Chapter 2: Business (Corporate) Finance

Multiple Choice Questions

1. Section: 2.1 Types of Business Organizations
Learning Objective 2.1
Level of difficulty: Intermediate
Solution: D
Most partnerships are formed in the professional services areas such as in accounting, investment banking, and medical professions. Factories (including a foundry) are the least likely to be operated as a partnership.

2. Section: 2.1 Types of Business Organizations
Learning Objective 2.1
Level of difficulty: Intermediate
Solution: B
The limited and general partnerships are generally formed for tax reasons. However, as long as a trust pays out all its income to its income holders, and owns the debt and equity, the use of debt can be maximized to reduce or eliminate corporate income tax.

3. Section: 2.1 Types of Business Organizations
Learning Objective 2.1
Level of difficulty: Intermediate
Solution: D
In a sole proprietorship, income is taxed at the personal tax rate.

4. Section: 2.1 Types of Business Organizations
Learning Objective 2.1
Level of difficulty: Intermediate
Solution: A
A trust has more tax advantages than a corporation because income passes through trusts without any corporate tax to the unit owners. Unit holders pay tax on the income received. It avoids the double taxation of a corporation.

5. Section: 2.1 Types of Business Organizations
Learning Objective 2.1
Level of difficulty: Intermediate
Solution: A. The corporate form is the most popular form of business. While its ownership and control are separated, it does have double taxation in that both the income of the business and income passed to shareholders are taxed.

6. Section: 2.2 The Goals of the Corporation
Learning Objective 2.2
Level of difficulty: Intermediate
Solution: C
The goal of a corporation is to maximize shareholders' wealth.

7. Section: 2.3 The Role of Management and Agency Issues
Learning Objective 2.4
Level of difficulty: Intermediate
Solution: D
Market prices are the main concern of shareholders.

8 Section: 2.3 The Role of Management and Agency Issues
Learning Objective 2.4
Level of difficulty: Intermediate
Solution: B

9. Section: 2.3 The Role of Management and Agency Issues
Learning Objective 2.4
Level of difficulty: Intermediate
Solution: A.

10. Section: 2.4 Corporate Finance
Learning Objective 2.5
Level of difficulty: Intermediate
Solution: A
All except choice A are concerns of capital budgeting.

11. Section: 2.5 Finance Careers and the Organization of the Finance Function
Learning Objective 2.6
Level of difficulty: Basic
Solution: B
Generally speaking the treasurer does finance-related activities while the controller and accountant do the accounting-related activities.

12. Section: 2.5 Finance Careers and the Organization of the Finance Function
Learning Objective 2.6
Level of difficulty: Intermediate
Solution: B
The treasurer would usually have the responsibility of credit management.

Practice Problems
Basic
13. Section: 2.1 Types of Business Organizations
Learning Objective 2.1
Level of difficulty: Basic
Solution:
The four major forms of business organization are:
i) Sole proprietorship – a business owned and operated by one person
ii) Partnership – a business owned and operated by two or more people
iii) Trust – a legal organization where assets are owned, and managed, or controlled, by different parties

iv) Corporation – a business organized as a separate legal entity under corporation law, with ownership divided into transferable shares

Intermediate
14. Section: 2.1 Types of Business Organizations
Learning Objective 2.1
Level of difficulty: Intermediate
Solution: The differences are as follows:
First, a sole proprietorship is owned and operated by one person, but a partnership is owned and operated by two or more people.
Second, a sole proprietorship is easier to set up than a partnership.
The similarities are as follows:
First, in both forms, the owner is not separate from the business and therefore has unlimited liability.
Second, income from the business is taxed at the personal tax rate.

15. Section: 2.1 Types of Business Organizations
Learning Objective 2.1
Level of difficulty: Intermediate
Solution: First, a corporation is a distinct legal identity, which means its life can continue on indefinitely. Second, there is a very clear separation between ownership and control of the corporation. Third, corporate owners have limited liability whereas sole proprietors have unlimited liability.

16. Section: 2.1 Types of Business Organizations
Learning Objective 2.1
Level of difficulty: Intermediate
Solution: Every director and officer of a corporation in exercising their powers and discharging their duties shall:
(a) Act honestly and in good faith with a view to the best interests of the corporation; and
(b) Exercise the care, diligence, and skill that a reasonably prudent person would exercise in comparable circumstances.

