* financial market, we focus on explaining how financial markets coordinate





# 可贷资金市场

## The Market for Loanable Funds

**可贷资金**指人们用来储蓄并借出、而不是用于自己消费的所有收入。

**Loanable funds** refers to all income that people have chosen to save and lend out, rather than use for their own consumption.



# **可贷资金市场的供给：储蓄**

## **Supply of Loanable Funds: Saving**

- **可贷资金的供给来自于那些有多余收入需要储蓄和贷出的人。**

**The supply of loanable funds comes from people who have extra income they want to save and lend out.**

# 可贷资金市场的供给：储蓄

## Supply of Loanable Funds: Saving

- **利率**是借（贷）款的价格。  
The **interest rate** is the price of the loan.
- 它代表借入者为贷款支付的金额，也是借出者从储蓄中得到的金额。  
It represents the amount that borrowers pay for loans and the amount that lenders receive on their saving.
- 可贷资金市场上的利率是**实际**利率。  
The interest rate in the market for loanable funds is the **real** interest rate.

# 可贷资金市场的供给：储蓄

## Supply of Loanable Funds: Saving

- 由于高利率使储蓄更有吸引力（当期消费更缺乏吸引力），所以，随着利率的上升，可贷资金的供给量增加。

**Because a high interest rate makes saving more attractive (or current consumption less attractive), the quantity of loanable funds supplied rises as the interest rate rises.**

- 可贷资金的供给曲线向右上方倾斜。

**The supply curve for loanable funds slopes upward.**



# **可贷资金市场的需求：投资**

## **Demand for Loanable Funds: Investment**

- **可贷资金的需求来自于希望借入以进行投资的家庭和企业。**

**The  
demand for loanable funds comes from  
households and firms that wish to  
borrow to make investments.**

# 可贷资金市场的需求：投资

## Demand for Loanable Funds: Investment

- 由于高利率使得借款更为昂贵，所以，随着利率的上升，可贷资金的需求量减少。

**Because a high interest rate makes borrowing more expensive, the quantity of loanable funds demanded falls as the interest rate rises.**

- 可贷资金的需求曲线向右下方倾斜。

**The demand curve for loanable funds slopes downward.**



# 可贷资金市场上的供给与需求

## Supply and Demand for Loanable Funds

- 金融市场的运作和经济中的其他市场非常相似。

Financial markets work much like other markets in the economy.

