

## **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?

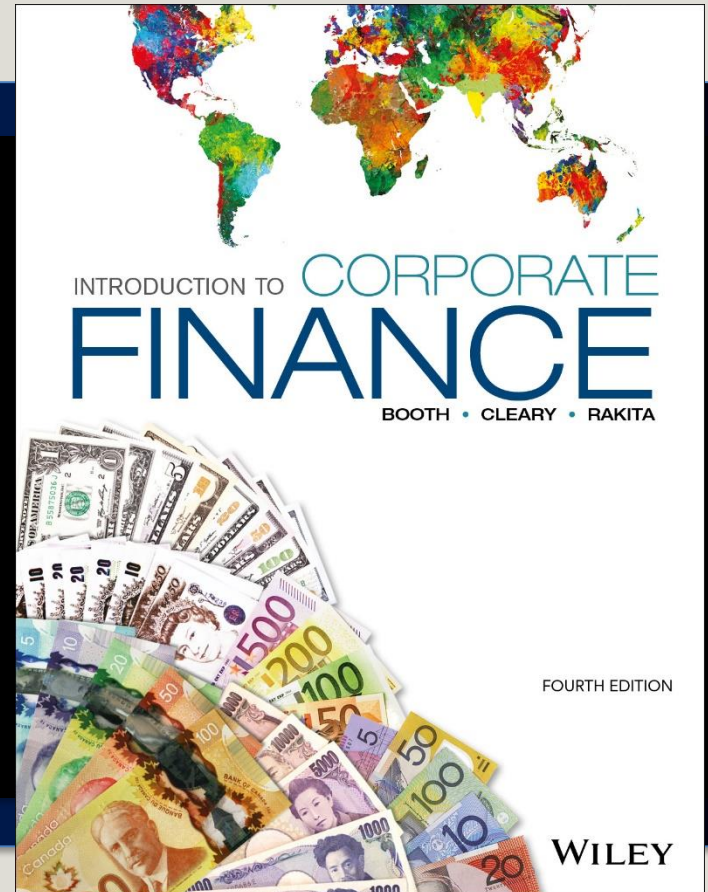
3. What are the two key topics covered in the study of corporate finance?

The financial management of assets and corporate financing decisions represent the area of corporate finance.

# INTRODUCTION TO CORPORATE FINANCE

Fourth Edition

BOOTH • CLEARY • RAKITA



# WILEY

# CHAPTER 2: BUSINESS (CORPORATE) FINANCE

## Learning Objectives

- 2.1** List the four forms of business organization and describe the advantages and disadvantages of each.
- 2.2** Describe the goals of the firm and the pressures exerted on corporations by various stakeholders.
- 2.3** Explain what agency costs are and how they affect the interests of management and shareholders.
- 2.4** Explain the importance of aligning the interests of management with the interests of the shareholders in a corporation.
- 2.5** Identify the main corporate finance decisions involving the financial management of a firm's assets and liabilities (corporate financing).
- 2.6** List some finance jobs available with financial and non-financial companies.

## 2.1 TYPES OF BUSINESS ORGANIZATIONS

- Sole proprietorships
- Partnerships
  - *Limited liability partnerships (LLPs)*
- Trusts
  - *Income and royalty trusts*
- Corporations

# TYPES OF BUSINESS ORGANIZATIONS:

## Sole proprietorships

### **Nature of the Business:**

- A business owned and operated by one person
- Legally inseparable from the person who owns and operates the business
- Reports income, both gross and net, on personal income tax returns
- Net business income is taxed at the person's marginal tax rate

### **Financing:**

- Limited to the resources of the individual owning and operating the business and their personal capacity to borrow

# TYPES OF BUSINESS ORGANIZATIONS:

## Sole proprietorships

### **Formality:**

- Business records must be maintained for reporting to Canada Revenue Agency like any other business
- Owners may wish or, depending on the type of the business and the jurisdiction, be required to register with their provincial government
- If employing persons, the owner must obtain an employer number, deduct and remit income taxes as well as make employer contributions to the Canada Pension Plan and Employment Insurance.

