

CH. 4

MANAGING YOUR CASH AND SAVINGS

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# **CASH MANAGEMENT**

- The routine, day-to-day administration of cash and near-cash resources, also known as liquid assets, by an individual or family.
- Efficient cash management ensures adequate funds for both household use and an effective savings program.

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### HISTORICALLY LOW RATES

- With low interest rate, stock prices tend to rise.
- Low rates help fund large, long-term assets such as cars or houses.
- Low rates indicate sluggish economic growth and increase risk of deflation.
- Discourage savings and penalizes savers.
- Encourages investors to take more risk for higher return.
- The inflation adjusted rate may be negative.

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## TYPES OF FINANCIAL INSTITUTIONS

- Two broad groups based on whether or not they accept deposits:
  - Depository institutions include commercial banks, savings and loan associations, saving banks and credit unions.
  - Non-depository institutions include stock brokerage firms and mutual funds.

#### DEPOSITORY FINANCIAL INSTITUTIONS

- Commercial bank: Offers checking and savings accounts and a full range of financial products and services; the only institution that can offer non-interestpaying checking accounts (demand deposits).
- Savings and loan association (S&L): Channels the savings of depositors primarily into mortgage loans for purchasing and improving homes. Also offers many of the same checking, saving, and lending products as commercial banks. Often pays slightly higher interest on savings than do commercial banks.

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### **DEPOSITORY FINANCIAL INSTITUTIONS**

- Credit union: A nonprofit, member-owned financial cooperative that provides a full range of financial products and services to its members, who must belong to a common occupation, religious or fraternal order, or residential area.
  - Generally small institutions when compared with commercial banks and S&Ls. Offer interest-paying checking accounts called share draft accounts—and a variety of saving and lending programs.
  - Because they are run to benefit their members, they pay higher interest on savings and charge lower rates on loans than do other depository financial institutions

#### NON-DEPOSITORY FINANCIAL INSTITUTIONS

- Stock brokerage firms: Offer several cash management options, including money market mutual funds that invest in short-term securities and earn a higher rate of interest than bank accounts.
- Mutual funds: Pool money from many investors and invests the money in securities such as stocks, bonds, and short-term debt. Like stockbrokers, mutual fund companies offer money market mutual funds.
- Insurance companies: Provide insurance contracts under which one party (the insurer), in consideration of receipt of a premium, undertakes to pay money to another person (the assured) on the happening of a specified event (e.g. death, accident, or loss/damage to property).

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#### INSURANCE ON DEPOSITS

- Deposit insurance: A type of insurance that protects funds on deposit against failure of the institution; can be insured by the Federal Deposit Insurance Corporation (FDIC) and the National Credit Union Administration (NCUA).
- Amount: \$250,000 per depositor at bank. If person has multiple accounts with over \$250,000, the insurance is limited to \$250,000 for the depositor.
- A joint account has two depositors, thus \$500,000 insurance. Same couple could have an individual account in their own name and that would be two additional depositors.

### CHECKING ACCOUNTS

- Deposit account held at a bank or other financial institution.
  - Also called as transaction account, current account, demand deposit account, or share draft account at credit unions
  - ✓ Fund in checking account is available to the account owner "on demand" and, therefore, it is available for frequent and immediate access by the owner.
  - Access may include cash withdrawals, debit cards, checks and electronic transfer.
  - ✓ Funds held in a checking account are regarded same as cash and earn typically very low or no interests.

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### **SAVINGS ACCOUNTS**

- Remains on deposit for a longer time than a demand deposit, hence referred to as time deposits.
- May limit the number of withdrawals, may lack checks, may limit transfer options, and may not allow to be overdrawn.
- Interest paid is slightly higher than checking accounts.

### REGULATION Q

- Federal Reserve Board (FRB) rule that sets "minimum capital requirements and capital adequacy standards for board regulated institutions" in the United States.
- The original rule was created in 1933, in accordance with the Glass-Steagall Act, with the goal of prohibiting banks from paying interest on deposits in checking accounts. It also enacted ceilings on the interest rates that could be paid in other types of accounts. The purpose was to limit speculative behavior by banks competing for customer deposits.
- In 2011, Regulation Q was repealed by the Dodd-Frank Wall Street Reform and Consumer Protection Act, allowing banks to pay interest on demand deposits.

