CHAPTER 2
FINANCIAL INSTITUTIONS,
FINANCIAL INTERMEDIARIES,
AND ASSET MANAGEMENT FIRMS

FINANCIAL INSTITUTIONS

Financial institutions perform several important services:

1. Transforming financial assets acquired through the market and constituting them into a different, and more widely preferable, type of asset, which becomes their liability. This is the function performed by financial intermediaries.

2. Exchange financial assets for their customers, typically a function of brokers and dealers.

3. Exchange financial assets for their own account.

4. Create financial assets for their customers and sell them to other market participants—the underwriter this role.

5. Give investment advice to others and manage portfolios of customers.

6. Managing the portfolio of other market participants.

Financial intermediaries including **depository institutions**, which acquire the bulk of their funds by offering their liabilities to the public mostly in the form of deposits, insurance companies, pension funds, and finance companies.

ROLE OF FINANCIAL INTERMEDIARIES

Intermediaries obtain funds from customers and invest these funds. Such a role is called **direct investment**. Customers who give their funds to the intermediaries and who thereby hold claims on these institutions are making **indirect investments**. A **commercial bank** accepts deposits and uses the proceeds to lend funds. Financial intermediaries, such as **investment companies**, play a basic role of transforming financial assets which are less desirable for a large part of the public into other financial assets which are broadly preferred by the public. By doing so they provide at least one of the following four economic functions: (1) providing maturity intermediation, (2) reducing risk via diversification, (3) reducing costs of contracting and information process, (4) providing a payment mechanism.

Maturity Intermediation

The customer (depositor) often wants only a short-term claim, which the intermediary can turn into a claim on long-term assets. In other words, the intermediary is willing and able to handle the liquidity risk more readily than the customer. This is called **maturity intermediation**.

Risk Reduction Via Diversification

By pooling funds from many customers the financial intermediary can better achieve **diversification** of its portfolio than its customers.

Reduced Costs of Contracting and Information Processing

Financial institutions provide expert analysis, better data access, and loan enforcement. Costs of writing loan contracts are referred to as **contracting costs**. Also there are information processing costs. They also benefit from economies of scale.

Providing a Payments Mechanism

Financial depositories provide a **payment mechanism**, e.g. checking accounts, credit cards, certainty debt cards, and electronic transfers of funds.

OVERVIEW OF ASSET/LIABILITY MANAGEMENT FOR FINANCIAL INSTITUTIONS

All intermediaries face **asset/liability management** problems. The nature of the liabilities dictates the investment strategy a financial institution will pursue.

Nature of Liabilities

The **liabilities** of a financial institution mean the amount and time of the cash outlays that must be made to satisfy the contractual terms of the obligations issued. These liabilities can be categorized into four types.

Type I Liabilities: Both amounts of cash outflows and timing are known, e.g., fixed-rate certificates of deposit and **guaranteed investment contracts**. The former are among liabilities of financial depositories. Life insurance companies offer the latter.

Type II Liabilities: Cash outflows are known, but timing is not, e.g. life insurance policies.

Type III Liabilities: Cash outflows are not known, but timing is known, e.g. floating-rate **certificates of deposit**.

Type IV Liabilities: Neither cash outflows nor timing are known, e.g., auto or home insurance policies.

Liquidity Concerns

Due to different degrees of certainty about timing and outlay, some institutions must have deposits more cash on hand or accessible in order to satisfy their obligations, e.g. the offering of demand means customers can obtain whatever amount of their funds whenever they wishplays . The greater the concern over liquidity, the fewer less-liquid investments an intermediary can hold.

CONCERNS OF REGULATORS

The risks of a financial institution are: credit, settlement, market, liquidity, operational, and legal.

Credit risk is the risk that the obligor of a financial instrument held by a financial institution will fail to fulfill its obligation. **Settlement risk** is the risk that when there is a settlement of a trade or obligation, the transfer fails to take place. **Counterparty risk** is the risk that a counterparty fails to satisfy its obligation.

Liquidity risk in the context of settlement risk means that the counterparty can eventually meet its obligations, but not at the due date. Liquidity risk has two forms. **Market liquidity risk** is the risk that a financial institution is unable to transact in a financial instrument at a price near its market value. **Funding liquidity risk** is the risk that the financial institution will be unable to obtain funding to obtain cash flow necessary to satisfy its obligations.

Market risk is the risk of a financial institution's economic well being that results from an adverse movement in the market price of the asset it owns or the level or the volatility of market prices. There are measures that can be used to gauge this risk. One such measure endorsed by bank regulators is **value-at-risk**.