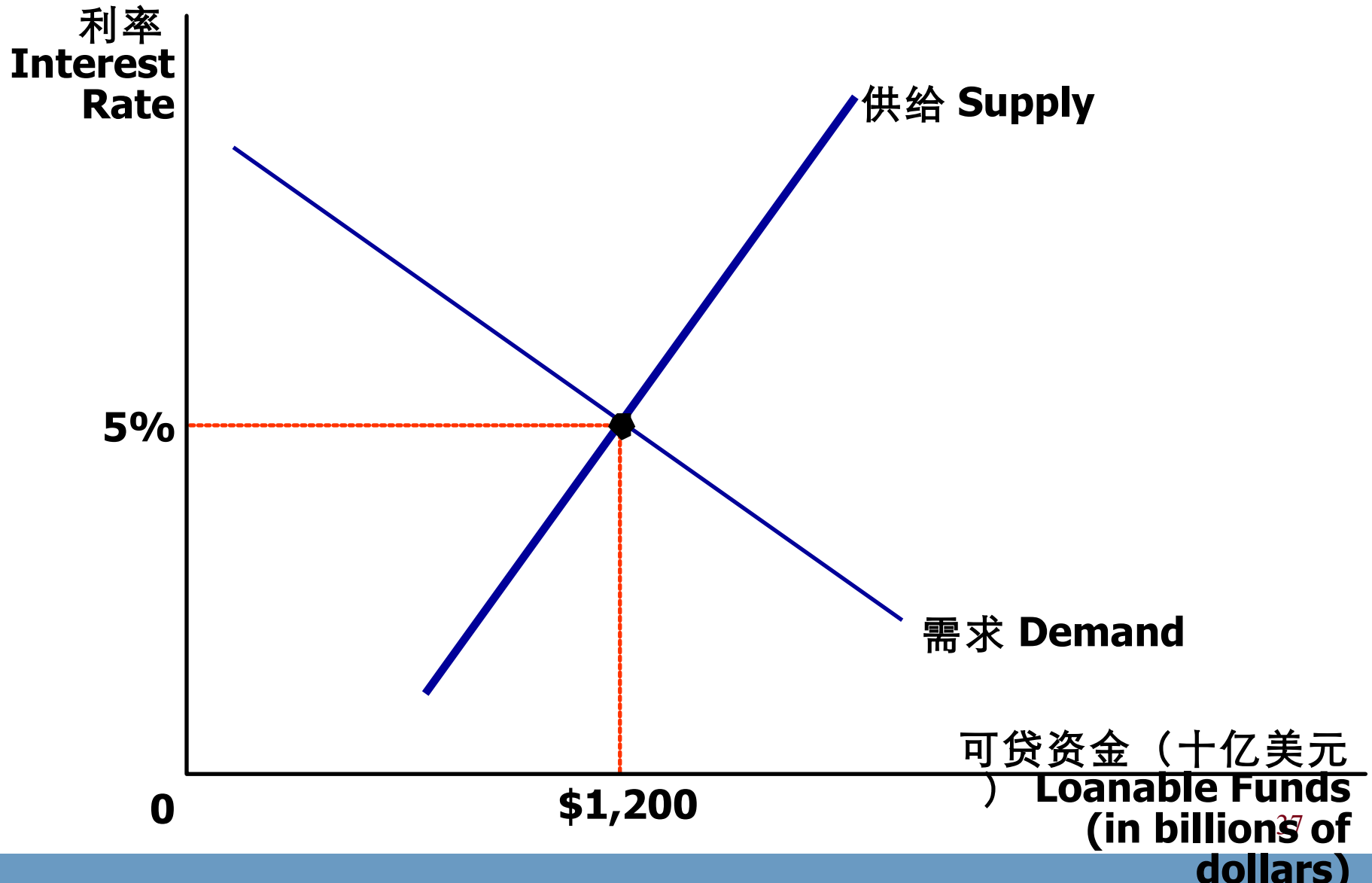
- 利率调节使得可贷资金供求平衡，协调了储蓄和投资。

When the **interest rate** adjusts to balance supply and demand in the market for loanable funds, it coordinates the behavior of savors and investors.



# 可贷资金市场

## Market for Loanable Funds...





# **影响储蓄与投资的政府政策**

## **Government Policies That Affect Saving and Investment**

- **税收与储蓄 Taxes and saving**
- **税收与投资 Taxes and investment**
- **政府预算赤字 Government budget deficits**



# 税收与储蓄

## Taxes and Saving

**对利息收入征税极大地减少了当前储蓄的未来偿付，因而减弱了储蓄的激励。**

**Taxes on interest income substantially reduce the future payoff from current saving and, as a result, reduce the incentive to save.**

