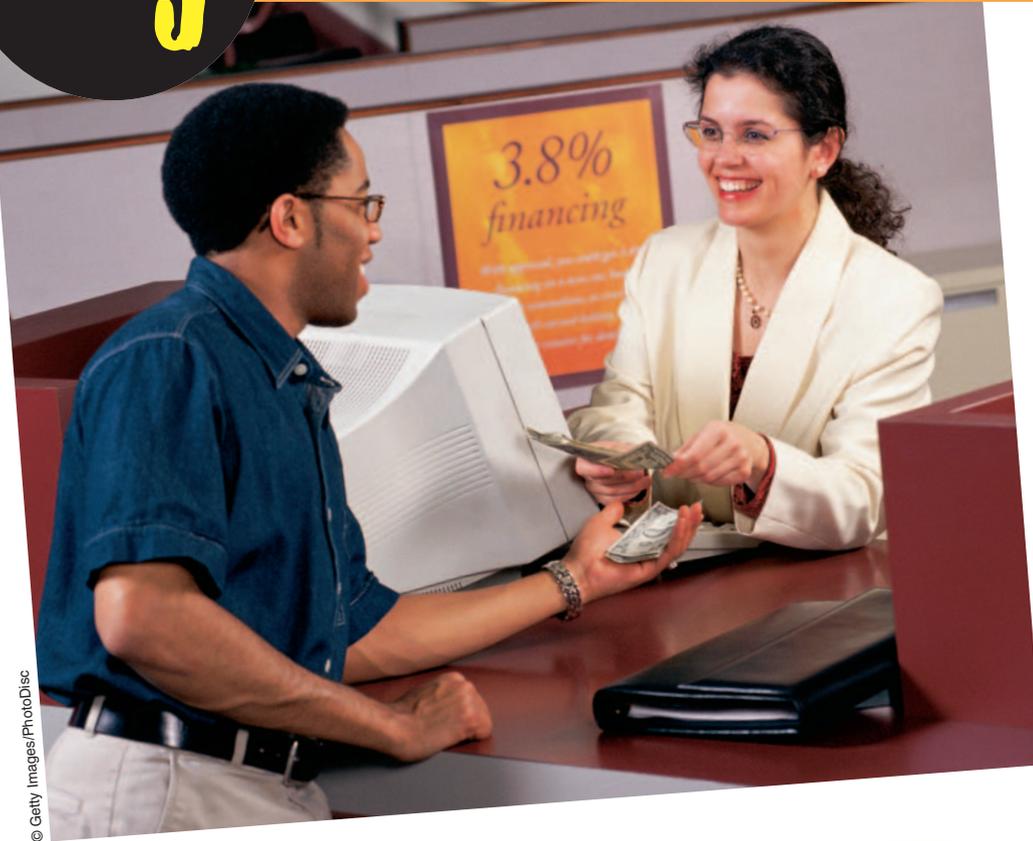


CHAPTER

5

BANKING PROCEDURES



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Chapter 5 discusses banking activities for consumers and banking in the United States. Many benefits and services for consumers are available from financial institutions. Some accounts have fees or restrictions of which consumers should be aware. Banking in this country is centralized through the Federal Reserve System. In this chapter, you will explore how this system works and what it means to you as a consumer.

ONLINE RESOURCES

Personal Financial Literacy
Web site:

- Data Files
- Vocabulary Flashcards
- Sort It Out: Banking Procedures
- Chapter 5 Supplemental Activity

Search terms:

- bank reconciliation
- online banking
- U.S. savings bonds
- Federal Reserve System
- monetary policy

Checking Accounts



OUTCOMES

- Explain the purpose and use of a checking account.
- Prepare a checkbook register.
- Write a check and prepare a deposit slip.
- Prepare a bank reconciliation.

INTRODUCTION TO CHECKING ACCOUNTS

Banks offer various types of accounts that consumers may find useful. Checking accounts, savings accounts, certificates of deposit, and money market accounts are popular choices. In this part of the chapter, you will learn about checking accounts. You will learn about other types of accounts in the next part of the chapter.

A **checking account** is a demand deposit account in a bank. Its purposes are to provide a safe place to keep money and to allow users easy access to the money in the account. The account holder may withdraw money from the account at any time. The account holder is also able to write checks on the account. A **check** is a written order to a bank to pay the stated amount to the person or business named on the check from an account. Checks can be used to pay bills by mail or to purchase items in stores. Writing a check for a major purchase is safer than carrying a large amount of cash to a store. A canceled check (one that has been cashed) also serves as proof of payment for bills or purchases.

A checking account provides a safe place to keep money. Checking accounts at banks generally are insured by the Federal Deposit Insurance Corporation (FDIC) up to the legal limit of \$100,000 per depositor per bank. The FDIC is an agency of the federal government. By insuring deposits in banks, the FDIC helps to promote public confidence in the U.S. financial system. Consumers should confirm that a checking account will be insured by the FDIC before opening an account.

Opening a Checking Account

To open a checking account, the account holder will need some money (cash or checks). Often, as little as \$50 or \$100 is needed to open an account. The account holder will be given some checks when the account is opened. These checks have blank spaces in which to write information about the account. Personalized checks, which have the account holder's



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Financial institutions offer checking accounts and many other financial services.

name and other data printed on them, are provided a short time later. A checkbook register and a checkbook cover are usually included with the checks. With a typical account, the account holder is charged a fee for the personalized checks. The account holder may also be charged a monthly fee for the account or for each check written. These fees may not apply if a certain minimum balance, such as \$1,000, is kept in the account.

When opening a checking account, the account holder will need to provide personal data. An address, a phone number, and a Social Security number are usually required. The account holder may be asked to show a picture ID such as a driver's license for identification.

Some banks request that the account holder answer a security question, such as "What is your pet's name?" Others ask for a code word, such as your mother's maiden name. The purpose of a security question or code word is to identify the account holder when he or she calls on the phone.

The account holder will sign a signature card. This card provides an official signature that the bank can compare to the signature written on checks. A bank account can be a joint account owned by two or more people. Each person who is authorized to write checks on the account must have a signature card on file with the bank. The account holder should sign her or his name on the signature card the way it will appear on signed checks.



Focus on . . .

CHECK CASHING SERVICES

Exchanging a check written to you for money is called cashing the check. The money received can be in currency (bills and coins). It can also be a credit (increase) in your checking account if the check is deposited.

Some banks will not allow a person to cash a check unless he or she has an account with the bank. A very profitable business is cashing checks for people who may not have their own checking accounts. Check cashing businesses charge a fee for this service. Some states regulate the fees that may be charged. Fees vary by state and, in some cases, by the type of check being cashed. For example, the fee for a Social Security check might be 3 percent or \$2, whichever is greater. The fee for a personal check might be 10 percent or \$5, whichever is greater. If you have your own checking account, you do not have to use a check cashing service, and you can keep the full amount of the check.

Some check cashing companies also make short-term loans. An individual is given an advance, often called a payday loan, based on proof of employment. The borrower writes a check to the lender for the amount to be borrowed plus a fee.

The lender agrees to hold the check (not cash or deposit it) until after the borrower's next payday. A high fee is charged for this service. For example, to get an advance of \$100 for 14 days, a borrower might have to pay a fee of \$15. This fee is in addition to repaying the \$100. In this example, the cost of the loan is a \$15 finance charge at a 391 percent annual percentage rate.

Payday loans can be helpful to consumers. However, consumers should use this service sparingly. Getting payday loans regularly can lead to a cycle of borrowing money at a high cost. For example, a consumer may not have enough money to pay bills this month. A payday loan can help provide the money needed. However, the next month, the consumer may have even less money with which to pay bills. This happens because part of the money earned this month must be used to repay the loan from last month. The consumer is again short of money after repaying the loan. Borrowing money from other sources at a lower rate may be a better short-term solution for the consumer. Developing a budget that allows the consumer to pay all expenses with the available income is a better long-term solution.

Keeping a Checkbook Register

Keeping accurate records of checking account transactions is very important. Account holders should verify that the amounts deducted from the account and the amounts added to the account are correct. A **checkbook register** is a tool that can be used to track checking account transactions. The register can also provide a record of payments made for bills or purchases.

A **deposit** is money added to a checking or savings account. The money can be in the form of currency, checks, or electronic transfers. All deposits, checks, other withdrawals, and fees should be recorded in the checkbook register. The purpose of the transaction can also be recorded.

