天津外国语大学（天外）
Tianjin Foreign Studies University (TFSU)

Class starts at 10:00

(Beijing Time, GMT+8)

Ivan Monich, PhD, www.Monich.pro

Week 03, 2023

Credit

LEARNING OBJECTIVES

- Define and explain credit

What is Credit?

When you make a purchase using money that you don’t have, you are using credit. Credit is someone else’s money that they have lent to you. Instead of saving up and only then paying for them, credit allows you to buy now and pay for them over time. Sometimes people obtain credit in advance so that in the future when opportunities or needs arise they will be able to buy something. This is particularly common for businesses. Either way, when you use credit, you are borrowing money.

Credit vs. Debit

0:30

Q

Check Your Understanding. Answer the question(s) below to see how well you understand the topics covered in the previous section. This short quiz does not count toward your grade in the class

1 of 1

Which of the following transactions would be considered using credit?

- ○ Buying concert tickets using your Apple pay connected to your checking account.
- ● Using financial aid to pay for school this semester. ✔
- ○ Withdrawing money from an ATM at a bank.

Check Answer

Correct. This is using credit because you are accessing money that does not belong to you in the form of a loan. When you make a purchase using money that you don't have, you are using credit. Credit is someone else's money that they have lent to you. Credit comes in many forms, including loans, bonds, notes, or lines of credit (like home equity loans). All are essentially IOUs: that is, promises to repay with interest. Debt is accumulated credit, less what has been repaid.

Introduction to Financial Markets

What you'll learn to do: describe the role financial markets play in an economy

The answer to each of these questions is financial markets. Financial markets are where savers put their savings to work and borrowers find funding to borrow. In this section, we will provide an overview of financial markets to provide context for the subsequent discussion of money and the banking system.

Financial Markets and Assets

An **IOU**, also known as an "I owe you," is a document or informal agreement that acknowledges a debt that one person owes to another. It is typically used in situations where a person borrows money or an item from someone else, and promises to repay the debt at a later date. **IOUs** can take many forms, from a written document that spells out the terms of the loan, to a verbal agreement between two parties.

LEARNING OUTCOMES

Describe financial markets and assets, including securities.

Individuals can either consume or save their income. It should be noted that business investment in physical capital is the primary way they grow.

All financial assets are called securities. Equities (i.e. stocks) give savers ownership in a company in return for dividends (a regular payment from the company) and/or capital gains (e.g. when you sell the stock at a profit). Bonds are a type of debt. All forms of debt are IOUs, where a saver lends money to a borrower in return for an interest payment.

Borrowing: Banks and Bonds

Businesses need money to operate and to grow. When a firm has a record of earning revenues, or better yet, of earning profits, it becomes possible for the firm to borrow money. Firms have two main borrowing methods: banks and bonds.

https://pixabay.com/photos/stock-trading-monitor-business-1863880/

TREASURY BILLS, NOTES AND BONDS

When the U.S. federal government runs a deficit, it borrows the money from financial markets. The U.S. Treasury sells three types of debt: Treasury Bills, Treasury Notes and Treasury Bonds. Each of these debt instruments represents an IOU from the federal government. The difference between bills, notes and bonds is in their maturities: Bills are the shortest term debt with maturities less than one year. Notes have maturities between one and ten years. Bonds have maturities longer than ten years.

Corporate Stock

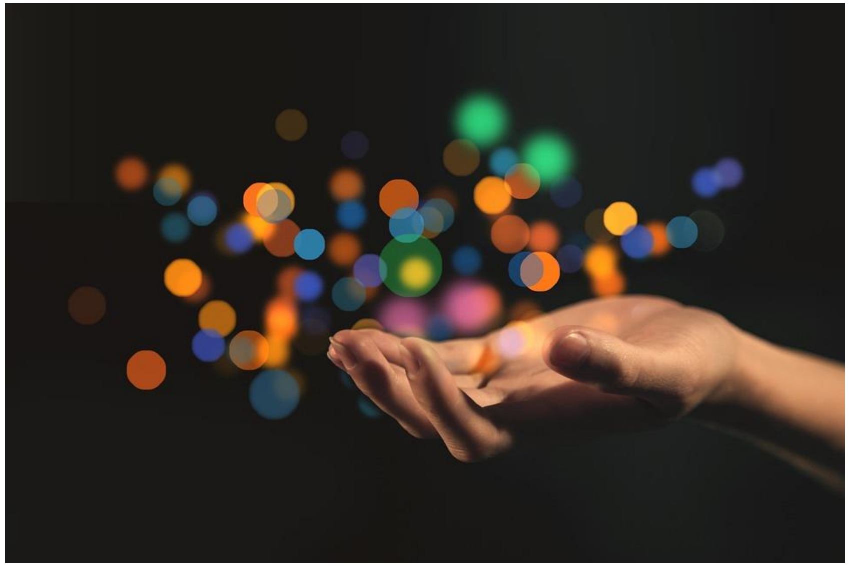
Corporations may be private or public, and may or may not have publicly traded stock. They may raise funds to finance their operations or new investments by raising capital through selling stock or issuing bonds.

When a large number of shareholders own a company, there are three questions to ask:

- How and when does the company obtain money from its sale?
- What rate of return does the company promise to pay when it sells stock?
- Who makes decisions in a company owned by a large number of shareholders?

Seed funding leads to MVP creation IPO

First, a firm receives money from the stock sale only when the company sells its own stock to the public. We call a firm's first stock sale to the public an **initial public offering (IPO)**. The IPO is important for two reasons.



https://pixabay.com/photos/hand-bokeh-give-gift-offer-open-3889288/

Dividends & capital gain

When a firm decides to issue stock, it must recognize that investors will expect to receive a rate of return. That rate of return can come in two forms. A firm can make a direct payment to its shareholders, called a dividend. Alternatively, a financial investor might buy a share of stock in Wal-Mart for $45 and then later sell it to someone else for $60, for $15 gain. We call the increase in the stock value (or of any asset) between when one buys and sells it a capital gain. Note that it is also possible that a stockholder can suffer a capital loss, if the price of the stock when sold is less than the price when it was purchased. Thus, while the potential benefits of stock ownership are unlimited, there is a risk of losing some or all of what was invested.

Private company

A private company is owned by the people who run it on a day-to-day basis. Individuals can run a private company. We call this a sole proprietorship. If a group runs it, we call it a partnership. A private company can also be a corporation, but with no publicly issued stock.

https://pixabay.com/photos/teamwork-cooperation-brainstorming-3213924/

0:30

Q

Check Your Understanding. Answer the question(s) below to see how well you understand the topics covered in the previous section. This short quiz does not count toward your grade in the class

1 of 1

Financial assets are also called ________ while examples include ________.