# TYPES OF BUSINESS ORGANIZATIONS:

## Sole proprietorships

### Advantages:

- Easy to start
- Little formality, but business records must be maintained

### Disadvantages:

- **Unlimited legal liability**
- Net income is taxed at the personal marginal tax rate
- Financing is limited to the resources of the owner
- The life of the enterprise is limited to the working life of the sole proprietor



# TYPES OF BUSINESS ORGANIZATIONS:

## Partnerships

### Nature of the Business:

- Involves two or more partners
- Must have at least one general partner, who has unlimited legal liability for the activities of the business, while all other partners are referred to as limited partners and have **limited legal liability**

### Financing:

- A function of the combined resources of the partners
- Can attract additional resources through limited partner contributions

# TYPES OF BUSINESS ORGANIZATIONS:

## Partnerships

### **Formality:**

- Must be registered under provincial partnership legislation
- Should be formalized through a partnership agreement outlining partner responsibilities, how partners invest and divest of the business, and the division of net business income

# TYPES OF BUSINESS ORGANIZATIONS:

## Partnerships

- ***Limited Liability Partnerships***: A new form of organization for professional firms, commonly used by Canadian legal and accounting firms, that limits the liability of partners
- The income of partners is included as ordinary income and filed using an individual tax return

# **TYPES OF BUSINESS ORGANIZATIONS:**

## **Limited and General Partnerships**

### **Used for Tax Purposes:**

- Limited partners are often able to use unused non-cash deductions such as depreciation and/or business losses to offset personal tax liabilities

### **The General Partner:**

- There must be one general partner, which is responsible for operating the business and has unlimited legal liability
- Often the general partner is a corporation

### **Limited Partners:**

- Passive investors
- Contribute money to the business; share in the profits

# TYPES OF BUSINESS ORGANIZATIONS:

## Partnerships

### **Advantages:**

- Harnesses the combined talents and energies of all the partners
- Potential for greater combined financial resources of the partners
- Spreads liability across the partners (jointly and severally)

### **Disadvantages:**

- Income is taxed at the individual's marginal rate
- Governed by provincial partnership legislation and often requires a formal partnership agreement
- Unlimited legal liability
- Non-partnership business arrangements can be deemed partnerships under Canadian law
- It can be legally challenging to disassociate oneself from and/or dissolve a partnership arrangement

# TYPES OF BUSINESS ORGANIZATIONS:

## Trusts

### **Nature of the Business:**

- Trusts are used to separate *ownership* from *control*
- Controlled by a trustee in accordance with trust documents for the benefit of the named beneficiary(ies).