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events. The definition of operational risk includes **legal risk**. This is the risk of loss resulting from failure to comply with laws as well as prudent ethical standards and contractual obligations. Sources of operation risk include: employees, business process, relationships, technology, and external factors.

ASSET MANAGEMENT FIRMS

Asset management firms manage the funds of individuals, businesses, endowments and foundations, and state and local governments. Types of funds managed by asset management firms include regulated investment companies, insurance company funds, pension funds, and hedge funds. Asset management firms are ranked based on **assets under management**. These firms receive compensation primarily from management fees charged based on the market value of the assets managed for clients. Also, they are increasingly adopting **performance-based management fees** for other types of accounts.

Hedge Funds

There is not a single definition of hedge fund. There are several characteristics.

1. The word "hedge" is misleading. Many funds do not hedge risk at all, but engage in highly risk, leveraged transactions.

2. Hedge funds use a wide range of trading strategies and techniques to earn a superior return. These strategies include: leverage, short selling, arbitrage, and risk control.

3. Hedge funds operate in all of the financial markets: cash markets for stocks, bonds, and currencies and the derivatives markets.

4. The management fee structure for hedge funds is a combination of a fixed fee based on the market value of assets managed plus a share of the positive return.

5. Investors are interested in the absolute return generated by the asset manager, not the relative return. Absolute return is simply the return realized. Relative return is the difference between the absolute return and the return on some benchmark or index.

Types of hedge funds: There are various ways to categorize the different types of hedge funds.

1. A **market directional hedge fund** is one in which the asset manager retains some exposure to systemic risk.

2. A **corporate restructuring hedge fund** is one in which the asset manager positions the portfolio to capitalize on the anticipated impact of a significant corporate event. These funds include: (1) hedge funds that invest in the securities of a corporation that is either in bankruptcy or is highly likely in the opinion of the asset manager to be forced into bankruptcy; (2) hedge funds that focus on merger arbitrage, (3) hedge funds that seek to capitalize on other types of broader sets of events impacting a corporation.

3. A **convergence trading hedge fund** uses a strategy to take advantage of misalignment of prices or yields, an **arbitrage strategy**. Technically, arbitrage means riskless profit. Some strategies used by hedge funds do not really involve no risk, but instead low risk strategies of price misalignments.

4. An **opportunistic hedge fund** is one that has a broad mandate to invest in any area that it sees opportunities for abnormal returns. These include fund of funds, and global macro hedge funds that invest opportunistically on macroeconomic considerations in any world market.

Concerns with hedge funds in financial markets: There is concern that the risk of a severe financial crisis due to the activities and investment strategies of hedge funds, most notably the use of excess leverage. The best known example is the collapse of Long-Term Capital Management in September 1998. Most recently, in June 2007, there was the collapse of two hedge funds sponsored by Bear Stearns. Obviously, subsequent market develops in 2008 relate to the concern with hedge fund activities in financial markets.

ANSWERS TO QUESTIONS FOR CHAPTER 2

(**Questions** are in bold print followed by answers.)

1. Why is the holding of a claim on a financial intermediary by an investor considered an indirect investment in another entity?

An individual's account at a financial intermediary is a direct claim on that intermediary. In turn, the intermediary pools individual accounts and lends to a firm. As a result, the intermediary has a direct contractual claim on that firm for the expected cash flows. Since the individual's funds have in essence been passed through the intermediary to the firm, the individual has an indirect claim on the firm. Two separate contracts exist. Should the individual lend to the firm without the help of an intermediary, he then has a direct claim.

2. The Insightful Management Company sells financial advice to investors. This is the only service provided by the company. Is this company a financial intermediary? Explain your answer.

Strictly speaking, the Insightful Management Company is not a financial intermediary, because it lacks the function of deposit taking and creating liabilities.

3. Explain how a financial intermediary reduces the cost of contracting and information processing.

Financial intermediaries can reduce the cost of contracting by its professional staff because investing funds is their normal business. The use of such expertise and economies of scale in contracting about financial assets benefits both the intermediary as well as the borrower of funds. Risk can be reduced through diversification and taking advantage of fund expertise.

4. "All financial intermediaries provide the same economic functions. Therefore, the same investment strategy should be used in the management of all financial intermediaries." Indicate whether or not you agree or disagree with this statement.

Disagree. Although each financial intermediary more or less provides the same economic functions, each has a different asset-liability management problem. Therefore, same investment strategy will not work.