FIGURE 5-1.1

CHECKBOOK REGISTER

CHECK NO. OR TRANSACTION CODE	DATE	DESCRIPTION OF TRANSACTION	PAYMENT/ DEBIT (-)	FEE (-)	✓	DEPOSIT/ CREDIT (+)	BALANCE	
							\$800	00
581	7/1/--	Food Mart	\$ 36 12	.20		\$	36	32
		Groceries					763	68
DEP	7/15/--	Deposit Paycheck				220 50	220	50
							984	18
WD	7/16/--	ATM Withdrawal	20 00				20	00
							964	18
582	7/20/--	Bellvue Apts.	600 00	.20			600	20
		Rent					363	98
ON	7/22/--	Metro Gas & Electric	32 50				32	50
		Online Payment					331	48
SC	7/31/--	Monthly Account Fee		5.00			5	00
		July					326	48

A running balance in the register shows the amount of money in the account. By carefully entering all data related to the account into the register, you will be sure to know how much money is in your account at all times. A register can be kept manually or using a computer program such as *Excel* or *Quicken*. A manual register is shown in Figure 5-1.1.

Always complete the register entry for a check first. Then write the check. This process will help ensure that you do not forget to enter the item. Checking the balance in the account before writing a check is a good practice. You want to be sure you have enough money in the account to cover the check.

In the first column of the register, list the check number or a code to identify the transaction. For example, enter a code such as DEP to stand for *deposit*. Enter a code such as WD to stand for *withdrawal*. The check number, 581, is entered on the first line of the register in Figure 5-1.1.

In the Date column, enter the current date. (The characters -- are used in Figure 5-1.1 to represent the current year.) In the Description of Transaction column, enter the name of the person or business to which the check is written. You can also enter the purpose for the check. For example, Groceries is entered on line 2 of the register in Figure 5-1.1.

In the Payment/Debit column, enter the amount of the check or other withdrawal. If there is a check fee, enter that amount in the Fee column. In the register in Figure 5-1.1, \$0.20 is entered as the check fee. When making a deposit, enter the amount in the Deposit/Credit column. Carry the amount of the payment plus any fee or the deposit to the Balance column. Subtract the payment or add the deposit amount to find the new balance.

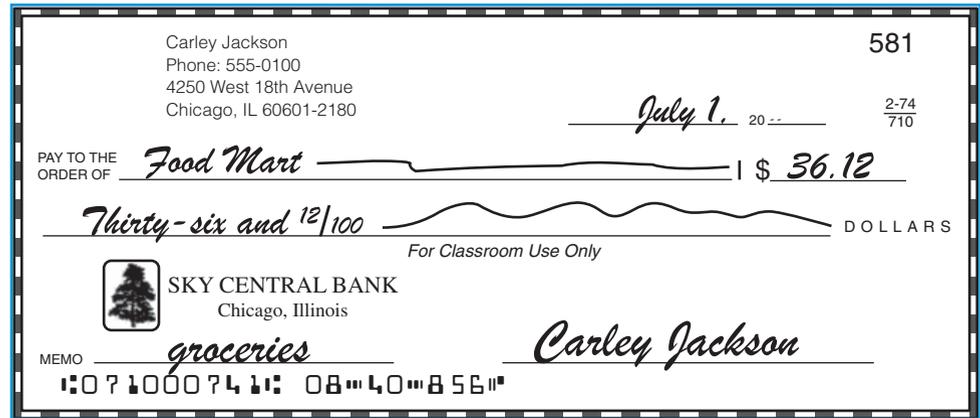
CHECKS AND OTHER DEBITS

An advantage to a checking account is that the money is easy to access. The account holder can write checks to use money to pay bills or make purchases. Many banks offer debit cards that can also be used to make purchases or get cash. Automated teller machines (ATMs) are provided by many banks. Bank customers and others can use an ATM card to withdraw money from a checking account.

Some accounts offer the option of automatic withdrawals. With an **automatic withdrawal**, money is deducted from your account and

FIGURE 5-1.2

PERSONAL CHECK



transferred to another party. For example, insurance premiums could be deducted from your account and transferred to the insurance company. The main advantage is that you do not have to write a check each month to pay this bill.

Writing Checks

A check is a legal document used to transfer money. When you write a check, you are telling the bank to pay money to the person or company named on the check. This person or company is called the payee. The payee can cash the check or deposit it into a bank account.

Figure 5-1.2 shows an example check. Notice that the account holder’s name and address are printed on the check. The check number, 581, appears near the top right of the check.

Checks should be written in ink. Use dark ink, such as navy blue or black. Write legibly so that your handwriting can be read. Fill in the spaces, and do not leave space before or after your writing. Follow these steps as you write checks:

1. Enter the current date. Checks should not be postdated. A **postdated check** is a check written with a date that will occur in the future. Banks will not hold postdated checks until the future date; they will process them at once without regard to the date.
2. Enter the name of the payee on the Pay to the Order of line. Do not leave this line blank. If you do so and lose the check, anyone can cash the check by simply writing the word *Cash* or her or his own name in the blank.
3. Enter the amount of the check in numbers after the dollar sign. Fill the space, separating dollars and cents clearly.
4. Write the dollar amount in words. Do not leave extra space anywhere on the line. Draw a line to the end if the space is not filled. Use the word *and* to separate dollars and cents, such as “Fifty-five and 35/100” _____ Dollars.
5. Sign your name exactly as you signed it for the signature card at the bank. Do not leave the signature line blank. An account holder authorized to write and sign checks is called a drawer.
6. Enter a note on the Memo line, if desired, to give the purpose of the check.

If you make a mistake when writing a check, begin again with a new check. On the check with the error, write VOID in large letters. In the checkbook register, write VOID over the entry in the Description of Transaction column. Draw a line through the check amount and the balance amount. Record the check data again, using the new check number.

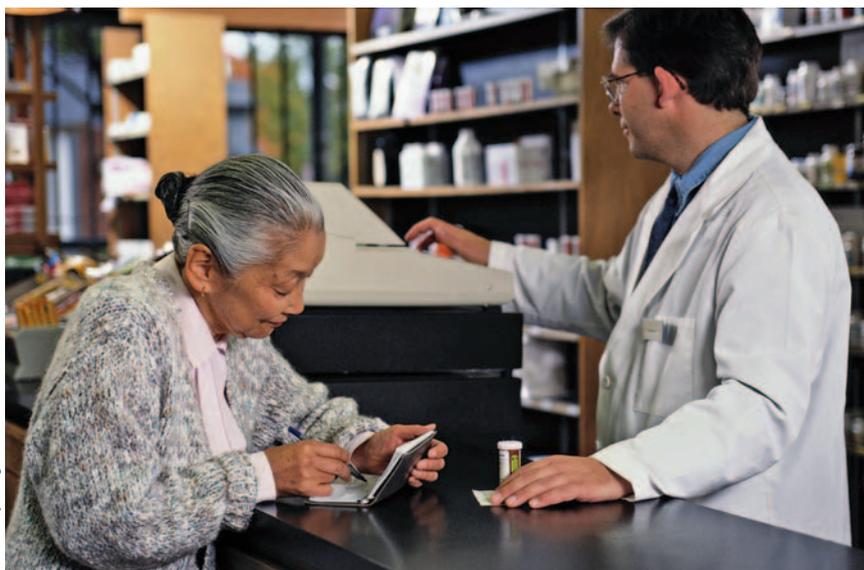
Using Debit Cards and ATM Cards

A **debit card** allows the account holder to withdraw cash from an account at an ATM. The card can also be used to make purchases. The effect is the same as writing a check, but the withdrawal is made electronically. The money is taken out of the account very quickly. To use a debit card, the account holder passes the card through a card reader of some type. The account holder must also enter a personal identification number (PIN) or password. In some systems, a signature is also required. The PIN gives access to the account, so it should be guarded carefully.

An ATM card is similar to a debit card; however, the ATM card can be used only at an ATM. The account holder cannot make a purchase using an ATM card. At an ATM, the ATM card can be used to get cash from an account or to make deposits to an account.

Protecting Your Account Data

When someone alters a check to get money from another person's account, that is a crime called check fraud. When someone signs another person's name on a check, it is the crime of forgery. Identity theft occurs when someone uses your data without your permission to make purchases, withdraw cash, or borrow money. To help protect yourself from crime, take good care of your supply of checks. Keep them in a safe location. When using a debit card or an ATM card, protect your PIN or password and account number. Do not give out your bank account number unless you are sure the person or company receiving it is reputable.



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Using a checking account means that you do not have to carry as much cash.



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Automated teller machines make personal banking easy and convenient.

