**CHAPTER 1**

**FOUNDATIONS**

**FOCUS**

Chapter 1 is designed to provide an overview of finance. The emphasis is on breadth, lightly touching a number of topics without going into a great deal of detail. The chapter provides a foundation on which to base the more advanced work of later chapters.

**TEACHING OBJECTIVES**

Students should gain an understanding of the following concepts:

1. the basic nature of financial assets (securities) and the organization and operation of financial markets;

2. the role and responsibility of financial management in corporations;

3. the relationships between finance and accounting and between finance and economics, along with the importance of cash flow in finance;

4. the *financial* implications of the proprietorship and corporate forms of business organization including the true role of limited liability;

5. the need for a top level managerial goal and why maximizing shareholder wealth works;

6. stakeholder groups and conflicts of interest especially between management and stockholders.

**OUTLINE**

I. AN OVERVIEW OF FINANCE

A. Financial Assets

Distinguish financial assets from real assets and establish the basis of their value in future cash

flows.

B. Financial Markets

Define financial markets as networks within which financial assets are traded. Describe the

purpose of markets as transferring funds from investors to companies.

C. Raising Money

Corporations raise money in financial markets to *finance* projects.

D. Financial Management

The role of financial management within companies including Treasury and Control functions and the responsibilities associated with each.

E. The Price of Securities - A Link Between the Firm and the Market

The market price of securities provides a link between the activities of management and the

players in financial markets.

II. FINANCE AND ACCOUNTING

The relationship between finance and accounting conceptually and in the typical organization.

A. The Importance of Cash Flow

Cash is king in finance. How that perception differs from the accounting viewpoint.

B. The Language of Finance

Financial people need to know at least a little accounting because it's the system in which businesses "keep score."

III. FINANCIAL THEORY - THE RELATIONSHIP WITH ECONOMICS

A. Financial theory distinguished from everyday practice.

B. The roots of financial theory in economics.

IV. FORMS OF BUSINESS ORGANIZATION AND THEIR FINANCIAL IMPACT

The forms of business organization from the perspective of an entrepreneur starting and then expanding a business.

A. The Proprietorship Form

Easy to start, taxed just once. However, raising money for expansion is tough because no one wants to lend to new small businesses.

B. The Corporate Form

Double taxation, but now the business can sell stock, which can give investors an incentive to put money into a new small business.

C. The Truth About Limited Liability

Limited liability works for an absentee equity investor, but rarely does small business owners

much good because of personal guarantees and liability for negligence.

D. Limited Liability Companies (LLCs) and S-Type Corporations and

The best of both worlds for small businesses, from the people who gave you the tax system.

V. THE GOALS OF MANAGEMENT

Maximizing shareholder wealth. Distinguished from maximizing profits.

A. Stakeholders and Conflicts of Interest

Corporate constituencies and how their interests can be different.

B. Conflicts of Interest - An Illustration

Employees vs. Stockholders - A gym on the factory site. Management referees.

VI. MANAGEMENT, A PRIVILEGED STAKEHOLDER GROUP,

A. The Agency Problem

The special status of management and the opportunity to take advantage of it.

VII. CREDITORS VS STOCKHOLDERS - A FINANCIALLY IMPORTANT CONFLICT OF INTEREST

The losses from risky ventures may be shared by debt and equity investors, but the rewards accrue to the stockholders.

VIII. CONCEPT CONNEDTIONS

A text feature provided throughout the book that relates end of chapter problems to in chapter examples making studying easier and more efficient.

IX. SECURITIES ANALYSIS AND THOMSON ONE – BUSINESS SCHOOL EDITION

An introduction to the Thomson financial data base provided with the book for use to analyzing companies.

**QUESTIONS**

1. Separate the following list of assets into real assets and financial assets. What are the distinguishing characteristics of each type of asset?

Delivery Truck

Factory Building

Corporate Bond

Inventory

Corporate Stock

Land

Note Receivable

Computer

**ANSWER:** Real Assets: Delivery Truck, Factory Building, Inventory, Land, Computer

Financial Assets: Corporate Bond, Corporate Stock, Note Receivable

Real assets are objects that provide some use or service. Financial assets are pieces of paper or electronic files that provide a claim to future cash flows.

2. What is the primary factor that determines the price of securities? Can you think of another factor that might significantly affect how investors value the first factor?