17. Section: 2.1 Types of Business Organizations
Learning Objective 2.1
Level of difficulty: Intermediate
Solution:
The fall in the unit price was mirrored by an increase in the yield. The new yield was (\$1.03/\$12.26) = 8.4% per year.

18. Section: 2.1 Types of Business Organizations
Learning Objective 2.1
Level of difficulty: Intermediate
Solution:

When operating as a sole proprietorship, all of the assets of the company belong to the owner; the company's debts are also the owner's debts. Janice will have to pay her friends and family (the debtholders) the full $100,000 they are owed. This will leave her with $8,000.

A corporation exists independently from its owners. The $108,000 obtained from selling the assets will first be used to pay the debtholders what they are owed. Any remaining funds will be paid to Janice. Because the value of the assets is greater than the money owed to the debtholders, the payments are the same as they were with the sole proprietorship.

19. Section: 2.1 Types of Business Organizations
Learning Objective 2.1
Level of difficulty: Intermediate
Solution:
The debtholders will receive the entire $93,000 obtained from selling the assets. The remaining $7,000 that they were owed will not be paid because the company has no more funds. Furthermore, the limited liability of shareholders in a corporation means that the debtholders have no legal right to expect Janice to pay them the rest of the money. Nonetheless, Janice receives nothing from the asset sale.

If the business were a sole proprietorship, the debtholders would receive the $93,000 from the sale of assets. However, they would also have the right to force Janice to pay them the extra $7,000 they were owed. Janice would not only receive no money from the sale of the assets, she would have to pay the extra $7,000!

20. Section: 2.3 The Role of Management and Agency Issues
Learning Objective 2.4
Level of difficulty: Intermediate
Solution: They differ in these four areas.
1) Performance appraisal: Managers use accounting numbers like the return on investment or cash while shareholders use market prices.
2) Investment analysis: Managers use the IRR of the best division while shareholders use the external WACC.
3) The order of financing: Managers prefer retentions to debt and prefer debt to new equity while shareholders prefer debt first.
4) Risk concern: Managers are concerned with the preservation of the firm while shareholders are concerned about their portfolios.

21. Section: 2.3 The Role of Management and Agency Issues
Learning Objective 2.4
Level of difficulty: Intermediate
Solution:
Dan is likely to prefer Project A because it will result in a $5,000 annual bonus for him, whereas Project B would provide only a $4,000 annual bonus. On the other hand, you (the owner) would be better off choosing Project B as it creates more value.

22. Section: 2.3 The Role of Management and Agency Issues
Learning Objective 2.4
Level of Difficulty: Intermediate

Solution:
The idea behind a stock option plan is simply to have the best interests of CEOs and senior managers coincide with those of shareholders. But the actual impact is doubtful. In reality, when a company's stock falls and makes existing options worthless, new ones are granted to continue to provide incentive for managers.

Additionally, some companies were investigated by regulatory institutions on the "back-dating" stock option issue. The fraud was that senior managers would get the compensation committee to award them stock options and then date them to an earlier period when the company's stock price was low. Effectively, this meant that on the approval date, the stock was already worth a large amount of money, so there was little incentive value to the grant.

23. Section: 2.4 Corporate Finance
Learning Objective 2.5
Level of Difficulty: Intermediate
Solution:
Capital budgeting considers some basic questions:
1. How does a firm decide to expand its existing buildings or to construct or buy another building?
2. How does a firm decide to replace machinery and equipment? Just because it still works, does this mean that the firm should still use it?
3. How does a firm decide whether to buy or lease machinery and equipment?
4. How much stock or inventory should a firm carry? Should it keep stocks to meet every contingency or perhaps use just-in-time methods to reduce the investment?

24. Section: 2.4 Corporate Finance
Learning Objective 2.5
Level of Difficulty: Intermediate
Solution:
Financial management includes the following areas.
1. How do firms decide to extend credit to customers to purchase their product?
2. How do firms manage their cash? This is a non-interest-bearing asset, so it seems that it should be minimized, but corporations have considerable amounts of money on deposit at banks.
3. How do firms manage any temporary surplus cash?
4. Finally, why do firms take minority stakes in other firms, or more generally, how do they decide to buy 100 percent or less of another firm? This question leads us into corporate acquisitions and valuation.