MAKING DEPOSITS

A short time after opening an account, the account holder will usually receive personalized deposit slips, along with checks. Blank deposit slips, available at the bank, can also be used. Figure 5-1.3 on page 130 shows

FIGURE 5-1.3

DEPOSIT FORM

Depositor's name and address

FOR DEPOSIT TO THE ACCOUNT OF
 Carley Jackson
 Phone: 555-0100
 4250 West 18th Avenue
 Chicago, IL 60601-2180

DATE July 15, 20 --

SIGN HERE FOR LESS CASH IN TELLER'S PRESENCE.

 SKY CENTRAL BANK
 Chicago, Illinois

		DOLLARS	CENTS
CHECKS	CASH	20	50
	<u>2-51</u>	200	00
SUBTOTAL		220	50
LESS CASH RECEIVED			
NET DEPOSIT		220	50

2-74
710

BE SURE EACH ITEM IS PROPERLY ENDORSED.

⑆07100074⑆ 08⑆40⑆856⑆

CHECKS AND OTHER ITEMS ARE RECEIVED FOR DEPOSIT SUBJECT TO THE TERMS AND CONDITIONS OF THIS INSTITUTION'S COLLECTION AGREEMENT.

Account number

a deposit slip for a checking account. Note that the depositor's name and address are printed on the slip. The account number appears at the bottom of the slip.

Checks that are to be included in a deposit must be properly endorsed. An **endorsement** is a signature or instructions written on the back of a check. It authorizes the bank to cash or deposit the check. If a check is not properly endorsed, it may be returned by the bank to the customer and not included in the deposit. Some endorsements provide more instructions than others. The most commonly used forms of endorsement are blank, restrictive, and special. Look closely at Figure 5-1.4 on page 131 as you read about each form of endorsement.

Many checks have an endorsement area printed on the back of the check. Be careful to write the endorsement within this area. If the back of the check is blank, place the check face up. Turn the check over, keeping the same edge at the left. Write an endorsement on the left edge of the check or other marked endorsement area.

For a blank endorsement, the signature of the payee is written on the back of the check. The signature must be in ink. This endorsement provides little protection. Anyone who has the check can cash it. This endorsement should be used only when you are at the bank ready to cash or deposit the check.

In a restrictive endorsement, the purpose of the transfer of the check is given. For example, *For deposit only* may be written on the check above the name of the payee.

In a special endorsement, the words *Pay to the order of* and the name of the person or company to which the check is being transferred are placed before the signature of the payee. In some instances, a special endorsement is referred to as an *endorsement in full*.

Once the checks are endorsed and the cash is totaled, you are ready to complete the deposit slip. Follow these steps to prepare a deposit slip. Refer to Figure 5-1.3 as you read the instructions.

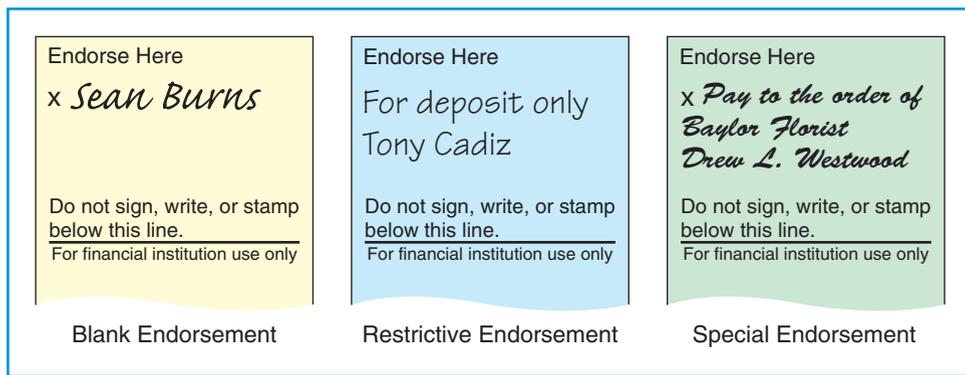


FIGURE 5-1.4

Endorsements provide varying levels of protection.

1. Enter the current date on the Date line.
2. Enter the amount of cash (bills and coins) in the Cash section.
3. Enter checks in the Checks section. Enter the bank's American Banking Association (ABA) number, shown at the upper-right-hand corner of most checks, beside each check. A deposit may contain more checks than can be listed on the front of the deposit slip. When this is the case, list the other checks on the back of the slip in the spaces provided. Carry the total of the checks to the front of the deposit slip.
4. Enter the total amount of cash and checks in the Subtotal section.
5. Enter the amount of cash received at the time of deposit, if any, in the Less Cash Received section, and sign on the line indicated.
6. Enter the total deposit amount in the Net Deposit section.
7. Make the appropriate entry in your checkbook register to record the deposit.

Deposits can be made at one of your bank's ATMs. If you make a deposit at an ATM, follow the instructions on the screen, and get a receipt. Verify that the receipt shows the correct amount of the deposit.

When checks are deposited in person, by mail, or at an ATM, it can take a few days for the deposit to be processed. The account holder may not have access to the money deposited for several days.

Automatic deposit is an option with many accounts. With **automatic deposit**, money is electronically placed in an account. Many people receive Social Security payments in this manner. Many businesses provide this service for their employees. If payday is the first of the month, the amount of the employee's net pay will be deposited electronically and is usually available on that day. The main advantage for account holders is that they have instant access to their money. This method is also safer and more convenient than carrying checks to the bank for deposit.

RECONCILING A BANK STATEMENT

Once a month, you will receive a statement from the bank. The statement may be on paper and arrive by mail, or it may be sent to you electronically. You may also receive cleared checks that you have written or photocopies of the checks. The statement will list checks, other withdrawals, and

deposits made to the account. It will show the account beginning balance and ending balance. Any service charges or other fees that have been debited (charged) to the account and any interest earned will also be listed.

When you get a bank statement, you should compare it to your checkbook register. You will adjust the balance shown in the checkbook register to record interest earned or fees charged. You will adjust the balance shown on the bank statement for checks or other withdrawals and deposits that have not yet been processed by the bank. After adjustments are made, the two balances (register and statement) should be the same. This process is called reconciling a bank statement. A form may be provided on the back of the bank statement for use in reconciling the account. You can also use programs such as *Excel* to prepare a reconciliation. A sample bank reconciliation is shown in Figure 5-1.5 on page 133.

Refer to Figure 5-1.5 as you read the following steps for reconciling a bank statement:

1. Enter the date of the reconciliation and the account number on the reconciliation form.
2. Enter the ending balance date and amount from the bank statement on the reconciliation form. The amount probably will not be the same as the balance shown in your checkbook register.
3. Compare your checkbook register with the bank statement. Verify that the amount of each deposit made is shown correctly on the bank statement. Place a check mark in the check mark (✓) column of the register by each deposit that is shown on the bank statement.
4. On the reconciliation form, list the date and amount of any deposits you made that do not appear on the bank statement. These are called deposits in transit. Total the amounts. Add the total deposits in transit to the bank statement ending balance. Place this amount on the Subtotal line.
5. Compare your checkbook register with the bank statement. Verify that the amount of each check you wrote and each ATM or debit card withdrawal you made is shown correctly on the bank statement. Place a check mark in the check mark (✓) column of the register by each check or other withdrawal that is shown on the bank statement.
6. On the reconciliation form, list the check number or code, date, and amount of any checks and other withdrawals you made that do not appear on the bank statement. Checks written that have not yet been processed by the bank are called outstanding checks. Total the amounts. Subtract the total from the Subtotal calculated in step 4. The amount left is called the adjusted bank balance.
7. Enter the balance date and amount shown in your checkbook register on the reconciliation form.
8. On the reconciliation form, list any fees or charges shown on the bank statement that are not recorded in the register. Total the amounts. Subtract the total from the checkbook register balance on the form. Record the fees and charges in your checkbook register, and update the balance.
9. On the reconciliation form, list any interest or other credits (additions) shown on the bank statement that do not appear in the register. Total the interest and other debits. Add this total to the amount calculated

RECONCILIATION OF BANK STATEMENT

Date August 3, 20--
 Account No. 942869

Bank Statement Balance on July 31, 20-- \$ 966.68

Add Deposits in Transit and Other Credits

Date	Amount
7/31/20--	220.50

Total Deposits in Transit/Credits 220.50

Subtotal 1,187.18

Deduct Outstanding Checks/Withdrawals

Check No.	Date	Amount
580	7/2/20--	20.00
581	7/29/20--	36.12
ATM	8/1/20--	40.00

Total Outstanding Checks/Withdrawals 96.12

Adjusted Bank Balance \$ 1,091.06

Checkbook Register Balance on August 3, 20-- \$ 1,096.06

Deduct Bank Charges

Description	Amount
Service charge, monthly fee	5.00

Total Bank Charges 5.00

Subtotal 1,091.06

Add Interest or Other Credits

Description	Amount

Total Credits 0

Adjusted Checkbook Register Balance \$ 1,091.06

in step 8. Record the interest or other credits in the register, and update the balance.