**ANSWER:** Financial assets, or securities, derive their value from the expected cash flows that come from owning them. Hence the primary determinant of price is what investors expect those cash flows to be. The second factor is risk. Some securities are volatile, and people understand that the cash flows coming from them may turn out to be a great deal more or less than originally expected. These risky securities have less value than more stable issues with the same expected cash flows.

3. Discuss the differences, similarities, and ties between finance and accounting.

**ANSWER:**  Finance and accounting both deal with the firm's money. All records are stated in terms of the accounting system, so financial people have to be conversant with accounting. In finance, the emphasis is on cash flow, while accounting is more concerned with giving an overall portrayal of the firm's condition. Accounting is generally part of the finance department, but people commonly think of treasury functions as "finance" and separate from accounting.

4. Discuss the relationship between finance and economics.

**ANSWER:** Financial theory grew out of the application of economic methods to financial markets and the problems of businesses. Financial theory is therefore sometimes called Financial Economics. The techniques of analysis used by theorists in finance are essentially the same as those used in economics and tend to be very mathematical.

5. How does the activity of investors in financial markets affect the decisions of executives within the firm?

**ANSWER:**  The primary goal of management is to maximize shareholder wealth, which is taken to be equivalent to maximizing the price of the firm's stock. Senior corporate executives are therefore graded (and compensated) largely on the price performance of their companies' stock. That means they evaluate the impact of most decisions on investors in terms of how the decision will affect the price of

securities. For example, an action that's likely to make the company more risky will be considered very carefully because it might cause investors to lose interest in the stock, which would lower its price.

6. What are the significant financial advantages and disadvantages of the sole proprietorship/ partnership form in comparison with the corporate form?

**ANSWER:**  The proprietorship form is easy to start and is taxed only once. However, it is difficult for a proprietorship to raise money since it must do so by borrowing. The corporate form is harder to start, and suffers from double taxation. However, it allows the sale of stock to raise money, which is much more attractive than debt to potential investors in new small businesses.

7. Is limited liability a meaningful concept? Why or why not? And if so, for whom?

**ANSWER:** Limited liability is most meaningful to investors who own stock in firms they don't operate. To people who operate their own businesses the rule is of minimal value. With respect to loans, this is because banks demand personal guarantees from the owners of small firms to which they lend money. With respect to lawsuits it is because individuals within companies can be sued for damages they cause along with the companies.

8. What conflict(s) of interest can you imagine arising between members of the community in which a company operates and some other stakeholders? (*Hint*: Think about pollution.)

**ANSWER:** It's generally cheaper to pollute than not to pollute; i.e., cleaning up industrial waste is expensive. That means profits are lower and shareholders are poorer if a company doesn't pollute. The people who live in the community, however, are better off if it doesn't foul the local environment. This creates a conflict between the community and shareholders.

9. Is the agency problem an ethical issue or an economic issue?

**ANSWER:**  It's both. It's an ethical issue because management may appropriate resources for their own benefit that rightly belong to stockholders. It's an economic issue because the resources so diverted make companies less efficient.

10. Compare and contrast the terms “stockholder” and “stakeholder.”

**ANSWER:** A stockholder owns part of a company and is entitled to income in the form of dividends. Stockholders also elect directors who run the company. Stakeholders are groups of people who have an interest in how the firm is run. These include stockholders, employees, management, creditors and customers among others. Each group is interested in the firm’s operation and profitability for its own reasons. All stockholders are stakeholders, but all stakeholders aren’t stockholders.

**BUSINESS ANALYSIS**

1. Diversified companies are made up of divisions, each of which is a separate business. Large companies have divisions spread over the entire country. In such companies ***most*** treasury functions are centralized, whereas ***most*** accounting functions are carried out in the individual divisions.

The cash management function controls the collection of revenues and the disbursement of funds from various bank accounts. It makes sure that the company never runs out of cash by monitoring outflows and having lines of bank credit ready in case temporary shortages occur. Today's banking system is linked electronically so that cash can be transferred around the country immediately.

The credit and collection function decides whether a particular customer can buy the firm’s products on credit. After the sale, it is responsible for following up to ensure that the bill is paid. Customers are often reluctant to pay because of problems and misunderstandings with sales or service departments.

If you were designing the finance department of a diversified company, would you centralize these functions or locate them in the remote divisions? Why? Address each function separately.

