FEDERAL RESERVE BANK OF SAN FRANCISCO

Savers and Borrowers:

Financial Markets in the United States

Teacher's Curriculum Guide

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Savers & Borrowers:
FINANCIAL MARKETS IN THE UNITED STATES

INTRODUCTION

Savers & Borrowers, from the Federal Reserve Bank of San Francisco, has been developed for high school students enrolled in economics or consumer economics classes.

Savers & Borrowers has four overall learning objectives. The material in the curriculum package will enable students to understand that:

- savings and investment are the sources of economic growth.
- in advanced economies financial markets efficiently channel savings to the most productive investments, at home or abroad.
- financial institutions issue a range of financial products to attract funds and savers.
- borrowers and investors make decisions among financial products based primarily on risks, rewards, and the stream of interest income earned by the product.

Students who complete the lessons and activities will be able to apply their knowledge in making decisions on savings, investment, and borrowing. They will also learn, through these lessons and their assigned readings and research in print material and on the Internet, that financial institutions have evolved and will continue to evolve in response to changing economic circumstances and advances in technology, resulting in more efficient methods of intermediation in the financial markets.

The curriculum package contains everything educators need to use it effectively. It includes the following parts:

1. The Economic Background: The background is presented in question and answer format. The questions can then be used, at your discretion, to assess students' mastery of the economic content. The background essay includes the major points students should include in their answers to questions on a test or in a classroom discussion of financial institutions.

2. Four detailed lesson plans covering the following topics:

    a. Saving and Borrowing: The Circular Flow.

    b. Financial Markets: Where Savers and Borrowers Meet.

    c. Mutual Funds: Understanding the Risks.

    d. Surfing the Channels: Making Decisions in the Financial Marketplace.

    Each lesson plan includes: teachers background, student objectives, a vocabulary list, materials needed, advanced preparation, detailed procedures, and suggested extension activities. Worksheets and charts are included for reproduction and distribution to the students.

3. A glossary.

4. A reference list of related materials from the Federal Reserve System and other sources.

5. A curriculum matrix relating the topics covered in the lessons to topics in the standard high school economics course.

6. Individual charts including:

    a. The Circular Flow (Appendix D).

    b. Types of Financial Intermediaries (Appendix E).

When this study is completed students will understand that a key to the future of a nation's economy depends on the ability to channel savings to the most efficient uses.

ECONOMIC BACKGROUND

Part I. Financial Intermediaries in the Circular Flow

1. What is the circular flow?

   ➤ The circular flow is a simplified picture of the economy. It divides the "actors" in the economy into four groups—households, businesses, government, and the financial sector. Households receive income from selling the factors of production (land, labor, capital) which they own. Households spend their income on goods and services produced by businesses. Businesses buy the factors of production from households and sell the products they produce back to households. Government receives revenue and spends money providing government goods and services and transfer payments. The role of the financial sector is discussed in question three.

2. What does the circular flow teach about the economy?

   The circular flow teaches that:

   ➤ factors of production (land, labor, and capital) are owned by households.

   ➤ factors are traded in the factor markets, where households are suppliers and businesses are purchasers of factors.

   ➤ goods and services are produced by the business sector.

   ➤ goods and services are traded in the product markets where businesses are the suppliers and households the purchasers of goods and services.

   ➤ households do not spend all the money they earn on goods and services. They pay some of their money to the government in taxes and also save some of their income.

   ➤ not all business production is of goods and services for household consumption. Some of this production includes capital goods. Some also is purchased by the government.

   ➤ the level of income in the economy will remain stable if the total of injections into the circular flow equals the leakages from the circular flow.

   ➤ injections into the circular flow include investment spending and government spending.

   ➤ leakages include savings and money paid to the government.

   ➤ if leakages are greater than injections, demand for goods and services and income will fall. If injections are greater than leakages, demand for goods and services and income will rise.

3. What role do financial institutions play in the circular flow?

   ➤ Financial institutions receive savings from households, businesses, and the government and invest these savings. This role is crucial for two reasons. First, an efficient financial sector assures the movement of savings to the most efficient investments. Investment increases labor productivity and the standard of living which means a greater variety and quantity of goods and services are available, often at lower prices. Second, households do not spend all of their income. Some is saved. If household saving is not injected back into the circular flow in the form of investment, then income will fall and the country will have a recession. An efficient financial sector is one of the institutions in the United States economy that keeps the level of income growing.

4. What are financial intermediaries?

   ➤ Financial intermediaries are the institutions which are intermediaries between savers and investors, moving funds between the two. Examples include banks, insurance companies, credit unions, mutual funds, pension funds, and finance companies. In addition, the 1999 Gramm-Leach-Bliley Act (GLB) authorized the creation of financial holding companies (FHC) that are allowed to engage in a wide range of financial services, including banking, securities, and insurance activities. Financial intermediaries are described in Part II of this economic background.

5. What are the sources of saving in the economy?

   ➤ Households and businesses are the primary sources of savings in the United States economy. Household or personal savings is the part of personal income which is neither spent on goods or services nor paid out in taxes. Business savings is the part of a firm's profits which is not paid in taxes nor distributed to shareholders (the owners of the business) in dividends. Governments also may save. Government savings occurs when its revenue exceeds its expenditures. Another name for government savings is a surplus. When government expenditures exceed government revenue the Government must also borrow to finance a deficit.

6. What is "investment" to an economist?

   ➤ To an economist, investment is the flow of expenditures to increase or maintain the capital stock of an economy. Capital is one of the three major factors of production to produce goods and services. The other two are labor and land. Although an individual might buy an existing bond or a painting by an old master as investment, this would not be investment in an economic sense. These items do not increase the stock of capital.

7. What is “investment” to an economist (continued):

   Economic investments are usually divided into the following kinds:

   a. Investment in machinery and equipment.

   b. Investment in a technology and processing equipment.

   c. Investment in structures including residential and nonresidential construction.

   d. Investment in inventory.

All of these investments involve using savings to increase the capital stock of the economy.

Part II. Financial Markets: Where Savers and Borrowers Meet

1. What are the primary types of financial intermediaries?

➤ Financial intermediaries are divided into two types: depository institutions and non-depository institutions. The separation is based on the type of account or liability the institution issues. Appendix E contains a chart which illustrates financial intermediaries by type and sources and uses of funds.

Depository institutions obtain their funds primarily from deposits from the public. Examples of these institutions include commercial banks, savings and loan associations, savings banks, and credit unions. From a consumer's perspective, depository institutions now all provide similar banking services—car loans, credit cards, home equity lines of credit, mortgage loans, checking accounts, and time deposits. Demand and time deposits account for most of depository institutions' liabilities. Banks are the largest of the depository institutions, accounting for 23 percent of the total assets of all financial intermediaries in 2000. Savings institutions (S & Ls) and credit unions combined accounted for approximately six percent of the total assets of financial intermediaries in 2000.

There are three major types of non-depository financial institutions[1]:

a) Contractual Savings Institutions: Examples include insurance companies and private, state, and local government pension funds. These institutions enter into contracts with customers that are long-term financial arrangements. Insurance or pension payments are usually set for a fixed period of time.

b) Finance Companies: These companies borrow in the financial markets and lend to businesses and consumers. Included in this group are auto finance companies which are often called "captives." Captives are owned by the automobile manufacturer which offers credit to their customers to purchase the automobiles they produce. In total, these companies were about four percent of the industry, as measured by assets, in 2000.

c) Investment Intermediaries: Examples include mutual funds and money market mutual funds. These investment intermediaries are a fast growing sector of the financial industry. In 1970, mutual funds and money funds were small. By 2000, they controlled more than 23 percent of financial institution assets.

1 Securities market financial institutions are another type of non-depository financial institution. These include investment banks and security brokers and dealers. They help the security market function smoothly by assisting in the transfer of assets. They do not function as financial intermediaries.