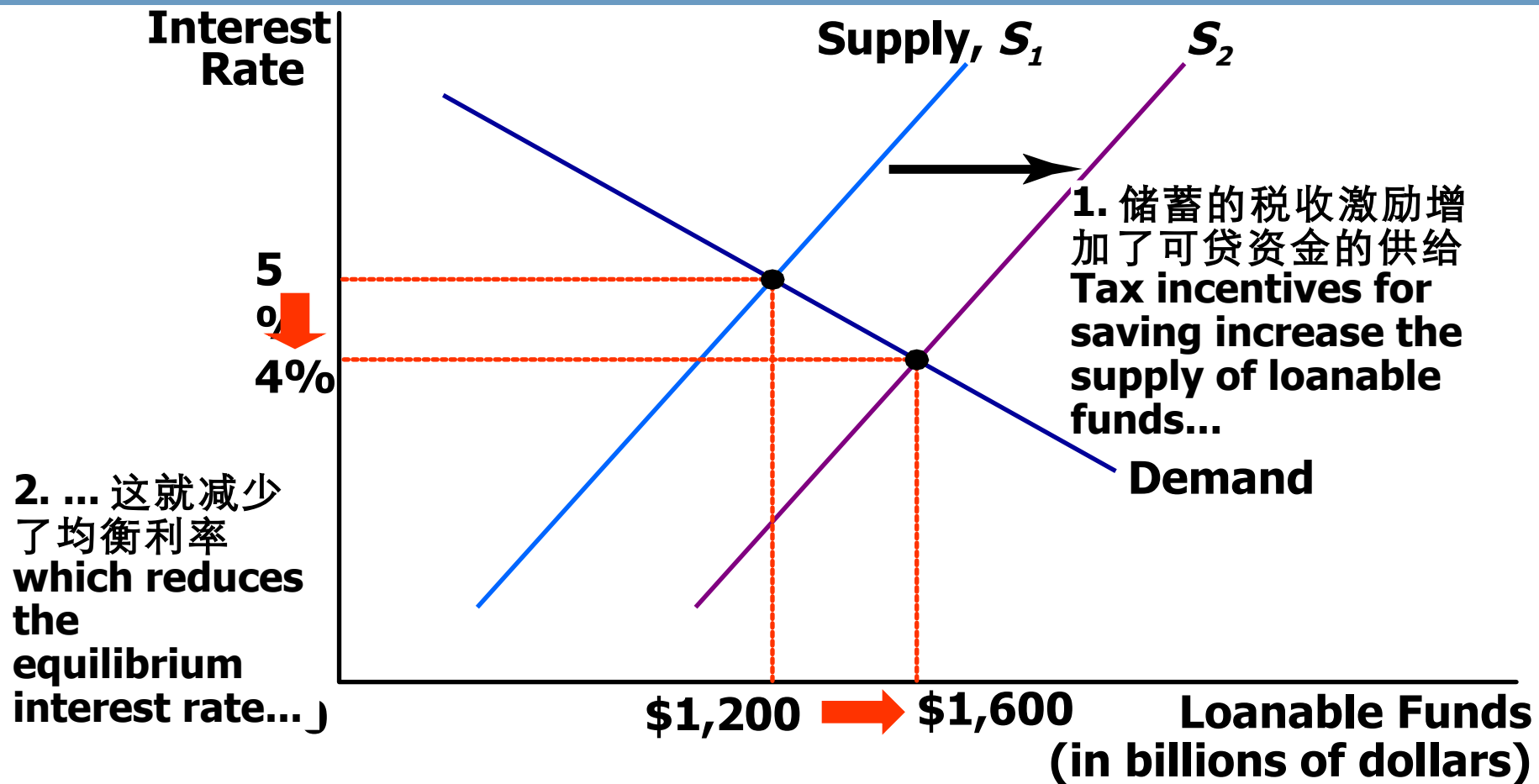
# 税收与储蓄

## Taxes and Saving

- **减税增加了家庭在给定利率下进行储蓄的激励** A tax decrease increases the incentive for households to save at any given interest rate.
  - **可贷资金的供给曲线向右移动。**  
The supply of loanable funds curve shifts to the right.
  - **均衡利率下降。**  
The equilibrium interest rate decreases.
  - **可贷资金的需求量增加。**  
The quantity demanded for loanable funds increases.

# 可贷资金供给的增加

## An Increase in the Supply of Loanable Funds...



# 税收与储蓄

## Taxes and Saving

如果税法的变动鼓励更多的储蓄，  
结果就是利率下降和投资上升。

If a change in  
tax law encourages greater saving, the  
result will be lower interest rates and  
greater investment.



# 税收与投资

## Taxes and Investment

- 投资的税收优惠增加了借入的激励。  
An investment tax credit increases the incentive to borrow.
  - 增加了可贷资金的需求。  
Increases the demand for loanable funds.
  - 需求曲线右移  
Shifts the demand curve to the right.
  - 导致更高的利率和更多的储蓄量  
Results in a higher interest rate and a greater quantity saved.

