CHAPTER 5 Deposits in Banks

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climbing the ladder

From Trust Associate to Trust Department Director

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Kisho, the trust department director for a large bank, is reviewing the presentation he plans to give to a group of employees who are either new hires or recent transfers into the trust department. Preparing an overview of trust department job functions has caused Kisho to reflect upon his own career.

When he began his career as a trust associate, he was responsible for maintaining designated trust liquidity levels for trust clients. Using clients' standard letters of direction, Kisho determined the appropriate trade actions that were needed to maintain daily authorized liquidity levels. He was also responsible for identifying any type of recurring activities in daily processing that could lead to corporate liability. Sometimes he recommended processing changes to reduce liability.

Kisho's curiosity regarding the most effective way to invest to maximize trust performance led him to his next position as an investment analyst in the institutional trust department. By working on investment modeling, performance analysis, and risk analysis across all asset classes, Kisho gained a deeper understanding of trust performance.

Software selection and management was a critical part of Kisho's job. He kept current on new software developments in risk management, returns-based analysis for marketable securities, and holdings-based analysis.

After learning the nuts and bolts of how trust asset decisions were made and managed, Kisho decided to learn more about compliance. Working in his next position as a trust auditor, Kisho participated in the bank's trust audit programs to identify regulatory requirements, assist in the establishment of internal controls, and help other departments with periodic compliance reviews. The position helped Kisho increase his personal network by maintaining relationships with external auditors and bank examiners.

Kisho spent three years earning a chartered financial analyst (CFA) designation through evening coursework. This helped Kisho land his next position as a portfolio manager. In this role, he was responsible for managing trust account assets to maximize investment return relative to an acceptable amount of risk. He also assisted with developing short- and long-term investment strategies that satisfied management needs and met customer investment objectives.

Currently, as trust department director, Kisho manages a high volume of complex trust accounts and achieves aggressive sales goals. He is responsible for the execution of the terms of any complex plan servicing the trusts of high-net-worth individuals. As some of these trusts are multigenerational trusts, managing the relationships among all involved parties requires tact and discretion.

Upper Rungs to Consider

One facet of his current position that Kisho particularly enjoys is being involved with the community and with professional organizations to keep current on relevant events. As he always enjoys interacting with a wide variety of people, he is going to monitor job postings to look for a position as a marketing director or as a relationship development director.

Preparing for the Climb

Maintaining a strong and diverse personal network is important for career advancement. What steps can you take to expand your personal network?

5.1 Deposit Accounts

goals

- Define transaction accounts and identify major types of checking accounts.
- Define time deposits and identify major types of savings accounts.

terms

- transaction account
- demand deposit
- Check 21
- time deposit
- statement savings account
- money market deposit account (MMDA)
- certificate of deposit (CD)

Banking Scene

Rosa Lopez is preparing to open a checking account at a local bank. She knows that there is a wide variety of checking accounts, and that similar accounts may have different names at different banks. She has decided to collect information from various banks in an effort to find an account that will best suit her needs. To do so, she plans to make a list of questions about how she expects to use the account. Using answers to her questions, Rosa hopes to be able to match her requirements to account features offered by banks. What kind of questions about her own needs should Rosa include in her list?

Making Your Deposit

You have studied the big picture of how the national banking system works to keep money circulating. Now you will walk through the local bank doors and look more closely at various types of accounts available to individual consumers. You may see a bewildering array of accounts, but things are not as complicated as they seem. Although each bank may use different names for the various accounts offered, most banks offer similar accounts. A bank may assign "marketing names" to accounts as a way of distinguishing itself from its competitors. Features and fees may vary, but the essential services are the same with a few exceptions. Federal and state regulations require banks to provide explanations of their fees and policies.

Transaction Accounts

Deposit accounts fall generally into one of two categories: *transaction accounts* and *time deposits*. A **transaction account** is an account that allows transactions to occur without restrictions on the frequency or the volume of transactions. Many transaction accounts are **demand deposit** accounts and are payable on demand whenever the depositor chooses. The total funds in transaction accounts affect the money supply because of their high liquidity. Transaction accounts are a large component of M1. These demand deposits require banks to hold reserve funds, because the money could be transferred immediately at the direction of the account holder.

The most common form of a transaction account is a *checking account*. You withdraw money from the account by means of a check, which is a written notice to the bank to pay a named person a specified amount from your account. Checking accounts offer customers quick access to their money, provide a convenient way to pay bills, and facilitate transferring funds to other institutions. Prior to writing a check, customers need to have sufficient funds in the bank to cover checks written and any fees to be deducted. Because there are many kinds of checking accounts from which to choose, consumers can find accounts that best meet their needs.

Historically, checks were paper documents. During the 1970s, direct deposit and auto debit, two forms of electronic funds transfer (EFT), began replacing checks. More recently, advances in Internet sophistication, as well as increased Internet experience among consumers and businesses, have prompted a shift to electronic checking. Online banking, which incorporates electronic checking, provides an assortment of streamlined account management services. These services range from accounts summary information through electronic bill pay.

Checking Accounts

Checking accounts have various characteristics. All are generally classified according to their ownership—single or joint. An *individual account*, sometimes called a *single account*, is owned by one person. A *joint account* has two or more owners, each of whom has equal and independent access to it. There are two different types of joint accounts. One, held by *tenants in common*, is frequently used by business partners. The approval of all owners is required to make withdrawals. The *joint tenancy* account, used by two or more persons wishing to have co-owner accounts with others, allows each co-owner to make deposits and withdrawals independently. Joint tenancy accounts may be used by siblings, roommates, spouses, domestic partners, or any individuals who have a consumer partnership. A joint tenancy account provides the *right of survivorship*, which gives a surviving owner the right to the account's assets upon the other owner's death.

Check 21, federal legislation that became effective in October 2004, created a new category of negotiable instrument. This *substitute check* allows banks to electronically process check information. Consequently, photographic replications of the front and back sides of checks are commonly returned to customers who have check return included in their checking account services.

The names of checking accounts can differ from one bank to another. Regardless of the name, checking accounts can be categorized by their characteristics.

Basic Basic checking accounts offer a few simple services for minimal cost. These accounts may vary considerably in set fees and services, and most do not pay interest. Some may have no charges as long as a minimum balance is maintained, but most have a basic fee and price extra services per item. For example, you may have a set number of checks or deposits allowed per month, and all transactions beyond these incur an extra charge. Extra charges may also be incurred for automated teller machine (ATM) and debit card transactions. The return of canceled checks may cost you, or may not be an option at all.

