


N. Gregory Mankiw

Principles of
Macroeconomics
 Sixth Edition

13

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

*Premium
 PowerPoint
 Slides by
 Ron Cronovich*



*In this chapter,
 look for the answers to these questions:*

- What are the main types of financial institutions in the U.S. economy, and what is their function?
- What are the three kinds of saving?
- What's the difference between saving and investment?
- How does the financial system coordinate saving and investment?
- How do govt policies affect saving, investment, and the interest rate?

1

Financial Institutions

§ The **financial system**:

§ **Financial markets**:

Examples:

- § The Bond Market.
 A **bond** is
- § The Stock Market.
 A **stock** is

2

Financial Institutions

§ Financial intermediaries:

Examples:

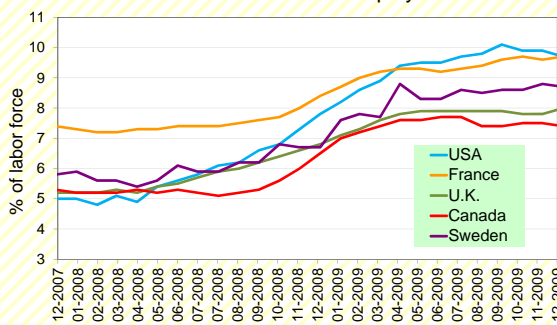
§ Banks

§ Mutual funds

3

The Financial Crisis of 2008–2009

§ A financial crisis led to a deep recession in the U.S. and around the world. A few unemployment rates:



FYI: Elements of Financial Crises

§

§ 2008–2009: Housing prices fell 30%.

§

§ 2008–2009:
Banks and other institutions failed when many homeowners stopped paying their mortgages.

§

§ 2008–2009:
Customers with uninsured deposits began pulling their funds out of financial institutions.

5

FYI: Elements of Financial Crises

§

§ 2008–2009: Borrowers unable to get loans because troubled lenders not confident in borrowers' credit-worthiness.

§

§ 2008–2009: Failing financial institutions and a fall in investment caused GDP to fall and unemployment to rise.

§

§ 2008–2009: The downturn reduced profits and asset values, which worsened the crisis.

6

Different Kinds of Saving

Private saving

Public saving

7

National Saving

National saving

= private saving + public saving

8

Saving and Investment

Recall the national income accounting identity:

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

For the rest of this chapter, focus on the closed economy case:

$$Y = C + I + G$$

Solve for I:

9

Budget Deficits and Surpluses

Budget surplus

Budget deficit

10

ACTIVE LEARNING 1

A. Calculations

§ Suppose GDP equals \$10 trillion, consumption equals \$6.5 trillion, the government spends \$2 trillion and has a budget deficit of \$300 billion.

§ Find public saving, taxes, private saving, national saving, and investment.

ACTIVE LEARNING **1**
Answers, part A

ACTIVE LEARNING **1**
B. How a tax cut affects saving

- § Use the numbers from the preceding exercise, but suppose now that the government cuts taxes by \$200 billion.
- § In each of the following two scenarios, determine what happens to public saving, private saving, national saving, and investment.
1. Consumers save the full proceeds of the tax cut.
 2. Consumers save 1/4 of the tax cut and spend the other 3/4.

ACTIVE LEARNING **1**
Answers, part B

ACTIVE LEARNING 1

C. Discussion questions

The two scenarios from this exercise were:

1. Consumers save the full proceeds of the tax cut.
2. Consumers save 1/4 of the tax cut and spend the other 3/4.

§ Which of these two scenarios do you think is more realistic?

§ Why is this question important?

The Meaning of Saving and Investment

§ **Private saving** is the income remaining after households pay their taxes and pay for consumption.

§ Examples of what households do with saving:

- § Buy corporate bonds or equities
- § Purchase a certificate of deposit at the bank
- § Buy shares of a mutual fund
- § Let accumulate in saving or checking accounts

16

The Meaning of Saving and Investment

§ **Investment** is the purchase of new capital.

