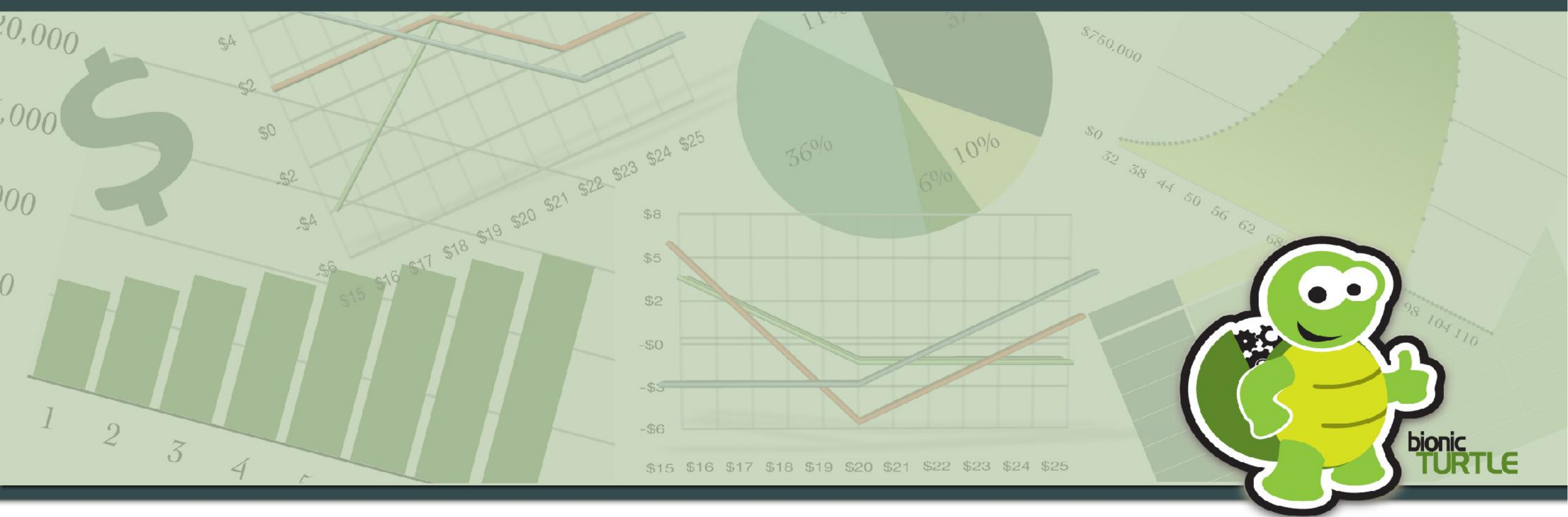


P2.T8. Liquidity and Treasury Risk Measurement and Management

Peter Rose, Sylvia Hudgins, Bank Management & Financial Services, Ninth Edition

Bionic Turtle FRM Study Notes

Rose, Chapter 12. Managing and Pricing Deposit Services

DIFFERENTIATE BETWEEN THE VARIOUS TRANSACTION AND NON-TRANSACTION DEPOSIT TYPES. .. 3
COMPARE DIFFERENT METHODS USED TO DETERMINE THE PRICING OF DEPOSITS AND CALCULATE THE PRICE OF A DEPOSIT USING COST-PLUS, MARGINAL COST, AND CONDITIONAL PRICING FORMULAS........ 7
EXPLAIN CHALLENGES FACED BY BANKS THAT OFFER DEPOSIT ACCOUNTS, INCLUDING DEPOSIT INSURANCE, DISCLOSURES, OVERDRAFT PROTECTION, AND BASIC (LIFELINE) BANKING. 12