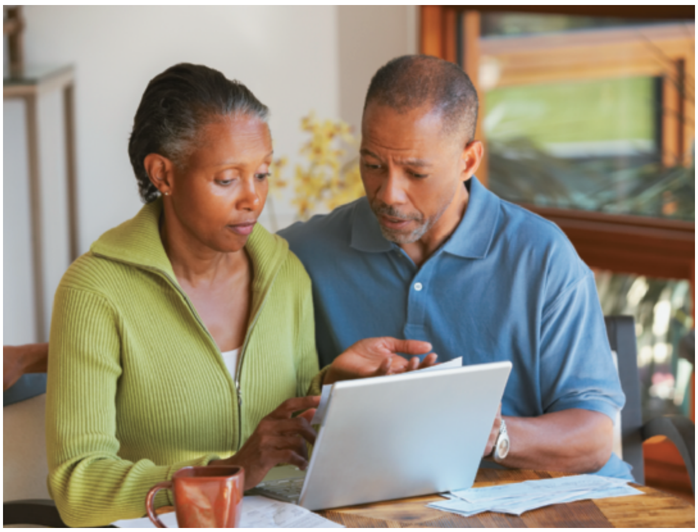
There are numerous forms of basic checking accounts with many names, but the same fee-for-service principle applies. Generally, a basic checking account is ideal for those who don't plan to keep a high balance.

"Free" This checking account usually requires a minimum balance but waives certain fees, such as ATM and per-check fees. Fees are charged to consumers who fail to maintain the minimum balance.

"No Service Charge" This account, which may charge for ATM withdrawals, has no other service fees and no minimum balance. Minimum balance requirements for free checking accounts should be compared for brick-and-mortar banks and online banks. Some online banks have lower minimum account requirements than brick-and-mortar banks.

Interest-Bearing These checking accounts also vary widely. They do pay interest on the balance deposited in the account, but usually only if the deposited balance is maintained at or above a required level. Generally, the higher the interest offered, the higher the minimum balance required. Minimum balance may be calculated based upon the average balance in the account each day of the month, or it may be a preset level. If the balance falls below the level on any day of the month, higher service charges apply.

Express Designed for people who prefer to bank by ATM, telephone, or online, this account usually offers unlimited check writing, low minimum balance requirements, and low or no monthly fees. However, teller fees as high as $6 a visit, or a flat monthly fee of $8 or more for teller visits, are charged. These accounts are popular with students and younger customers on the go who don't want to spend a lot of time on banking.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Lifeline This account's low minimum deposit and balance requirements as well as monthly fees—from zero to $3, depending on the bank—are attractive to low-income bank customers. It limits the number of checks per month that you can write. Some states require banks to offer such accounts.

"No-Frills" Many banks offer special checking deals if you are age 55 or over or are a student. The benefits may include the following.

- Free personal checks
- Free cashier's or traveler's checks
- Increased use of ATMs
- Better rates on loans and credit cards
- Discounts on a variety of items such as travel

Asset Management Many banks offer this advanced type of checking account that offers the convenience of one account to take care of typical banking and investment needs. The account typically provides unlimited check-writing privileges and a comprehensive end-of-year statement that documents the year's transactions. Requirements include a higher minimum balance to open and an annual fee.

Online Banking Online banking services are available as either independent accounts or as an additional service to standard brick-and-mortar accounts. Due to their lower cost structure, online banking accounts may offer lower minimum balances and fewer fees than traditional banks. Online banking services, either through an online bank or as part of a brick-and-mortar bank's package of services, offer a variety of services ranging from consolidated management of multiple accounts through automated bill payments.

NET Bookmark

The government wants to educate consumers to make sure that online banking transactions occur legally and safely. Access www.cengage.com/school/pfinance/banking and click on the link for Chapter 5. Visit the FDIC site and review the article on *Safe Internet Banking*. What risks do you incur by using a bank that is chartered overseas? What should you do if you are not certain that an online bank is legitimate?

www.cengage.com/school/pfinance/banking

Mobile Banking Although other countries have achieved higher utilization of mobile banking, some American banks have begun offering mobile banking services to customers. Transactions that consumers can perform from a mobile phone include balance inquiries and payment requests. Information that banks can automatically send to customers includes paycheck deposit alerts and bounced check notification. These mobile services can be linked to a variety of checking accounts.

ATM Fees Fees for using an ATM should be carefully assessed. Depending on the type of checking account, consumers have the potential to incur two fees when using an ATM that is not affiliated with their own bank. A single transaction may prompt the non-member bank to charge one fee and the member bank to charge another fee.

Consumers should look closely at the services included with their checking account as well as the fee structure for the account. A basic account may actually cost more money to operate than another type of account if there are transaction-based fees. In the same way, the interest earned on an interest-bearing account may not be enough to offset the higher cost of fees if the balance maintained is fairly low, especially if it falls below the minimum balance requirement. Account regulations for each account as well as account usage patterns should be carefully considered. Finding a good match between the two can result in cost savings.

Other Demand Deposit Transactions

Certain other transactions are also categorized as demand deposit transactions, such as traveler's checks, money orders, ATS (automatic transfer service) transactions, and EFT (electronic funds transfer) that make automatic withdrawals or transfers to pay bills without writing checks. Most checking

*interest*ing *facts*

To qualify as a time deposit and thus be exempt from reserve requirements, an account must have no more than six withdrawals or transfers per month. It is up to the bank to ensure that holders of the account comply with the rules.

accounts also allow access to deposits via ATMs, electronic banking, and debit cards. Some banks allow account access through mobile phones. Debit card transactions function like check transactions, except that no check is written. All deposits to cover these transactions are called *checkable deposits*, as are the funds deposited in checking accounts.

✓ checkpoint

What is a transaction account and why is it a demand deposit?

Time Deposits

Time deposits, as the name implies, are deposits that are held for or mature at a specified time. Generally, time deposits include savings accounts, money market deposit accounts, certificates of deposit (CDs), and various bonds. Time deposits are less liquid than checkable deposits. There are no reserve requirements imposed by the Federal Reserve on time deposits.

Savings Accounts

The most common time deposit account is the savings account. For time deposits, banks may require up to a seven-day notice from a depositor who wants to withdraw money. In contrast, demand deposits require no notice. As a practical matter, most banks don't impose the prior notice requirement for savings accounts, but they reserve the right to do so. Savings accounts valued at less than $100,000 are part of the M2 money supply.