10. Compare the adjusted bank statement balance and the adjusted checkbook register balance. The two amounts should be the same. If they are not, complete the steps again and check your calculations carefully. If the numbers still are not the same, check your calculations in the checkbook register. If you find that a mistake has been made, add or subtract the amount of the mistake to correct the checkbook register balance.
11. In the checkbook register, enter a note in the Description column to indicate that the balance is in agreement with the bank balance on this date; for example, "Register and statement are in balance on August 3, 20--."
12. Store the bank statement and the completed reconciliation form for future reference. Organize the documents by date so you can find a particular statement easily.

CHECKING ACCOUNT FEES

Some checking accounts do not have monthly service fees. To get this type of account, you may have to meet some criteria. For example, you may be required to keep a minimum balance in the account. Some checking accounts pay interest to you on the money you keep in the account. You might choose to have an account that pays a lower interest rate on the deposited amount in order to have no monthly fee.

Some accounts charge a fee for each check you write, such as 20 cents. In other accounts, you might be allowed ten checks at no charge and then have a set charge for each check after that. Fees and rules for checking accounts vary. Consumers should compare accounts and banks to find the best value for the type of account desired.

Credit unions are not-for-profit financial organizations. Members of a credit union may be offered free checking accounts with no minimum deposit. Some banks offer free checking accounts to senior citizens or others. Students or people under age 18 may also qualify. Accounts with monthly fees often cost \$5 to \$10 a month. This charge is in addition to charges for checks and fees for other services.

5-1 REVIEW

5-1 Activity 1 Can You Recall?

Answer these questions to help you recall what you have read. If you cannot answer a question, read the related section again.

1. What are the purposes of a checking account?
2. What information will a person typically be required to provide when opening a checking account? What form of identification and other information might also be required?
3. Checking accounts at banks generally are insured by the FDIC for up to how much?
4. What is the purpose of a signature card?
5. What does the term *cashing a check* mean?
6. Why should consumers use payday loans sparingly?
7. What is the purpose of a checkbook register? What types of data should be in a register?
8. List the six steps in writing a check.
9. What should you do with a check on which you make an error?
10. What is the difference between a debit card and an ATM card?
11. Why is it important to protect your bank account number and PIN or password?
12. What is the purpose of a check endorsement? How does a blank endorsement differ from a restrictive endorsement?
13. What procedure should you follow when completing a deposit form if you have more checks than can be listed on the front of the form?
14. What are some advantages for account holders of having automatic deposit for money received?
15. What is the purpose of completing a bank statement reconciliation?

5-1 Activity 1 Manage a Checking Account



Managing your checking account is a responsibility. You should write checks and complete deposit forms and the checkbook register carefully to avoid errors. In this activity, you will update a checkbook register, complete a deposit form, write checks, and reconcile a bank statement. Use the current year for dates. Refer to Figures 5-1.1, 5-1.2, 5-1.3, 5-1.4, and 5-1.5 for examples as you complete the activity.

1. Open and print the PDF file *CH05 Forms* from the data files. This file contains a deposit form and checks. It also contains a checkbook register.

2. Use the following information to complete the checkbook register and the deposit form. Remember to sign your name on the appropriate line to indicate that you received cash. Show how you would endorse the checks you are depositing using the space provided.
 - Date of the deposit: August 30, 20--
 - Items to be deposited:

Currency	0
Checks	
15-456	\$108.66
16-589	\$ 50.00
 - Cash received from the deposit: \$25.00
3. On August 30, write a check for \$15.85 to Quick Pizza for food. Remember to complete the checkbook register before writing the check. Sign your name (first and last) to the check.
4. On August 31, complete the register and write a check for \$12.35 to Fresh Cleaners for cleaning services. Sign your name to the check.
5. Open and print the PDF file *CH05 Statement* from the data files. This file contains a bank statement and a reconciliation form.
6. Reconcile the bank statement. Use the checkbook register you completed earlier. You can use the form provided or create a similar form using software such as *Excel*. Use September 3, 20--, as the date for the reconciliation.
7. Check your work. The adjusted bank statement balance and the adjusted checkbook register balance should be \$382.29.



Savings Accounts

OUTCOMES

- Explain the purpose of savings.
- Compute interest on savings at a fixed interest rate.
- List savings options and their advantages.

THE PURPOSE OF SAVINGS

Saving money is important because it means you are providing for future needs and wants. A **savings account** is a demand deposit account that may have some restrictions about how quickly or easily the money can be withdrawn. When an account allows quick and easy access to the money in it, this is known as liquidity. Savings accounts are not as liquid as checking accounts. The purpose of a savings account is to accumulate money in a safe place for future use. Savings accounts at banks generally are insured by the FDIC up to the legal limit of \$100,000 per depositor per bank.

Most savings accounts pay interest at a low rate. However, the rate is higher than on money in a checking account. Some banks allow depositors to link their savings and checking accounts. This allows the transfer of money back and forth (by phone or electronically) at the account holder's convenience.

Having a savings account helps you be prepared for emergencies and other unplanned spending. It gives you flexibility so that you can



© Getty Images/PhotoDisc

Savings allow you to make purchases in the future.

make better buying decisions. For example, you may be able to buy items now at sale prices that will be used in the future. Buying at sale prices now saves money in the long run. Savings accounts allow you to accumulate money for large purchases, such a car or house. Setting aside money today for use later is a first step in becoming financially secure.

COMPUTING INTEREST

Money deposited in a savings account will usually earn a set rate of interest. Interest earnings are taxable when they are earned. The sum of money set aside on which interest is paid is called **principal**. Money earned on the principal is called interest. The higher the rate of interest, the more money the account earns.

When interest is computed on the principal once in a certain time period, this is called simple interest. The interest amount is not added to the principal. The simple interest method assumes that one interest payment will be made at the end of the period. Interest rates are usually given in yearly rates. However, the interest may be paid after a certain number of months. In this case, the months must be converted into a fraction of a year. The fraction is shown as a decimal amount in the formula. The formula for calculating simple interest and a sample problem are shown in Figure 5-2.1.

Another way of calculating interest is called **compound interest**. With this method, interest earned is added to the principal. Then, interest will be earned on the principal plus interest that was earned earlier. Figure 5-2.2 shows how interest compounds. The principal, \$100, was put into savings at an annual rate of 6 percent. The interest was then compounded quarterly (4 times per year) for 3 years. An interest rate of 6 percent per year is 1.5 percent quarterly.

FIGURE 5-2.1

SIMPLE INTEREST EXAMPLE

SIMPLE INTEREST	
Interest (I) = Principal (P) × Rate (R) × Time (T)	
Interest = \$1,000 × 6% annual rate × 6 months	
\$30 = \$1,000 × 0.06 × 0.5	

FIGURE 5-2.2

COMPOUND INTEREST EXAMPLE

QUARTERLY COMPOUNDING (Annual Interest Rate 6%)							
Year	Beginning Balance	Rate	Quarterly Interest				Ending Balance
			1	2	3	4	
1	\$100.00	0.015	\$1.50	\$1.52	\$1.55	\$1.57	\$106.14
2	\$106.14	0.015	\$1.59	\$1.62	\$1.64	\$1.66	\$112.65
3	\$112.65	0.015	\$1.69	\$1.72	\$1.74	\$1.77	\$119.57

SAVINGS OPTIONS

Many people choose to save money using a savings account at the same bank where they have a checking account. This option provides some advantages. Using one bank for both accounts may be more convenient than using two or more banks. Having both accounts in one bank may allow you to use the savings account for overdraft protection. This means that if you write checks for more money than you have in your checking account, the bank will draw the money from your savings account or loan it to you. Without this protection, the check would be returned for non-sufficient funds (NSF). You would probably have to pay fees to your bank and to the person or business to which you wrote the check, as well as the original amount of the check.