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#### INTEREST PAYING CHECKING ACCOUNTS

- NOW Accounts: Negotiable order of withdrawal accounts pays interest and may require a minimum balance in account. Dodd-Frank Act repealed Regulation Q in 2011, allowing banks to pay interest on demand deposits, and basically eliminated any advantage that NOW Accounts offered.
- Money Market Deposit Accounts: Account federally insured, has high minimum deposit requirement, pays highest rate of interest a bank pays on accounts with checking privileges. However, the monthly bank charges may be higher than the interest.
- Money Market Mutual Funds: A mutual fund that pools the funds of many small investors and purchases high-return, short-term marketable securities. Offers higher interest and checking privileges. Not federally insured.

#### ASSET MANAGEMENT ACCOUNTS

- Asset management account is a comprehensive deposit account that combines checking, investing, and borrowing activities and is offered primarily by brokerage firms and mutual funds.
- Small investors that cannot meet the minimum opening balance are not eligible.
- Many financial services charge monthly or quarterly maintenance fees.

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#### **ELECTRONIC FUNDS TRANSFER SYSTEMS**

- Debit card: Use to transfer funds from a customer's bank account to the recipient's account to pay for goods or services.
- Credit card: A payment card issued to users to enable the cardholder to pay a merchant for goods and services based on the cardholder's accrued debt. Hence, credit cards give you access to a line of credit issued by a bank, while debit cards deduct money directly from your bank account.
- Automated teller machine (ATM): A remote computer terminal that customers of depository institutions can use to make basic transactions 24 hours a day, 7 days a week.

#### **MOBILE PAYMENT SYSTEM**

- Near-field communication (NFC) payments: NFC phones communicate with NFC-enabled card machines using close-proximity radio frequency identification (e.g. Google Pay, Apple Pay, Samsung Pay, etc.)
- SMS payments: Paying for products or services via a text message. Once you've submitted a text message with the relevant information to the right payee phone number, the payment amount is added to your mobile phone bill.
- Payment Apps: Paypal, Venmo, Square Cash, Zelle, etc.

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### STARTING A SAVING PROGRAM

- Use automatic transfer option to move fund to a savings account.
- Build an emergency fund of liquid assets equal to 6 months of after-tax income.
- Continue transferring funds to build an investment fund.

#### INTEREST PAYING INVESTMENTS

- Certificate of deposit (CD): A type of savings instrument issued by certain financial institutions in exchange for a deposit; typically requires a minimum deposit and has a maturity ranging from 7 days to 7 or more years.
- U.S. Treasury bill (T-bill): A short-term (3- or 6-month maturity) debt instrument issued at a discount by the U.S. Treasury in the ongoing process of funding the national debt. Treasury bills are issued for terms of 4, 8, 13, 26, and 52 weeks. Current rate: 0.050% for T-bill with 4-week term.
- Series EE bond: Low-risk savings products that pay interest until they reach 30 years or you cash them, whichever comes first. Current rate: 0.10% for bonds issued May 2021 – October 2021.
- I Savings bond: Security that earns interest based on both a fixed rate and a rate that is set twice a year based on inflation. For the first six months you own it, the Series I bond we sell from May 2021 through October 2021 earns interest at an annual rate of 3.54 percent. A new rate will be set every six months based on this bond's fixed rate (0.00%) and on inflation.

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### INTEREST RATE

• APR: Annual percentage rate (simple interest)

$$APR = r_m \times m$$

 $r_m = periodic interest rate$ 

m = no. of compounding periods per year

 APY: Annual percentage yield (compound interest); also called EAR (Effective annual rate)

$$APY (EAR) = (1+APR/m)^m - 1$$

m = no. of compounding periods per year

### **INFLATION & INTEREST RATE**

- Inflation: Rate at which prices as a whole are increasing.
- Nominal Interest Rate: Rate at which money invested grows.
- Real Interest Rate: Rate at which the purchasing power of an investment increases.

Real interest rate = 
$$\frac{1 + \text{Nominal interest rate}}{1 + \text{Inflation rate}} - 1$$

Approximation formula:

Real interest rate ≈ Nominal interest rate – inflation rate

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### **INFLATION**

#### **Example**

If the interest rate on one year govt. bonds is 4.6% and the inflation rate is 3.1%, what is the real interest rate?

Real interest rate = 
$$(1+.046)/(1+.031) - 1$$

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Approximation:

Real interest rate  $\approx$