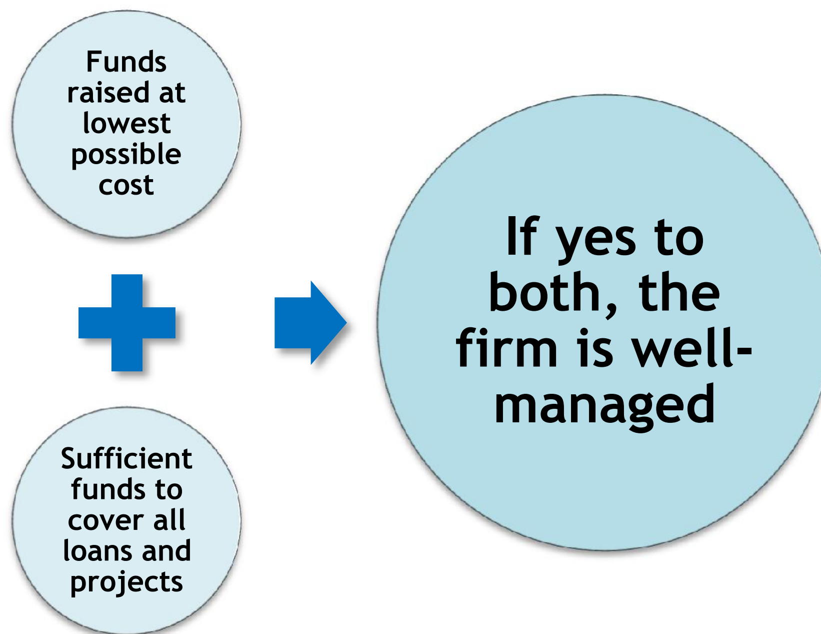
Rose, Chapter 13. Managing Nondeposit Liabilities

DISTINGUISH THE VARIOUS SOURCES OF NON-DEPOSIT LIABILITIES AT A BANK. 16
DESCRIBE AND CALCULATE THE AVAILABLE FUNDS GAP. 27
DISCUSS FACTORS AFFECTING THE CHOICE OF NON-DEPOSIT FUNDING SOURCES. 28
CALCULATE OVERALL COST OF FUNDS USING BOTH THE HISTORICAL AVERAGE COST APPROACH AND THE POOLED-FUNDS APPROACH. 33

Rose, Chapter 12. Managing and Pricing Deposit Services

- **Differentiate between the various transaction and non-transaction deposit types.**
- **Compare different methods used to determine the pricing of deposits and calculate the price of a deposit account using cost-plus, marginal cost, and conditional pricing formulas.**
- **Explain challenges faced by banks that offer deposit accounts, including deposit insurance, disclosures, overdraft protection, and basic (lifeline) banking.**

Differentiate between the various transaction and non-transaction deposit types.



In the world of evaluating management's effectiveness, two important questions must be answered:

1. Have all deposits been raised at the lowest possible cost?
2. Are there enough deposits to cover all loans and projects that the firm wishes to pursue?

These two broad, overarching questions lead to more detail questions, including:

1. Where can management find the lowest cost funds?
2. How can the financial firm's managers ensure that they always have enough funds to meet expected business and household demand?

Answering these two questions is no easy task. The competitive nature of the business has led firms to even create a *chief deposit officer* position. Part of the answer to the two questions stems from the types of deposits offered by depository institutions.

Transaction (Payments or Demand) Deposits

The most common type of deposit is a demand deposit (sometimes referred to as a payment deposit). A demand deposit includes regular noninterest-bearing demand deposits that carry no explicit interest payment. Examples of demand deposits include checking account funds, safekeeping of funds, and purchases made via check, card or via an electronic network. Demand deposits also include products that provide the just-mentioned services that may pay interest to the depositor as well.

Noninterest-Bearing Transaction (Demand) Deposits

Since the passage of the Glass-Steagall Act of 1933, paying interest on regular checking accounts has been prohibited. At the time, Congress feared that allowing banks to pay interest on checking accounts would endanger their safety. For the business customer, this changed with the passage of the 2009 Wall Street Reform and Consumer Protection Act. The bill allowed banks offering demand deposits to pay interest on accounts held by corporations or other businesses.

Interest-Bearing Transaction Deposits

The inability to pay interest on regular checking accounts led to innovative structuring of bank accounts. In the 1970s, beginning in New England, hybrid checking-savings accounts appeared in the form of a negotiable order of withdrawal accounts (commonly known as NOW accounts). NOW accounts allow the bank the ability to insist on prior notice before the customer withdrawals funds. In practice, customers almost never give notice, which led to customers using NOW accounts just like checking accounts. The practice behind NOW accounts was legalized nationwide in 1981 with the passage of the Depository Institutions Deregulation Act of 1980. Interestingly, the accounts could only be held by nonprofit institutions and individuals. When NOWs were legalized, Congress also authorized what is known as automatic transfers (ATS) between a savings account to a transaction account. Customers often use this ability to shift money between accounts today to avoid overdraft charges. In terms of interest payments, the net effect of NOW accounts was to essentially pay interest on transaction accounts by a savings account.