Certificates of Deposit

Banks offer other savings options that you should consider in addition to a savings account. A **certificate of deposit**, called a CD, is a time deposit (rather than a demand deposit). This means that the money you deposit is set aside for a fixed amount of time. For example, you may put your money into a 6-month CD at a guaranteed rate of 5.25 percent. If you leave your money in the CD for the entire 6 months, you will earn the full 5.25 percent. If you withdraw part or all of it before the 6 months, you will be penalized. At some banks, you will lose part of your principal, as well as receive no interest on the money deposited.

Money Market Accounts

A **money market account** is another option offered by some banks. This type of account pays the market rate of interest on the money deposited. When interest rates are rising, a money market account will often earn more than a savings account or CD. When rates are falling, however, the interest earned may be less than that paid on a CD. A minimum balance, such as \$1,000 or \$5,000, is often required to open a money market account. Restrictions may apply to the account. For example, you may be able to write only two or three checks per month on the account. If you do not maintain the balance required, or if you write too many checks, you will be charged fees.

U.S. Savings Bonds

If you are able to commit your money for a longer period of time, you have other choices. One good long-term choice is a savings bond. A **U.S. savings bond** is a discount bond issued by the federal government. That means you pay less than face value. For example, you can purchase a \$100 (face value) Series EE paper savings bond for \$50. As interest is earned on the bond, it will grow to be worth the \$100 (the maturity value).

U.S. savings bonds pay a guaranteed rate of interest if you keep the bond for a certain period of time. U.S. bonds are considered to be a safe form of saving. If you cash the



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A certificate of deposit or money market account provides a good way to save for education in the future.

FIGURE 5-2.3

The TreasuryDirect Web site provides information on savings bonds.



Source: TreasuryDirect, Converting Your Paper Savings Bonds Using SmartExchange, <http://www.treasurydirect.gov/indiv/research/indepth/smartexchangeinfo.htm> (accessed April 27, 2006).

bond before the time is up, the bond will earn a lower rate of interest. U.S. savings bonds can be purchased through banks or at the TreasuryDirect® Web site. You can also see the guaranteed rates currently being paid at the Web site. You can access the TreasuryDirect Web site using the link provided on the Web site for this textbook.

Once a savings bond has matured (has reached face value), it may continue to earn interest. In general, savings bonds earn interest for different lengths of time. Some types earn interest for up to 40 years. Others stop earning interest after 20 or 30 years. Information about the length of time a bond earns interest can be found on the TreasuryDirect Web site. When a bond stops earning interest, it should be cashed in or converted to another type of bond. Interest is not taxable until the bond is cashed in. If the bond is used for education expenses (for yourself or your children), the interest may not be subject to federal taxes. Look for more information about taxes on bonds at the TreasuryDirect Web site.

Individual Retirement Arrangements

Saving for retirement is an important goal for many people. One way to save for retirement is by creating an individual retirement arrangement (IRA). An IRA allows individuals to deposit money into an account during their working years. The money deposited may be tax-deductible. Taxes are paid on the money and interest earned when the money is withdrawn during retirement. Taxes paid then may be at a lower rate than the rate paid during working years.

IRAs can be set up at a bank or another financial institution. IRAs can also be set up through mutual fund companies, insurance companies, and stockbrokers. Different types of IRAs can be created. The amount of money that can be put in the account each year and other rules regarding IRAs are set by the federal government. More information about IRAs can be found in *Publication 590, Individual Retirement Arrangements (IRAs)* from the Internal Revenue Service. A link to the IRS Web site where you can search for this publication is provided on the Web site for this textbook.

Success Skills

NEGOTIATING

Negotiation is the process of reaching an agreement that benefits you or enables you to get what is important to you. You have probably heard the expression "In life you don't get what you deserve; you get what you negotiate." It's true—people who have good negotiation skills get more of what they want!

The first step in negotiating is to understand your own position. What exactly do you want? In clear, unemotional words, be able to state your wants or needs. Have solid reasons for your choices.

The second step in negotiating is to understand your opponent's position. What

exactly does he or she want? What needs and motives does this person have? When you know her or his needs, you can find ways to meet them while meeting yours, too.

Third, create a proposed solution. This usually means you give up something minor to get something important to you. It also means the other person will give up something to get what he or she wants.

People with good negotiation skills identify what is important to both sides and what they are willing to give up in order to reach an agreement. Both sides must feel good about what they are getting.

MEETING FINANCIAL GOALS

When choosing a savings option, consider your financial goals. How much money do you want to save and earn in interest for a particular purpose? How much time do you have in which to save? What interest rate can you earn on your savings?

All these factors should be considered when choosing a savings option.

The amount of time you have to save and the interest you can earn determine how much money you need to save each month or year to meet your goals. The amount of interest you can earn and the time the money must be left on deposit affect the savings option you should choose. For example, if you want to save \$10,000 to buy a used car, a certificate of deposit might be a good choice. The CD would likely pay higher interest than a savings account, and you would not need immediate access to the money. A money market account might also be a good choice. This type of account typically earns higher interest than a savings account. A U.S. savings bond would probably not be a good choice in this situation. Savings bonds should be used to save for longer periods of time (20 or 30 years) to gain their full value.

A principle called the **Rule of 72** provides a quick way to see how long it will take to double money invested at a given rate. To apply the Rule of 72, simply divide the annual interest rate into 72. The answer is the number of years it will take at that rate to double the amount invested. For example, if \$50 is invested at 6 percent interest, then it will grow to \$100 in 12 years ($72/6 = 12$). At 4 percent interest, money invested will double in 18 years ($72/4 = 18$).

OTHER SERVICES AND FEES

Financial institutions offer a number of services. Some of these are included with a checking account. Others cost additional money, either once a year or as you use them.

Bank Services

Many banks rent safe deposit boxes as a service to customers. A safe deposit box is a secure container located in the bank vault. You can store important documents, such as deeds or stock certificates, there. The safe deposit box protects items from fire or theft. A safe deposit box usually costs from \$35 to \$100 a year, depending on the size of the box.

Overdraft protection can be a valuable service. If you write a check and your account does not have enough money to cover the check, the bank returns the check for non-sufficient funds. The check is commonly called a **bounced check**. The bank will charge you a fee when this happens—often \$30 to \$40, or more, per check. When a check bounces, the person or business that deposited it will also be charged a fee. You will be expected to pay that fee as well. A bounced check could cost you \$50 or more! If you have overdraft protection, NSF checks will be paid rather than bounced. The money may come from a savings account you have at the bank. The money might also be paid by the bank as a short-term loan to you. You would have to pay the amount of the check plus a fee. However, the fee would be less than if the check bounced.

Ethics

Having a checking account is not a right; it is a privilege. Banks, credit unions, and others make these accounts available to customers. Using a checking account is a very convenient way to manage money. You should monitor your account carefully. Be certain you have money in your account to cover checks you write.

When you write a check and you do not have money in your account to cover it, you are writing a *bad check*. This is also called a non-sufficient funds (NSF) check. If you do not monitor your account balance carefully, you might write a bad check by mistake. Knowingly writing a bad check is illegal and unethical. Criminal or civil charges can be brought against a person who writes bad checks. Writing bad checks can also affect your credit rating. You may

have trouble borrowing money for purchases such as a car or getting a credit card if you have a poor credit rating.

Writing bad checks can be thought of as a form of stealing. Many merchants and individuals who are given bad checks never get the money that is due them. Merchants pass on some of the cost of bad checks to consumers in the form of higher prices.

You should write checks only when you have enough money in the account to cover the check. Do not write a check and plan to deposit money later to cover the check before the check is processed. Checks can be processed quickly. You should not expect that you will have time to deposit money before a check clears.

WRITING BAD CHECKS

Another service provided by banks is called stop payment. With a **stop payment**, the bank is instructed not to honor a check you wrote or lost. The bank charges a fee for this service, often \$25 or more per check. If the check has not already been processed, it will not be honored by the bank.

A **cashier's check** is a check issued against bank funds. When you buy a cashier's check, the money comes from your account to pay the bank. The money for the payee of the cashier's check comes from the bank's account. Some people prefer to receive a cashier's check rather than a personal check because a cashier's check is more secure. The check will not bounce because the money is set aside and waiting to be paid by the bank.

Some banks issue money orders. A **money order** is a type of check used to pay bills or make a payment for which the money is guaranteed. There is usually a fee for this service, based on the amount of the money order.

Some banks and credit unions also offer personal financial advising services. They look at your goals and resources and sell you financial products, such as mutual funds. Before investing, check options on your own. Be sure the funds and other products have been in existence for a long time and have performed well over time.