- (selected) securities; stocks, bonds, and bank deposits ✔
- securities; M1 and M2
- options; stocks, bonds, and bank deposits

Check Answer

Correct. Financial assets are also called securities because they are negotiable financial instruments that represents some type of financial value. Examples include equities (i.e. stocks) that give savers ownership in a company in return for dividends (a regular payment from the company) and/or capital gains (e.g. when you sell the stock at a profit) along with bonds, a type of debt, where a saver lends money to a borrower in return for an interest payment.

0:30

Q

Check Your Understanding. Answer the question(s) below to see how well you understand the topics covered in the previous section. This short quiz does not count toward your grade in the class

1 of 1

Financial markets are where ________.

- Individuals can buy physical assets and resell them.
- Investments are not made. Financial markets are where individuals can put their savings, and where businesses can obtain the funding for investment expenditure. Financial markets are where investment transactions are done and include such activities as saving and borrowing.
- Firms can borrow to fund capital projects. ✓

Check Answer

Correct. Financial markets are where individuals can put their savings, and where businesses can obtain the funding for investment expenditure. Financial markets are where financial assets, such as a business loan, are transacted.

GLOSSARY

bills: short term (less than one year) debt instruments

bond: a financial contract through which a borrower like a corporation, a city or state, or the federal government agrees to repay the amount that it borrowed and also a rate of interest over a period of time in the future; usually long-term (greater than 10 year) debt instruments

bondholder: someone who owns bonds and receives the interest payments

capital gain: a financial gain from buying an asset, like a share of stock or a house, and later selling it at a higher price

corporation: a business owned by shareholders who have limited liability for the company's debt yet a share of the company's profits; may be private or public and may or may not have publicly-traded stock

dividend: a direct payment from a firm to its shareholders

equities or stocks: ownership in a private company (unlike debt which conveys no ownership)

financial markets: marketplace where money is invested and borrowed, or in other words, where securities are traded

initial public offering (IPO): original sale of stock by a corporation

mutual funds: funds that buy a range of stocks or bonds from different companies, thus allowing an investor an easy way to diversify

notes: intermediate term (1-10 year) debt instruments

private company: a firm owned by the people who run it on a day-to-day basis

public company: a firm that has sold stock to the public, which in turn investors then can buy and sell

securities: synonym for financial assets, or a certificate or other financial instrument that has monetary value and can be traded. These can be debt securities like bonds or equity securities like stocks.

shareholders: people who own at least some shares of stock in a firm

shares: a firm's stock, divided into individual portions

sole proprietorship: a company run by an individual as opposed to a group

stock: a specific firm's claim on partial ownership

Treasury bond: a bond issued by the federal government through the U.S. Department of the Treasury

venture capital: financial investments in new companies that are still relatively small in size, but that have potential to grow substantially

Financial Markets, Supply and Demand, and Interest

LEARNING OBJECTIVES

- Describe types of financial markets and how they are linked
- Explain how market forces determine interest rates in financial markets

In this section, we will explore these two features, that asset prices or rates of return are determined by supply and demand, and that all financial markets are linked. These features will help us understand later how monetary policy works.

Who Demands and Who Supplies in Financial Markets?

Financial markets can be analyzed by using the theories of supply and demand. Those who save money (or make financial investments, which is the same thing), whether individuals or businesses, are on the supply side of the financial market. Those who borrow money are on the demand side of the financial market.

The simplest example of a rate of return is an interest rate. For example, when you put money into a savings account at a bank, you receive interest on your deposit. The interest payment expressed as a percent of your deposits is the interest rate. Similarly, if you demand a loan to buy a car or a computer, you will need to pay interest on the money you borrow.

figure 1 illustrates demand and supply in the financial market for credit cards. The horizontal axis of the financial market shows the quantity of money that is loaned or borrowed in this market. The vertical or price axis shows the rate of return, which in the case of credit card borrowing can be measured with an interest rate.Table 1 shows the quantity of financial capital that consumers demand at various interest rates and the quantity that credit card firms (often banks) are willing to supply.

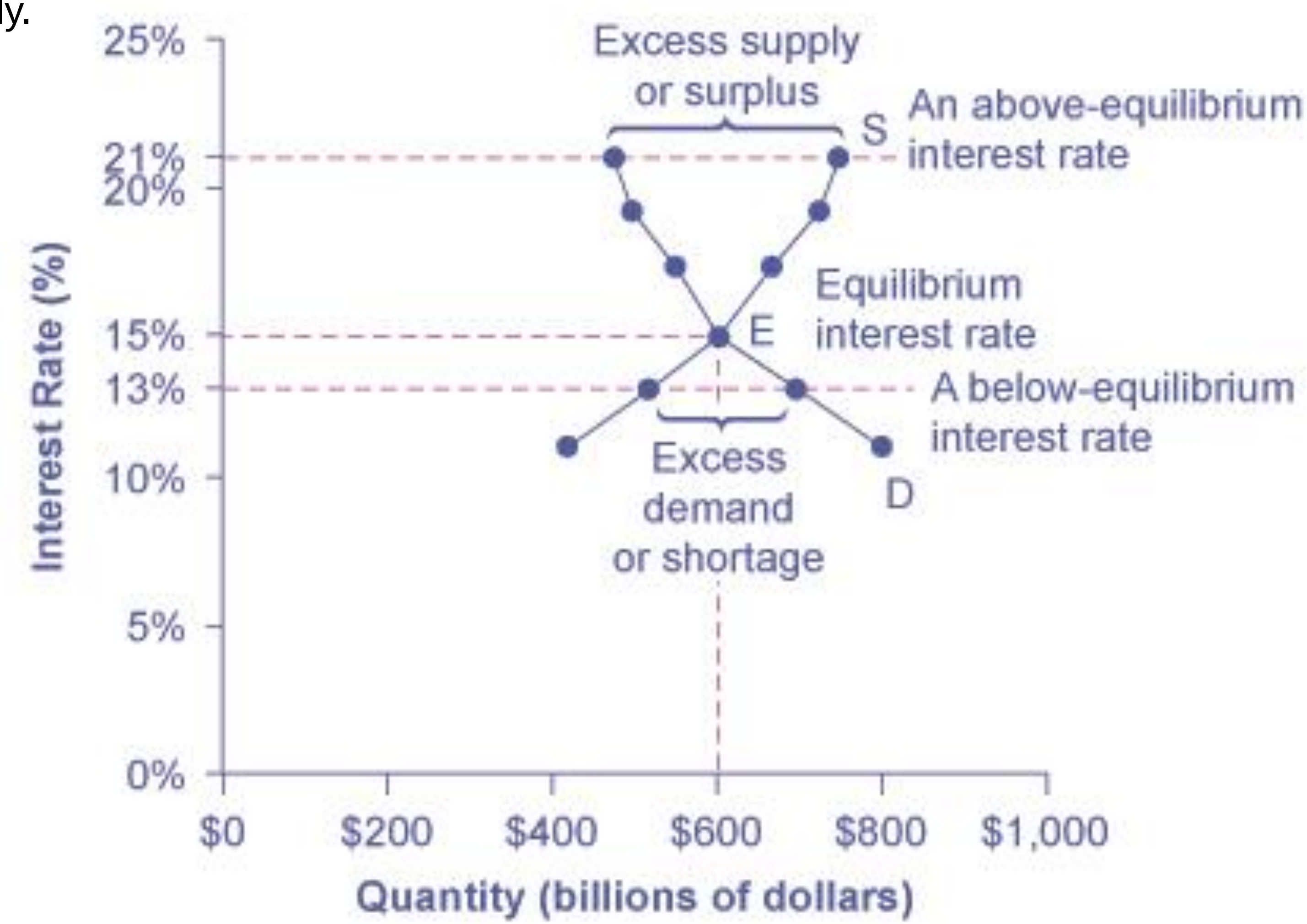
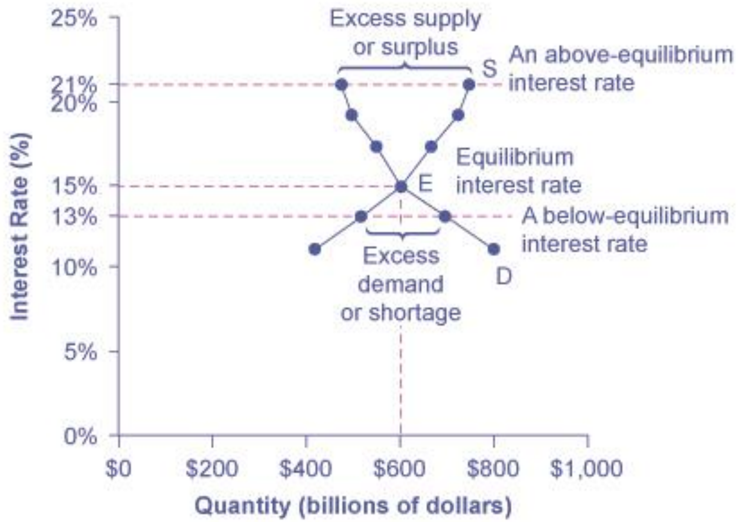