Congress authorized two other innovative ways for customers to enjoy interest-bearing transaction accounts, authorized by the passage of the Garn-St. Germain Depository Institutions Act of 1982. Banks and thrift institutions could offer customers accounts that had competitive rates with share accounts offered by money market funds. Money market funds generally carried higher interest rates because they were unregulated and backed by a pool of high-quality securities. The two new account types that appeared were money market deposit accounts (MMDAs) and Super NOWs (SNOWs). These two account types offered competitive money market rates while simultaneously offering customers the ability to write checks or preauthorized drafts against the balances.

MMDAs. Money market deposit accounts are short-maturity deposits with terms of a few days up to months. Depository institutions can pay any interest rate they so desired that may attract customers' deposits. Financial institutions may allow customers to make up to six preauthorized drafts per month, although only three may be made by writing checks. Customers may make an unlimited amount of personal withdrawals within the maximum amounts and frequencies allowed by the depository institution. MMDAs may also be offered to businesses as well as individuals.

SNOWs. Super NOWs can only be held by individuals and nonprofit entities. Because the number of checks a depositor may write is unlimited (not regulated), depository institutions may post lower yields on SNOWs compared to MMDAs. In recent years, regulatory authorities have classified MMDAs as savings deposits as opposed to transaction deposits. They are included here because of their limited check-writing privileges.

Mobile Apps and Their Impact on Transaction Deposits and Potential Customers

Perhaps the hottest item in the transaction deposit field today is the mobile check deposit. Mobile apps now allow customers to take pictures of their endorsed checks and "instantly" deposit the funds into their accounts. The development of mobile banking has some observers asking questions about the future of banking, including:

- Who will write checks in the future with mobile-phone digital banking services?
- How will the use of mobile apps affect operating branches and automated teller machines?
- Will the incentive to visit a depository institution eventually go away with phone delivery?
- What sort of new business opportunities will arise because of mobile-phone developments?
- How big will the mobile-phone user base for banking services become? Will it eventually encompass all banking customers?

Nontransaction (Savings or Thrift) Deposits

Savings or thrift deposits generally offer customers higher returns on their deposits. As with the development of numerous types of checking accounts, so it is with savings accounts.

Passbook savings accounts. This type of savings account originally offered depositors the ability to save with as little as $5 and the ability to withdraw money was unlimited. Although banks could have required customers to provide advanced notice prior to withdrawal, because of the low-interest rate offered on passbook savings accounts, depository institutions virtually never enforced this regulation. All entity types could hold such accounts, although, in the U.S., businesses were limited to the amount they could place in passbook savings accounts to $150,000.

Statement savings deposits. In addition to a passbook savings account, some depository institutions offer statement savings deposits. These accounts offer only electronic statements or printouts.

Time deposits. These types of deposits offer a variety of terms and conditions. The most popular time deposit is the certificate of deposit (CDs). Some CDs are issued in negotiable form, with the larger CDs – those with values of $100,000 or more – purchased mainly by corporations and wealthy individuals – and may be sold an unlimited number of times until maturity. Other CDs are non-negotiable. These non-negotiable CDs cannot be traded prior to maturity. They are generally of smaller denomination value. Recent developments include:

- Bump-up CDs, which allow the owner to switch to a higher earning CD if interest rates rise.
- Step-up CDs, which allow the owner an upward adjustment in their interest rates.
- Liquid CDs, which allow the depositor to withdraw some of the funds without penalty.
- Index CDs, which link their return to financial indices, such as the S&P 500 stock index.

Retirement Savings Deposits

In 1981, through the passage of the Economic Recovery Tax Act, Congress opened the door to another type of savings account – retirement savings accounts. Commonly known as IRAs today (individual retirement accounts), traditional IRAs allow eligible individuals to contribute to their IRAs tax-deferred until the funds are used in retirement.

The availability of IRAs was expanded in 1997 with the Tax Relief Act. The bill created the Roth IRA, which allows owners to place money into the accounts on a non-tax-deductible basis for the initial year, but earnings grow tax-free and owners pay no tax when funds are withdrawn once they reach the age at which distributions come with no fees.