Banks offer loans to their depositors. Credit unions offer loans to their members. Because credit unions are nonprofit organizations, members may get lower interest rates on loans. Some examples of the types of loans provided by banks and credit unions are home mortgage loans, car loans, and personal lines of credit.

Technology Corner

INTERNET BANKING

Many banks allow their account holders to have Internet and telephone access to their accounts. An access code or PIN number along with a user name is needed. Customers can view their accounts at almost any time on any day. Banks typically will close access to accounts for several hours on the weekend so that they can update their systems. Accounts cannot be accessed during this time for online banking.

Internet banking may offer other services, such as those in the following list:

- Paying bills electronically
- Transferring money between accounts, such as from checking to savings

- Monitoring activity in an account
- Checking that deposits are posted
- Seeing which checks have cleared (have been processed)
- Seeing interest or fees that have been posted

Many people think that banking via the Internet is as safe as writing paper checks. When deposits and withdrawals are made electronically, nothing can get lost in the mail. Account holders can see when checks and deposits have been processed and exactly how much is in an account at any time.

Some financial institutions offer car buying services. For a fee of about \$500, the company will find and buy the new or used car of your choice. This saves you the hassle of negotiating the price for the car. Basically, you are paying the company to negotiate on your behalf. In many cases, the bank or credit union is able to get a better price than you can.

Bank Cards

Banks and credit unions issue several types of bank cards. These cards have special features and are electronically coded. This allows you to use them for purchases, cash advances, and deposits.

Banks may issue credit cards to their customers who qualify and want this service. These cards often have interest rates that are both fixed and low. Because you are a customer, you may also be offered a high credit limit.

ATM cards and debits cards, discussed earlier in the chapter, are two other types of bank cards. Making a purchase with a debit card usually does not involve a fee. Using an ATM card may involve a fee. Many banks will allow you to use their own ATMs free of charge. If you use an ATM from another bank, however, the other bank will charge you a fee of \$2 or more. Your own bank may charge you another fee of \$2 or more.

Similar to debit and ATM cards, a smart card carries an electronic balance on the card. These cards can also be purchased at stores in the form of gift cards that can be renewed. You deposit money to the smart card electronically when you purchase or renew the card. When the money is spent, you can add more money to the card and continue using it. The advantage of a smart card is that it is not linked to your checking account, and if it is lost or stolen, the thief cannot access your account.

5-2 REVIEW

5-1 Activity 1 Can You Recall?

Answer these questions to help you recall what you have read. If you cannot answer a question, read the related section again.

1. What is the purpose of a savings account?
2. What is the sum of money set aside on which interest is paid called?
3. What is the formula for calculating simple interest?
4. How does compound interest differ from simple interest?
5. How do a certificate of deposit and a money market account differ from a regular savings account? How are they the same?
6. Why is a U.S. savings bond considered a safe form of saving?
7. What is the purpose of an IRA? What types of companies offer IRAs?
8. How do the amount of time you have to save and the interest you can earn relate to achieving financial goals?
9. What is the Rule of 72 that is related to saving?
10. List some other services banks may provide for customers in addition to checking and savings accounts.

5-1 Activity 2 Compute Interest

1. Selena has placed \$500 in an account that pays simple interest of 5 percent annually. How much interest will Selena have earned by the end of the year?
2. Suki has placed \$800 in an account that pays 4 percent interest compounded quarterly. What will be the balance in the account at the end of 2 years (8 quarters)? How much interest will Suki have earned during that time? Round your answers to the nearest cent.
3. Jessica is considering putting her money (\$50) into a \$100 paper U.S. savings bond. Assume the guaranteed rate of interest is 4 percent. How long will it take for the money to double (reach \$100)? Use the Rule of 72 to find the answer.

The Federal Reserve System

OUTCOMES

- Describe the purpose of the Federal Reserve System.
- Define *monetary policy* and discuss goals of U.S. monetary policy.
- Explain how the Federal Reserve System controls the banking industry.
- Identify the types of interest rates controlled by the Federal Reserve System.

INTRODUCTION TO THE FEDERAL RESERVE SYSTEM

The Federal Reserve System is the central bank of the United States. It is commonly called the Fed. The Fed was created by Congress in 1913. Its purpose is to provide the nation with safe, flexible, and stable monetary and financial systems. The system has a seven-member Board of Governors. Its headquarters is in Washington, D.C. The Fed also has 12 regional banks located in major cities across the United States. The 12 Federal Reserve districts are shown in Figure 5.3-1 on page 147.

The seven members of the Board of Governors are nominated by the President. They are confirmed by the U.S. Senate to serve 14-year terms of office. Members may serve only one full term. The President also chooses two members to be the Chairman and the Vice Chairman, for four-year terms. These terms may be renewed by the President.

ROLES OF THE FED

The Fed's activities are in four general areas as listed below. These areas are discussed in the sections that follow.

- Conducting monetary policy
- Providing financial services to the U.S. government, financial institutions, and the public
- Supervising and regulating banking
- Keeping the country's financial systems and markets stable

Conducting Monetary Policy

An important role of the Fed is conducting monetary policy. **Monetary policy** refers to actions of the Fed to influence money and credit conditions

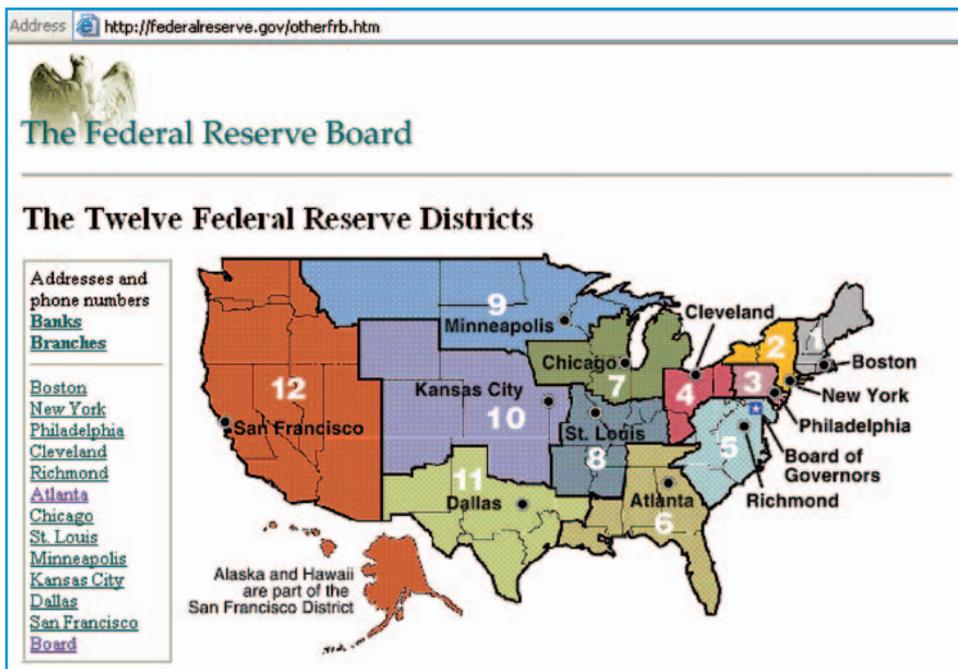


FIGURE 5-3.1

THE FEDERAL RESERVE SYSTEM DISTRICTS

Source: Federal Reserve Board, The Twelve Federal Reserve Districts, <http://federalreserve.gov/otherfrb.htm> (accessed April 27, 2006).

in the economy. These conditions affect employment levels and prices. The Fed tries to speed up or slow down the economy as needed to keep employment high and prices stable. The Fed watches the economy. When prices are rising too fast, it tries to slow down spending. This helps curb inflation. One way to slow down the economy is by raising interest rates. When interest rates rise, both individuals and businesses find it more expensive to borrow money to buy more goods and services. This slows down spending. (As you may recall from Chapter 3, demand-pull inflation is caused by spending in the economy.)

INTEREST RATES

Several types of interest rates are controlled by the Fed:

- The **discount rate** is the rate that banks have to pay to borrow money from the Fed. Banks borrow money when they have the opportunity to make loans but do not have enough cash on hand. Banks are required to have a certain amount of cash on hand, called reserves. If these reserves go below the required amount, banks must borrow money.
- The **federal funds rate** is the rate at which banks can borrow from the excess reserves of other banks. For example, if one bank has more money than it needs, it can loan that extra money to other banks.
- The **prime rate** is the rate that banks charge to their most creditworthy business customers. When the discount rate increases, the prime rate also rises. The prime rate is often 3 percent (or more) higher than the discount rate or the federal funds rate.