### **Examples:**

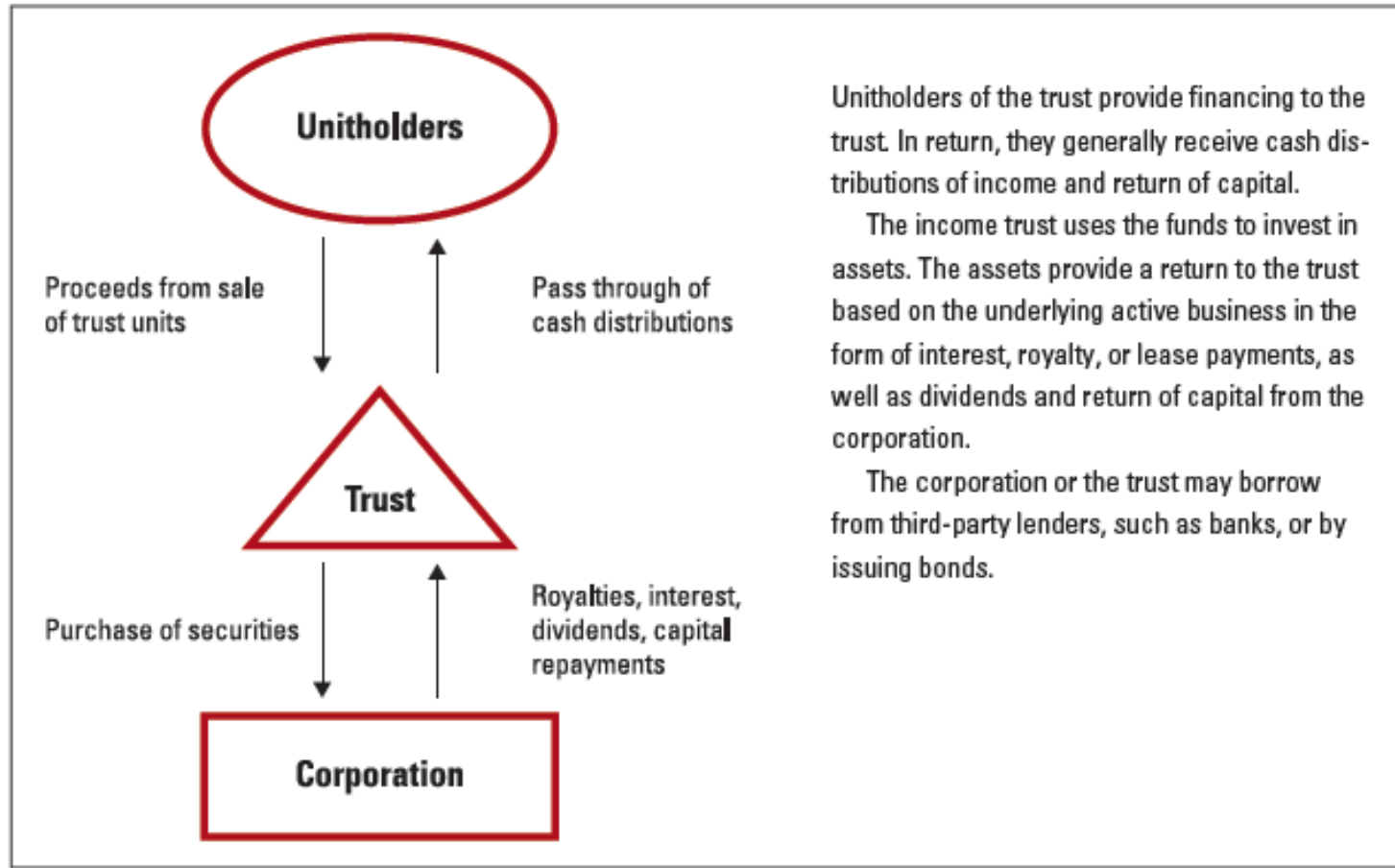
- *Inter vivos* and testamentary trusts for estate and tax planning purposes
- Open-ended mutual funds organized as unit trusts
- Many corporations have restructured themselves as income and royalty trusts

### **Formality:**

- Established through a formal trust agreement naming trustee and beneficiary(ies)

# TYPES OF BUSINESS ORGANIZATIONS:

## Income Trust Structure



# TYPES OF BUSINESS ORGANIZATIONS:

## Trusts

### **Nature of the Business:**

- Invest in both the debt and shares of one company in order to function as a pass-through entity
- Net cash flows from the business operations of the company pass through the trust without taxation

### **Purpose of the Structure:**

- To minimize the income tax payable on the cash flows generated by the underlying business so that more cash flow passes to the trust's unit holders than through a traditional common stock investment



# TYPES OF BUSINESS ORGANIZATIONS: Income and Royalty Trusts

## **Status:**

- Total market capitalization in Canada is \$192 billion (as of March 2006)
- Incorporated into the S&P/TSX Composite Index as of March 2006
- On October 31, 2006 the Minister of Finance (Jim Flaherty) announced any newly established Income and Royalty Trusts would be taxed as corporations and that previously-established trusts would be taxed starting in 2011.