Table 1. Demand and Supply for Borrowing Money with Credit Cards

Interest Rate (%)	Quantity of Financial Capital Demanded (Borrowing) ($ billions)	Quantity of Financial Capital Supplied (Lending) ($ billions)
11	$800	$420
13	$700	$510
15	$600	$600
17	$550	$660
19	$500	$720
21	$480	$750

Equilibrium in Financial Markets

In the financial market for credit cards shown in Figure 1, the supply curve (S) and the demand curve (D) cross at the equilibrium point (E). The equilibrium occurs at an interest rate of 15%, where the quantity of funds demanded and the quantity supplied are equal at an equilibrium quantity of $600 billion.



0:30

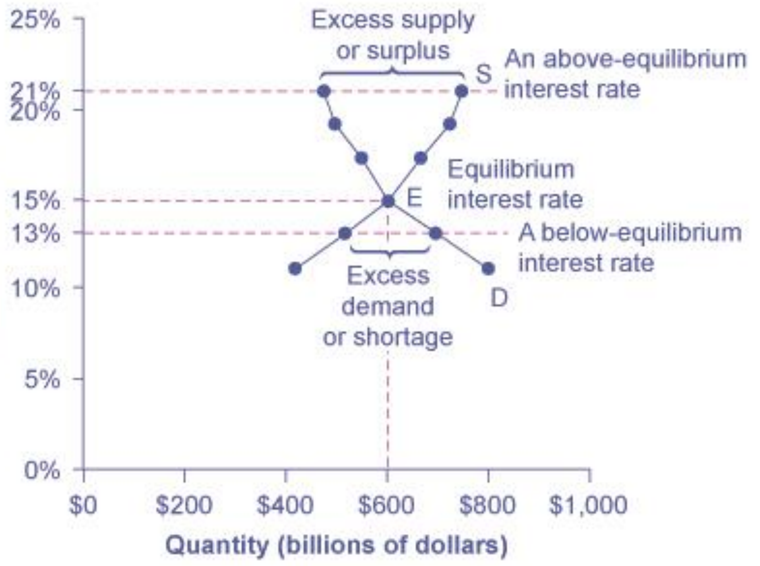
Equilibrium in Financial Markets

The simplest example of a rate of return is an interest rate. Consider Figure 1. Demand and Supply for Borrowing Money with Credit Cards. When the demand for loanable funds exceeds the supply of loanable funds, what happens to the interest rate?

- ○ The interest rate is unchanged.
- ● The interest rate will rise. ✔
- ○ The interest rate will fall.

Check Answer

Correct. If the interest rate is too low, borrowers want more of the economy's output than savers want to save. Equivalently, the demand for loanable funds exceeds the supply of loanable funds. When this happens, the interest rate rises so that equilibrium is reached again.



0:30

Equilibrium in Financial Markets

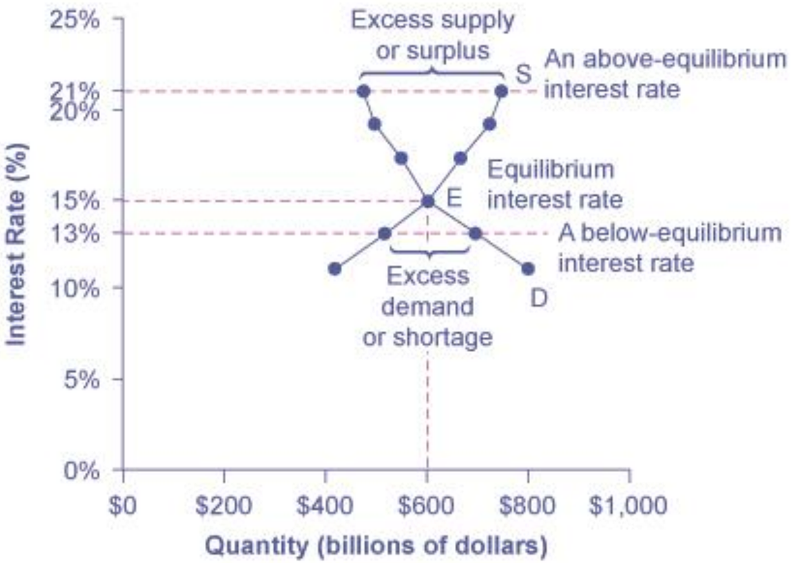
1 of 1

If an increase in consumer confidence leads to increased purchases by consumers using credit cards then the demand for loanable funds will ________ and cause interest rates to ________.

- ○ decrease; lower
- ○ increase; lower
- ◉ increase; rise ✔

Check Answer

Correct. There is a positive relationship between loanable funds and interest rates so if demand for credit cards increases then credit card firms will perceive that they are overloaded with eager borrowers and conclude that they have an opportunity to raise interest rates or fees. The interest rate will face economic pressures to creep up toward the equilibrium level.