2. What is a financial holding company?

   In 1999, the Gramm-Leach-Bliley Act created the financial holding company (FHC). The FHC, which is a subset of a bank holding company, is a new type of financial intermediary that crosses traditional industry lines. After nearly seven decades of the separation of banking from securities and insurance activities, this historic Act will facilitate the integration of the U.S. financial system. While the Act removes most of the traditional restrictions limiting the integration of banking and other lines of business, like securities and insurance, it did not remove most of the limitations between banking and commerce.

3. What are the types of investments in which each of these financial intermediaries specialize?

   ➤ Depository institutions provide mortgages, make loans to businesses and consumers, and invest in United States government and other securities[2]. Insurance companies and pensions funds—the contractual savings institutions—receive much of their funds from long-term contracts. Since they have a predictable, long-term flow of funds, contractual savings institutions can invest in longer-term assets, without fear of loss of liquidity. Thus, these intermediaries invest in corporate bonds and stocks, as well as U.S. government and state and local municipal securities. Life insurance companies also make commercial mortgage loans.

     Finance companies make business and consumer loans. Automobile manufacturers often have their own finance companies called "captives," which provide credit to customers who purchase their particular make of automobile. Some finance companies are a source of credit for higher risk borrowers who can't qualify for loans from depository institutions.

     Investment intermediaries, as the name implies, invest in stocks and bonds, and, in the case of money market mutual funds, in short-term money market instruments.

4. What are the advantages to household savers in using investment intermediaries such as mutual funds rather than investing directly in stocks and bonds?

   ➤ Most individual households have limited assets making it difficult to diversify by buying many different stocks or bonds. Diversification helps reduce the risk of capital loss for an investor. Individual investors can obtain the benefits of diversification when an individual household's funds are pooled with funds from other investors in financial products like mutual funds.

2 The U.S. Treasury issues bills, notes, and bonds. Short-term Treasury obligations with maturities of thirteen weeks to one year are called Treasury Bills. Treasury obligations with maturities from two to ten years are called Treasury notes. Obligations with maturities over ten years are called bonds.

- Mutual funds managers also research information about different investment instruments and the financial condition of individual companies. It is often difficult for a part-time or non-professional investor to obtain this information.

- Most mutual funds have many different types of investment funds. Switching between them is often permitted at no cost or very low cost. For an individual investor, switching between individual stocks, selling and buying, often entails high commission or transaction costs.

5. What caused the changes in market share of different types of financial intermediaries over the last three decades?

   - Shifts in market shares of the different types of financial intermediaries represent an interesting example of the adjustment of financial markets and institutions to changing economic and regulatory conditions. At the end of the 1970s, short-term market interest rates rose with inflation. However, banks could not pay market interest rates because regulators maintained ceilings on the interest rates banks could pay depositors.[3] In response to this opportunity, money market mutual funds became popular. These money market mutual fund accounts, issued by investment firms, paid market interest rates to small savers by pooling investor funds and purchasing financial instruments. These investments provided savers with higher interest rates than regulated accounts such as passbook savings accounts.

     Consumer's rapid acceptance of money market mutual funds suggests that that the higher market interest rates compensated for the lack of deposit insurance on these products. In the 1980s and 1990s, mutual funds were able to broaden their appeal to savers by offering a wide array of stock, bond, and money funds designed to appeal to savers. During the 1990s, the upswing in the stock market typically generated higher returns on stock funds than the market interest rates banks paid on time and savings deposits. As a result of these higher returns, the mutual fund industry, including money market funds, now accounts for more than one-fifth of financial institutions' assets.

     Changes in market share are a result of innovation, deregulation, and changes in technology. Additional changes in the provision of financial services are expected due to the passage of the Gramm-Leach-Bliley Act in 1999. This Act resulted in the authorization of a new entity, the financial holding company (FHC), and likely will accelerate the integration of banking, securities, and insurance activities starting in 2000.

3 Regulation Q was a Federal Reserve Regulation which set a ceiling on the amount that banks could pay their depositors. Until 1970, the ceiling applied to large denomination CDs as well.

6. What is the difference between direct and indirect investment?

➤ Indirect investment occurs when people and businesses borrow and lend through financial intermediaries. Direct investment occurs when people and businesses borrow and lend directly rather than through intermediaries.Today, many large corporations borrow and lend directly in the financial markets without going through a financial intermediary because they can get better rates by borrowing or lending directly. Commercial paper, a short-term unsecured promissory note issued by a large corporation, provides a good example of direct investment. Corporations might buy commercial paper directly from another firm as an investment rather than putting their funds into a bank that holds commercial paper in its portfolio. Corporations also borrow directly, with guarantees from banks, in the commercial paper market rather than borrowing from a bank. Similarly, small savers often buy Treasury securities directly rather than putting funds into a bank which holds Treasury securities in its portfolio.

7. What is the most important characteristic distinguishing financial products such as mutual funds from checking and savings deposits?

➤ Checking and savings and time deposit accounts issued by depository institutions which belong to the Federal Deposit Insurance Corporation (FDIC) are insured against loss of principal deposited up to a balance of $100,000 per depositor per ownership category (individual or joint). Mutual funds and other financial products aren't insured by the FDIC.

8. What is meant by the statement that deposits at depository institutions are insured?

➤ This statement means that if the institution becomes insolvent, or is closed, depositors will not lose any of the principal in their deposit and time accounts up to a maximum of $100,000 per deposit account.

9. What circumstances could result in a person losing some or all of the amount they invest in a stock, mutual fund, or bond?

➤ All or part of the principal of these types of investments may be lost when their market value falls. What causes the market value to fall? Consider a long-term bond or mutual fund which invests in such bonds. If market interest rates rise, the value or price of the bond or the bond fund will fall since their rate of return is below market rates. Higher interest rates on alternative investments mean that demand for the bond or bond fund will fall, lowering the price. Therefore, a fixed rate bond can only yield a higher effective rate of interest if the price of the bond falls to offset the difference between the bond's fixed rate of return and the higher market interest rates.

Of course, an investor can choose to hold the bond or bond fund until it matures to avoid the loss of principal, but the interest rate yield will be below market rates.

Investors also may be subject to default or credit risk if the company or financial institution in which the person invests suffers a market loss due to unfavorable business conditions, bankruptcies, or fraud. Investors may lose all or some of their principal under these circumstances.

LESSON ONE

Savings and Borrowing: The Circular Flow

Teacher's Background:

The opening lesson has two parts. The first part focuses on the circular flow, and how the economy channels both money and real resources among households, businesses, and the government sectors. The second part concentrates on savings and investment, and how economists define each. Through studying the circular flow, students will learn that savings are the major source of investment in our economy. They will learn the important role financial institutions play as intermediaries channeling savings to investors (borrowers) so they can be used productively in the economy. When a saver, for example, buys a CD (certificate of deposit) the funds may be channeled to a business which uses the funds to expand its inventory or to buy a new up-to-date computer, two types of investment.

A large part of the material in this lesson requires that students master a new economics vocabulary or learn new meanings for words they previously may have understood in different ways. Examples of such vocabulary include: investment, injections, and leakages. Students, after completing this lesson, will understand the importance of savings and investment in the economy. In Lesson Two they will apply their knowledge to study the different types of financial intermediaries.

The standard of living of a country grows as the workers in the economy become more productive. Investment leads to increases in capital goods which increases labor productivity. But what are the sources of investment?

Student Objectives:

- ➤ Students will describe the major actors in the circular flow in the economy.
- ➤ Students will explain the leakages from the circular flow, focusing on the savings' leakage.
- ➤ Students will explain the injections into the circular flow, focusing on the investment injection.
- ➤ Students will define the financial market and define its role in the circular flow (channeling savings to the most productive investment).