# TYPES OF BUSINESS ORGANIZATIONS:

## Trusts

### **Advantages:**

- Funds flowing through the trust are not subject to income tax
- Separates ownership and control

### **Disadvantages:**

- Governance structure may only be appropriate for well established firms with little further needs for capital investment

# TYPES OF BUSINESS ORGANIZATIONS:

## Corporations

### **Nature of the Business:**

- A separate legal entity (person) under the law that can be incorporated under provincial or federal legislation
- Governed by a Board of Directors (BOD) elected by shareholders, managed by professional managers and owned by shareholders

### **Financing:**

- Highly flexible and long-term including issuing stocks, bonds and other hybrid securities to raise capital

### **Formality:**

- Articles of Incorporation, and corporate bylaws and practices are governed by corporate and securities law

# TYPES OF BUSINESS ORGANIZATIONS:

## Corporations

### **Advantages:**

- No limit to how long an enterprise can operate, so it can issue securities with very long terms to maturity
- Potential to attract large amount of financing by expanding its base of shareholders
- Potential to attract well qualified people to its BOD and to use their expertise to advance the firm's interests
- Has the potential to hire professional managers to build value

### **Disadvantages:**

- Formality and structure may slow the speed of organizational response
- Canadian tax law double-taxes dividends: dividends paid to shareholders are taxed first as income of the corporation and then again as personal income of shareholders

# CORPORATIONS:

## Corporate Governance

- Shareholders, as owners of the corporation, have residual claims to profits and assets and voting rights.
- Shareholders vote to:
  - (1) elect the Board of Directors
  - (2) adopt financial statements, and
  - (3) approve the auditors for the coming year.
- The Board of Directors and Management are responsible for the day-to-day operation of the corporation in accordance with standards set out in the *Canada Business Corporations Act*

# CORPORATIONS:

## Corporate Governance

### Director and Officer Responsibilities

Section 122.1 of the *Canada Business Corporations Act* states that 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.

# CORPORATIONS:

## Corporate Governance

### Separation of Ownership and Management

- Professional managers and directors manage the corporation and are the *agents* of the shareholders who are the *principal* owners.
- It is possible for agents (management) to pursue their own goals at the expense of the principal (shareholders)
- The fact that owners (shareholders) have limited access to information about the company they own, and managers and the board of directors hold superior information, creates further potential for conflict
- Corporate law anticipates the potential for *principal-agent conflict* and imposes responsibilities and reporting controls on management to reduce the probability of such conflicts