Passbook savings accounts, which helped build the banking industry, provided a ledger of activity that the teller updated when the customer made deposits or withdrawals. This traditional type of savings account has all but disappeared, replaced by statement savings accounts. Both types of accounts allow you to make deposits in person, by mail, electronically, or by direct deposit.

Statement savings accounts, now the industry standard, provide a monthly or quarterly computerized statement detailing all account activity, including interest credited and fees charged. Often, statements are combined with those of other accounts held at the bank, providing a complete and clear picture of all banking activity.

Savings accounts are among the safest places to put money. Accounts are insured by the Federal Deposit Insurance Corporation (FDIC) up to $100,000 per depositor per bank. For high net worth individuals with more than $100,000 to keep in a bank account, any deposit amounts exceeding a combined total of $100,000 at a single banking company should be transferred to a bank owned by a different company. The Emergency Economic Stabilization Act of 2008 temporarily increased the FDIC cap to $250,000 per depositor through the end of 2009. As interest income on savings accounts is relatively low, high net worth individuals would probably invest their money in products providing a higher yield than savings accounts. If liquidity is needed, then savings accounts are a good option.

Money Market Deposit Accounts

Money market deposit accounts (MMDAs) offer a higher rate of interest than savings accounts, but they usually require a higher initial deposit to open an account. In addition, minimum balance requirements to avoid the imposition of fees are also higher. The FDIC insures MMDAs for amounts up to $100,000 per depositor. The bank invests money market deposits in a variety of savings instruments. Similar accounts, called *money market mutual fund accounts*, invest the money in mutual funds. Although they are not insured, banks make most of these investments in safe, short-term savings instruments with high credit ratings.

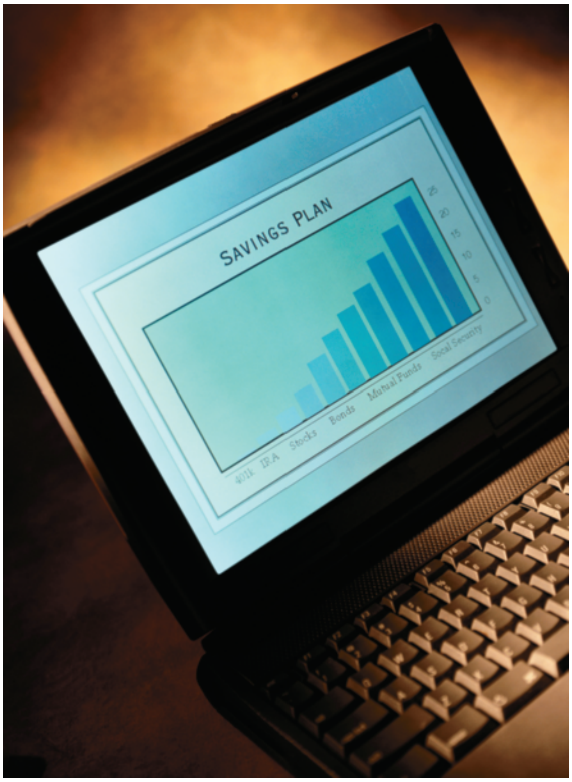
Liquidity of these accounts is not as high as savings accounts. You may be restricted to six transactions per month. Only three of them may be checks, and you may have to wait up to three days to get your money.

Certificates of Deposit

Certificates of deposit (CDs) are certificates issued by banks that guarantee the payment of a fixed interest rate until the *maturity date*, which is a specified date in the future. Banks offer CDs with maturity dates from seven days to ten years. Generally, the larger the amount of the CD and the longer the term, the greater the interest rate.

Some CDs offer fluctuating rates. Variable rate CDs are often linked to the prime rate and may offer an interest rate at a predefined percentage rate less than the prime rate. For example, a variable rate CD might offer interest at 2.25 percent less than the prime rate. Some CDs offer *bump-ups* that provide the opportunity to increase the interest rate on the CD when interest rates rise. A *callable* CD is one that can be called in at the discretion of the issuing institution. Be sure not to confuse the callable date with the maturity date.

Usually, the rate for CDs is higher than the rates offered by money market or savings accounts. For the vast majority of CDs the maturity date is fewer than eighteen months. You can get your money before the maturity date if you need to, but you will pay an interest penalty, anywhere from three to six months' worth of interest, if you withdrawal the money early.



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branching out

Wal-Mart

Realizing that a substantial number of its customers do not have traditional bank accounts, Wal-Mart developed creative ways of providing financial services to consumers. Wal-Mart partnered with a variety of third parties to provide bank-like services to its customers. By developing these partnerships, Wal-Mart was not required to go through the regulatory processes and approvals required of banks. The Wal-Mart MoneyCard is one example of a product developed as a result of a partnership. The MoneyCard, issued by GE Money Bank, allows customers to set up direct deposit of their payroll checks onto their Wal-Mart MoneyCard. When the MoneyCard is used for a transaction, the stored value of the money on the card is used. The MoneyCard is not a credit card. No credit check or bank account is required. There can be fees for reloading the card, for monthly card maintenance, and for assorted administrative costs that a customer may elect to use. Under certain circumstances, specific fees may be waived.

Think Critically How does the entry of a retail outlet with the consumer reach of Wal-Mart affect competition within the banking industry?

Certificates of deposit are quite safe, as the FDIC insures them for amounts up to $100,000 per depositor, but they are not very liquid. Consumers should consider the maturity date when investing in CDs, because the interest rate remains the same on fixed rate CDs. If interest rates rise, the CD rate will not earn as much as other forms of time deposits. But if interest rates fall, locked-in CD rates can be an advantage. Depositors must also decide how long they are willing and able to tie up their money.

Sometimes *brokers* sell callable CDs. You should understand which bank issued the callable CD. The FDIC insurance rates of $100,000 apply to each depositor at each lending institution. Knowing which institution issued a CD will help you or your bank's customers avoid exceeding the $100,000 limit at an institution.

Credit Union Products Credit unions offer both transaction accounts and time deposits. These holdings usually represent shares in the credit union rather than deposits. A *share-draft account* is much like a checking account, a *share account* is essentially like a savings account, and a *share certificate* is equivalent to a certificate of deposit.

✓ checkpoint

List three types of time deposits. Which of these are exempt from reserve requirements?

assessment 5.1

Think Critically

1. Why does the Federal Reserve require reserves for demand deposits but not for time deposits?

2. How might competitive pressures have led to different types of checking accounts?

3. Why do you think passbook savings accounts have disappeared?

4. What factors should be considered when contemplating a certificate of deposit?

Make Academic Connections

5. **Communication** With a partner, make a list of questions you need to ask to help determine your checking account needs. Compare various types of checking accounts and focus your questions on what you now know about differences in checking accounts. Come up with at least four questions, and then compare lists with those of other pairs.