# 税收与投资

## Taxes and Investment

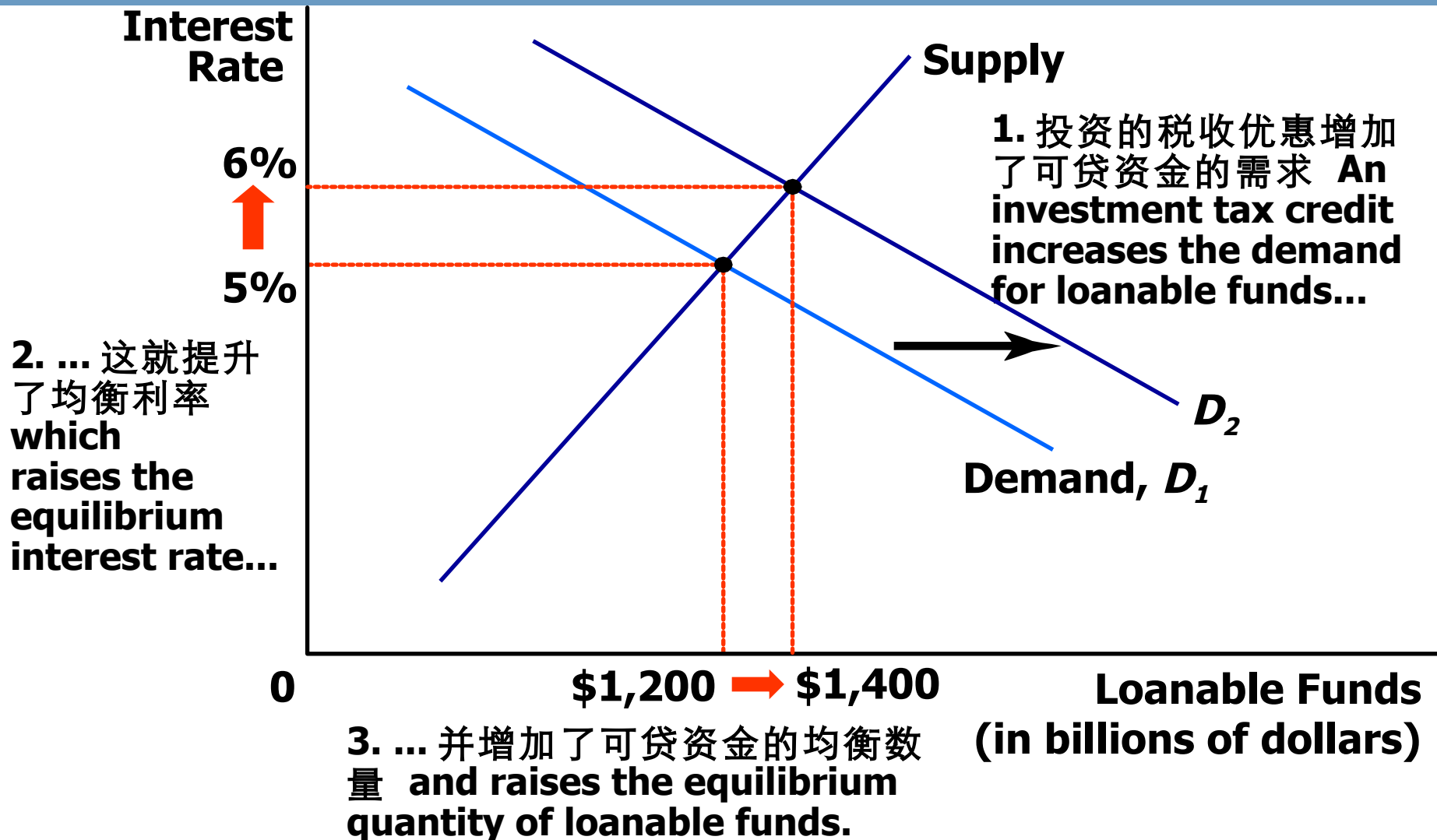
如果税法的变动鼓励更多的投资，结果是更高的利率和更多的储蓄。

If a change in tax laws encourages greater investment, the result will be higher interest rates and greater saving.



