LESSON FIVE:
THE FED IS PROTECTING YOUR MONEY

LESSON OVERVIEW:
“The Fed plays a vital role in the nation’s payments system.” So begins the section on financial services in The Fed Today video. Students already learned from the video how the Federal Reserve keeps the money and banking system running smoothly. Lesson Five opens with a brief review of what money is, followed by an examination of the various forms of payment that exist in today’s economy. Students will discuss these and discover how changing technologies have resulted in new ways for consumers and businesses to pay for goods and services. Students will conduct a survey to determine which payment methods people use today and they will conclude that consumers often have choices about which types of payment methods to use. Learning about the advantages and disadvantages of cash, checks, and electronic payments can help students make informed choices.

STUDENT OBJECTIVES:
Students will:
- Identify the three functions of money.
- List the most common forms of payment used in today’s economy.
- Survey adults to examine payment system trends in their communities.
- Discuss the risks and benefits of cash, checks, and electronic money.

TIME NEEDED:
One-two 50-minute class periods

MATERIALS:
- Classroom Visual #1: Common Forms of Payment—Advantages and Disadvantages
- Student Handout #1: Functions of Money and Forms of Payment
- Student Handout #2: Student Survey of Consumer Payment Methods
- Access to the FED101 website: http://www.federalreserveeducation.org/fed101/services/ to learn more about electronic payments, the life of a one-dollar bill, and where a check goes. Additional on-line activities available. (Optional)

TEACHER PREPARATION:
1. Review content of class visuals and handouts.
2. Prepare copies of Student Handout #1: Functions of Money and Forms of Payment and group sets of Student Handout #2: Student Survey of Consumer Payment Methods
3. Items to lay out for the class: a dollar bill, a check, a credit card, and a piece of gold or silver jewelry.
4. Review FED101 website at http://www.federalreserveeducation.org/fed101/services/ to learn more about electronic payments, the life of a one-dollar bill, and where a check goes. Additional on-line activities available. (Optional)
**ACTIVITY:**

**The Fed is Protecting Your Money**

**PROCEDURES:**

1. Write on the board, “Who is protecting your money?” Begin the lesson by asking students who they think is protecting their money. Discuss responses and explain that it is the Fed who is protecting money to see that the payment system is safe and reliable. Ask students to recall *The Fed Today* video and think of some of the services that ensure that the payment system is operating smoothly. (Examples: cash processing, check processing, and electronic funds transfers.)

2. Ask students how they make payments to businesses, consumers, and government. Place a dollar bill, a check, a credit card, and a piece of gold or silver jewelry in front of the class. Ask students which of these items is considered to be money.

3. Project an overhead slide of Student Handout #1: Functions of Money and Forms of Payment. Discuss the three functions of money. Ask students why tobacco leaves used during the Colonial Era do not fulfill the three functions of money today. (Tobacco spoils, which makes it a bad store of value.) Ask students why gold bricks do not fulfill the three functions of money today. (Carrying gold bricks is difficult, making gold an impractical medium of exchange.) Ask students why a cow does not fulfill the three functions of money today. (Dividing a cow is messy, which makes it a poor unit of measure.) Explain to students that although tobacco, gold bricks, and cows have been used as forms of exchange in the past, none of them fulfill all three functions of money as well as the current forms of money.

4. Ask students to apply the same criteria to the items placed in the front of the class at the beginning of the lesson. The discussion that follows should be quite lively. For example, because a credit card does not serve as a store of value, it does not fulfill the three functions of money. In fact, only the one-dollar bill fulfills the three functions of money.

5. Covering up the “Forms of Payment” section of the slide, ask students to name some of the different forms of payment used in today’s economy. Your list may include but is not limited to the following:

   1. cash
   2. coin
   3. check
   4. credit card
   5. debit card
   6. direct deposit
   7. direct payment
   8. money order
   9. Internet payment
   10. barter (Yes, barter is still used informally.)

Finally, distribute Student Handout #1: Functions of Money and Forms of Payment.

6. Have students choose a partner and distribute Student Handout #2: Student Survey of Consumer Payment Methods. Instruct pairs of students to ask ten adults how they make payments for various goods and services such as groceries, car payments, rent, mortgage, or utilities. Students should record responses on the form. Provide students with adequate time to gather the appropriate information.

7. When student groups have gathered the necessary information, discuss the payment trends that the students see in their community. Ask the students what types of payment mechanisms are commonly used. For example, are people using cash, checks, and electronic payments equally? If not, ask for opinions and thoughts about why that’s not the case.

8. Ask students which form of payment is most commonly used in today’s economy: cash, checks, or electronic payments. Ask them which form of payment accounts for the most value (the largest amount of money exchanged). Remind students that they have choices about how to make payments in our economy. Ask students about the advantages and disadvantages of using cash, checks, and electronic payments.
9. Display the top graph on Classroom Visual #1: Forms of Payment—Advantages and Disadvantages. Ask students to interpret the graph by having them differentiate between volume and value. Emphasize that although cash is used more often, it accounts for a small percentage of the total dollar value of U.S. payments while electronic payments account for the largest value of U.S. payments. This explains the two upside-down triangles in the diagram.

10. Explain to students that one of the Fed’s responsibilities is keeping the U.S. payments system safe and reliable. It does this by providing high quality coin and currency to banks, processing over one-third of the nation’s checks, and providing direct payment and electronic funds transfers to financial institutions.

11. Ask students to speculate on reasons why people prefer one payment method to another. What are the advantages and disadvantages to a consumer of one method over another? (The people whom they interviewed might have expressed opinions on this.) Students should understand that what could be a disadvantage to a merchant (e.g., accepting a check) could be an advantage to a consumer who wrote a check instead of paying cash or using a credit card. Compare student responses with the suggested answers on Classroom Visual #1: Forms of Payment—Advantages and Disadvantages.