We stopped here 22-09-2023
Shifts in Demand and Supply in Financial Markets

Participants in financial markets must decide when they prefer to consume goods: now or in the future. Economists call this intertemporal decision making because it involves decisions across time. Unlike a decision about what to buy from the grocery store, decisions about investment or saving are made across a period of time, sometimes a long period.

Shifts in Demand and Supply in Financial Markets

By contrast, many students need money today when their income is low (or nonexistent) to pay their expenses. As a result, they borrow today and demand from financial markets. Once they graduate and become employed, they will pay back the loans. Individuals borrow money to purchase homes or cars. A business seeks financial investment so that it has the funds to build a factory or invest in a research and development project that will not pay off for five years, ten years, or even more. So when consumers and businesses have greater confidence that they will be able to repay in the future, the quantity demanded of financial capital at any given interest rate will shift to the right.

The United States as a Global Borrower

In the global economy, trillions of dollars of financial investment cross national borders every year. In the early 2000s, financial investors from foreign countries were investing several hundred billion dollars per year more in the U.S. economy than U.S. financial investors were investing abroad. The following feature, which should look familiar from the earlier module “Applications of Supply and Demand,” deals with one of the macroeconomic concerns for the U.S. economy in recent years.

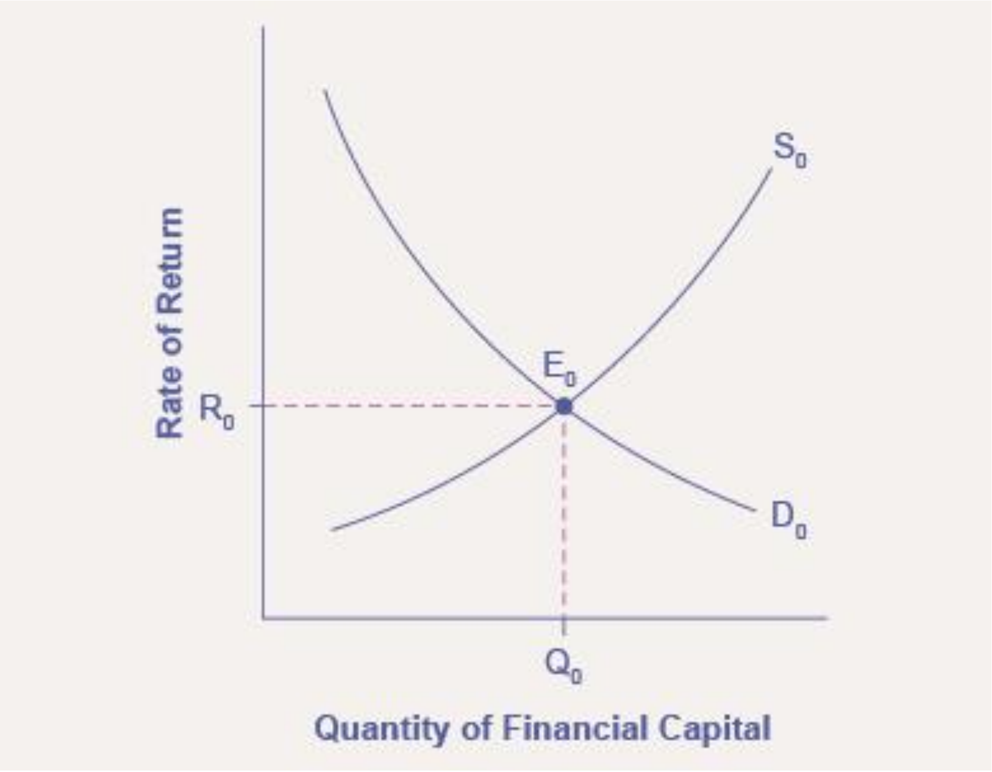
THE EFFECT OF GROWING U.S. DEBT

Imagine that the U.S. economy became viewed as a less desirable place for foreign investors to put their money because of fears about the growth of the U.S. public debt. How would this change in perceptions about the desirability of investments in U.S. public debt affect the equilibrium price and quantity for capital in U.S. financial markets?

THE EFFECT OF GROWING U.S. DEBT

Step 1

Figure 2. The United States as a Global Borrower Before U.S. Debt Uncertainty. The graph shows the demand for financial capital from and supply of financial capital into the U.S. financial markets by the foreign sector before the increase in uncertainty regarding U.S. public debt. The original equilibrium (E_0) occurs at an equilibrium rate of return (R_0) and the equilibrium quantity is at Q_0.



Step 2. Will the diminished confidence in the U.S. economy as a place to invest affect demand or supply of financial capital?
Step 3. Will supply increase or decrease?
Step 4. What does this mean for U.S. financial markets?

THE EFFECT OF GROWING U.S. DEBT

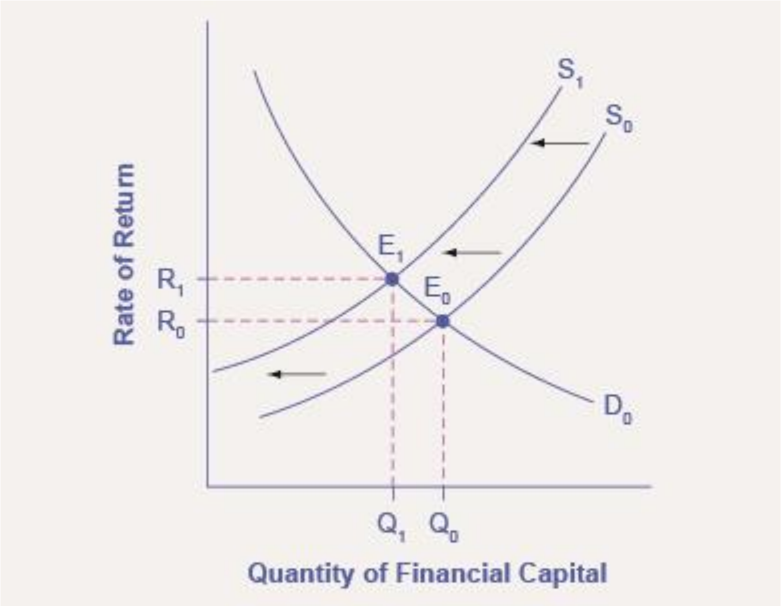
Step 2. Will the diminished confidence in the U.S. economy as a place to invest affect demand or supply of financial capital?

Yes, it will affect supply. Many foreign investors look to the U.S. financial markets to store their money in safe financial vehicles with low risk and stable returns. As the U.S. debt increases, debt servicing will increase—that is, more current income will be used to pay the interest rate on past debt. Increasing U.S. debt also means that businesses may have to pay higher interest rates to borrow money, because business is now competing with the government for financial resources.

THE EFFECT OF GROWING U.S. DEBT

Step 3. Will supply increase or decrease?