Vocabulary:

financial intermediaries

These are depository and non-depository institutions (banks, savings and loan associations, credit unions, insurance companies, pension funds, finance companies, investment institutions such as mutual market funds as well as the newly authorized financial holding companies) that channel funds from savers to borrowers.

injection

Refers to injections into the circular flow of the economy including government and investment spending.

investment

Investment, *to an economist*, is the flow of expenditures to increase or maintain the capital stock of an economy. The spending of money on goods such as tools, factories, or machinery that are used to produce other goods and services.

leakage

Refers to leaks from the circular flow of the economy as savings and money paid to the government.

savings

The unspent income that households do not spend on goods and services.

Materials Needed:

- ➤ Copy of the circular flow diagram (Appendix D). Reproduce in classroom sets, draw on chalk board, or copy onto transparency master.
- ➤ Art supplies and/or drawing program for classroom computer.
- ➤ Economic textbooks for reference.
- ➤ Reproduce copies of Student Handout A—"Savings: A Survey."

Procedures:

Part I : The Circular Flow

1. Draw the circular flow diagram on the blackboard or reproduce and distribute copies. Write the following words on the chalk board:

    Households

    Businesses

    Government

    Financial Institutions

    Tell students that in this lesson they will be studying the major roles of each of these members of the cast of characters in the economy. Distribute copies of the "Cast of Characters" handout located at the end of this lesson. Make three columns on the board with the following headings to recreate the "Cast of Characters" handout:

    How do they receive funds?

    How do they spend funds?

2. Pointing to the circular flow diagram, lead students in a discussion of the flows depicted. Then discuss the questions and write in the answers for each of the twelve boxes of the grid you have drawn on the board.

3. Explain to the students that the economy is made up of many different types of markets and that the actors in the circular flow can be either buyers or sellers in these markets. Point to each of the markets on the circular flow diagram in turn. Have students tell you what is exchanged in these markets, who is demanding or buying and who is supplying or selling. For example, in the market for products, businesses are selling and households are buying. In the market for factors of production, (land, labor, and capital), households are selling and businesses are buying. Finally, in the financial markets or sector, savers are supplying funds to financial intermediaries and investors are borrowing or demanding funds from intermediaries.

4. Describe to students that economists often depict the circular flow as flows in pipes, like plumbing in a house with the flow depicted as water moving in and out. The circular flow has also been depicted as a giant pin ball machine. Ask students to draw their own version of the circular flow, using art supplies or a computer drawing program. Students can complete their diagrams as a homework assignment and submit it during the next class period.

5. Summarize the role of each of the sectors in the economy. Announce to students that the second part of this lesson will concentrate on the financial markets: savings, borrowing, and investment.

Part II: Savings and Borrowing

1. Write the word "Savings" on the chalk board. Ask students how they would define savings. Review where savings appeared on the circular flow diagram taught in the first part of the lesson.

2. Conduct a class survey to determine the savings practices of students. (The survey should be conducted with anonymity.) A suggested survey instrument is included in this lesson (Student Handout A).

3. Select one group of students to tabulate the survey results, another to develop a chart with the findings, and another to make a report to the class on the survey results. While some students are at work on specific tasks related to the survey, other students should review material in their economic textbooks related to savings and financial intermediaries.

4. Ask the class to generalize the results of the survey by asking them what factors would determine how much households in the economy save. Students should volunteer that income will be the major determinant of saving but that households might save more if the interest or return they could earn were higher. Ask the class to further generalize the impact of a lack of savings on the economy as a whole.

5. Now write the word "investment" on the board. Explain to students that the term investment is used differently by economists than by average members of the public. Have students look up this word in a print or computer dictionary, and report the different meanings. Read the economic definition of investment from the glossary to students.

6. Write the following list on the board and ask students to explain which actions would be considered investment by an economist and which would not be considered investment. Lead students in a discussion of the factors which they considered important in making their decisions.

   a. An automobile manufacturer buys a robot for the plant.

   b. A woman buys a life insurance policy.

   c. A student puts his earnings in a savings account.

   d. A contractor builds a new apartment building.

   e. A taxi company buys ten new taxis.

   (*Answers:* The first, fourth, and fifth transaction are considered investment, while the second and third are not. This is because only the first, fourth, and fifth involve increases in the capital stock. When the earnings put into the savings account or the money used for purchase of an insurance policy is then loaned out and invested, we will have investment, but not until then.)

7. Summarize the key points of this lesson emphasizing the role of savings and investment in increasing productivity and growth in the economy. Add that financial markets efficiently channel savings to the most productive investments, at home or abroad. Tell students that in the next lesson they will be studying the different financial intermediaries that transfer funds from savers to borrowers and investors. Add that efficient financial markets ensure that savings are allocated to the most productive investments.

Extension Activities

- Campus Survey: Ask students to survey the savings behavior of other classes in the school using an anonymous survey instrument. Have them report the results, generalizing on factors which influence savings behavior. For example, students may find that younger students save more or less than older ones. Also, students with part-time jobs may have a higher rate of savings than students who don't work.

- Beyond the United States Economy: Have students select a developed or developing country and research their savings behavior, reporting the results in a written or oral report.

- Foreign Investments: Have students do research on foreign lending to developing countries. Have them concentrate on "who benefits" from this investment: the country where the investment is taking place, the foreign investor, or both. Ask them to consider the factors that will determine who benefits.

- Banking around the World: Ask students to select a country to research and write a report about the country's banking and financial markets, including the markets' impact on the nation's economy. This activity will reinforce your students' understanding of the importance of developed financial markets and financial intermediation for productivity and economic growth.

Cast Of Characters

	HOUSEHOLDS	BUSINESSES	GOVERNMENT	FINANCIAL INSTITUTIONS
How do they receive funds?				
How do they spend funds?				

Student Handout A

Savings: A Survey

1. *What is your class level?*
   ___ eighth grade
   ___ ninth grade
   ___ tenth grade
   ___ eleventh grade
   ___ twelfth grade

2. *How many hours per week do you work?*
   ___ zero
   ___ one to ten
   ___ eleven to twenty
   ___ more than twenty

3. *How often do you save money from your earnings or allowance?*
   ___ never
   ___ most of the time
   ___ occasionally
   ___ always

4. *If you save, approximately what percent of your earnings or allowance do you save?*
   ___ less than 10 percent
   ___ 10 to 24 percent
   ___ 25 to 49 percent
   ___ 50 to 75 percent
   ___ more than 75 percent

5. *What are you saving for?*
   ___ a car
   ___ sporting equipment (name it ___________________________________)
   ___ a vacation
   ___ high school expenses (ring, senior prom, yearbook)
   ___ other (name it ___________________________________)

6. *Where do you keep your savings?*
   ___ in a mutual fund
   ___ in a bank or savings and loan
   ___ in your room
   ___ with a family member
   ___ other (name it ___________________________________)

7. *What would you do tomorrow if you were given an unexpected gift of $100?*
   ___ save all of it
   ___ spend all of it
   ___ spend some and save some
   (Estimate percentage of each: save _______________ % spend _______________ %)

8. *What factors would determine whether you decide to save and how much you would save in the future?*
   ____

LESSON TWO

Financial Markets: Where Savers and Borrowers Meet

Teacher's Background:

In the economy, those who want to save and those who want to borrow are linked together through financial institutions called financial intermediaries. Banks are the oldest of these institutions in our economy. Today, when financial institutions and financial products are discussed people not only think of banks but also savings and loans, credit unions, insurance companies, mutual funds, and pension funds. Implementation of the Gramm-Leach-Bliley Act in 2000 adds integrated financial holding companies to the list of financial service firms providing banking, securities, and insurance services, and likely will increase the choice of services and products for both savers and borrowers.

In this lesson students will learn about these various financial institutions and the products that they offer. In an opening activity students will role play several scenarios where savers and borrowers try to *connect* with each other in a world without financial institutions.