# CORPORATIONS:

## Corporate Governance

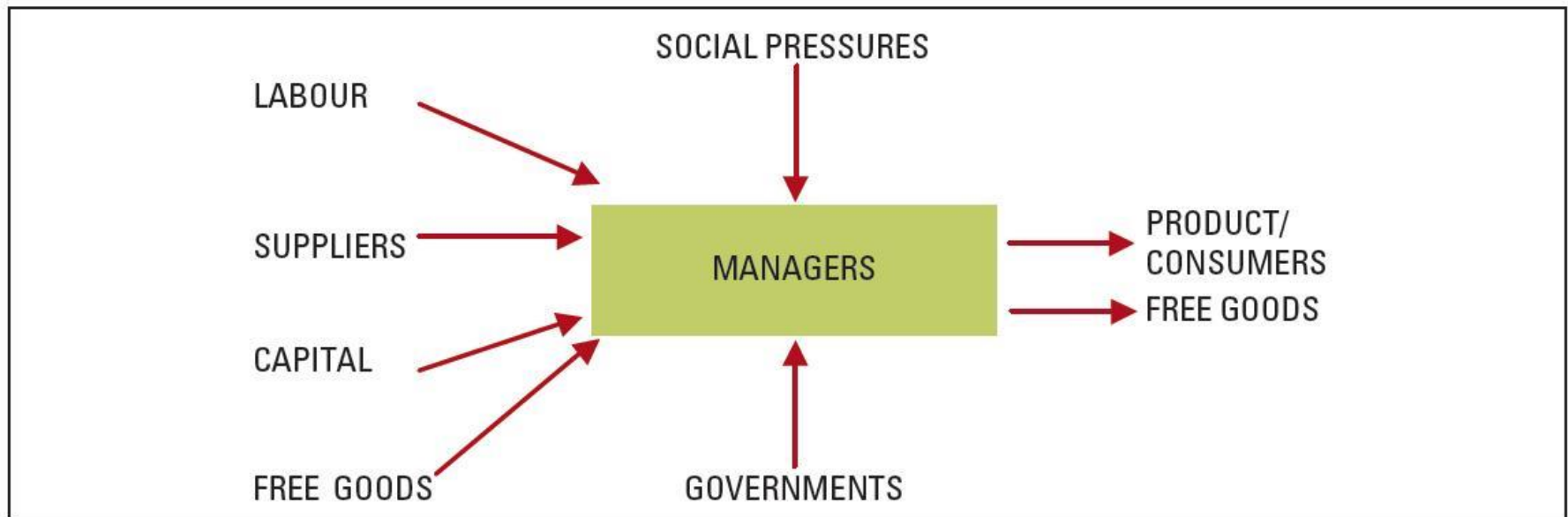
### Information Asymmetry

- Management (the *agent*) has more information about the company than shareholders (the *principal*), which establishes an information asymmetry
- To reduce the potential for conflict arising out of information asymmetry, corporate and securities law requires regular release of information about corporate performance and the right to require approval from shareholders for major changes in the corporation, including:
  - Annual shareholder meetings with proper notice
  - Audited financial statements
  - Shareholder approval of auditors for the coming year
  - Shareholder approval for changes to bylaws and articles of incorporation



## 2.2 THE GOALS OF THE CORPORATION

Professional managers of corporations face pressures and have responsibilities to many different stakeholders.



# THE GOALS OF THE CORPORATION

*Profit maximization* is an inadequate goal to guide officers and directors of the corporation:

- It fails to consider the risks undertaken by the firm to pursue profit
- It focuses on accounting profit
- Its focus on one year's accounting profit can potentially be at the expense of the long-term interests of the shareholders

# THE GOALS OF THE CORPORATION

*Shareholder wealth maximization* is considered the most appropriate goal to guide the corporation's directors and officers:

- Its focus is on genuine economic profit
- It reflects the value of all economic profits of the corporation now and into the future
- It takes into account the timing, magnitude and riskiness of all prospective (future) cash flows the corporation's capital investment is expected to generate

# THE GOALS OF THE CORPORATION

Despite the attention given to major corporations because of *negative externalities*, the agents (management) of the corporation must:

- Operate legally and in compliance with contractual responsibilities
- Act in the interests of the principals (shareholders) by creating value for them

## 2.3 THE AGENCY RELATIONSHIP AND AGENCY COSTS

- Managers work on behalf of shareholders in an **agency relationship**
- **Agency problems** can arise due to the potential divergence of interest between managers, shareholders and creditors
- ***Direct agency costs*** result from management making decisions that do not maximize shareholder value
  - *Examples:* Managers avoid high-risk projects to avoid looking bad or losing their jobs if the project fails, and managers spend corporate resources on perks for themselves such as executive aircraft.

# THE AGENCY RELATIONSHIP AND AGENCY COSTS

- ***Indirect agency costs*** are incurred by the firm in the attempt to avoid **agency costs**
  - *Examples:* Compensation schemes that attempt to align the interests of managers and shareholders (e.g., stock options), reporting requirements placed on management, and shareholder approval requirements for changes to corporate bylaws, articles of incorporation, etc.

## 2.4 ALIGNING MANAGERS AND OWNERS INTEREST

- Managers and shareholders may have differing goals, attitudes towards risk, and differential access to information about the firm, all of which can lead to disagreement.

**TABLE 2-2** Areas of Disagreement

	<b>Managers</b>	<b>Shareholders</b>
Performance appraisal	Accounting ROI/cash	Market prices
Investment analysis	IRR of best division	WACC external
Financing	Retentions, debt, new equity	Debt, retentions, new equity
Risk	Preservation of firm	Portfolio

# THE ROLE OF MANAGEMENT AND AGENCY ISSUES

## Executive Compensation

- Compensation is tied to performance measures in an effort to align management and shareholder interests
- Performance-based compensation schemes are not always effective in achieving the goal of aligning interests and have lead to concerns about excessive management compensation
- Executive stock options, for example, magnify returns to management when the stock price rises regardless of whether the rise is attributable to managerial performance, but don't expose management to the losses shareholders will endure if the stock price falls