6. **Banking Math** According to a Federal Reserve study, Americans wrote about 31 billion checks and made about 63 billion electronic payments in 2006. This reflects a steady trend to shift away from checks in favor of electronic payments. At that time, the population of the United States was about 300 million. Using those figures, how many checks and how many electronic payments were written per capita in a year in the United States?

5.2 Interest-Bearing Accounts

goals

- Explain how interest is calculated.
- Discuss why compound interest is such a powerful savings tool.
- Describe how interest rate variations can impact consumer behavior.

terms

- interest
- compound interest
- annual percentage rate (APR)
- annual percentage yield (APY)

Banking Scene

As she considered what type of checking account to open, Rosa Lopez felt it would be a good idea to open a savings account as well. She looked for advertised interest rates for accounts and certificates of deposit, and began to consider how those rates would affect her savings over time. She wanted to design a chart or table to compare rates and intervals at which interest would be paid, and then fill it with some example numbers. How would Rosa design such a chart?

In Your Interest

It might not always be good to be called a "calculating person," but when it comes to your finances, you had better be. Banks offer interest on many deposit accounts, and they charge interest on loans they make. Understanding these calculations is absolutely necessary to analyzing your own finances. Whether it's money coming to you or money you're paying to borrow, interest will likely determine how well you fare.

Interest is the price paid for the use of money. The bank is using your money when you deposit funds. In some cases, the bank pays you for the use of your money. If you borrow from a bank or other financial institution, you pay to use that money, and interest is the amount you pay. Interest is almost always expressed as a rate or percentage of the total amount of money in use, and it is calculated over time.

Calculating Interest

$$P \times R \times T = I$$

To calculate simple interest, you must know the amount of money that is being used. This beginning amount is called the *principal*. The basic formula for calculating interest is $P \times R \times T = I$, where P is principal, R is rate, T is time, and I is interest. Rate is expressed as a percentage. Time is expressed in years or parts of years. Portions of a year are expressed as a decimal value. For example:

six months is 0.5 years
nine months is 0.75 years
a year and a half is 1.5 years

Banking Math *Connection*

Calculate the simple interest earned on a savings account in nine months that begins with a deposit of $2,200 and pays 4½ percent interest.

Solution

The formula for calculating interest is

Principal × Rate × Time = Interest
$2,200 × 0.045 × 0.75 = $74.25

If you had such an account, you would have earned $74.25 in interest, giving you a balance of $2,274.25. This example assumes no compounding and that the interest is paid at the end of the nine months, which might not reflect conditions of an actual account.

Interest in the Real World

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Calculating simple interest provides an idea of the process, but in the real world there are some complexities. Banks calculate the interest they pay on some fixed interval. Interest may be paid once a year (annually), every six months (semiannually), every three months (quarterly), or any other interval as defined in the account regulations. If the bank paid 4½ percent interest on a $2,200 account semiannually, at the end of six months $49.50 would be added to the account. For the next six-month interval, the beginning principal would not be $2,200 but would be $2,249.50. Interest would now be earned on the higher amount. Adding interest to the principal and paying interest on the new total is called paying **compound interest**. It is the most powerful savings tool.

✓ checkpoint

What do the terms in the formula $P \times R \times T = I$ stand for?

interesting *facts*

For the purposes of computing interest compounded daily, a year is generally considered to be 360 days or twelve 30-day months. Using this figure actually increases the effective rate of interest compared to a 365-day year.

THE POWER OF COMPOUNDING

Compound interest "starts over" with a new principal every time interest is paid, adding the paid interest to create a higher principal on which interest is paid in the next interval. For example, assume you loaned $10,000 to your cousin for three years at a simple interest rate of 5 percent per year. You'd make $500 in interest the first year, $500 in interest the second, and $500 in the third, for a total of $11,500.

Assume you put the same $10,000 in a bank account paying 5 percent interest compounded semiannually. You'd get back $11,597.10. In effect, that's a rate of 5.3 percent per year.

	Simple Interest 5%		**Compound Interest 5%**	
Time	***Interest***	***Principal***	***Interest***	***Principal***
6 months	$250	$10,000	$250.00	$10,250.00
1 year	250	10,000	256.30	10,506.30
1½ years	250	10,000	262.70	10,769.00
2 years	250	10,000	269.20	11,038.20
2½ years	250	10,000	276.00	11,314.20
3 years	250	10,000	282.90	11,597.10
Total	**$1,500**		**$1,597.10**	

The algebraic formula for calculating compound interest is $F = P(1 + R)^n$, where F stands for future value, P is principal, R is rate, and n is the number of intervals. There are many online calculators that will compute compound interest for you. Memorizing the formula is less important than understanding the idea behind compound interest.

Larger principals and longer terms have a more dramatic effect, especially if regular additions are made to the principal, as on a regular savings plan. For example, if you put $20 a week in a savings account earning 5 percent interest compounded annually, at the end of five years you would have deposited $5,200, but your balance would be $6033.99.

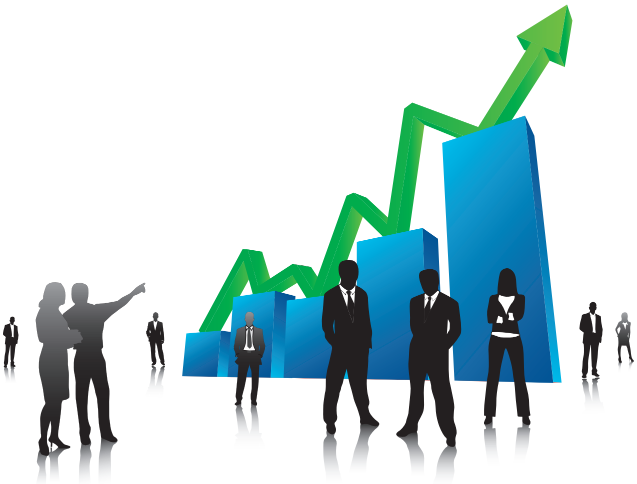
APR and APY

Two terms you may encounter when evaluating interest are APR and APY. Both allow you to compare interest. **Annual percentage rate (APR)** is the nominal rate on which interest is calculated per year. In the example above, both investments have an APR of 5 percent. Another measure gives a better comparison. The **annual percentage yield (APY)** represents the effect of compounding. In the example above, the APY of the simple interest is 5 percent and of the compounded interest is 5.3 percent. APY varies according to the APR and the frequency of compounding. APY is mandated as the required quotation by the Truth in Savings Act. Although banks may elect to present an APR, they must present the APY.

checkpoint

Why is compound interest such a powerful savings tool?