When the enthusiasm of foreign investors' for investing their money in the U.S. economy diminishes, the supply of financial capital shifts to the left. Figure 3 shows the supply curve shift from S_0 to S_1.



THE EFFECT OF GROWING U.S. DEBT

Step 4. What does this mean for U.S. financial markets?

Foreign investors' diminished enthusiasm leads to a new equilibrium, E1, which occurs at the higher interest rate, R1, and the lower quantity of financial investment, Q1.

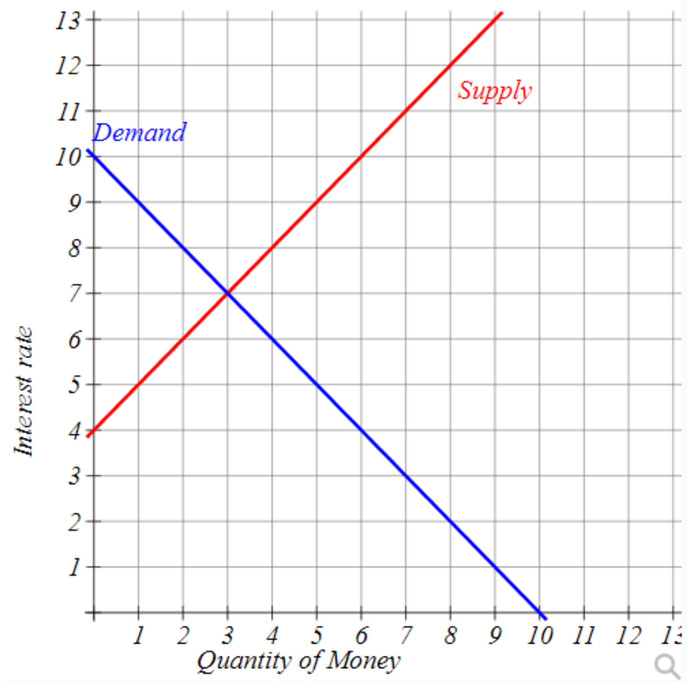
0:30

Q

Check Your Understanding. Answer the question(s) below to see how well you understand the topics covered in the previous section. This short quiz does not count toward your grade in the class

Question 1

The graph below shows the supply and demand curves in the market for credit card borrowing.



What is the equilibrium interest rate?

7

Hint

Show Answer

0:30

Q

Check Your Understanding. Answer the question(s) below to see how well you understand the topics covered in the previous section. This short quiz does not count toward your grade in the class

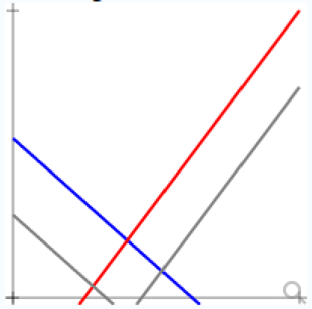
Que

Does this change impact the demand for borrowing? Does this change impact the supply of borrowing? Can it affect both?

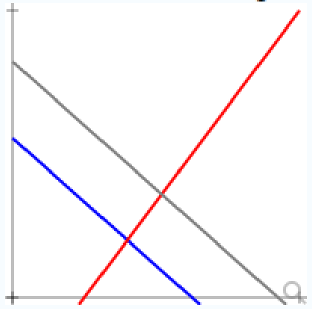
Hint

Suppose that consumers have a major change in their consumption/savings preferences. As a result of a serious recession they decide to consume less and save more. Which graph most accurately shows how this would affect demand and supply for borrowing money with credit cards? Note that the new curves are shown in gray.

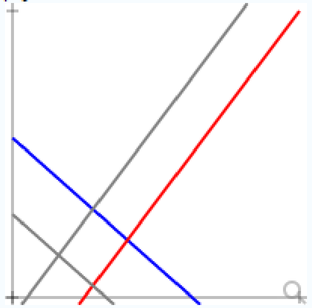
Supply curve shifts right and Demand curve shifts left:



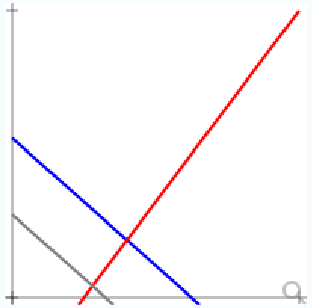
Demand curve shifts right: ✔



Supply and Demand curves shift left:



Demand curve shifts left:



Show Answer

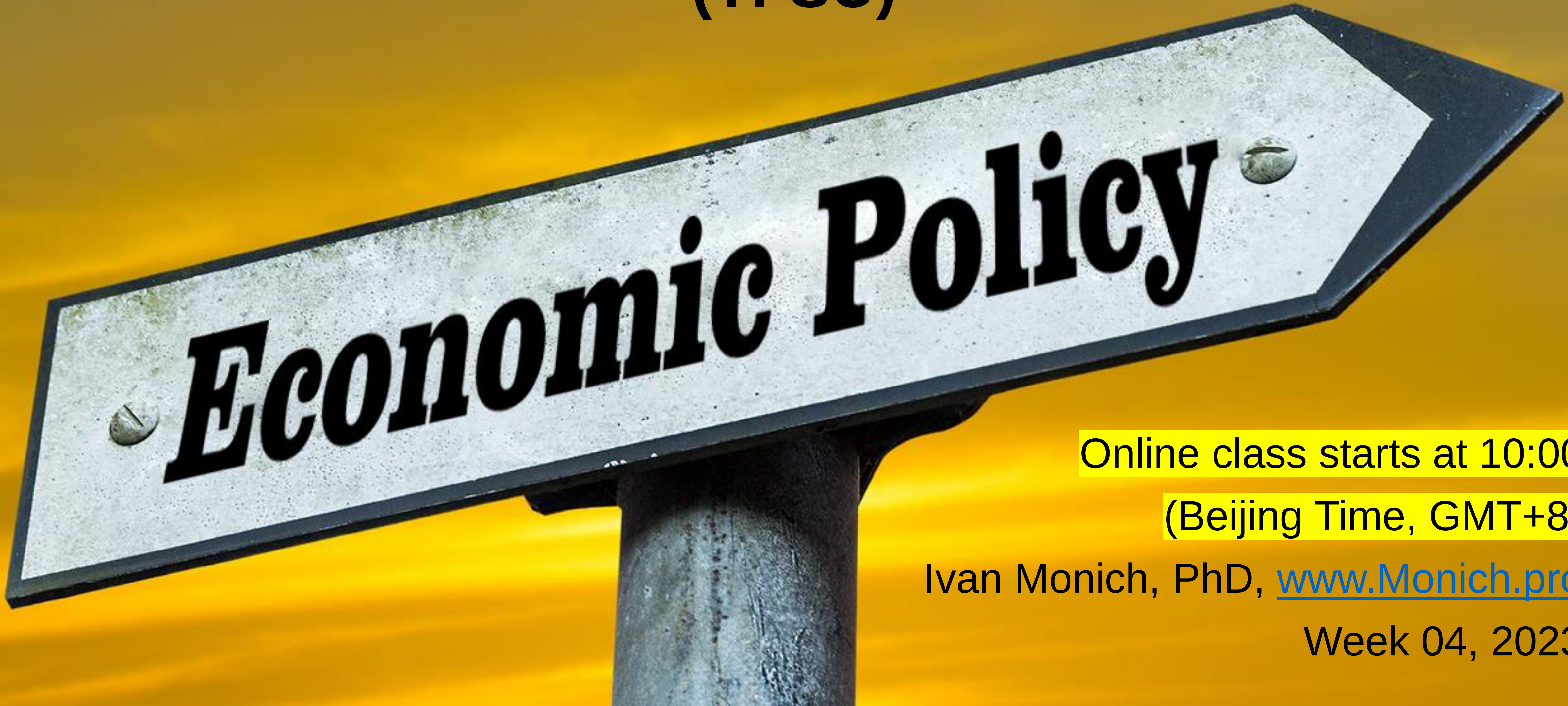
✔ Correct.