§ Examples of investment:

- § General Motors spends \$250 million to build a new factory in Flint, Michigan.
- § You buy \$5000 worth of computer equipment for your business.
- § Your parents spend \$300,000 to have a new house built.

Remember:

17

The Market for Loanable Funds

- § A supply–demand model of the financial system
- § Helps us understand

18

The Market for Loanable Funds

Assume: only one financial market

- § All savers deposit their saving in this market.
- § All borrowers take out loans from this market.
- § There is one interest rate, which is both the return to saving and the cost of borrowing.

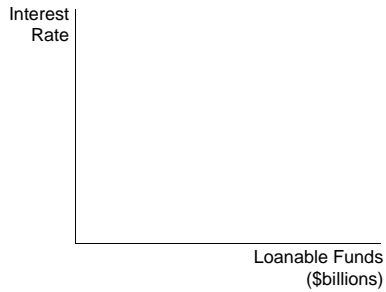
19

The Market for Loanable Funds

The supply of loanable funds comes

20

The Slope of the Supply Curve



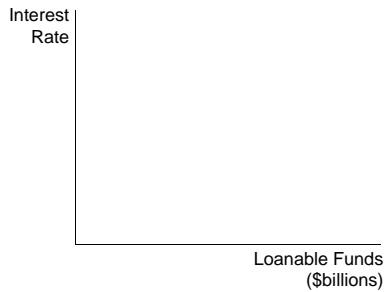
21

The Market for Loanable Funds

The demand for loanable funds comes from

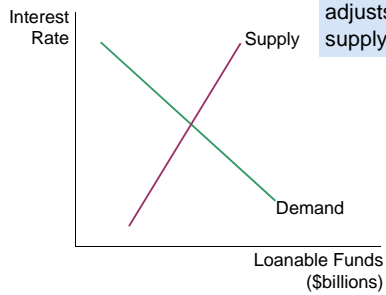
22

The Slope of the Demand Curve



23

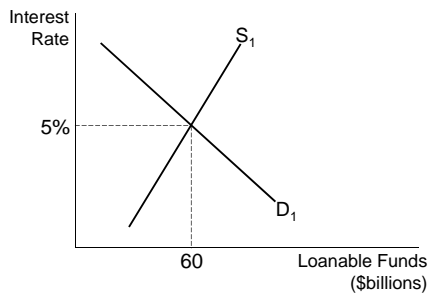
Equilibrium



The interest rate adjusts to equate supply and demand.

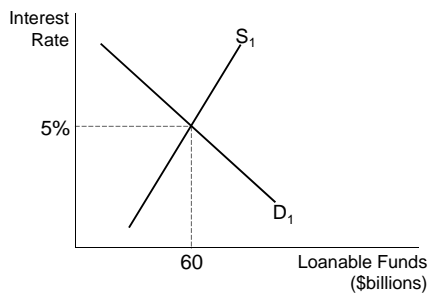
24

Policy 1: Saving Incentives



25

Policy 2: Investment Incentives



26

ACTIVE LEARNING 2

Budget deficits

- § Use the loanable funds model to analyze the effects of a government budget deficit:
 - § Draw the diagram showing the initial equilibrium.
 - § Determine which curve shifts when the government runs a budget deficit.
 - § Draw the new curve on your diagram.
 - § What happens to the equilibrium values of the interest rate and investment?

ACTIVE LEARNING 2

Answers

Budget Deficits, Crowding Out,
and Long-Run Growth

- § Our analysis: Increase in budget deficit causes fall in investment.
- § This is called **crowding out**.
- § Recall from the preceding chapter:

The U.S. Government Debt

- § The government finances deficits by borrowing (selling government bonds).
- § Persistent deficits
- § The ratio of govt debt to GDP is a useful measure of the government's indebtedness relative to its ability to raise tax revenue.
- § Historically, the debt-GDP ratio

30



CONCLUSION

- § Like many other markets, financial markets are governed by the forces of supply and demand.
- § One of the Ten Principles from Chapter 1:
Markets are usually a good way to organize economic activity.
Financial markets help allocate the economy's scarce resources to their most efficient uses.
- § Financial markets also link the present to the future:

32