12. Teacher Summary: Remind students that the Federal Reserve is charged with helping to maintain a safe and reliable payments system. One of the ways it does this is by providing financial services to banks. Ask for student participation to summarize the following main points:

   • The three functions of money are store of value, medium of exchange, and unit of measure.
   • Although there are many different forms of money, cash, checks, and electronic payments are the most common forms of money.
   • Cash is usually the most private and convenient form of payment. However, cash can be risky to carry and awkward to transfer in large amounts.
   • Checks are one of the safest and most popular forms of payment. However, checks can create a risk for merchants and may be less desirable for transferring funds because they can take longer to clear (see check clearing).
   • Electronic payments decrease merchant risk while increasing accessibility to consumers. However, electronic payments often require consumers to have a certain comfort level with technology.

**EXTENDING THE LESSON:**

Have students visit the FED101 website at http://www.federalreserveeducation.org/fed101/services/ to learn more about electronic payments, the life of a one-dollar bill, and where a check goes. They may also take an online quiz. (Optional)

**DISCUSSION POINT:**

**Myth:**

Federal Reserve Banks use public tax revenues to fund their operations.

**REALITY:**

The Federal Reserve System is a self-financing entity not subject to congressional appropriations. Its income is derived primarily from the interest on U.S. government securities acquired through open market operations. The Federal Reserve also collects revenues for services it provides to banks for electronic and check processing. These gross earnings from the System’s operations are first dedicated to its operating costs. What remains is all paid over into the Treasury. Over its history, the Fed has paid approximately 95 percent of its earnings to the Treasury. These annual payments are currently running between $20 and $25 billion over the past few years.
FUNCTIONS OF MONEY AND FORMS OF PAYMENT

THE THREE FUNCTIONS OF MONEY

Store of Value:
Money functions as a store of value when you can choose not to spend it today but instead buy something with it in the future. However, rising inflation can make money a poor store of value because its purchasing power is reduced over time. Fish were sometimes used as a form of money during Colonial times, but fish didn’t function well as a store of value.

Medium of Exchange:
Money functions as a medium of exchange if sellers are willing to accept it in return for goods and services. In the past, however, sellers were willing to barter for goods and services. The problem with barter is what to do when you want to purchase something else after accepting payment. Imagine if you worked at a fast-food restaurant and you were paid only in hamburgers and French fries. It would be extremely difficult to purchase clothing and CDs with cold burgers and stale fries.

Unit of Measure:
Money functions as a unit of measure if it can measure the value of goods and services through the mechanism of prices. Without pricing, consumers could not compare a used $4,000 clunker with a brand new $40,000 sports car. Although beaver pelts were bartered by many of the American pioneers, they were not a good unit of measure because they came in different sizes with varying degrees of quality.

TEN COMMON FORMS OF PAYMENT IN TODAY’S ECONOMY

1. cash
2. coin
3. check
4. credit card
5. debit card
6. direct deposit
7. direct payment
8. money order
9. Internet payment
10. barter (Yes, barter is still used informally.)
**STUDENT SURVEY OF CONSUMER PAYMENT METHODS**

Survey of Consumer Payment Methods

Our class at _______________ School is conducting this survey as part of our study of the nation’s payment system. We want to determine the methods people use to pay for various goods and services.

<table>
<thead>
<tr>
<th>Interview #</th>
<th>Groceries</th>
<th>Electricity</th>
<th>Rent/Mortgage</th>
<th>Phone</th>
<th>Gas</th>
<th>Clothes</th>
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<tbody>
<tr>
<td>Example:</td>
<td>Cash</td>
<td>Check</td>
<td>Direct Payment</td>
<td>Check</td>
<td>Credit Card</td>
<td>Debit Card</td>
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### Common Forms of Payment – Advantages and Disadvantages

Sources: NACHA, The Nilson Report, ATM & Debit News, CHIPS, Federal Reserve

#### US Payments—2000

<table>
<thead>
<tr>
<th>Payment Type</th>
<th>Volume of Transactions</th>
<th>Value of Transactions</th>
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<tbody>
<tr>
<td>Electronic Transactions</td>
<td>7.4% 49.5 Billion</td>
<td>88.9% $695 Trillion</td>
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<tr>
<td>Check Transactions</td>
<td>10.3% 69 Billion</td>
<td>10.9% $85 Trillion</td>
</tr>
<tr>
<td>Cash Transactions</td>
<td>82.3% 550 Billion</td>
<td>0.3% $2.2 Trillion</td>
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#### Suggested Answers:

<table>
<thead>
<tr>
<th>Payment Type</th>
<th>Advantages</th>
<th>Disadvantages</th>
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<tr>
<td>Cash</td>
<td>• Provides privacy&lt;br&gt;• Provides convenience&lt;br&gt;• Accepted universally</td>
<td>• Risk of loss and theft&lt;br&gt;• Transferring over long distances is difficult&lt;br&gt;• Transferring large amounts is difficult</td>
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<td>Checks</td>
<td>• Provides safety and convenience&lt;br&gt;• Serves as legal proof of purchase&lt;br&gt;• Allows for more payment control</td>
<td>• Assigns risk to merchant&lt;br&gt;• Access to funds may be delayed&lt;br&gt;• Processing costs increase</td>
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<td>Electronic Payments</td>
<td>• Decreases merchant risk&lt;br&gt;• Provides 24-hour access&lt;br&gt;• Reduces processing costs&lt;br&gt;• Saves paper</td>
<td>• Compromises privacy&lt;br&gt;• Can require knowledge of technology&lt;br&gt;• Reduces payment control</td>
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