When the Fed raises the discount rate, this causes interest rates to rise on all levels. For example, when the discount rate is 3 percent and the Fed raises it to 3.25 percent, the prime rate may go up from 6 to 6.5 percent or more. Consumers are charged higher interest rates (than the prime rate) on money they borrow. When the prime rate is 6 percent, consumers are probably paying 9 percent or more. Thus, with a 0.25 percent increase in





the discount rate, the rate that consumers pay will likely rise from 9 percent to 12 percent. These interest rate increases have a slowing effect on borrowing and thus on spending.

The Fed affects the money supply by changing interest rates. The money supply, also called the money stock, is made up of currency (coins and bills) held by the public. It also includes deposits held by the public in banks and other institutions, money market funds, and other deposits.

When the federal funds rate falls, short-term market interest rates also fall. The short-term market interest rates may be below the rates paid on deposits at banks. This is because changes in bank rates tend to lag behind changes in market rates. The public tends to increase deposits at the banks to get the higher rates. This means the money supply increases. However, when the federal funds rate goes up, so do other short-term interest rates. The rates paid at banks become less attractive, and money growth slows.

OPEN-MARKET TRANSACTIONS

The Fed is also responsible for selling and buying back U.S. government securities such as government bills, notes, and bonds. This activity is called open-market transactions. Consumers can buy bills, notes, and bonds from the TreasuryDirect Web site.

Government bills, also known as Treasury bills, are short-term debt, up to 26 weeks. Buyers of these bills loan money to the federal government at a set interest rate. When the Fed sells Treasury bills to consumers,

savings by consumers increase. In other words, people or businesses that buy Treasury bills are saving their money rather than spending it. This slows down the economy. When the Fed buys back Treasury bills, the money is available for spending. This speeds up the economy.

Treasury notes are medium-term debt. Notes are issued for 2, 3, 5, and 10 years. Treasury bonds (like savings bonds) are long-term debt (30 years) at fixed rates. Once again, selling Treasury notes and bonds takes money from the economy, and buying them back puts money into the economy. These open-market transactions are tools used by the Fed to regulate the economy.

Providing Financial Services

The Fed plays a major role in operating the country's payment systems. For example, the Fed is responsible for printing money. As bills get old and worn, they are destroyed, and new bills are printed.

The 12 reserve banks act as a clearinghouse for checks that are written on banks in the United States. Processing of checks is rapid. Today, you can expect that checks may clear your account the same day they are received by a business. Many businesses turn a check into an electronic deduction from your account. The Fed allows this to happen.

Regulating the Banking Industry

The Fed is empowered by Congress to control the banking industry. All banks that have interstate (in more than one state) operations are required to be member banks of the Fed. Banks that are intrastate (state-chartered) only do not have to belong to the Fed. However, all banks are subject to the rules and regulations of the Fed. These include credit policies, minimum payments, and other lending policies.

One important policy is called the reserve requirement. It means that banks must keep on hand a percentage of deposits by customers. When the reserve requirement is raised, banks have less money to lend. When the requirement is lowered, banks have more money to lend.

Maintaining Stability

Keeping the financial systems and markets in the United States stable is another role of the Fed. This role is carried out through the routine activities of the Fed. Supervising banks helps ensure that the banking system is safe and sound. This promotes consumer confidence in the system. The Fed operates key parts of the payment systems. It also oversees operation of the payment systems in general. This oversight helps keep the systems stable. The Fed uses monetary policy, as discussed earlier, to help keep the economy stable.

Actions of the Fed affect financial decisions made by consumers in this country. By raising and lowering interest rates, the Fed influences how willing people and companies are to buy goods. Will you buy a new car or house? Will you put savings in a bank, buy bonds, or invest



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The Fed is in charge of our nation's money supply.

Building Communications Skills

READING COMPREHENSION

Good reading skills will help you be more productive at school, at work, and in personal activities. Comprehension is the ability to understand what you have read. Reading for comprehension is also called study reading. The goal of this type of reading is to learn and to remember what has been read.

To help improve reading comprehension, read slowly and think about what you are reading. Written material is divided into passages. A passage is a group of paragraphs. Paragraphs are used to introduce and explain ideas. Paragraphs often have a common structure. The first sentence of a paragraph is the topic

sentence. It tells you what the paragraph is about. The middle sentences explain the topic. The last sentence of a paragraph sums up or draws a conclusion. To improve understanding as you read, think about the purpose of the paragraph and how it relates to the overall topic of the passage.

Many people take notes of major points in each paragraph. Underlining or highlighting can help identify key points when you are reviewing the material. Comprehension can be improved when you read passages more than once. The first time, look for main ideas and points being made. The second time, focus on vocabulary and details.

in the stock market? Will you start a new company? Will a business expand operations by building a new plant? The answers to these questions are affected by how costly it is to borrow money. They are also affected by what consumers and companies think about the economy. If they think the economy is stable and growing, they are more likely to spend on goods and services.

5-3 REVIEW

5-3 Activity 1 Can You Recall?

Answer these questions to help you recall what you have read. If you cannot answer a question, read the related section again.

1. What is the Fed? When was it created, and what is its purpose?
2. The Fed's activities are in what four general areas?
3. What is the meaning of the term *monetary policy*?
4. What is the discount rate? The federal funds rate? The prime rate?
5. How does the Fed control the money supply in the United States?
6. How do open-market transactions for U.S. government securities affect the economy?
7. What types of banks must be members of the Federal Reserve System? Are banks that are not members also regulated by the Fed?
8. What is a bank reserve requirement?

5-3 Activity 1 The Fed



www.thomsonedu.com/school/pfl

1. The Federal Reserve System requires national banks to be members. There are also state-chartered banks and credit unions that are not required to join the Fed. Even though non-member banks do not belong to the Fed, how are you (the depositor) protected at these banks?
2. Refer to Figure 5-3.1 on page 147. In which city is the Federal Reserve bank that serves the area where you live?
3. Who is the chairman of the Federal Reserve System? Access the Internet and search for this information if you do not know the answer.



EXPLORING CAREERS IN ARTS, A/V TECHNOLOGY, AND COMMUNICATIONS

Do you have artistic or musical talent? Is performing on stage your dream? Do you like to write stories with complicated plots? Do you like to find interesting ways to share information in print or video? If the answer is yes, a career in arts, A/V technology, and communications might be right for you. Jobs in this area are varied. Some workers in this field use their talents and skills to write, sing, make music, or perform on stage. Others use print, video, and technology to share creative messages. Artists, sculptors, photographers, and animators also work in this career area.

Jobs in this career area are found in government and businesses. Many people in the visual arts field, such as painters, photographers, and animators, are self-employed. They work on a freelance basis and sell their services or products to businesses and consumers. The need for jobs in arts, A/V technology, and communications varies by career area. Employment in some jobs will grow; in others, it will decline.

Skills Needed

Some of the skills and traits needed for a career in arts, A/V technology, and communications include the following:

- Communications skills
- Computer/technology skills
- Creative writing ability
- Natural talent for performing arts
- Decision-making skills
- Problem-solving skills

Job Titles

Many jobs are available in arts, A/V technology, and communications.

Some job titles for this career area include the following:

- Actor/actress
- Camera operator
- Desktop publisher
- Electrical engineer
- Graphic designer
- News reporter
- Playwright
- Sound technician
- Telecommunications equipment installer

Explore a Job

1. Choose a job in arts, A/V technology, or communications to explore further. Select a job from the list above, or choose another job in this career area.
2. Access the *Occupational Outlook Handbook* online. A link to the site is provided on the Web site for this textbook.
3. Search for more information about the job you selected to answer these questions:
 - What is the nature of the work this job involves?
 - What is the job outlook for this job?
 - What training or qualifications are needed for this job?
 - What are the median annual earnings for this job?