**TABLE 2-2** Canadian Executive Compensation, 2014

Executive	Organization Name	Base Salary	Bonus	All Other Compensation	Share-Based Awards	Option-Based Awards	Pension Value	Total Reported Compensation
John Chen	BlackBerry Ltd.	\$341,452	\$684,054	\$0	\$88,689,513	\$0	\$0	\$89,715,019
Donald J. Walker	Magna International Inc.	\$358,924	\$11,634,643	\$193,267	\$7,757,165	\$3,473,275	\$0	\$23,417,274
Gerald W. Schwartz	Onex Corp.	\$1,435,694	\$19,700,252	\$0	\$0	\$0	\$0	\$21,135,946
Hunter Harrison	Canadian Pacific Railway Ltd.	\$2,421,592	\$7,289,700	\$582,344	\$3,662,444	\$3,661,937	\$14,152	\$17,632,169
Mark Thierer	Catamaran Corp.	\$1,325,256	\$2,125,932	\$41,966	\$10,943,301	\$1,894,012	\$0	\$16,330,467
Donald Guloien	Manulife Financial Corp.	\$1,438,720	\$3,329,088	\$101,890	\$5,274,666	\$3,516,444	\$823,400	\$14,484,208
John Thornton	Barrick Gold Corp.	\$2,760,950	\$10,491,610	\$180,618	\$0	\$0	\$828,285	\$14,261,463
Paul Wright	Eldorado Gold Corp.	\$1,514,000	\$3,974,250	\$0	\$2,744,125	\$2,744,125	\$2,812,202	\$13,788,702
Bradley Shaw	Shaw Communications Inc.	\$2,500,000	\$6,957,500	\$435,675	\$0	\$0	\$3,450,930	\$13,344,105
Steven Williams	Suncor Energy Inc.	\$1,361,731	\$2,055,000	\$155,945	\$4,955,500	\$3,894,000	-\$37,500	\$12,384,676

Source: Data retrieved from "Executive Compensation," *The Globe and Mail Report on Business*, June 6, 2015, B8. ©The Globe and Mail, Inc. All rights reserved. Reprinted by permission.

## 2.5 CORPORATE FINANCE

Corporate finance involves the **financial management** of a corporation's assets and **corporate financing decisions**.

### Financial Management of Assets

- **Capital budgeting decisions**, including the analysis of asset investment, acquisition and replacement proposals.
- Credit (accounts receivable) policy
- Cash management

### Corporate Financing Decisions

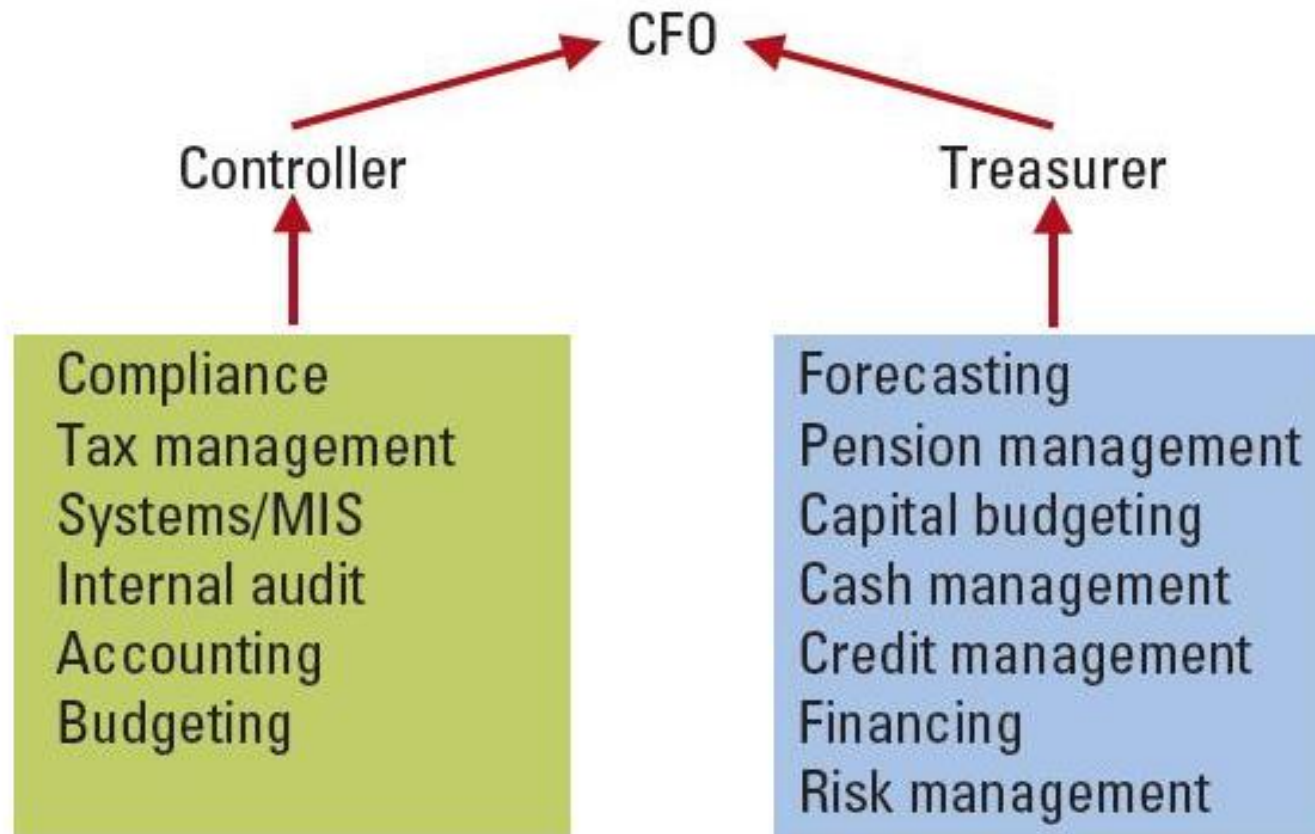
- Managing capital structure: the ratio of debt and equity
- Raising new equity capital either through profit retention or new share issues
- Dividend policy
- Borrowing decisions and liability management