Students also will do an in-class research project, using newspapers and brochures and other promotional materials from financial institutions in order to identify the range of intermediaries and the myriad of financial products that are offered. Students may "interview" parents and grandparents to learn about the financial intermediaries they use. An extension activity on graph reading helps students focus on the changing market share of financial intermediaries over the last three decades. The activities in this lesson provide the background and basis for decision making that students will complete in the final part of this curriculum.

Student Objectives:

- ➤ Students will identify a range of financial institutions and financial products offered in the United States.
- ➤ Students will analyze and explain the problems inherent in an economy without financial institutions.
- ➤ Students will list and describe the roles that financial institutions play in the economy.

Vocabulary:

financial institutions

These are institutions such as banks, saving and loan associations, insurance companies, credit unions, pension funds, finance companies, and financial holding companies that function as financial intermediaries channeling funds from savers to borrowers in the financial markets. Securities dealers and brokers also are considered financial institutions, but they do not function as intermediaries. Instead, they transfer funds helping financial markets to run smoothly.

interest

The money paid or received for borrowing or lending money.

Materials Needed:

- Business sections of daily and Sunday newspapers.
- Brochures and advertisements from a range of financial institutions.
- Yellow pages from local or regional phone books.
- Economic textbooks.
- Index cards (or half sheets of scratch paper).
- Reproduce copies of Student Handout B, "Financial Institution Survey."
- Reproduce copies of Student Handout C, "Market Share Chart" (for Extension Activity).

Advance Preparation:

- Students should have completed Lesson One and understand how saving, borrowing, and investment help to promote economic growth.
- Students should understand what interest is and be able to explain how the rate of interest affects savers and borrowers.
- Materials describing various financial institutions and products should be available and displayed. Students can be assigned the task of collecting brochures, pamphlets, and advertisements from financial institutions.

Procedures:

1. Ask students to imagine a world where banks and other financial institutions do not exist. Ask them to think about the following questions:

    a. Where would you and other consumers in the economy save money if there were no banks or other financial institutions?

    b. Where would borrowers go to find the money they needed to buy a car, purchase a house, or start a business?

2. Copy, cut, and paste a sufficient number of the borrower and saver scenarios from the Lesson Two "Savers/Borrowers Scenarios" on separate index cards so that each student represents a borrower or a saver. Distribute the cards creating equal groups of borrowers and savers. Allow the borrowers and savers to move around the classroom to find their partners. For example, in the first scenario, Sam and Uncle Bill search for each other to negotiate a possible loan based on the information on their index cards.

BORROWER: Sam/Uncle Bill
(Both parties may negotiate loan conditions to compromise to make a transaction.)
Sam is a sixteen-year-old high school student. He wants to borrow $4,000 from his Uncle Bill for a used truck. He wants to repay the loan over four years at a maximum 10% interest rate. He has a part-time job.

SAVER: Uncle Bill/Sam
(Both parties may negotiate loan conditions to compromise to make a transaction.)
Uncle Bill has $5,000 he wants to invest over three years. He needs the money in three years to buy new machinery for his business. He wants a low-risk investment earning at least 6%. He wants some kind of security for the loan since he plans to spend the money in three years.

3. Have a few students role play their scenarios in front of the class, illustrating the difficulties they experienced as they tried to reach a loan agreement. Discuss the difficulties in making such matches, such as agreeing on interest rates and repayment periods. Ask them to identify the missing link or channel that could have made these transactions easier and safer. Ask students if they know what types of institutions bring savers and borrowers together.

4. Organize the class into small groups of three or four students to research the range of financial institutions that take deposits and make loans. Students can look through newspaper advertisements, brochures, and the Internet. Each group should complete the "Financial Services Survey" listed in Student Handout B. In this survey, students will compare and contrast banks, credit unions, finance companies, and investment brokerages.

5. Call on groups to report their "Financial Services Survey" findings and create the following matrix for each financial product.

Financial Services Matrix:
Product: ______________________ (interest checking, one-year CD, 30-year fixed-rate mortgage, 60-month new auto loan, mutual fund, etc.)

Institution			
Federally Insured?			
Time Period?			
Interest Rate?			
Degree of Risk?			
Advantages?			
Disadvantages?			

6 Summarize the lesson by reviewing how financial institutions provide the channel or link between savers and borrowers in the economy. Review for students that financial institutions provide:

- security for deposits (insured and non-insured financial products will be covered in Lesson Three);
- a mechanism whereby savings are channeled in the form of loans and investments;
- loans for individuals and businesses; and
- a market and a place to bring savers and borrowers together.

Extension Activities:

- **Guest Speaker:** Invite a representative of a financial institution to the classroom. Have her/him discuss the range of services that his/her institution provides to households and businesses. Another option is to have a teacher who serves on the board of a local or state teachers' credit union discuss how the credit union operates and is different from other financial institutions.

- **Market Share:** Duplicate and distribute copies of the Student Handout C "Market Share of Financial Intermediaries." This chart compares the change in market share of financial intermediaries between the years 1960 and 1998. Students should answer and be prepared to discuss the questions that are listed on the chart.

- **A World without Banks:** Ask your students to write a short story called *A World without Banks*. Their stories should focus on how they and their families would be affected personally, how businesses would be affected, or how the circular flow would be impacted in a world without banks to channel funds from savers to borrowers.

Student Handout B Financial Institution Survey

Group Names ______________________ ______________________
______________________ ______________________

Deposit/Investment Account

Choose a type of deposit account (interest checking, one-year CD, mutual fund, etc.)
Choose two types of financial institutions ________________ & ________________
(bank, credit union, brokerage, etc.)

	Financial Institution #1	Financial Institution #2
Interest rate		
length of maturity		
minimum balance		
service charge		
degree of risk		
advantages/disadvantages		

Business or personal loan

Choose a type of loan ______________________________
(small business loan, 30-year fixed-rate mortgage, 60-month auto loan, etc.)

Choose two types of financial institutions ________________ & ________________
(bank, credit union, finance company, etc.)

	Financial Institution #1	Financial Institution #2
Interest rate		
loan time period		
minimum amount		
service charge		
collateral required		
degree of risk to institution		
advantages/disadvantages		

Savers & Borrowers:

FINANCIAL MARKETS IN THE UNITED STATES

SAVERS & BORROWERS SCENARIOS

PROCEDURE: Cut and paste a sufficient number of the borrower and saver scenarios listed below on separate index cards so that each student represents a borrower or a saver. Allow the borrowers and savers to move around the classroom to find their loan partners. For example, in the first scenario, Sam and Uncle Bill search for each other to negotiate a possible loan based on the information on their index cards.

BORROWER: Sam/Uncle Bill
(Both parties may negotiate loan conditions to compromise to make a transaction.)

Sam is a 16-year-old high school student. He wants to borrow $4,000 from his Uncle Bill for a used truck. He wants to repay the loan over four years at a maximum 10% interest rate. He has a part-time job.

SAVER: Uncle Bill/Sam
(Both parties may negotiate loan conditions to compromise to make a transaction.)

Uncle Bill has $5,000 he wants to invest over three years. He needs the money in three years to buy new machinery for his business. He wants a low-risk investment earning at least 6%. He wants some kind of security for the loan since he plans to spend the money in three years.

BORROWER:
The Gilbert Family/ Grandpa & Grandma Gilbert
(Both parties may negotiate loan conditions to compromise to make a transaction.)

The Gilbert Family—husband, wife, and two young children—want to add another bedroom to their cramped house. They've asked their grandparents for a $10,000 loan. The Gilberts want to repay the loan over a 10-year period at a low interest rate—around 8%. They purchased their home five years ago.

SAVER:
Grandpa & Grandma Gilbert/The Gilbert Family
(Both parties may negotiate loan conditions to compromise to make a transaction.)

Grandpa & Grandma Gilbert have $8,000 to invest. They need the money in two years to supplement their other retirement investments. They want a low-risk loan, that earn at least 8%.