Interest Rates Impact Consumer Behavior



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Savvy consumers, who want to make money in a fairly low-risk environment, have focused their energy on earning personal income by exploiting the spread of interest points in the marketplace. The spread is the variation in value of two competing interest rates.

By using sophisticated online software that analyzes and summarizes the highest interest levels offered by assorted savings institutions, these consumers are perpetually moving their funds among various accounts to obtain the highest interest available at any point in time. In some cases, these consumers will borrow money on a credit card, at either low or no interest introductory rates, and use those borrowed funds to gain interest in a high-yield online account.

Some financial institutions, who offer the high rates in hopes of obtaining long-term customers, have tried to combat these customers by increasing the minimum deposit required to participate in the high-yield accounts.

Consumers who use these tactics are often referred to as *rate chasers*. A variety of websites are available that offer comparative interest rates.

checkpoint

Why do financial institutions try to thwart the efforts of rate chasers?

assessment 5.2

Think Critically

1. Why is it important for consumers to compare interest rates on bank accounts and other interest-bearing instruments?

2. How does the frequency that interest is compounded change the effect of compounded interest rates?

3. Why is APY a more useful measure for comparing interest rates than APR?

Make Academic Connections

4. **Banking Math** Marie Broussard puts $10 a week in a savings account. At the end of two years, how much more would Marie have in savings if she found an account that paid interest of 5½ percent instead of 4½ percent per year, assuming both accounts compound annually?

5. **History** The practice of paying and charging interest has been around a long time. Do research on interest, and write a one-page report on the earliest beginnings of the practice.

6. **Technology** Online financial calculators are becoming increasingly useful tools, performing complex calculations quickly. Find three such calculators on the Internet, and describe the particular features, advantages, and disadvantages of each.

Flow of Deposits

5.3

goals

- Explain the complexity of forces that influence the flow of deposits.
- Identify limitations of the Federal Reserve's influence of the flow of deposits.

terms

- interbank transactions

Banking Scene

Rosa Lopez has made her decisions about what services she needs in checking and savings accounts. Now her task is to choose accounts that match her needs. With so many banks, so many accounts, and so many similar but not identical names, collecting information on specific offerings could be complicated and time consuming. How would you recommend Rosa pursue this task most efficiently?

A Complex Pattern

You go to work, get your check, and deposit it in the bank. Of course, your employer wrote that check against funds deposited in the company's bank, and the money for those deposits came from somewhere too. The next time you are in a bank or waiting in a drive-through, look around and multiply the process by everyone you see. Then multiply the process by the millions of people at work in the United States, using thousands of banks. If you are starting to get a picture of a complex flow of deposits rocketing around the nation, you are getting the idea.

The Federal Reserve, or Fed, came into being to serve as the nation's central bank. The money supply is sometimes adjusted by the actions of the Fed. Because banking is so important, it may be easy to assume that the government is running everything, but that is not really how it works. In addition to new money and the easing or tightening of credit, the flow of deposits also includes all the money already circulating in the day-to-day business of economic life. Money doesn't just mean currency, but includes checks, ledger transfers, and even credit.

The Economic Engine

The engine that drives the flow of deposits is the economy itself. Basic economic principals of supply and demand for goods and services push money through banks. In a way, the movement of money is like the movement of communication through phone lines and cellular phones. Individual transmissions may not be very complicated, but there are a lot going on at once, and they may be going in many different directions. At the same moment you deposit your check at the teller window, someone else cashes his or hers at the drive-through. In addition to these small transactions,

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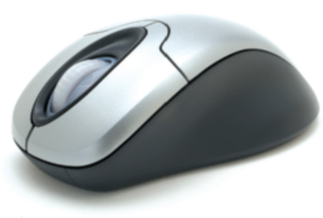


Cup of Java?

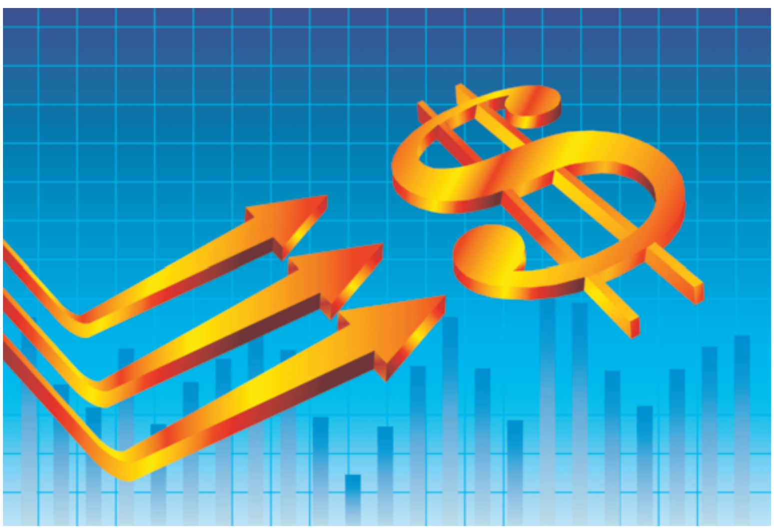
Many banks offer interactive tools on the Internet, such as interest calculators of various types. Have you ever wondered how they work? Many of them run by means of Java, a programming language specially designed to run small applications, called "applets," over the Internet. Advantages of Java are that it works with any operating system, such as Windows, Macintosh, or OS/2, and that it allows for distributed processing, so the software need not all be resident on your computer.

Think Critically Why do you think interactive tools on bank Internet sites have become so popular? Search the Internet for bank sites that offer interactive tools. List at least five useful tools you find.

banks themselves, just like you, may have changes in cash-flow needs. Maybe revenues are down, or expenses are up, or maybe business is so good they need more money to support it. The transactions that occur when banks make or receive deposits from each other or from the Fed are called **interbank transactions**.

It is not always easy to predict the results of these transactions, but the best predictor is the past. That is why economists, banks, and the Federal Reserve pay close attention to recording and analyzing economic statistics.

In fact, the economy at large plays a far greater role in determining how money is moving than does the government. Market forces are a primary determinant of interest rates. Fluctuations in interest rates are caused by variations of capital needs, individual tendencies toward saving or spending, and on inflation-related effects.