GLOSSARY

interest rate: the “price” of borrowing in the financial market; a rate of return on an investment

intertemporal decision making: the study of how people make choices about what and how much to do at various points in time; when choices at one time influence the possibilities available at other points in time

天津外国语大学(天外)
Tianjin Foreign Studies University (TFSU)



Online class starts at 10:00

(Beijing Time, GMT+8)

Ivan Monich, PhD, www.Monich.pro

Week 04, 2023

Introduction to Banking

What you'll learn to do: explain what a bank does.

A nation's banking system consists of commercial banks and similar financial institutions, and a central bank, which regulates commercial banks and the availability of credit. In the United States, the central bank is called the Federal Reserve System.

In this section, you will examine the role of banks and understand the purpose they serve in the economy.

The Commercial Banking System

LEARNING OBJECTIVES

- Explain how banks act as intermediaries between savers and borrowers
- Differentiate between banks and credit unions

The Role of Banks

Banks play two key roles in the functioning of the economy, first by facilitating the payments system and second by serving as financial intermediaries.

Banks are a critical intermediary in what is called the payments system, which helps an economy exchange goods and services for money or other financial assets.

https://pixabay.com/photos/wealth-fortune-center-beauty-706335/

Video

Principles of Economics: Macroeconomics
What Do Banks Do?

Banks as Financial Intermediaries

Banks are a convenient place to store one’s savings, rather than looking for a person or business that is willing to borrow from them and then repay them at a later date. Transaction costs are the costs associated with finding a lender or a borrower for this money. Thus, banks lower transactions costs and act as financial intermediaries—they bring savers and borrowers together. Along with making transactions much safer and easier, banks also play a key role in the creation of money.

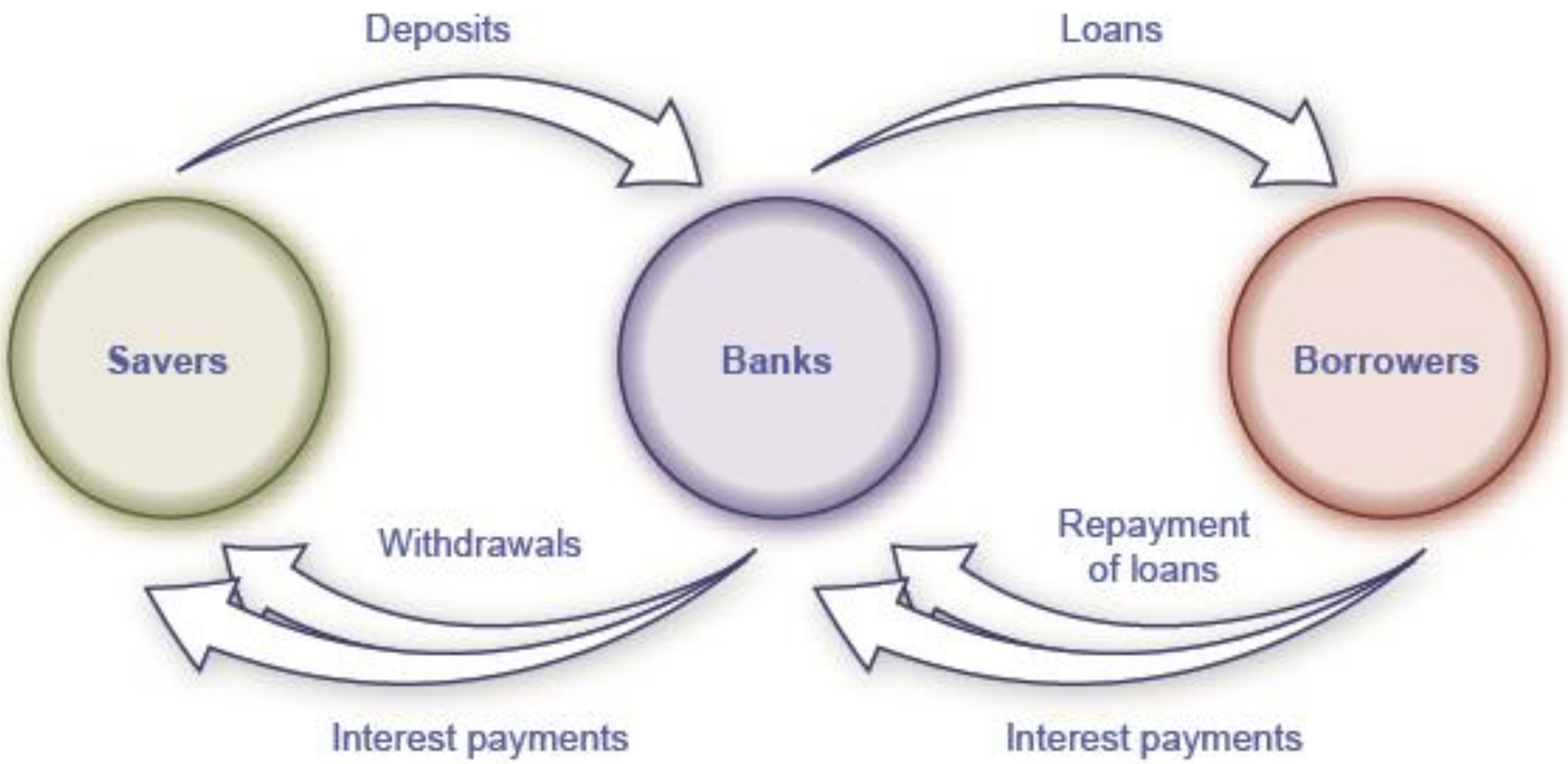
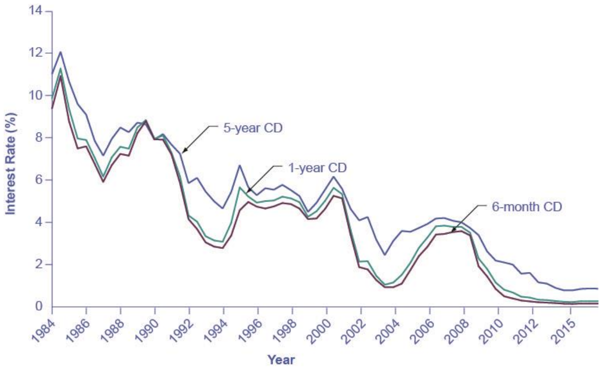


Figure 1. Banks as Financial Intermediaries. Banks act as financial intermediaries because they stand between savers and borrowers. Savers place deposits with banks, and then receive interest payments and withdraw money. Borrowers receive loans from banks and repay the loans with interest. In turn, banks return money to savers in the form of withdrawals, which also include interest payments from banks to savers.