BORROWER:
Sanchez Newlyweds/ Fred Martinez
(Both parties may negotiate loan conditions to compromise to make a transaction.)

Mr. and Mrs. Sanchez are newlyweds. They want to borrow $2,000 at 8% over 15 years for a down payment on a new home. They both work full time, but Mrs. Sanchez plans to work part time as soon as she enters graduate school.

SAVER: Fred Martinez/Sanchez Newlyweds
(Both parties may negotiate loan conditions to compromise to make a transaction.)

Fred Martinez is 48 years old. He has $10,000 to invest. He wants a very high rate of return—at least 15% for ten years—since this money is contributing to his retirement nestegg.

Savers & Borrowers:

Financial Markets in the United States

BORROWER: Sara/Jason
(Both parties may negotiate loan conditions to compromise to make a transaction.)

Sara is a 12-year-old student who has requested a $600 loan from her brother Jason so she can buy a new mountain bike. Sara wants to repay the loan at 4% over a four-year period. She earns money baby sitting part-time.

SAVER: Jason/Sara
(Both parties may negotiate loan conditions to compromise to make a transaction.)

Jason is an 18-year-old soon-to-be college freshman. He has $2,000 his grandparents gave him for a graduation present. He plans to spend $1,000 and hopes to invest the remaining $1,000, earning a 20% rate-of-return over a one-year period.

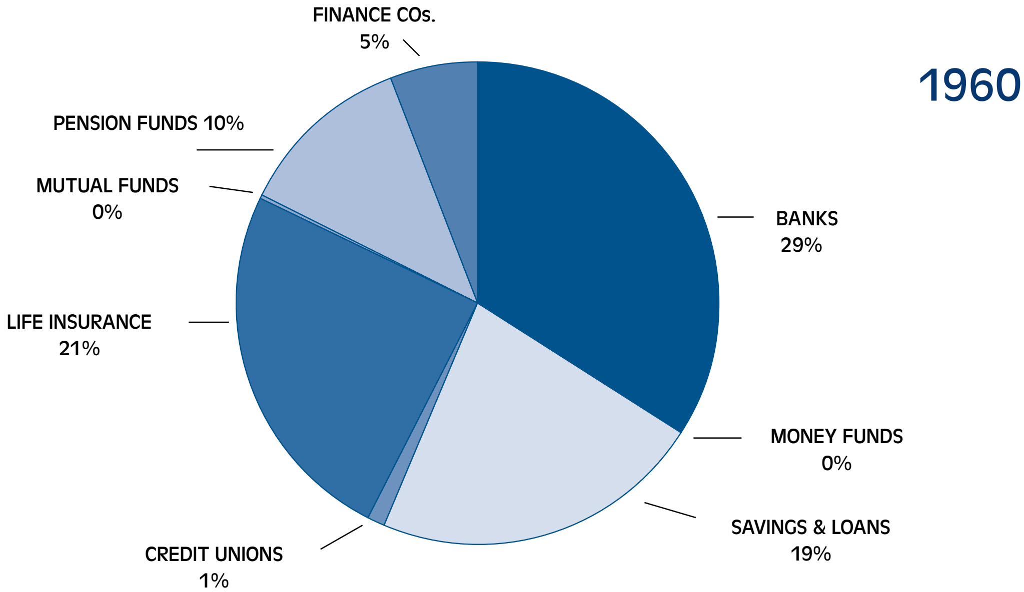
BORROWER: Jessica/Golden Gate Boys and Girls Club
(Both parties may negotiate loan conditions to compromise to make a transaction.)

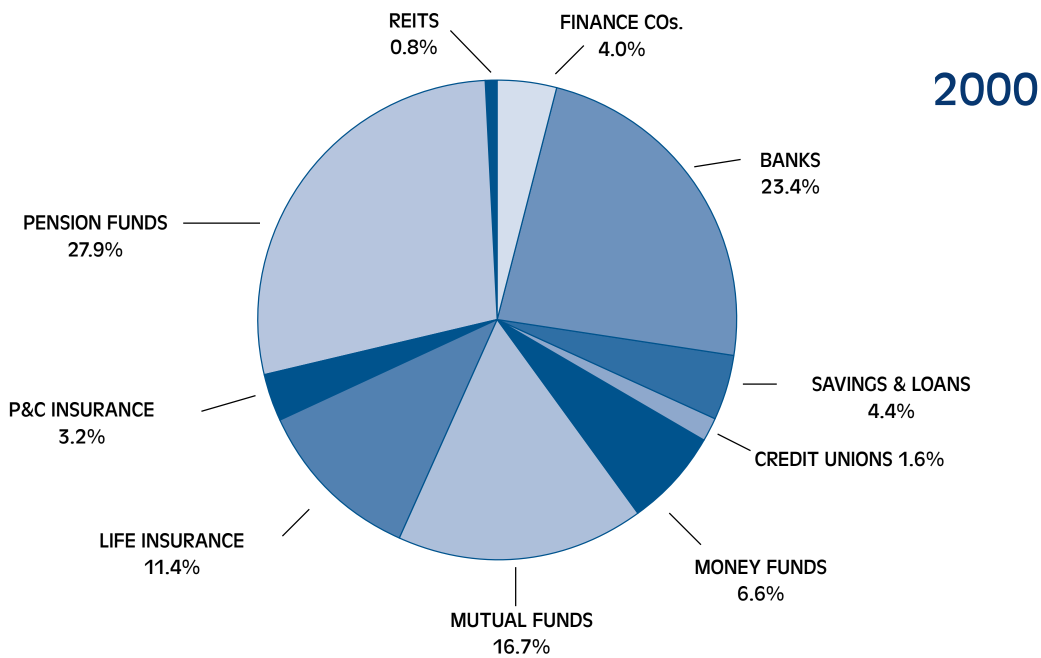
Jessica is entering college next fall. To pay for her living expenses, she needs to borrow $12,000 at a maximum 5%, payable over a 10-year period.

SAVER: Golden Gate Boys and Girls Club/Jessica
(Both parties may negotiate loan conditions to compromise to make a transaction.)

The Golden Gate Boys and Girls Club offers 2%, low-interest, loans to college students. The loans have two stipulations: they must be repaid one year after graduation, and the borrower must work part time while in college.

FINANCIAL INTERMEDIARIES BY MARKET SHARE





TO DO:

1. What are the financial intermediaries listed on the market share charts? ____________________

   ____

2. Compare the changes in market share between 1960 and 1998 for the following financial intermediaries:
   a) banks ____
   b) mutual funds ____
   c) thrifts (S&L, CU [credit unions]) _____________________________________
   d) pensions ____

3. Why did the market share of mutual funds increase substantially from 1960 to 2000?

   ____

Sources: Federal Reserve Bank, Federal Deposit Insurance Corporation, Office of Thrift Supervision.

LESSON THREE

Mutual Funds: Understand the Risks

Teacher's Background:

Today many different businesses are taking place in local banks. They accept deposits and sell financial instruments like mutual funds. Deposits are insured up to $100,000 per deposit account and pay a fixed interest on time deposits. Mutual funds are not insured and purchasers may lose part or all of their principal. Although the interest or dividend return on mutual funds is not fixed, it can be larger than on traditional deposits, depending upon market conditions.

In this lesson students will view an eight-minute video called *Mutual Funds: Understand the Risks*. Before the viewing, students are encouraged to visit a local bank or savings and loan to find out about deposit and investment opportunities, and the costs and returns of each. They also will complete a video viewing worksheet.

Students Objectives:

- Students will describe how bank deposits are insured while investments such as mutual funds sold by banks are not insured.
- Students will be able to explain the tradeoffs between risk and return for various financial investments.

Vocabulary:

annuity
An uninsured investment which can be purchased to yield a fixed payment for a specified period of time.

bond
A fixed interest security that promises to pay the holder a specific amount of money on a certain date. Corporations, for example, sell bonds in order to raise money for expansion.

certificates of deposit (CDs)
A savings account in which an individual agrees to leave money on deposit for a specific amount of interest and for a specific period of time.

dividends
A share of profit received by a stockholder or a policyholder of a mutual fund investment.