## 2.6 FINANCE CAREERS:

### Non-financial firms

- **Chief Financial Officer (CFO) / Senior Vice-President of Finance**
- **Treasurer**
  - A pure finance role with responsibilities including: forecasting, financial management, capital budgeting, cash management, credit management, financing and risk management
- **Controller**
  - A role that combines finance and accounting with responsibilities including: : compliance, tax management, systems, internal audit, accounting and budgeting

# FINANCE CAREERS: Non-financial firms



# FINANCE CAREERS:

## Financial firms

- Analysts
- Associates
- Managers
- Account managers
- Banking associates
- Security analysts
- Sales and trading
- Private bankers
- Retail brokers
- Financial and Investment analysts
- Portfolio managers
- Corporate finance associates and consultants

# WEB LINKS



- ✓ Wiley Weekly Finance Updates site (weekly news updates): <http://wileyfinanceupdates.ca/>
- ✓ Textbook Companion Website (resources for students and instructors): [www.wiley.com/go/boothcanada](http://www.wiley.com/go/boothcanada)

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# WILEY

Annual Interest		0.1	
Year	Beginning Amount	Ending Amount	
1	\$1,000	\$1,100	
2	\$1,100	\$1,200	
3	\$1,200	\$1,300	
4	\$1,300	\$1,400	
5	\$1,400	\$1,500	



Principal Amount	\$1,000
Interest Rate	0.1
Number of Years	50
Value in Future	\$6,000

pv =	1000
rate =	0.1
nper =	5
FV =	=FV(B2,B3,0,-B1,0)

pv =	1000
rate =	0.1
nper =	50
FV =	=FV(B2,B3,0,-B1,0)

fv =	1000000
rate =	0.1
nper =	40
PV =	=PV(B2,B3,0,-B1,0)

fv =	32000
pv =	-20000
nper =	5
RATE =	=RATE(B3,0,B2,B1,0)

fv =	32000
pv =	-20000
rate =	0.1
NPER =	=NPER(B3,0,B2,B1,0)

pmt = 153400  
nper = 6  
rate = 8%  
**(a)** FV = \$1,125,332  
**(b)** PV = \$709,150

pmt = 153400  
nper = 6  
rate = 8%  
**(a)** FV = \$1,215,358  
**(b)** PV = \$765,882



pmt = 3000  
nper = 30  
rate = 12%  
**(a)** PV = 24165.55  
**(b)** PV = 25000

Interest Rate	0.12
Payment	\$2,000

Twin One

FV after 6 years	\$16,230.38
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FV after 38 years	\$1,203,963.99
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Twin Two