5. A bank issues an obligation to depositors in which it agrees to pay 8% guaranteed for one year. With the funds it obtains, the bank can invest in a wide range of financial assets. What is the risk if the bank uses the funds to invest in common stock?

Practically, it is not a valid statement as banks are not allowed to hold stocks. The bank has a funding risk. On the liability side, amount of cash outlay and timing are known with certainty (Type I). However, on the asset side, both factors are unknown. Thus, there is liquidity risk and price risk.

6. Look at Table 2-1 again. Match the types of liabilities to these four assets that an individual might have:

- **a. car insurance policy**
- **b. variable-rate certificate of deposit**
- **c. fixed-rate certificate of deposit**
- **d. a life insurance policy that allows the holder's beneficiary to receive $100,000 when the holder dies; however, if the death is accidental, the beneficiary will receive $150,000**

a. Car insurance: neither the time nor the amount of payoffs are certain, which is Type IV liability

b. Variable rate certificates of deposit: times of payments are certain, the amounts are not, which is Type II liability.

c. Fixed-rate certificate of deposit: both times of payments and cash outflows are known, which is Type I liability.

d. Life insurance policy: time of payout is not known, but the amount is certain, which is Type III liability.

7. Each year, millions of American investors pour billions of dollars into investment companies, which use those dollars to buy the common stock of other companies. What do the investment companies offer investors who prefer to invest in the investment companies rather than buying the common stock of these other companies directly?

In investing funds with the investment companies, investors are reducing their risk via diversification and the cost of contracting and information. These companies also provide liquidity to the investor.

8. In March 1996, the Committee on Payment and Settlement Systems of the Bank for International Settlements published a report entitled "Settlement Risk in Foreign Exchange Transactions" that offers a practical approach that banks can employ when dealing with settlement risk. What is meant by settlement risk?

Counterparty risk is that risk that a counterparty to a transaction cannot fulfill its obligation. It is related to settlement risk in that counterparty party risk bears on the question of whether settlement can take place or not.

9. The following appeared in the Federal Reserve Bank of San Francisco's *Economic Letter*, January 25, 2002:

> **Financial institutions are in the business of risk management and reallocation, and they have developed sophisticated risk management systems to carry out these tasks. The basic components of a risk management system are identifying and defining the risks the firm is exposed to, assessing their magnitude, mitigating them using a variety of procedures, and setting aside capital for potential losses. Over the past twenty years or so, financial institutions have been using economic modeling in earnest to assist them in**

> **these tasks. For example, the development of empirical models of financial volatility led to increased modeling of market risk, which is the risk arising from the fluctuations of financial asset prices. In the area of credit risk, models have recently been developed for large-scale credit risk management purposes.**
>
> **Yet, not all of the risks faced by financial institutions can be so easily categorized and modeled. For example, the risks of electrical failures or employee fraud do not lend themselves as readily to modeling.**

What type of risk is the above quotation referring to?

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events.

10. What is the source of income for an asset management firm?

The sources of income are a fee based on assets under management, and sometimes a performance fee based on returns that meet certain benchmarks or targets.

11. What is meant by a performance-based management fee and what is the basis for determining performance in such an arrangement?

Performance based management fees are typically seen in hedge funds. Increasingly, they are also used by managers of asset management firms. These fees are fees based on performance that meet specified criteria.

12. a. Why is the term *hedge* to describe "hedge funds" misleading?
b. Where is the term *hedge fund* described in the U.S. securities laws?

a. Hedge denotes hedging risk. Many hedge funds, however, do not use hedge as a strategy, and these funds take significant risk in their attempt to achieve abnormal returns.

b. The term is not described in US securities laws, and hedge funds are not regulated by the SEC.

13. How does the management structure of an asset manager of a hedge fund differ from that of an asset manager of a mutual fund?

Asset management firms are compensated by a fee on asset under management. Hedge funds are compensated by a combination of assets under management and a performance fees. Clearly, investment strategies of these firms will be different since hedge funds seek to generate abnormal returns.

14. Some hedge funds will refer to their strategies as "arbitrage strategies." Why would this be misleading?

Arbitrage means riskless profit. These opportunities are few and fleeting. Hedge funds take great risk. The arbitrage typically taken is where there is a disparity between the risk and the return, such as pricing disparities across markets.

15. What is meant by a convergence traded hedge fund?

A convergence trading hedge fund uses a strategy to take advantage of misalignment of prices or yields.

16. What was the major recommendation regarding hedge funds of the President's Working Group on Financial Markets?

The major recommendation was that commercial banks and investment banks that lend to hedge funds improve their credit risk management practices.