Banks as Financial Intermediaries

Financial intermediaries include other institutions in the financial market such as insurance companies and pension funds, but they are not included in this discussion because they are not considered to be depository institutions, which are institutions that accept money deposits and then use these to make loans.

Banks as Financial Intermediaries



Another way to deposit savings at a bank is to use a certificate of deposit (CD). With a CD, you agree to deposit a certain amount of money in the account for a fixed period of time, typically ranging from a few months to several years. In exchange, the bank agrees to pay a higher interest rate than for a regular savings account. While you can withdraw the money before the allotted time, as the advertisements for CDs always warn, there is “a substantial penalty for early withdrawal.”

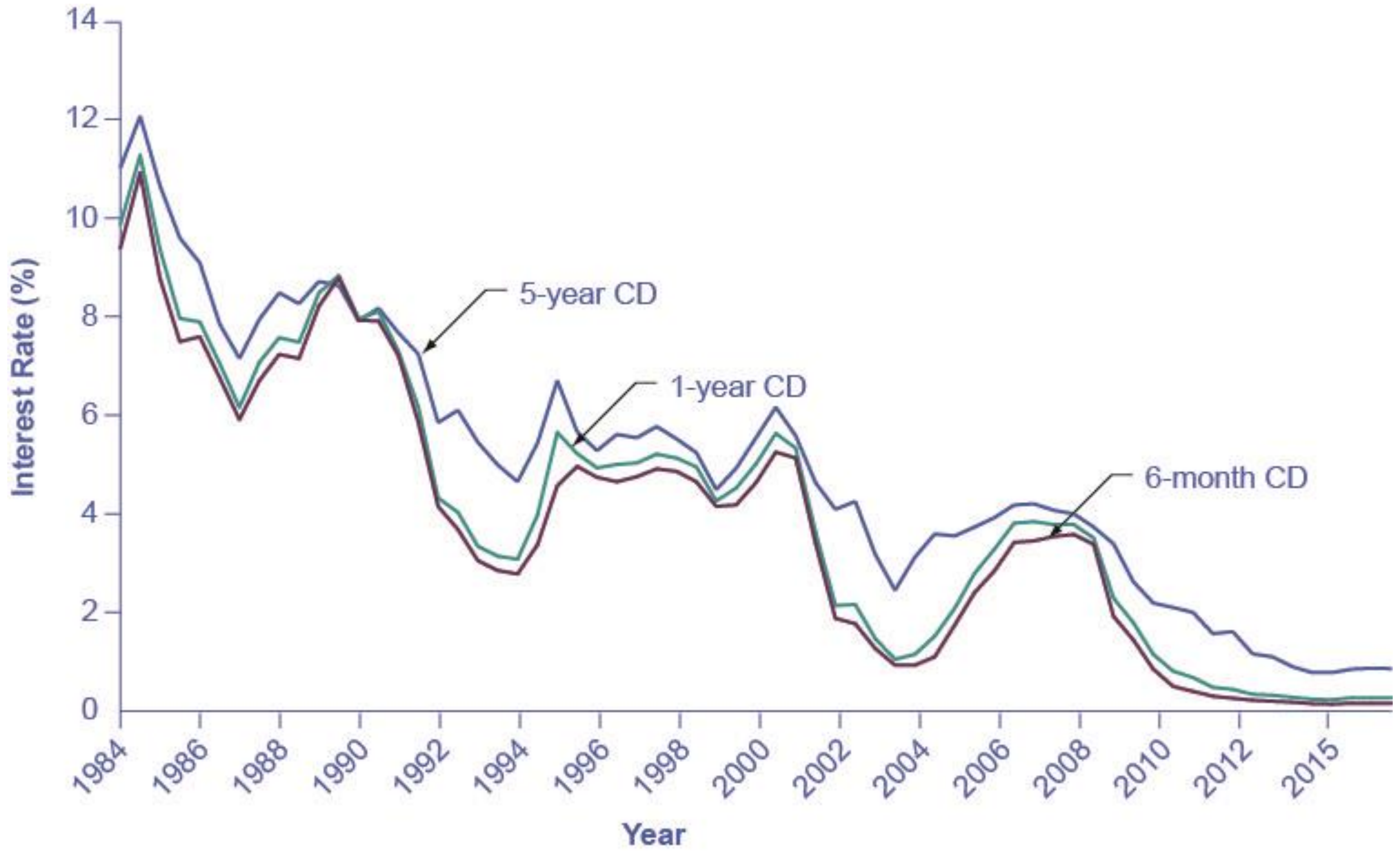


Figure 2. CD Interest Rates. The interest rates on certificates of deposit have fluctuated over time. The high interest rates of the early 1980s are indicative of the relatively high inflation rate in the United States at that time. Interest rates fluctuate with the business cycle, typically increasing during expansions and decreasing during a recession. Note the steep decline in CD rates since 2008, the beginning of the Great Recession.

0:30

Q Check Your Understanding. Answer the question(s) below to see how well you understand the topics covered in the previous section. This short quiz does not count toward your grade in the class

1 of 1

Banks act as financial intermediaries by doing which of the following?

- (selected) Converting household savings into business investments in which savings appear as a liability on the bank's balance sheet. ✔
- Converting business investments into household savings in which loans appear as a liability on the bank's balance sheet.
- Converting household savings into business investments in which savings appear as an asset on the bank's balance sheet.

Check Answer

Correct. Banks act as financial intermediaries because they stand between savers and borrowers. Savers place deposits with banks, and then receive interest payments and withdraw money. Borrowers receive loans from banks and repay the loans with interest. In turn, banks return money to savers in the form of withdrawals, which also include interest payments from banks to savers. However, then banks accept deposits from households, they do not own the deposit or asset so it must go down on their balance sheet as a liability. The loans banks make with the money deposited by the household is considered the asset to the bank.

HOW ARE BANKS, SAVINGS AND LOANS, AND CREDIT UNIONS RELATED?