FV after 38 years	\$1,219,661.07
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Payment Amount	\$100,000
Growth Rate (g)	0.04
Discount Rate (k)	0.15
Growing Perpetuity	\$945,454.55

CF1	\$200,000
Shrinking Rate (g)	-0.1
Discount Rate (k)	0.2
Years (N)	10

PV of Mining Project    \$ 629,124.32

pv = 1,000.00  
rate = 16%  
nper = 1.00  
**(a)** FV = 1,160.00  
**(b)** m = 4  
FV = 1,169.86

	m	Effective Rate
(a)	1	12.0000%
(b)	2	12.3600%
(c)	4	12.5509%
(d)	12	12.6825%
(e)	365	12.7475%
(f)	1000000	12.7497%
(f)	Continuous	12.7497%

Period	Beg. Principle	PMT	Interest
1	5000	=-PMT(0.1,3,5000)	=0.1*B2
2	=F2	=-PMT(0.1,3,5000)	=0.1*B3
3	=F3	=-PMT(0.1,3,5000)	=0.1*B4

Principle Repayment	Ending Principle
=C2-D2	=B2-E2
=C3-D3	=B3-E3
=C4-D4	=B4-E4



pmt =	2010.57
nper =	2
rate =	0.1
PV =	=PV(B3,B2,B1,0,0)

pmt =	2010.57
nper =	2
rate =	0.1
PV =	=PV(B9,B8,B7,0,0)

rate = 0.06  
 nper = 25  
 pv = 200000  
 Monthly Rate (k) =  $=(1+B1/2)^(2/12)-1$   
 PMT =  $=-PMT(B4,B2*12,B3)$

**Amortization Schedule (Formulas)**

Period	(1) Beginning Principle Outstanding	(2) Payment	(3) Interest [k x (1)]
1	=\$B\$3	=\$B\$5	=\$B\$4*B10
2	=F10	=\$B\$5	=\$B\$4*B11
3	=F11	=\$B\$5	=\$B\$4*B12
4	=F12		

**Amortization Schedule (Dollar Values)**

Period	(1) Beginning Principle Outstanding	(2) Payment	(3) Interest [k x (1)]
1	200000	1279.61	987.72
2	199708.11	1279.61	986.28
3	199414.78	1279.61	984.83
4	199120		

<b>(4) Principal Reduction</b>	<b>End Principle Outstanding</b>
<b>[(2)-(3)]</b>	<b>[(1) - (4)]</b>
=C10-D10	=B10-E10
=C11-D11	=B11-E11
=C12-D12	=B12-E12

<b>(4) Principal Reduction</b>	<b>End Principle Outstanding</b>
<b>[(2)-(3)]</b>	<b>[(1) - (4)]</b>
291.89	199708.11
293.33	199414.78
294.78	199120

rate =	6.00%
nper =	15
pmt =	1279.61
Monthly Rate=	0.49386%
PV =	-\$152,355.78

First Annuity (Years 1 to 4)

rate = 10%

nper = 4

pmt = 1000

PV = **-\$3,169.87**

Second Annuity (Years 5 to 7)

nper = 3

pmt = 2000

PV (time 4) = **-\$4,973.70**

PV (time 0) = **-\$3,397.11**

PV (Total) **-\$6,566.97**

First Annuity (Years 1 to 4)

rate =	10%
nper =	4
pmt =	1000
FV (time 4) =	-\$4,641.00
FV (time 7) =	\$6,177.17

Second Annuity (Years 5 to 7)

nper =	3
pv =	\$8,822.83
PMT =	-\$2,665.51

20 Annual (start of year) withdrawals:

rate = 6%

nper = 20

pmt = 48000

PV (time 35) = **-\$583,589.59**

Net required after sale o **-\$383,589.59**

Annual (end of year) investment for 35 years:

rate = 8%

nper = 35

PMT = \$2,226.07