# 可贷资金需求的增加

## An Increase in the Demand for Loanable Funds...





# 政府预算赤字和盈余

## Government Budget Deficits and Surpluses

- 如果政府花掉的比它得到的税收收入要多，这一亏空称为**预算赤字**。

When the government spends more than it receives in tax revenues, the short fall is called the **budget deficit**.

- 过去的预算赤字的积累称为**政府债务**。  
The accumulation of past budget deficits is called the **government debt**.

# 政府预算赤字和盈余

## Government Budget Deficits and Surpluses

- 回顾可贷资金的供给（储蓄）等于私人储蓄加上公共储蓄：

$$S \equiv (Y - T - C) + (T - G)$$

- 当政府的支出（**G**）增加但税收（**T**）不变时：
  - 公共储蓄（**T-G**）下降；
  - 私人储蓄（**Y-T-C**）不变；
  - 可贷资金供给下降

# 政府预算赤字和盈余

## Government Budget Deficits and Surpluses

- 预算赤字（政府支出增加）减少了可贷资金的供给

**A budget deficit (an increase in government expenditure) decreases the supply of loanable funds.**

- 供给曲线左移

**Shifts the supply curve to the left.**

- 提高了均衡利率

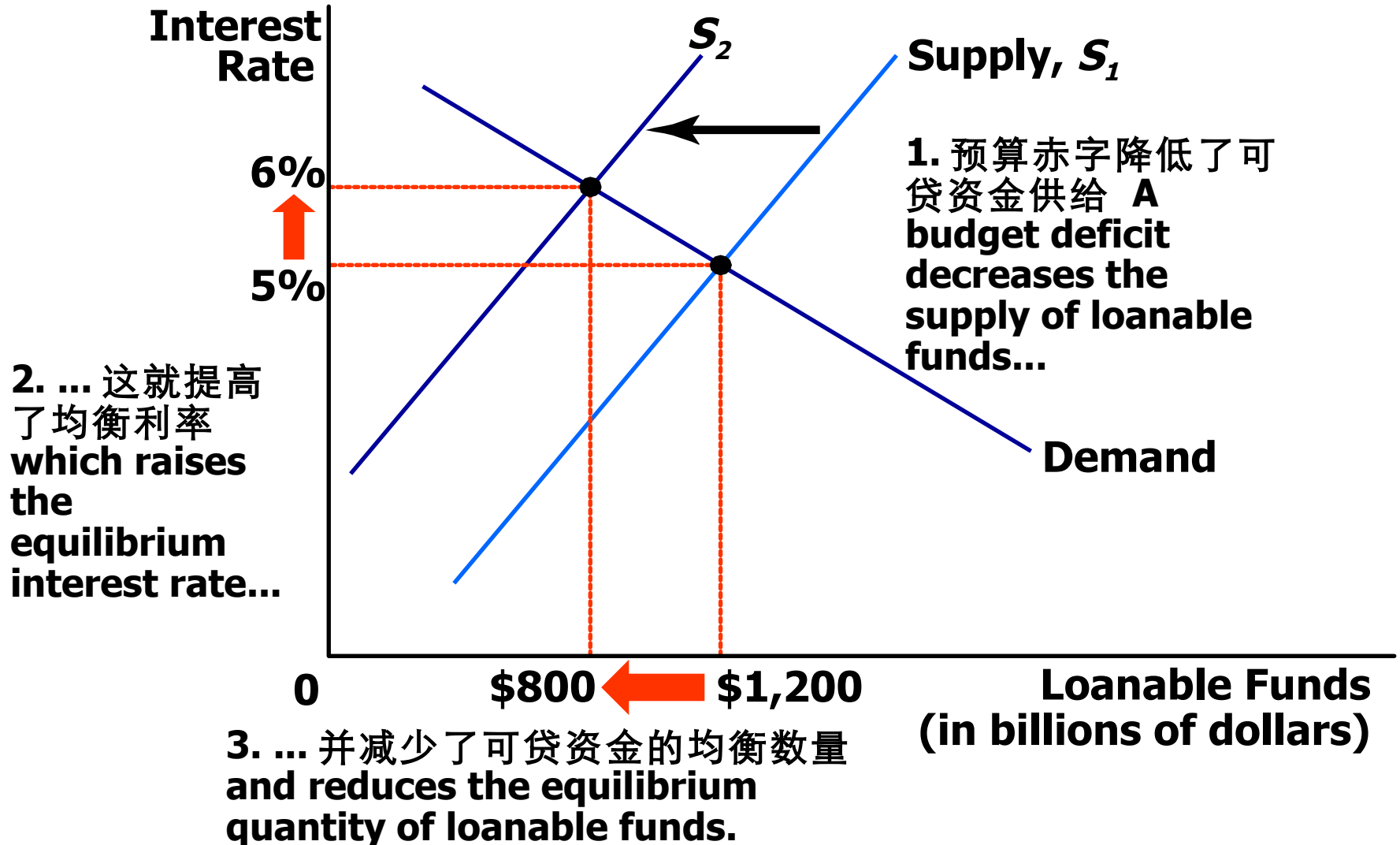
**Increases the equilibrium interest rate.**