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Disintermediation of funds also affects the economy. *Disintermediation of funds* occurs when depositors take their money out of bank accounts and invest those funds directly into capital markets. The term also captures the activity that occurs when companies, seeking financing, go directly to capital markets to secure the financing. In both instances the traditional role of a bank, of accepting deposits from one group and providing loans to another group, is diminished. This financing method increased during the 1980s and 1990s. However, during the credit squeeze that began in 2007, the trend began to reverse. At that time, mutual funds began to seek financing directly from banks in an effort to maintain the required liquidity of their funds.

✓ checkpoint

What is the greatest factor in the flow of deposits? Why do economists track and analyze so much data?

Deposits and the Fed

Whether the money supply is expanding through the creation of new money or contracting as credit tightens, supply and demand for money affects deposits. The Federal Reserve also has an effect on deposits. For example, the Federal Reserve sets reserve requirements. If reserve requirements are high, banks must keep back more money and consequently have less to lend. If reserve requirements are low, more money may be available for loans. Still, there are reasons not to overestimate the power of this capability.

- Reserve requirements do not change that often and are not as much a factor in bank lending as general economic conditions.
- Reserve requirements only apply to the M1 money supply (the checkable deposits that are already moving freely). Other parts of the money supply are operating entirely by means of market forces, and though less volatile, are not under the Fed's control.
- The Fed does not control other forms of commerce. Much wealth today is generated by nonbank financial institutions, such as stockbrokers and the securities and other instruments they trade, which are a form of money themselves. These instruments, the institutions that sell them, and the policies they have are not controlled by the Federal Reserve, though they affect the economy at large.

In general, the money supply is determined by the supply and demand for credit, and although the Federal Reserve responds to these conditions, it does not necessarily create them.

Adjusting the Money Supply

It is true that the Fed does have an influence on the money supply and the flow of deposits, most frequently through its *open market operations*.

- **The Federal Reserve can put more money in the economy.** To do so, it buys U.S. government securities on the open market. The Fed buys these securities by using money that is part of the Fed's balance sheet. The sellers of the securities deposit money from the Fed in financial institutions. Thus, deposits flow from money on the Fed's balance sheet into bank accounts. By generating funds from the sale of government securities, banks then have more money to lend, and the money supply expands as a consequence of the multiplier effect.

"communicate"

Conduct a survey among 20 friends, family members, and classmates to examine consumer attitudes. Ask these questions:

1. *How much do you consider the economy at large when making purchase and loan decisions?*
2. *What do you think is the state of the economy at large at present, and what are its prospects for the next year?*

Based on responses to your survey, write a two-page report describing the economic mood of the country.

PHOTODISC/GETTY IMAGES

- **The Federal Reserve can effectively take money out of the economy.** If the Fed feels it needs to slow the economy, it sells the Treasury securities it holds. There is a market for them because of their security. When it sells the securities, the money comes from bank deposits, thus leaving less in the system at large. The money the Fed receives for the securities is removed from the economy, as it does not go into a bank account of any kind. It effectively disappears.

In addition, the Fed can adjust the discount rate, which is the rate it charges banks for loans. If the discount rate is low, banks are more likely to borrow money to use to make money. If the discount rate is high, just like consumers, banks are less likely to borrow.

The Banking Business

Governmental measures influence but do not entirely control the flow of deposits. Banks are businesses and do what they can to make a profit. Deposit flow is determined by the needs of all businesses, bank and non-bank, moving money around in the banking system. Banks move money from themselves to consumers, back and forth among themselves as a function of normal business or borrowing funds from each other, and back and forth from the Federal Reserve, in a constant flow of deposits. They function just as you do but on a larger scale, moving and using or even borrowing money to acquire things they need.

checkpoint

How does the Federal Reserve influence the flow of deposits?

assessment 5.3

Think Critically

1. Why is it sometimes hard to predict the flow of deposits in the banking system?

2. How might political or national events affect the flow of deposits in the banking system?

3. Do you think the government should have more direct control of the economy and thus the flow of deposits? Why or why not?

4. Give examples of daily economic activities that are more likely to have predictable effects on the flow of deposits.

Make Academic Connections

5. **GRAPHICS** Make a graphical representation or flow chart of how money is added to or removed from the economy by the Federal Reserve. What activities should be included in the representation?

6. **SOCIAL STUDIES** How do current economic conditions affect social conditions in our country? Explore the effect of the economy on daily life in the United States. Write a one-page personal essay about ways that you think the state of the economy affects how we live, the values we hold, the ways we spend our time, our political opinions, our career choices, and any other aspects of our lives that you find interesting. Incorporate information about how the credit collapse of 2008 affected your life. These ideas may be personal opinions, but try to express them clearly and be sure to give reasons for your thinking.

5.4 Deposit Regulations

goals

+ Describe several deposit account documents.
+ Identify basic deposit account rules and what they cover.

terms

+ governing documents
+ stale check
+ post-dated check

Banking Scene

When Rosa Lopez opens her checking and savings accounts, she is given a variety of brochures explaining the features and benefits of the accounts. She is also given sheets that list rules and regulations pertaining to each of her deposit accounts. They are detailed documents that include legal language and are printed in small type without graphics. Why should Rosa read these documents carefully, even though she has a clear picture of account features, charges, and interest rates?

Deposit Account Documents

The relationship between a financial institution and its customers is more than a business relationship. It is also a legal relationship that offers rights and imposes responsibilities on each party. Banks document these rights and responsibilities. When an account is opened, customers receive documentation outlining the rights and responsibilities associated with the account.

State and federal governments require banks to provide this documentation to customers so that questions about account policies and procedures have clear answers. These documents protect both the consumer and the bank from misunderstanding and loss.

The Federal Reserve, in its regulatory capacity, along with state and sometimes local governments, performs reviews to ensure that deposit account documents are specific, complete, clear, and used appropriately. Banks, including online banks, must comply with various state and federal consumer laws, including laws about fairness and full disclosure. Several documents are typically included in this document package.

- **Account rules** explain characteristics of each type of account. They include definitions, requirements, restrictions, and other information associated with each account.
- **Deposit rate schedules** list interest rates in effect at the time for various types of accounts.
- **Fee schedules** show all charges that apply to each specific type of deposit account.
- **Check hold policies** explain when deposited funds will be available for use by the consumer. Usually, deposited funds are credited provisionally,

until full and final payment is received. In most cases, funds are available for use immediately, but the bank may charge back to the account any amount that is uncollectible.