Summary

- A checking account is a demand deposit that allows you to access your money quickly and easily.
- A checkbook register is a record of checks written, deposits and other withdrawals made, and other charges to a checking account; it must be reconciled with the bank statement.
- Checks that are to be included in a deposit must be properly endorsed.
- Automatic deposits and automatic withdrawals are the electronic transfer of funds into or from an account.
- Fees charged on checking accounts include fees for ATM withdrawals, monthly fees, fees for checks written, and NSF check fees.
- To protect your account data, keep checks in a safe location. When making a purchase or withdrawing cash with a debit card or an ATM card, protect your PIN or password and account number.
- A savings account is a demand deposit that may have some restrictions about how quickly or easily money can be withdrawn.
- A certificate of deposit or money market account offers higher interest rates than a regular savings account, but it is also less liquid.
- A U.S. savings bond is a good way to save if you can invest the money for a long term.
- A sum of money set aside on which interest is paid is called principal. The Rule of 72 calculates how quickly principal earning interest at a certain rate will double.
- The calculation for simple interest is $\text{Interest} = \text{Principal} \times \text{Rate} \times \text{Time}$. With compound interest, interest earned is added to the principal and also draws interest.
- Banks may offer services such as safety deposit boxes, overdraft protection, stop payment, cashier's checks, money orders, loans, bank cards, car buying services, and financial advice.
- The Federal Reserve System (Fed) is the central bank of the United States. It controls the money supply in the United States and sets interest rates.
- The Fed sells and buys back U.S. government securities, including notes, bills, and bonds.
- The Fed regulates the banking industry, including credit and lending policies.
- The Fed sets the reserve requirement, which gives banks more money or less money to lend.

Key Terms

automatic deposit	compound interest	money order
automatic withdrawal	debit card	postdated check
bounced check	deposit	prime rate
cashier's check	discount rate	principal
certificate of deposit	endorsement	Rule of 72
check	federal funds rate	savings account
checkbook register	monetary policy	stop payment
checking account	money market account	U.S. savings bond

ACTIVITY 1 Review Key Terms

Use the key terms from Chapter 5 to complete the following sentences:

1. Money electronically added to your checking account is called a(n) _____.
2. A bank card that allows the account holder to make purchases and to withdraw cash from an account at an ATM is called a(n) _____.
3. A math formula called the _____ is used to tell you how long it will take money earning a certain interest rate to double.
4. A demand deposit called a(n) _____ allows you quick and easy access to your money without penalties.
5. A discount bond issued through the United States government is called a(n) _____.
6. A(n) _____ is a convenient way to pay bills if you do not have a checking account.
7. _____ is interest earned on both principal and previous interest earnings.
8. A(n) _____ is a check issued by a bank against its own funds.
9. A bank service directing the bank not to honor a check is called a(n) _____.
10. The interest rate that banks charge to corporations, called the _____, is for the most creditworthy customers.
11. A record for keeping track of checks written and deposits made is called a(n) _____.
12. A check written with a future date is called a(n) _____.
13. The rate at which banks can borrow from the excess reserves of other banks is called the _____.
14. A(n) _____ is a signature or instructions written on the back of a check authorizing a bank to cash or deposit the check.

15. A savings option called a(n) _____ pays interest at the current market rate.
16. A(n) _____ is a written order to a bank to pay the stated amount to the person or business named from a certain account.
17. The _____ is the rate banks are charged to borrow money from the Fed.
18. A check returned by the bank, called a(n) _____, was returned because there was not enough money in the account.
19. Actions of the Fed to influence money and credit conditions in the economy are called _____.
20. A(n) _____ is money deposited for a fixed amount of time at a fixed interest rate.
21. An amount of money set aside (deposited or borrowed) on which interest is paid is called the _____.
22. A demand deposit called a(n) _____ may have restrictions and/or penalties for taking out money.
23. A(n) _____ is money added to a checking or savings account.
24. A(n) _____ deducts money from an account and electronically transfers it to another party.

ACTIVITY 2

Math Minute

When interest is compounded, interest earned is added to the principal before interest is calculated again. Use spreadsheet software to complete these compound interest problems, if it is available. If not, complete the problems manually. Round to the nearest cent.

1. Gloria has an account that draws interest at the rate of 6 percent per year, compounded monthly at 0.5 percent. The following amounts were deposited in the account in the current year. What is the balance in the account on December 31 of the current year?

June 1	\$50
July 1	\$50
August 1	\$50
September 1	\$50
2. Yoshi has an account that draws interest at an annual rate of 5 percent. The interest is compounded quarterly. The following amounts were deposited in the account in the current year. What is the balance in the account on December 31 of the current year (after four quarters)?

January 1	\$450
April 1	\$350
July 1	\$200
September 1	\$300



ACTIVITY 3

Checkbook Register



Open and print the PDF file *CH05 Register* from the data files. For each transaction, record the information in the register. Then write the check or complete the deposit slip if one is needed for the transaction. Use the current year in dates. Keep a running balance, and double-check your work. The ending balance should be \$87.38.

1. Beginning balance \$218.33
2. Check No. 401 on April 1 to Westside Services \$15.00 for haircut
3. Check No. 402 on April 5 to J. Jill \$28.50 for new shirt
4. Cash withdrawal at ATM for \$20.00 on April 8
5. Deposit of \$25.00 cash on April 10 (gift from uncle)
6. Debit card purchase (DC) of \$19.50 on April 11 at Rowe's for food
7. Check No. 403 on April 15 to Bill Baxter \$35.00 for loan payment
8. Cash withdrawal at ATM for \$20.00 on April 18
9. Debit card purchase of \$9.95 on April 25 at Aston Theater for movie
10. Bank service charge on April 28 for \$8.00

ACTIVITY 4

Saving for the Future

Setting aside money (saving) for the future is known as deferred spending. You are setting aside money today so that you will have it when you need it. Most financial planners recommend you save 10 percent or more of your earnings. This is a good first step toward your retirement. Use spreadsheet software to complete the following problems if available, or complete them manually. Round to the nearest cent.

1. Assume you will earn \$25,000 in gross pay the first year you work. Each year after that, you will get a 3 percent increase in pay. How much money will you have earned in 10 years?
2. Assume that during the 10 years discussed in problem 1, you set aside 10 percent of your earnings as savings. You estimate you can get an average of 5 percent (simple interest) yield per year return on your savings. How much money will you have saved in 10 years?

Example:

Year	Earnings	Savings	Interest	Total Savings and Interest
1	\$25,000.00	\$2,500.00	\$ 125.00	\$ 2,625.00
2	\$ 25,750.00	\$ 2,575.00	\$260.00	\$5,460.00

ACTIVITY 5

Online Banking



www.thomsonedu.com/school/pfl

Online banking is offered by many banks. Customers may have to pay a fee for online banking services. However, using online banking saves on postage and ensures that bills are paid on time—thus avoiding late fees.

1. Work with a classmate to complete this activity. Access the Internet and enter the term **online banking** in a search engine. This search should return a list of several banks that have online banking. You can also search using the name of a local bank to see if it has a Web site available.
2. Visit the Web sites for three banks or credit unions, and learn about their online banking. Answer the following questions about each bank or credit union:
 - What is the name of the bank?
 - Is online banking available?
 - Does the bank charge a fee for online banking? If so, how much is the fee?
 - What activities can the customer do through online banking?
3. Compare the results of your findings for the three banks. Which bank do you think has the best overall plan or services for online banking? Why?

ACTIVITY 6

Choosing an Account



Read the following descriptions for two types of checking accounts. Which one would fit your needs better? Why?

Special Student Account

- No minimum deposit required
- No monthly service fee
- ATM card provided; no fee for use at this bank's machines; \$2.00 fee for use at other ATMs
- 15-cent fee for each check processed
- \$2.00 flat fee for talking with a bank teller

Interest Plus Account

- Minimum deposit \$1,000.00
- No monthly service fee
- ATM/debit card provided; no fee for use at this bank's machines; \$2.00 fee for use at other ATMs
- No per-check fee
- Pays current rate of interest (0.5 percent)
- Automatic paycheck deposit
- No charge for talking with a bank teller

ACTIVITY 7 Bank Reconciliation

Use the following information to prepare a bank reconciliation. Use a format similar to that in Figure 5-1.5 for the reconciliation.

Bank reconciliation date	4/4/20--	
Account no.	589125	
Bank statement balance on 3/30/20--		\$629.64
Checkbook register balance on 4/4/20--		\$687.50
Outstanding checks		
4/1/20--	Check 498	\$20.00
4/5/20--	Check 499	\$28.50
Deposit in transit dated 4/2/20--		\$97.36
Bank fee for checking account		\$9.00

ACTIVITY 8 Government Bonds



www.thomsonedu.com/school/pfl

Government bonds can be researched and purchased on the TreasuryDirect Web site.

1. Visit the TreasuryDirect site. A link to the site is provided on the Web site for this textbook.
2. Find information for three types of bonds: I Bonds, EE Bonds, and HH Bonds. For each type, find the following information:
 - The bond name
 - A brief description of the bond
 - The current interest rate paid on the bond
 - The minimum purchase amount
 - The maximum purchase amount per year