Federal Deposit Insurance Corporation (FDIC)
The federal agency that insures savings and loan and bank deposits up to $100,000 per depositor per ownership category (individual or joint).

interest

The money paid or received for borrowing or lending money.

mutual funds

A corporation or trust that pools money from many investors in order to buy a large and sometimes diverse group of stocks, bonds, or money market instruments. Mutual funds offer various levels of risk and rates of return.

savings deposits

An account that draws interest in a bank or other depository institution.

Securities and Exchange Commission (SEC)

The federal regulatory agency founded in 1934 that enforces laws related to the sale of stocks and bonds.

stock

Claims of ownership in a corporation.

Materials Needed:

- Reproduce copies of Student Handout D, "Mutual Funds: Understanding the Risks."
- A copy of the videotape *Mutual Funds: Understanding the Risks*, Federal Reserve Bank of Minneapolis, 1996.

Advance Preparation:

Students should have completed classroom activities and reading assignments which provide them with the knowledge to explain:

- why financial intermediaries are needed in the U.S. economy.
- the basic types of financial intermediaries in the economy and the financial instruments which they issue.

Procedures:

1. Explain to students that they are about to view a video which will help them understand more about the different accounts and services which are available from their local banks, financial institutions, and savings and loans. Discuss how the information in the video will help them to avoid problems when they have savings and are looking for the best place to keep them, in light of their own financial objectives. Distribute the worksheet "Mutual Funds: Understanding the Risks" and explain to students that they should review it and complete their answers during or immediately after viewing the tape.

2. Show the eight-minute video.

3. Give students time to complete Student Handout D. Lead the class in a discussion of the worksheet questions. Emphasize the relationship between risk and return associated with various types of investments. Also emphasize that if an account is not insured, investors may lose all or some of their principal if the stock market falls, or in the case of a bond fund, if market interest rates go up or if the bonds default. Investors also may lose all or some of their principal if a firm in a bond or stock fund goes bankrupt.

Extension Activities:

➤ S&L Scandal: Have students research newspaper accounts about the savings and loans during the eighties. One famous case involved savers who were sold non-insured investments in a bank, without being warned of the risks they would face.
http://www.fdic.gov/bank/historical/s&l/

➤ FDIC: Have students research the founding of the Federal Deposit Insurance Corporation (FDIC). What were the historical events which proceeded its founding? How has the dollar amount of accounts which are insured changed since its founding?
http://www.fdic.gov/

➤ The SEC: Discuss the Securities and Exchange Commission (SEC) with students. Have them explain and discuss its role in the economy. Ask students to write to the SEC and obtain a copy of their study on public perceptions on mutual funds. (The findings of the report are mentioned in the video.)
http://www.sec.gov/

➤ Video on Loan: Encourage students to borrow the video, *Mutual Funds: Understanding the Risks*, to show to their adult family members. Stress to students that it is important that all savers know which accounts are insured.
http://www.frbsf.org/education/curriculum/mutual.html

➤ Gramm-Leach-Bliley Act of 1999: Have students research the key provisions of Gramm-Leach-Bliley Act of 1999, and evaluate how it might change the provision of financial services. How is this Act different from the Depression-Era Glass-Steagal Act?
http://www.frbsf.org/econrsrch/wklyltr/2000/el2000-10.html

STUDENT HANDOUT D

Mutual Funds: Understanding the Risks
Video Viewing Worksheet

1. What types of services do local banks provide?

2. What are mutual funds?

3. What are annuities?

4. What are the CDs mentioned in the video?

5. What is the FDIC? Why is the FDIC important to bank customers?

6. Write a sentence to explain each of the following statements, which were included in the video:

   a. Proceed with caution. ____

   b. Investigate before you invest. ______________________________________

   c. Forego risks and forego rewards. ___________________________________

   d. In the bank of the 1990s there are new opportunities and new responsibilities. ____________

   ____

7. What does it mean when someone states an account is insured?

Lesson Four

Surfing the Channels: Decisions and Choices on Saving and Borrowing

Teacher's Background:

This final lesson in the *Savers and Borrowers* curriculum introduces the economic decision-making model to students. This decision making process is one that assists people in making wiser decisions in their daily lives. Students will complete an activity in which they apply the economic way of thinking to decisions and choices related to saving and borrowing.

After a review of the steps in the decision-making process, students will work in small groups to make their own choices as savers and borrowers in the economy. As a culminating activity, students will analyze a set of situations that hypothetical savers and borrowers confront and report their decisions. These reports will provide students with a way of explaining and applying the economic decision-making model while identifying the range of financial institutions and financial products that are available in the economy. The lesson ends with a final brief summary of the *Savers and Borrowers* curriculum unit.

Student Objectives:

- Students will identify and explain the steps in the economic decision-making model.
- Students will apply the decision-making model to saving and borrowing problem situations.
- Students will summarize the role that financial institutions play in the economy.

Materials Needed:

- Reproduce copies of Student Handout E, "Decision-Making: Saving and Borrowing."
- Reproduce the six "Savers and Borrowers Task Cards." Cut and paste on index cards.
- Display materials on financial institutions and financial products that were collected for previous lessons (for reference purposes).

Advance Preparation:

- Complete lessons one through three and review key points about financial institutions contained in these previous lessons.
- Organize students into six groups to analyze the scenarios on the task cards.

Procedures:

1. Ask students to consider how they and their friends make major decisions. Ask students to provide some examples of some major decisions that they have made in the last few months. Students might list such decisions as: playing a school sport instead of keeping a part-time job, applying to three out-of-state colleges instead of local institutions, buying in-line skates instead of new school clothes, dropping an advanced math course, taking a zero period class, etc.

2. Have students elaborate on ways they make some of these decisions (e.g. ask a friend for advice, consult a family member, flip a coin, imagine all the alternatives, think the situation through, just make it!). Discuss how the use of a decision-making model is a tool to help people think though various alternatives before making a decision.

3. Introduce and/or reintroduce the steps in the decision-making model. Write the steps on the board. As the model is introduced, use a problem that could be specific to many of the students to illustrate the steps. For example, the problem of deciding where to go to college. As the steps are introduced, each student should develop their own criteria for judging various alternatives.

- State the problem. (Ask yourself what decision am I trying to make?)
- List the criteria. (What do you hope to accomplish in making your decision?)
- Rank the criteria. (What is most important to you? Least important?)
- List the alternatives you are considering.
- Evaluate the alternatives. (Rank them with a plus or minus according to how well each alternative meets the criteria.)
- Make a decision!

The following example could be used to illustrate the steps, although students might want to apply the steps to a problem situation that they are trying to solve.

What College is Right for Sarah? Sarah is a junior and is trying to decide where to apply for college for next year. Her problem is: where should she attend college? Sarah has to first ask herself what are her criteria for selecting a school. She has made the following list. The college must: (a) be state supported (b) be located within a four hour drive from home (c) have on-campus housing (d) offer part-time campus jobs (e) offer womens' sports competition. Next, Sarah has to rank her criteria by determining which is the most important factor and how the other items rate. When Sara considers various colleges, she will systematically rate them according to her criteria and see which institution matches her goals.

4. Have students state their own decisions they are considering and relate the steps of the model to the decision they need to make. Ask students to give examples of how their family members might use this decision-making model. Ask students if this model could be used to help people decide where to save their money or where to borrow money.

5. Organize the class into six groups and distribute one "Savers and Borrowers Task Card" and one Student Handout E, Decision-Making Grid, to each group. These groups should work together and analyze the problem presented on each card. As they carefully read the scenarios they will be able to extrapolate the criteria. Students should *not* make up their own criteria for this exercise. Students should be encouraged to refer to the materials on financial institutions and financial products that were used in previous lessons.