- **Disclosure statements** provide full information about bank policies, such as electronic funds transfer policies, lending policies, interest crediting, and compliance with banking regulations. These statements are required by law.
- **Opting out options** allow you to notify your bank that you do not authorize the bank to share your personal financial information, like average account balance, with any other businesses. Using this option can also keep the bank from sharing information with other divisions within the bank. For example, you may prohibit the bank from sharing your personal information with the financial planning division of the bank.

Deposit account documents are sometimes collectively called **governing documents**. Banks are free to change them, but they must give customers written notice of changes.

✓ checkpoint

Why are governing documents necessary?

Account Rules

The statement of account rules supplied for each account provides a detailed explanation of the policies, procedures, requirements, and agreements applying to that account. It is usually very specific, spelling out what is expected of both the customer and the bank.

Reference to Governing Documents The bank notes that account holders agree to abide by the rules as set forth in the rest of the governing documents. The bank also states that it may change the rules from time to time and acknowledges its responsibility to provide updated documents to account holders.

Signature Policies Banks keep a card on file with the signature of all parties to an account, whether it is held solely or jointly. Signature policies spell out who may do what, both in terms of the account as it exists when it is opened and in the event of inconsistencies, disputes, or the death of parties. Usually, in the event of disputes among parties, the bank refuses to pay items on the account until the parties resolve the dispute. The bank notes that it has no responsibility for a dispute, its resolution, or its choice to freeze the account. Orders to freeze accounts may originate due to the death of an account holder, lawsuits filed against account holders, or bankruptcy proceedings.

Ethics in Action

Some consumer advocates believe that many governing documents are made deliberately hard to read so that consumers won't read them. Banks argue that precise legal language is necessary to protect both themselves and consumers.

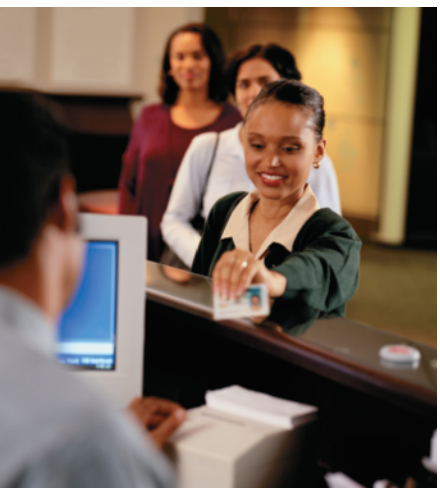
Think Critically

Would you support legislation that required account rules to be written in "plain English"? Why or why not?

Opening and Closing Accounts Policies governing opening accounts may include a specified minimum opening deposit, the presence of the person opening the account with proper identification, and the right not to open an account for a person if the bank so chooses. The bank also reserves the right to close an account at its discretion.

Resolution Form When opening an account for a business that is set up as a limited liability company (LLC), a corporation, or a partnership, the business may need to provide the bank with a *resolution* form. This form grants authority for specified individuals to manage account transactions on behalf of the business.

Deposit Collection This provision is similar to federal regulations concerning funds availability except that it goes further in explaining the effect of uncollected deposits on the account. The bank notes that it is not responsible for collecting deposits beyond using reasonable care in their processing. This statement often notes exactly when deposits are credited. For example, deposits made after 3:00 P.M. may be credited during the next business day.



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Overdraft Policies When an account has insufficient funds to meet its obligations, it is *overdrawn*. Depending on the account type, the bank may pay the obligation or return the check to whoever presented it. If an account holder has multiple accounts within a bank, the bank might transfer funds between accounts to cover overdrafts. An *overdraft* occurs when withdrawals are greater than deposits. Fees are charged for overdrafts. A reference to the fee schedule usually appears in the statement of account rules.

Minimum Balance/Service Charges The bank specifies the exact fee schedule for service charges when an account fails to maintain a minimum balance.

Withdrawal Policies Requirements for withdrawing funds from the bank vary by account type. They include maturity dates and penalties for early withdrawal of time deposits, making withdrawals in person, identification needed at withdrawal, and various other requirements for withdrawing funds.

Check Policies These policies relate to the accurate dating of checks and their timely deposit or presentation. A **stale check** is dated six months or more before it is presented for payment or deposit. A **post-dated check** is dated later than when it was written. A bank may refuse to honor either.

Account Statement Policies These policies deal with the bank statement. They state what is and is not included with each statement, the account holder's obligation to review the statement in a timely manner, and the discrepancy handling process.

Other Policies Account rules usually include assorted bank policies. Stopping payment of a check, handling inactive or dormant accounts, and reimbursement of expenses incurred by the bank on the account holder's behalf are a few examples of policies covered in this section.

Waivers Account rules may also contain notices about various waivers, such as the customer's agreement to waive protest of dishonored items and the bank's willingness to waive certain fees. The bank's waiver does not prevent it from enforcing the same provision(s) that it had waived previously.

Governing documents and account rules serve as the legal basis for the relationship between you and your bank. If you do not like a provision or some of the account rules, you are free to choose another bank. Most account and deposit regulations are fairly similar from bank to bank. In their precision and specificity, they protect the bank and the consumer.

Federal Reserve Regulations

Just as banks enforce account rules on consumers, the Federal Reserve imposes a number of requirements on banks or depository institutions. These may apply to transaction accounts as well as time deposits.

Regulation DD This policy implements the Truth in Savings Act of 1991. It requires banks to disclose the interest rate paid and the fees charged on deposit accounts to enable consumers to make informed decisions. The purpose of providing this information is to allow consumers to make comparisons among depository institutions.

In May 2005, Regulation DD was amended to require that banks provide explicit disclosure regarding the details of overdraft protection. Under this amendment, banks must clearly list all fees associated with overdraft protection services on banking statements. Final amendments to this rule, which became effective in July 2006, discuss which disclosures must be included in marketing materials related to overdraft protection.

Regulation D This regulation requires banks to maintain adequate reserves for the funds they have on deposit. Regulation D defines the types and number of transactions that the bank may allow on time deposits, such as savings accounts and money market accounts. Check or debit overdraft, preauthorized automated transfers, preauthorized electronic debit, and automatic or assisted phone transfers are limited to six per month. Balance inquiries, loan payments, and all transactions from a checking account do not count as part of these transactions.

"communicate"

Multiple federal agencies use a similar naming structure for regulations. For example, "Regulation D" is used by both the SEC and the Federal Reserve. For the SEC, Regulation D covers exemptions from registration requirements. For the Fed, Regulation D defines bank account reserve requirements. Use the Internet to find another overlap. Prepare a PowerPoint chart that clearly explains the difference in regulations with the same name. Be sure to include an easy-to-understand reference to the agency listing the regulation.

