

## Chapter 1: Basic Concepts

### Notes and Outlines

*Contemporary Financial Intermediation, Third Edition*, utilizes many concepts of financial economics. It is therefore imperative to discuss those concepts. This chapter reviews the following key concepts:

1. Risk preferences
2. Diversification
3. Riskless arbitrage
4. Options
5. Market efficiency
6. Market completeness
7. Asymmetric information and signaling
8. Agency and moral hazard
9. Time consistency issue
10. Nash Equilibrium
11. Revision of beliefs and the use of Bayesian rule
12. Liquidity
13. Systemic risk
14. Disagreement
15. Mark-to-market accounting

The first six sections are standard materials in an introductory finance course, so the instructor can briefly review or even skip them completely. It is very helpful, however, to devote more time to the last five sections which deal with the game theoretic concepts. The students should be made comfortable enough with this part since they will be required to apply those concepts in the subsequent chapters. Our recommendation, however, is that these concepts be developed in class as and when they are needed, rather than all at the outset.

To assist the students in understanding of the game theoretic concepts at this stage, the examples in the text should be worked out thoroughly. In addition, the instructor may wish to provide some other examples (taken from the subsequent chapters) without going into detail with the calculation. It is sufficient to discuss intuitively how the game theoretic concepts are used in the ensuing analyses.

## Chapter 2: The Nature and Variety of Financial Intermediation

### Notes and Outlines

This chapter introduces the nature of services performed by financial intermediaries and the variety of financial intermediaries that presently exist. It is divided into the following sections:

1. What are financial intermediaries?
2. The variety of financial intermediaries, depository and nondepository
3. Depository financial intermediaries
4. Investment banks: key nondepository intermediaries in the capital market
5. Separation between investment banks and commercial banks undone
6. Other nondepository intermediaries
7. Credit rating agencies
8. The role of government
9. Financial intermediaries on the periphery
10. Appendices

In Section 1, the two important functions that financial intermediaries serve in an economy are discussed. Specifically, financial intermediaries perform the brokerage and the qualitative asset transformation functions. Central to the brokerage function is the role of information reusability. With the qualitative asset transformation function, financial intermediaries accept some risk exposures. The importance of these functions should be emphasized since many recent developments in the banking field that will be discussed in the subsequent chapters can be traced back to these two functions.

Section 2 discusses the different types of financial intermediaries in reference to these two important functions. Section 3 focuses on depository intermediaries. In particular, the depository financial intermediaries include commercial banks, thrifts, and credit unions. The nature of ownership of these institutions is also briefly discussed. A more elaborate discussion of this is taken up in Chapter 3. Section 4 discusses investment banks as the first of the non-depository intermediaries. Section 5 discusses the dismantling of the Glass-Steagall Act with the passage of the Gramm-Leach-Bliley Act of 1999 and the elimination of the wall of separation between commercial and investment banking. Other nondepository financial intermediaries are discussed in Section 6. These include venture capitalists, finance companies, insurance companies, pensions, mutual funds, hedge funds, and investment banks. The unique features that distinguish these institutions from the depository intermediaries are discussed. It is important to stress the different functions that these institutions perform. In so doing, the students can appreciate why certain institutions emerged and what is special about them. Section 7 discusses credit rating agencies.

The sections above are the major part of the chapter. The role of the government, financial intermediaries on the periphery, and the appendices can be skipped without loss of continuity. However, if the instructor wishes to discuss the valuation of a banking firm, Appendix 2.1 is useful in alerting the students about balance sheet distortions. Also, if the

instructor wishes to discuss key banking regulations at this stage, Appendix 2.2 can either be used by itself or in conjunction with Chapters 10 and 11.

### Answers to Review Questions

1. Individual answers will vary, but students should focus on the brokerage and QAT functions. Basically, Appleton is claiming that banks provide only a brokerage function. This is wrong. They also provide QAT services, which is what Butterworth is alluding to. It is the provision of *both* brokerage and QAT services that makes banks special.
2. Brokerage means the bringing together of transactors in financial claims with complementary financial needs. Doing this does not expose the broker's own (financial) capital to risk. Asset transformation means the act of transforming the nature of financial claims between the transacting parties, something that exposes the asset transformer's financial capital to risk. The value of the brokerage function depends on the broker's special skills in interpreting subtle signals and on cross-sectional and intertemporal information reusability.
3. Commercial banks, finance companies, venture capitalists, hedge funds, investment banks.

*Commercial banks:* acquire funds in the form of (liquid) deposits and make (illiquid) loans to individuals and corporations (domestic and foreign). They do pre-lending screening and post-lending monitoring and through maturity, liquidity and credit risk transformation, they expose their capital to risk. Thus, they provide both brokerage and QAT services.

*Finance companies:* provide consumers and businesses with loans specially designed to meet specific needs and raise funding in the capital market  $\Rightarrow$  brokerage with some QAT.

*Venture capitalists:* specialize in providing "seed money" for start-up companies. They screen those they lend to, monitor them and provide guidance. Thus, they provide brokerage and QAT services.

*Hedge funds:* actively manage funds that invest in companies and pursue nontraditional investment strategies. They expose their capital to risk and serve a corporate governance role, thus providing brokerage and QAT services.

*Investment banks:* specialize in the design and issuance of financial securities and help companies seeking financing to use these securities to raise funds from investors. This aspect of investment banking is brokerage.

4. Students can be asked to collect information from the library (or COMPUSTAT®). It is worthwhile to point out the effect of regulation on the banking industry's capital-to-total asset ratios over time. The low capital-to-total asset ratios for banks are seen as

facilitating the role that banks play in the payment system. A deeper discussion appears in Chapter 13.

5. Judging from the capital ratios shown in Table 2.6, one can argue that banks' shareholders are exposed to more financial risk than that associated with a diversified market portfolio. This is because banks have much higher fractions of debt financing their balance sheets than do nonfinancial firms.