6. Have each of the groups report back to the class. As the students present their scenarios they will be demonstrating their understanding of the steps in the economic decision- making model and their knowledge of financial institutions and products they offer.

   Summarize that among all these financial institutions and range of financial products savers, borrowers, and investors make decisions based on rewards, risks, and the interest income generated by financial products.

7. Summarize the lessons presented in this *Savers and Borrowers* guide by asking each student to report on one or two major points they learned. Have them write their key points on butcher paper or on the blackboard. Summarize the points on the list and review for students that:

    - In the United States and other advanced economies, financial markets work to efficiently *channel* savings to the most productive investments. These investments are made both in the U.S. and abroad.
    - These savings and investments are the sources of economic growth and productivity in the economy.
    - Stress the idea that the health of the economy depends on *channeling* savings to the most efficient uses.

Extension Activities:

- **More Scenarios:** Have students create their own “Savers and Borrowers Task Cards” and exchange with others in the class. Students should then analyze the scenarios and apply the decision-making model to each problem situation.
- **More Surfing:** Ask students to use the **World Wide Web** as a source of information on financial institutions and financial products. Have them report back to the class on their findings. Students should include the web site addresses in their presentation and also describe how they initially surfed the Internet in order to find these financial institutions and products.
- **The ABCs of Figuring Interest:** Order a copy of *The ABCs of Interest Rates* from the Federal Reserve Bank of Chicago and use the publication as a resource for leading your students through interest rate calculations for various types of loans and financial products.

Student Handout E

Decision Making: Saving and Borrowing

____
Name

1. State the problem. (Ask yourself what decision am I trying to make?)
2. List the criteria. (What do you hope to accomplish in making your decision?)
3. Rank the criteria. (What is most important to you? Least important?)
4. List the alternatives you are considering.
5. Evaluate the alternatives. (Rank them with a plus or minus according to how well the alternative meets your criteria.)
6. Make a decision!

State the problem: ____

Criteria				
Rank of Criteria				
Alternative 1				
Alternative 2				
Alternative 3				

Decision: ____

Lesson Four Task Cards

Task Card 1

Congratulations Graduate

When Sandy graduated from the state university she was given a very special gift of $5,000 from her Aunt Virginia. The gift had restrictions, or as Aunt Virginia said in her letter, "there are strings attached to this gift."

The letter stated that:

1. No part of the $5,000 could be spent for goods and services for at least five years.
2. The money should be saved in a manner that reaches the *highest return* even if *risks* are taken.

TO DO:
How would you help Sandy make a decision about saving the $5,000? Use a decision-making model to help you analyze the alternatives and make a decision.

Task Card 2

Announcing the Birth of Travis Torres

When Travis Torres was only one week old, his parents agreed that each year they would save $300 until his 18th birthday. This would be money to help Travis attend college.

The Torres plan:

1. Before Travis is two months old, the family will save the first $300.
2. Each year on his birthday, another $300 will be saved and nothing will be drawn from this money until his 18th birthday.
3. They want a high return, but are only interested in an insured account.

TO DO:

Help the Torres family make a decision on where to save for college. Use the decision-making model.

Task Card 3

Accept No Risk

Robin and Robert just sold their in-line skate shop and have paid off all of their creditors. They are each left with a profit of $7,500 that they want to save. Although they are no longer business partners, they still want to save jointly.

They have agreed:

1. They want a high return on their money with little or no risk.
2. The money must be in an FDIC insured account.
3. The money cannot be withdrawn by either of the partners for at least four years.

TO DO:

Use the decision making model and help Robin and Robert find the best place for them to save their money. What might they expect to have at the end of four years?

____

Task Card 4

Cooking and Saving for the Future

Sammy graduated from Creekside Culinary Academy last month and now has his first full-time position working as a chef. Sammy really likes his chef job at a major down-town restaurant. Sammy has big plans for the future. He does not see himself working at this restaurant forever.

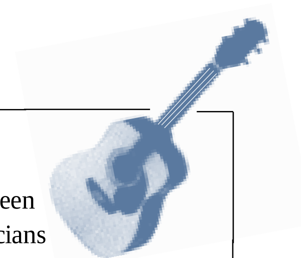
In the future:

1. Sammy wants to have his own restaurant and work for himself. Sammy has many ideas for the restaurant he will own someday.
2. Sammy has given himself six years to save $25,000 to open his restaurant business.
3. Sammy knows he can save $250 each month if he watches his budget.
4. Sammy wants the very highest return and doesn't mind taking some risks.

TO DO:

How would you help Sammy make his savings decision? Using the decision making model, look at the alternatives and make a decision to help Sammy.

____



Task Card 5

Notes — Musical and Financial

Charlene has been playing the guitar for eight years since she was fifteen. She has just been asked to join other rock musicians to form a group. Charlene and the other seven musicians have to contribute $2,500 each for start-up funds. This money will be used to rent a warehouse space for practice sessions, promotion, and tour expenses.

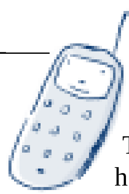
Charlene wants very much to join the group, but she doesn't have $2,500. She only has $500 in her savings. She has a small checking account with less than $75 and no credit cards.

The situation:

1. Her family and friends have said they would not loan her the money.
2. Her older brother has agreed to co-sign for a loan if she needs his help.
3. Charlene wants to pay back the loan quickly, but doesn't want a large monthly payment (over $150).
4. Charlene is not sure how much money (if any) she will make playing with this group. Right now she lives at home and has a part-time job in a tape and CD store that pays minimum wage.

TO DO:

Help Charlene borrow the funds she needs. Use the decision making model to find alternatives that she might have.



Task Card 6

Wheels to the Cell Factory

The cellular phone factory where Horace works is moving 50 miles out of town. The company has promised Horace employment at his same job at the new location. However, Horace now walks to his job, doesn't own a car and uses public transportation to get around. There is no public transportation to get Horace to the new location of the cellular phone factory. The only thing that Horace can do if he wants to keep his job is to buy a car. So Horace has to borrow money to buy a used and dependable car. He only has $300 in a credit union account.

Wheels for Horace:

1. He decided to buy a car for less than $3,500 but he will need to borrow all but $300 of this amount.
2. He wants small payments, over an extended time period, with low interest rates.
3. He has already been turned down by his relatives and a best friend who will not loan him the money to buy a car.

TO DO:

Use the decision-making model and help Horace make a decision on where to borrow money to buy an automobile.

Appendix A

Glossary

annuity

An uninsured investment which can be purchased to yield a fixed payment for a specified period of time.

asset

An item of value. The assets of a person can include human capital measured by a person's education and job skills, real assets such as a home and land, or financial assets like stocks, bonds and checking deposits.

bond

A fixed interest security that promises to pay the holder a specific amount of money on a certain date. Corporations and governments, for example, sell bonds in order to raise money for expansion and to build infrastructure.

broker (or stockbroker)

A licensed professional who provides investment advice and buys and sells financial products like stocks, bonds, and mutual funds for individuals or institutions.

certificates of deposits (CDs)

A time deposit (insured up to $100,000) in which an individual agrees to leave money on deposit for a specific amount of interest and for a specific period of time.

checking account

A bank account from which money is withdrawn by writing a check or ATM withdrawals.

circular flow model

A model of the economy summarizing the flows of goods and services from producers to households and the flows of factors of production from households to business firms. In this model the economy has four groups — households, businesses, government, and the financial sector.

credit unions

Depository institutions that provide deposit and loan services to their members.

demand deposits

Deposits that can be withdrawn from a depository institution at any time without restriction, usually by writing a check.

dividends

A share of profit received by a stockholder or a policyholder of a mutual fund investment.

factors of production

The resources needed to produce goods and services. The factors of production include land, labor, and capital, and may also include entrepreneurship.