**ANSWER:** The cash management function should be centralized so that efficient use can be made of the firm's total available cash. Divisions can collect from customers and pay their bills using centralized accounts without worrying about the details of banking relationships and how much cash is available at any time. In other words, nothing is gained by having divisional financial executives replicate the effort

of administering the banking relationship.

Credit and collection is a completely different matter. It requires input from customers and coordination with other departments in the company—like marketing, production, and engineering. Those functions are located at the division level as is the customer contact. Therefore, it makes sense to have a credit and collection department in every division.

2. The company president is reviewing the performance and budget of the marketing department with the vice president of marketing. Should that be a one-on-one meeting or should the CFO be present? Why? If you feel the CFO should be there, what should be his or her role in the meeting?

**ANSWER:**  The CFO should be present and act in an advisory role to the president. The budget is a financial representation of the physical activity planned for the next period. The translation between activities and dollars often takes some financial expertise that the CFO should provide. He or she

should also be sure the budget reflects a plan that is likely to achieve the firm's goals which tend to be stated largely in financial terms. Many presidents look to their CFOs to ask most of the questions in budget reviews. When this happens the CFO has to be cautious not to offend the Vice President of Marketing who is generally a peer.

**PROBLEMS**

**Accounting Records and Cash Flow – Example 1.1, Page 8**

1. Sussman Industries purchased a drilling machine for $50,000 and paid cash. Sussman expects to use the machine for 10 years after which it will have no value. It will be depreciated straight-line over the ten years. Assume a marginal tax rate of 40% What are the cash flows associated with the machine

a. At the time of the purchase?

b. In each of the following ten years?

**SOLUTION:**

a. At the time of the purchase, Sussman simply has a cash outflow of $50,000 reflecting the payment for the machine. There are no tax implications for this exchange of cash for another asset.

b. In each of the next 10 years, Sussman will recognize ($50,000 /10 years =) $5,000 of depreciation expense. As a result, taxable income will be $5,000 lower each year, and the firm will pay ($5,000x.40=) $2,000 less tax which is in effect a cash inflow of that amount. (Notice that the total after tax cash cost of the machine over its ten year life is $30,000 rather than $50,000.)

**Tax Consequences of Business Form - Example 1.2, Page 12**

2. Harvey Redmond is planning a new business that he expects will grow into a large company within a few years. Harvey’s lawyer has advised him that large companies are usually C-type corporations because of stock market considerations, so he’s considering that form now to avoid reorganizing later on. However, he’s also concerned about the after tax income he’ll be able to take out of the business during the first few years.

Harvey thinks his business will have pretax earnings (after paying his salary) of about $150,000 per year for the first three years. Does it make sense for him to operate as a proprietorship for three years and then reorganize into a C-type at an estimated cost of $80,000 or to choose the C-type now at essentially no additional cost? Assume a simplified tax system in which the corporate rate is 34% and Harvey’s personal tax rate is 28% on all income including dividends.

Ignore the fact that the cash flows occur at different times and the possibility of using an S-type corporation or an LLC for the first three years.

**SOLUTION:**

**C-type Proprietor**

Pretax earnings $150,000 $150,000

Less:

Corporate tax (34%) 51,000 —\_\_\_

Earnings/dividend $ 99,000 $150,000

Less:

Personal tax (28%) 27,720 42,000

Net $ 71,280 $108,000

The tax savings due to using the proprietor form is estimated at $36,720 per year for three years totaling $110,160. That’s considerably more than $80,000, so starting off as a proprietorship makes good financial sense.

3. Jill Meier is the sole owner of Meier Corp., which provides her only source of income. Jill has always paid herself entirely by drawing dividends from her corporation. A friend suggested that as long as she is earning about what she would have to pay someone else to run the business, she might be better off paying herself a salary instead of dividends, because she would avoid the problem of double taxation. If Jill’s company earns $120,000 all of which she will pay to herself, how much will she take home under each method. Assume a corporate tax rate of 30%, and a personal tax rate of 25% on both salary and dividend income.

**SOLUTION:**

Dividends Salary

Income before payment to Jill $120.0 $120.0

Salary 120.0

Earnings before tax $120.0 $ 0.0

Corporate tax (30%) 36.0 $ 0.0

Earnings after corporate tax (paid as dividend) $ 84.0 $ 0.0

Tax on personal income (25%) $ 21.0 $30.0

Payment (salary or dividend) minus taxes $ 63.0 $90.0