Banks have a couple of close cousins: savings institutions and credit unions. Banks, as explained, receive deposits from individuals and businesses and make loans with the money. Savings institutions are also sometimes called “savings and loans” (S&L) or “thrifts.” They also take loans and make deposits. However, from the 1930s until the 1980s, federal law limited how much interest savings institutions were allowed to pay to depositors. They were also required to make most of their loans in the form of housing-related loans, either to homebuyers or to real-estate developers and builders.

A **credit union** is a nonprofit financial institution that its members own and run. Members of each credit union decide who is eligible to be a member. Usually, potential members would be everyone in a certain community, or groups of employees, or members of a certain organization. The credit union accepts deposits from members and focuses on making loans back to its members. While there are more credit unions than banks and more banks than savings and loans, the total assets of credit unions are growing. Both credit unions and savings institutions are considered depository institutions.

In 2008, there were 7,085 banks. Due to the bank failures of 2007–2009 and bank mergers, there were 5,571 banks in the United States at the end of the fourth quarter in 2014. According to the Credit Union National Association, as of December 2014 there were 6,535 credit unions with assets totaling $1.1 billion. A day of “Transfer Your Money” took place in 2009 out of general public disgust with big bank bailouts. People were encouraged to transfer their deposits to credit unions. This has grown into the ongoing Move Your Money Project (watch a video about the project and competition between big banks and smaller community banks here). Consequently, some now hold deposits as large as $50 billion. However, as of 2013, the 12 largest banks (0.2%) controlled 69 percent of all banking assets, according to the Dallas Federal Reserve.

GLOSSARY

checking account: a bank account that typically pays little or no interest, but that gives easy access to money, either by writing a check or by using a “debit card”

credit union: a nonprofit financial institution that its members own and run

debit card: a card that lets the person make purchases, and the financial institution immediately deducts cost from that person’s checking account

depository institution: institution that accepts money deposits and then uses these to make loans

financial intermediary: an institution that operates between a saver with financial assets to invest and an entity who will borrow those assets and pay a rate of return

payments system: system by which buyers and sellers exchange money for goods, services and financial capital.

savings account: a bank account that pays an interest rate, but withdrawing money typically requires a trip to the bank or an automatic teller machine

transaction costs: the costs associated with finding a lender or a borrower for money

Banking Assets and Liabilities

WHAT LED TO THE FINANCIAL CRISIS OF 2008–2009?

Many banks make mortgage loans so that people can buy a home, but then do not keep the loans on their books as an asset. Instead, the bank sells the loan. These loans are often "securitized," which means that they are bundled together into a financial security that is sold to investors. Investors in these mortgage-backed securities receive a rate of return based on the level of payments that people make on all the mortgages that stand behind the security.

Securitization offers certain advantages. If a bank makes most of its loans in a local area, then the bank may be financially vulnerable if the local economy declines, so that many people are unable to make their payments. But if a bank sells its local loans, and then buys a mortgage-backed security based on home loans in many parts of the country, it can avoid being exposed to local financial risks. (In the simple example in the text, banks just own "bonds." In reality, banks can own a number of financial instruments, as long as these financial investments are safe enough to satisfy the government bank regulators.) From the standpoint of a local homebuyer, securitization offers the benefit that a local bank does not need to have lots of extra funds to make a loan, because the bank is only planning to hold that loan for a short time, before selling the loan so that it can be pooled into a financial security.

But securitization also offers one potentially large disadvantage. If a bank is going to hold a mortgage loan as an asset, the bank has an incentive to scrutinize the borrower carefully to ensure that the loan is likely to be repaid. However, a bank that is going to sell the loan may be less careful in making the loan in the first place. The bank will be more willing to make what are called "subprime loans," which are loans that have characteristics like low or zero down-payment, little scrutiny of whether the borrower has a reliable income, and sometimes low payments for the first year or two that will be followed by much higher payments after that. Some **subprime loans** made in the mid-2000s were later dubbed NINJA loans: loans made even though the borrower had demonstrated No Income, No Job, nor Assets.

These subprime loans were typically sold and turned into financial securities—but with a twist. The idea was that if losses occurred on these mortgage-backed securities, certain investors would agree to take the first, say, 5% of such losses. Other investors would agree to take, say, the next 5% of losses. By this approach, still other investors would not need to take any losses unless these mortgage-backed financial securities lost 25% or 30% or more of their total value. These complex securities, along with other economic factors, encouraged a large expansion of subprime loans in the mid-2000s.

The economic stage was now set for a banking crisis. Banks thought they were buying only ultra-safe securities, because even though the securities were ultimately backed by risky subprime mortgages, the banks only invested in the part of those securities where they were protected from small or moderate levels of losses. But as housing prices fell after 2007, and the deepening recession made it harder for many people to make their mortgage payments, many banks found that their mortgage-backed financial assets could end up being worth much less than they had expected—and so the banks were staring bankruptcy in the face. In the 2008–2011 period, 318 banks failed in the United States.

Banking Assets and Liabilities

LEARNING OBJECTIVES

- Describe a bank’s assets and liabilities in a T-account
- Analyze the causes of bankruptcy and recessions

A Bank’s Balance Sheet

A **balance sheet** is an accounting tool that lists assets and liabilities. An **asset** is something of value that is owned and can be used to produce something. For example, the cash you own can be used to pay your tuition. A home provides shelter and can be rented out to generate income. A **liability** is a debt or something you owe. Many people borrow money to buy homes. In this case, the home is the asset, but the mortgage (i.e. the loan obtained to purchase the home) is the liability. The **net worth** is the asset value minus how much is owed (the liability). A bank’s balance sheet operates in much the same way. A bank’s net worth is also referred to as **bank capital**. A bank has assets such as cash held in its vaults and monies that the bank holds at the Federal Reserve bank (called “reserves”), loans that are made to customers, and bonds.

https://www.istockphoto.com/photo/financial-data-analyzing-blue-tone-gm526142504-92543473

Banking assets

Assets		Liabilities + Net Worth	
Loans	$5 million	Deposits	$10 million
U.S. Government Securities (USGS)	$4 million		
Reserves	$2 million	Net Worth	$1 million

A Balance Sheet for the Safe and Secure Bank

The "T" in a T-account separates the assets of a firm, on the left, from its liabilities, on the right. All firms use T-accounts, though most are much more complex. For a bank, the assets are the financial instruments that either the bank is holding (its reserves) or those instruments where other parties owe money to the bank—like loans made by the bank and U.S. government securities, such as U.S. Treasury bonds purchased by the bank. Liabilities are what the bank owes to others. Specifically, the bank owes any deposits made in the bank to those who have made them. The net worth, or equity, of the bank is the total assets minus total liabilities. Net worth is included on the liabilities side to have the T account balance to zero. For a healthy business, net worth will be positive. For a bankrupt firm, net worth will be negative. In either case, on a bank's T-account, assets will always equal liabilities plus net worth.

Thank you