- 降低了可贷资金的均衡数量

**Reduces the equilibrium quantity of loanable funds.**

# 政府预算赤字的效应

## The Effect of a Government Budget Deficit...



# 政府预算赤字和盈余

## Government Budget Deficits and Surpluses

- 政府借钱来为其预算赤字筹资，减少了可以为家庭和企业投资提供资金的可贷资金供给。  
Government borrowing to finance its budget deficit reduces the supply of loanable funds available to finance investment by households and firms.
- 这一投资的下降被称为**挤出**。  
This fall in investment is referred to as **crowding out**.
  - 赤字借款**挤出了**试图为其投资融资的私人借款者。  
The deficit borrowing **crowds out** private borrowers who are trying to finance investments.

# 政府预算赤字和盈余

## Government Budget Deficits and Surpluses

当政府通过赤字运行减少了国民储蓄，则利率上升，投资下降。

When government reduces national saving by running a deficit, the interest rate *rises* and investment *falls*.

# 政府预算赤字和盈余

## Government Budget Deficits and Surpluses

预算盈余增加了可贷资金的供给，降低了利率，刺激了投资。

A budget surplus *increases* the supply of loanable funds, *reduces* the interest rate, and *stimulates* investment.





# 总结

## Summary

- **美国金融体系是由金融机构组成的，而金融机构包括债券市场、股票市场、银行和共同基金等。 The U.S. financial system is made up of financial institutions such as the bond market, the stock market, banks, and mutual funds.**
- **所有这些机构的作用都是将想要保留其某些收入的家庭的资源引导至想要借入的家庭和企业的手中。**

**All these institutions act to direct the resources of households who want to save some of their income into the hands of households and firms who want to borrow.**



# 总结

## Summary

- 国民收入帐户恒等式揭示了宏观经济变量的某些重要关系。

**National income accounting identities reveal some important relationships among macroeconomic variables.**

- 特别的，在一个封闭的经济中，国民储蓄必然等于投资。

**In particular, in a closed economy, national saving must equal investment.**

- 金融机构试图将一人的储蓄和另一人的投资匹配起来。

**Financial institutions attempt to match one person's saving with another person's**



# 总结

## Summary

- 利率决定于可贷资金的供给与需求。

The interest rate is determined by the supply and demand for loanable funds.

- 可贷资金的供给来自于想要保留其部分收入的家庭。

The supply of loanable funds comes from households who want to save some of their income.

- 可贷资金的需求来自于想要借入以投资的家庭和企业。

The demand for loanable funds comes from households and firms who want to borrow for investment.



# 总结

## Summary

- 国民储蓄等于私人储蓄加上公共储蓄。

**National saving equals private saving plus public saving.**

- 政府预算赤字代表了负的公共储蓄，因而减少了国民储蓄和可贷资金的供给。

**A government budget deficit represents negative public saving and, therefore, reduces national saving and the supply of loanable funds.**

- 当政府赤字挤出了投资，它就降低了生产率和GDP。 **When a government budget deficit crowds out investment, it reduces the growth of productivity and GDP.**