Regulation CC This is known as the Availability of Funds and Collection of Checks regulation. Regulation CC sets the schedules under which banks must make funds deposited into transaction accounts available for customer withdrawal. Usually, the maximum time to clear a check deposited into a checking account is two to five business days. Business days are defined as Mondays through Fridays, except most federal holidays. Some types of deposits require a next-day availability. To meet the requirements of Regulation CC, a bank must:

- Provide consumers who have transaction accounts, such as a checking account, with disclosures stating when their funds will be available for withdrawal.
- Post a notice of the bank's availability policy pertaining to consumer accounts. The posting is required in the bank as well as at all ATMs.
- Include a notice of funds availability on the front of all *preprinted* deposit slips. It does not have to appear on blank counter deposit slips.

Many financial institutions have been cited for violating various parts of Regulation CC. Thus, it is important for a bank to ensure it is in compliance with the requirements of Regulation CC.

In October 2004, Regulation CC was amended to include the Check 21 Act. As noted in lesson 4.1, Check 21 authorized the use of electronic checks as a viable negotiable instrument.

Regulation E EFTs are regulated under Regulation E. EFT is commonly used for direct deposit of paychecks or preauthorizing repetitive monthly payments of a consistent amount (like authorizing automatic payment of monthly health club fees from your checking account). Regulation E is designed to protect the rights of consumers who use EFT and to outline the responsibilities of financial institutions providing EFT. Consumers must receive EFT disclosures prior to making their first EFT transaction. Information to include in the disclosures includes:

- Limits of a consumer's liability and of an institution's liability if unauthorized EFT transactions occur
- Descriptions of the type and number of transactions that can be made
- ATM fees that can be incurred when using the bank's ATMs as well as the ATMs of other banks
- Contact information for reporting unauthorized EFTs

✓ checkpoint

How do governing documents and account rules differ?

assessment 5.4

Think Critically

1. Why do banks supply a separate set of account rules as part of the governing documents for each account?

2. Do you think most people carefully read the documents associated with their bank accounts? Why or why not?

3. Why does the government feel it is necessary to require that written copies of documents related to bank accounts be provided to customers?

4. In what circumstances might a bank waive a fee it had charged?

Make Academic Connections

5. **Social Science** Learn more about consumer protection and the banking industry. Using research materials of your choice, make a timeline showing key events in the growth of fair and reasonable banking practices.

6. **Problem Solving** If you had a dispute with a bank, how would you resolve it? What approaches would you take, and what further actions would you pursue if you could not come to an agreement? List steps that you would take to resolve a disagreement over an uncredited deposit, for example.

chapter 5 assessment

Chapter Summary

5.1 Deposit Accounts

A. Transaction accounts, like checking accounts, are demand deposit accounts that allow unlimited transactions.

B. Time deposits include savings accounts, money market deposit accounts, and certificates of deposit.

5.2 Interest-Bearing Accounts

A. Interest is the price paid for the use of money. Simple interest is calculated with the formula $P \times R \times T = I$.

B. Compounding greatly expands the power of interest. The formula for calculating compound interest is $F = P(1 + R)^n$. APR represents the annual percentage rate, and APY represents the annual percentage yield.

5.3 Flow of Deposits

A. The flow of deposits includes all economic transactions, not just those between banks and the Federal Reserve.

B. The Federal Reserve influences the flow of deposits, but supply and demand have a greater influence on deposit flows.

5.4 Deposit Regulations

A. For each account, banks provide a package of governing documents that include account rules, deposit rate schedules, fee schedules, check hold policies, and disclosure statements.

B. Account rules list detailed policies. The Federal Reserve imposes requirements on banks through various regulations.

Vocabulary Builder

a. annual percentage rate (APR)
b. annual percentage yield (APY)
c. certificate of deposit (CD)
d. Check 21
e. compound interest
f. demand deposit
g. governing documents
h. interbank transaction
i. interest
j. money market deposit account (MMDA)
k. post-dated check
l. stale check
m. statement savings account
n. time deposit
o. transaction account

Choose the term that best fits the definition. Write the letter of the answer in the space provided. Some terms may not be used.

____ 1. Price paid for the use of money

____ 2. Effective rate of interest when compounding is factored in

____ 3. Savings account earning a competitive interest rate from invested deposits

____ 4. Deposit held for or maturing at a specified time

____ 5. Account that allows transactions to occur at any time and in any number

____ 6. Deposit payable on demand whenever the depositor chooses

____ 7. Savings instrument with fixed interest rate and fixed maturity date

____ 8. Return calculated by adding interest to principal for next interval

____ 9. Nominal rate on which interest is calculated per year

____ 10. A transaction made between banks

____ 11. Account-specific documents outlining the legal rights and responsibilities of both the bank and the account holder

____ 12. A check that is dated six months or before it is presented for payment or deposit

Review Concepts

13. What is a demand deposit?

14. Name three forms of demand deposits.

15. What is a minimum balance?

16. Name three types of time deposits.

17. Why are savings accounts not subject to the Fed's reserve requirements?

18. Describe a certificate of deposit and its maturity date.

19. What do the letters in the formula $P \times R \times T = I$ represent?

20. Explain the basic idea of compound interest.

21. What is the difference between APR and APY?

22. What is the most significant factor influencing the flow of deposits in the United States?

23. Name five main types of documents typically supplied with new accounts.

Apply What You Learned

24. Why are transaction accounts the most liquid of all funds?

25. What factors should a person consider when choosing an account?

26. Why is the annual percentage rate an ineffective measure for comparing accounts?

27. Why won't the Federal Reserve's monetary policies completely control the flow of deposits in the U.S. banking system?

28. Why must banks provide customers with documents such as account rules, and how do account rules protect both banks and consumers?

29. How do Federal Reserve regulations protect consumers?

Make Academic Connections

30. **Advertising** Collect advertisements for checking and savings accounts that appear in print media. Evaluate the ads in terms of attractiveness, clarity, quality of product, and overall effectiveness. What makes a fair and good advertisement?

31. **Banking Math** Calculate the interest earned on a three-year certificate of deposit (CD) with an initial value of $12,500 earning 5½ percent, compounded annually. What will be the final account balance? Then calculate the interest earned on a one-year CD with an initial value of $5,000 earning 7 percent compounded semiannually. What will be the final balance?

32. **Design** Create a marketing brochure for a checking account. Select what features your account will offer, choose what type of customer you would like to attract, decide on a name, and design a brochure that will effectively and fairly present the features. You may wish to gather real brochures to use as models.