Federal Deposit Insurance Corporation (FDIC)

The federal agency that insures savings and loan and bank deposits up to $100,000.

Federal Reserve System

The United States central banking system which supervises banks and sets monetary policy.

Financial holding company

These are institutions, such as domestic bank holding companies, foreign banking organizations, securities firms, and insurance companies, that have been certified as financial holding companies (FHC) by the Federal Reserve. FHCs were authorized under the Gramm-Leach-Bliley Act of 1999, and the first 100-plus FHCs were certified in March 2000.

financial institutions

These are institutions, such as banks, savings and loan associations, insurance companies, pension funds, and finance companies that function as financial intermediaries channeling funds from savers to borrowers. Securities dealers and brokers also are considered financial institutions. These institutions typically help in the transfer of existing financial assets, which helps the financial markets to run smoothly. However, because they do not create pools of assets they are not considered financial intermediaries. In 1999, legislation authorized an integrated financial services firm, a financial holding company, that may offer a range of banking, securities, insurance, and merchant banking services.

government securities
: Treasury bills, notes and bonds sold by the federal government through the Federal Reserve System.

injection
: Refers to injections into the circular flow of the economy including government and investment spending.

interest
: The money paid or received for borrowing or lending money.

investment
: Investment, to an economist, is the flow of expenditures to increase or maintain the capital stock of an economy. Investment includes spending of money on goods such as tools, machinery, and information technology that are used to produce other goods and services.

leakage
: Refers to leaks from the circular flow of the economy in the form of savings and money paid to the government.

mutual funds
: A corporation or trust that pools the resources of many investors in order to buy large and sometimes diverse groups of stocks, bonds, money market and other financial instruments which offer various levels of risk and rates of return. Mutual funds are not insured.

opportunity cost
: The foregone benefit of the next best alternative when scarce resources are used for one purpose and not another.

savings
: The unspent income that households do not spend on goods and services.

savings deposit
: A savings account that can be withdrawn at any time and typically pays a low rate of interest.

savings and loan associations (S&Ls)

A financial institution that traditionally specialized in savings accounts and home mortgages. Today, they also offer checking accounts, automobile loans, credit cards, and financial planning.

securities

Another term used for stocks and bonds.

Securities and Exchange Commission (SEC)

The federal regulatory agency founded in 1934 that enforces laws related to the sale of stocks and bonds.

stock or equities

Claims of ownership in a corporation.

time deposit

A bank deposit that can be withdrawn only at a specified time or on advance notice.

trade-offs

The loss of one benefit in order to gain another.

APPENDIX B

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Web Sites

Board of Governors Information on GLB:
http://www.bog.frb.fed.us/BoardDocs/Press/BoardActs/2000/

Federal Deposit Insurance Corporation (FDIC) Information:
http://www.fdic.gov

List of Institutions that will be treated as FHC (as of 3-13-2000) — Board of Governors:
http://www.bog.frb.fed.us/BoardDocs/Press/BoardActs/2000/20000313/DEFAULT.htm

Remarks by Governor Laurence H. Meyer, Federal Reserve Board of Governors:
http://www.federalreserve.gov/boarddocs/speeches/2000/20000203.htm

FRBSF Economic Letter: The Gramm-Leach-Bliley Act and Financial Integration:
http://www.frbsf.org/econrsech/wklyltr/2000/el2000-10.html

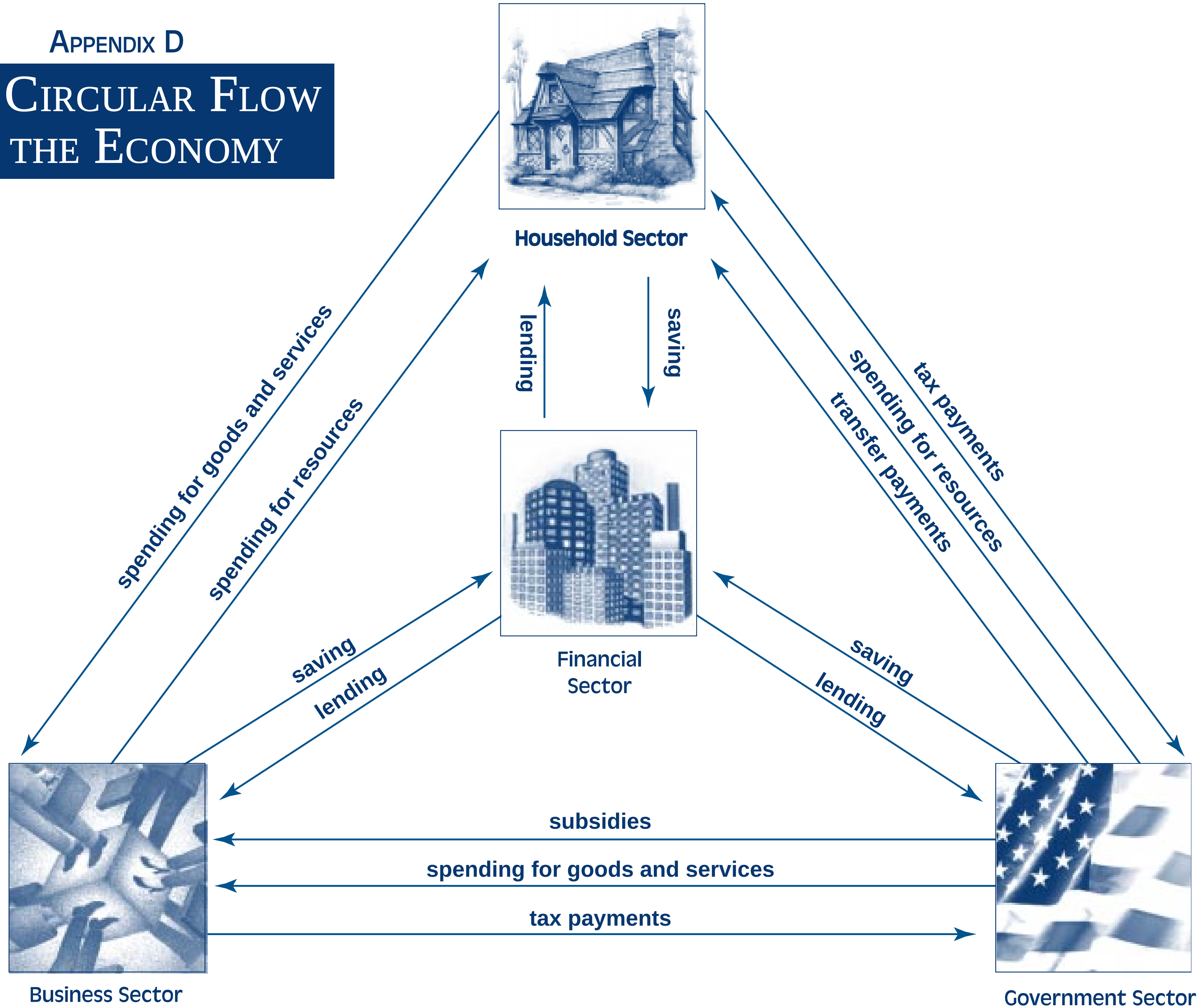
APPENDIX C

Economics Concepts in Channels Curriculum

Economic Topics	Lesson One	Lesson Two	Lesson Three	Lesson Four
Borrowing	X	X	X	X
Business Finance	X			X
Circular Flow	X			
Decision Making			X	X
Economic Growth	X			
Factors of Production	X			
Federal Deposit Insurance Corp.	X	X	X	X
Financial Institutions	X	X	X	X
Government Deficit	X			
Interest & Dividends	X	X	X	X
Investment	X	X	X	X
Markets	X	X		
Money & Banking	X	X		
Saving	X	X	X	X
Securities & Exchange Commission			X	

Appendix D

The Circular Flow of the Economy



Appendix E

Financial Intermediaries