25. Section: 2.4 Corporate Finance
Learning Objective 2.5
Level of Difficulty: Intermediate
Solution:
Corporate financing considers the following basic questions.
1. How does a firm decide between raising money through debt or equity?
2. In terms of equity how does it raise the equity: through retaining earnings or through issuing new equity?
3. How does a firm decide to go public and issue shares to the general public versus remaining a

non-traded private company?
4. If it decides to issue debt, what determines whether this is bank debt or bonds issued to the public debt market?
5. What determines whether firms access the short-term money market versus borrowing from a bank?

26. Section: 2.5 Finance Careers and the Organization of the Finance Function
Learning Objective 2.6
Level of Difficulty: Intermediate
Solution:
The major jobs available in the financial industry include analysts, associates, managers, account managers, banking associates, security analysts, sales and trading people, private bankers, retail bankers, financial and investment analysts, portfolio managers, fixed income or equity traders, corporate finance associates, and consultants. With financial innovations, more jobs are created.

27. Section: 2.5 Finance Careers and the Organization of the Finance Function
Learning Objective 2.6
Level of difficulty: Intermediate
Solution: The most senior person is the chief financial officer (CFO), or in more traditional companies, the senior vice-president of finance. Under the CFO are the two main finance jobs: the treasurer and the controller. The treasurer is responsible for forecasting, pension management, capital budgeting, cash management, credit management, financing, and risk management. The controller focuses on accounting issues such as compliance, tax management, internal auditing, and budgeting.

28. Section: 2.5 Finance Careers and the Organization of the Finance Function
Learning Objective 2.6
Level of Difficulty: Intermediate
Solution:
The controller's numbers indicate that the computer system will add ($60,000 – $50,000) = $10,000 of value to the firm. That would indicate that you should proceed with the purchase.
In general, the corporate treasurer has responsibility for capital budgeting decisions of this sort, including estimating costs and savings, determining the need for financing, and considering any risks involved. In this case, the interest expense identified by the treasurer brings the net value created down to –$1,000. It would be best to heed the treasurer and not purchase the computer system.

Challenging
29. Section: 2.3 The Role of Management and Agency Issues
Learning Objective 2.4
Level of Difficulty: Challenging
Solution:
Referring to Table 2-2, the major components of income are straight salary, annual bonus, share receipts or options, pension value, and other. Notice that in all cases, straight salary compensation is relatively low compared with the total package. Annual bonuses are generally somewhat larger, but the largest component by far in most cases is share compensation. This

comes in two forms: grants of restricted stock awarded under incentive plans, and stock options, for which if the company's stock price goes above a certain level, the executive gets the right to buy the stock at a fixed lower price.

Answers to Concept Review Questions

2.1 Types of Business Organizations

Concept review questions

1. Describe the main advantages and disadvantages of sole proprietorships and partnerships.
The big advantage of a sole proprietorship is that setting one up is easy - there is no paperwork involved and all you really have to do is start the business. However, the critical thing is unlimited liability, because you are liable not only to the extent of what you have invested in the business, but also for any other assets you own.

The two main partnership forms are *limited liability partnerships (LLP)* and *limited and general partnerships*. LLPs are the new form of organizing professional firms, since each partner has limited liability in terms of a possible suit against the firm. However, as a partnership, the partner's income is still included as ordinary income and filed with individual tax returns. Limited and general partnerships are generally used for tax reasons. In this case a general partner operates the business and limited partners are passive investors. As long as the limited partners are not active in the business they have the advantage of limited liability in that all they can lose is their initial investment. The general partner, on the other hand, has unlimited liability and is the operator of the business.

2. How are trusts distinct from corporations?
Trusts are used whenever you want to separate ownership from control. The use of trusts has recently expanded out of their use in personal finance and mutual funds to income and royalty trusts. The essence of income and royalty trusts is that the trust is set up to invest in the shares and debt obligations of a company. Further, since the trust owns both the debt and equity of the company, the use of debt can be maximized to reduce (or eliminate) any corporate income tax, provided the trust pays out most (or all) of its income to unit-holders. In the jargon of finance professionals, trusts are "tax efficient."

3. What are the main advantages and disadvantages of the corporation structure?
Unlike a partnership or sole proprietorship if you operate a business as a corporation, your personal assets are separate from any malfeasance or failure at the corporate level. The most difficult aspect of corporations is their control and taxation.

2.2 The Goals of the Corporation

Concept review questions

1. What is the primary goal of the corporation?
From an economics perspective, the goal of the firm is to maximize its profits. In finance we extend the definition from that used in economics, since what the firm should really do is enhance the owner's wealth.

2. What role does the board of directors serve?
The Board of Directors in directing the strategy of the firm should only be guided by what creates shareholder values.

3. Explain the cost imposed on society if firms become too big to fail, and discuss whether the government should break up large firms when they pose such risks.
If firms become too big to fail, it will become the responsibility of the Government to bail firms out and protect the firms from failure and not let the firms fail. After all, firms hold privileged status as corporations, because they act in *the owners*' interests, so the government has the right to oversee their actions. Consequently, many argue that corporations should act in the "social interest," rather than in the interests of their owners.

4. Should the Government allow one of the Big Six Canadian banks to fail if it loses money on its loan portfolio?
The creation of shareholder value has been widely accepted, not just by academic theorists but also by regulators. In 1994, the TSX issued a report entitled *Where Were the Directors*, commonly called the *Dey Report*, after its chairman, Peter Dey. The report's mandate was to look at the governance of Canadian companies after the serious recession of the early 1990s. The *Dey Report* concluded in Section 1.11:

> We recognize the principal objective of the direction and management of a business is to enhance shareholder value, which includes balancing gain with risk in order to enhance the financial viability of the business. (S1.11)

As you will see, this is exactly what finance takes as the objective of the firm. By not letting a firm fail, the Government will have reduced the risks for the firm, and management could take on more risk knowing the Government will bail the company out.

2.3 The Role of Management and Agency Issues

Concept review questions
1. Describe the nature of the basic owner-manager agency relationship.
For smaller firms, managers and owners are often the same people, so there is no problem. Even for some quite large Canadian companies, there is often a controlling shareholder to make sure that managers act in the shareholder's best interests. However, for many companies, the shareholders are widely dispersed and the firm's chief executive officer (CEO) is able to pack the BOD with cronies that will not challenge his or her authority. In other words, the firm has poor governance and few checks on management so it may be run in their interest rather than in the interests of the shareholders.

2. Define agency costs and describe both types.
The costs associated with agency problems are referred to as agency costs. There are two major types of agency costs: (1) *direct costs*, which arise due to sub-optimal decisions that are made by managers when they act in a manner that is not in the best interests of their company's shareholders; and, (2) *indirect costs*, which are those that are incurred in attempting to avoid direct agency costs.

3. How have management compensation schemes been designed to better align owner-manager interests? How well have these schemes performed in this regard?

The idea behind share incentive plans is simply to have the best interests of CEOs and senior managers coincide with those of stockholders. Often, shares are granted based on reaching certain objectives, such as revenue targets or investment returns. Whether or not share compensation schemes have successfully met their objectives, however, is doubtful.

4. What is moral hazard and why did it become the buzz word of the 2008 financial crisis?
In 1998, the U.S. government bailed out a hedge fund called Long-Term Capital Management (LTCM), because it was deemed to pose a systemic risk to the U.S. financial system—that is, it imposed an externality on others. This resulted in a common understanding that a financial institution could take risks, because, in the event of failure, the U.S. government would bail out the institution. This is the moral hazard problem: knowing that the U.S. government had bailed out LTCM, the behaviour of other institutions changed.

2.4 Corporate Finance

Concept review questions

1. Describe the two key decision areas with respect to the financial management of assets?
The combination of the real asset decision and these financial asset acquisition decisions represent acquisition or investment decisions. Generally we talk about investment decisions in terms of financial management.

2. What are some of the key corporate financing decisions made by firms?
- How does a firm decide between raising money through debt or equity?
- In terms of equity how does it raise the equity: through retaining earnings or through new issues of equity?
- In fact, how does a firm decide to go public and issue shares to the general public versus remaining a non-traded private company?
- If it decides to issue debt, what determine whether this is bank debt or bonds issued to the public debt market?
- What determines whether firms can access the short-term money market versus borrowing from a bank?

3. What are the two key topics covered in the study of corporate finance?
The financial management of assets and corporate financing decisions represent the area of corporate finance.