Brealey 5CE
Solutions to Chapter 1

1. real

   executive airplanes

   brand names

   financial

   stock

   investment

   capital budgeting

   financing

2. A firm might cut its labour force dramatically which could reduce immediate expenses and increase profits in the short term. Over the long term, however, the firm might not be able to serve its customers properly or it might alienate its remaining workers; if so, future profits will decrease, and the stock price will decrease in anticipation of these problems.

   Similarly, a firm can boost profits over the short term by using less costly materials even if this reduces the quality of the product. Once customers catch on, sales will decrease and profits will fall in the future. The stock price will fall.

   The moral of these examples is that, because stock prices reflect present *and future* profitability, the firm should not necessarily sacrifice future prospects for short-term gains.

3. The key advantage of separating ownership and management in a large corporation is that it gives the corporation permanence. The corporation continues to exist if managers are replaced or if stockholders sell their ownership interests to other investors. The corporation's permanence is an essential characteristic in allowing corporations to obtain the large amounts of financing required by many business entities.

   Both public and private corporations are distinct legal entity, separate from its owners (ie., its shareholders). The key difference between public and private corporations are the rules governing the sale of their common shares. The common shares of a public corporation are listed for trading on a stock exchange and investors can freely buy and sell the corporation's shares at the current stock price. The common shares of a private corporations are not listed for trading on a stock exchange. Shareholders of private corporations must negotiate directly with potential buyers and are subject to resale restrictions.

To learn more about the risks associated with investing in private companies, see this website run by the British Columbia Securities Commission: http://www.investright.org/private_company_investing.aspx

4. A sole proprietorship is easy to set up with a minimum of legal work. The business itself is not taxed. For tax purposes, the income of the proprietorship is treated as the income of the proprietor. The main disadvantages of a proprietorship are the proprietor's unlimited liability for the debts of the firm, and difficulty in raising large amounts of financing as the business grows.

   A partnership has the same tax advantage as the proprietorship. The partnership per se does not pay taxes. The partnership files a tax return, but all of the partnership income is allocated to the partners and treated as personal income. Also, it is fairly easy to set up a partnership. Because there can be many partners, a partnership can raise capital more easily than a proprietorship. However, like sole proprietors, partners have unlimited liability for the debts of the firm. In fact, each partner has unlimited liability for all the business's debts, not just his or her share.

   Corporate organization has the advantage of limited liability. Its owners, the shareholders, are not personally responsible for the debts of the corporation. It also allows for separation of ownership and management, since shares in the firm can be traded without changing management. A public corporation has the added advantage of easier access to equity financing because its shares are traded in public stock markets. The major disadvantage of corporate organization is the double taxation of income. Corporations pay taxes on their income, and that income is taxed again when it is passed through to shareholders in the form of dividends. Another disadvantage of corporate organization is the extra time and cost required in order to manage a corporation's legal affairs. These costs arise because the corporation must be chartered and is considered a distinct legal entity. Such administrative costs are significant only for small corporations, however. Furthermore, public corporations must provide investors with detailed financial information in their annual reports and inform investors about significant events. Disclosure takes time and resources and may also be costly in the sense that competitor firms learn what is going on too.

   LLP's may be considered to be hybrid organizations to the extent that while individual partners have unlimited liability, they are not liable for the actions of their partners.

5. *Double taxation* means that a corporation's income is taxed first at the corporate tax rate, and then, when the income is distributed to shareholders as dividends, the income is taxed again at the shareholder's personal tax rate.

6. a, c, d.

7. On the website, www.td.com, the various businesses are listed in a table in the middle of the page. Click a business, such as TD Canada Trust, and the main business activities appear in a box under the table. To work as an investment banker, you would work for TD Securities, listed under the heading "Wholesale Banking". Clicking on "TD Securities" and then on "Learn more" takes you to a webpage, www.tdsecurities.com/tds/content/AU_AboutUs1?language=en_CA that says:

With more than 2,700 people in ~~15~~ 14 offices around the world, TD Securities provides a wide range of capital market products and services to corporate, government and institutional clients who choose us for our knowledge, innovation and experience in the following key areas of finance:

- Investment and Corporate Banking
- Capital Markets
- Interest Rate, Currency and Derivative Products
- Commodities

Our services include the underwriting and distribution of new debt and equity issues, providing advice on strategic acquisitions and divestitures, and executing daily trading and investment needs.With our history of delivering results, we've developed considerable strengths, including recognized trading expertise and street-level market intelligence that we use to consistently create value for our clients.

To trade securities, join TD Asset Management, http://www.tdassetmanagement.com/Content/Homepage/p_Homepage.asp, "a highly diversified North American investment management firm with leading market positions in active, quantitative and passive portfolio management. The firm serves a large and diversified client base including pension funds, corporations, institutions, endowments, foundations and high net worth individuals. We also offer private money management services and manage retail mutual funds." To work as retail investment advisor, join TD Waterhouse Private Client services, http://www.tdwaterhouse.ca/pcs/pia/index.jsp

8. a. A share of stock — financial
   b. A personal IOU — financial
   c. A trademark — real
   d. A truck — real
   e. Undeveloped land — real
   f. The balance in the firm's chequing account — financial
   g. An experienced and hardworking sales force — real
   h. A bank loan agreement — financial

9. a. Real assets are items that are used to produce goods and services. Real assets include both tangible and intangible items. Tangible (physical) real assets include such items as machinery, building, and inventories. Intangible real assets include items such as research ideas, brand names and skilled work force. In contrast, financial assets are items that have value only because of their claim to cash flows generated by real assets. Many different types of financial assets exist, including bank loans, bonds, stocks, and options.

   b. Investment or capital budgeting decisions involve deciding which real assets to acquire. Financing decision involved arranging the money needed to pay for investments in the real assets. So, when making investment decisions you decide what to spend money on and when making financing decisions, you decide how to get the money to spend.

   c. Both capital budgeting and capital structure are long-term decisions. Capital budgeting decisions is the process of deciding the real asset investment plans. Capital structure decision is the process of deciding the mix of the long-term financing to use to fund the firm's assets. Essentially, capital structure decision involve selecting between equity financing and long-term debt financing.

10. <u>Capital budgeting decisions</u>

    Should a new computer be purchased?
    Should the firm develop a new drug?
    Should the firm shut down an unprofitable factory?

    <u>Financing decisions</u>

    Should the firm borrow money from a bank or sell bonds?
    Should the firm issue preferred stock or common stock?
    Should the firm buy or lease a new machine that it is committed to acquiring?

11. The stock price reflects the value of both current and future dividends the shareholders will receive. In contrast, profits reflect performance in the current year only. Profit maximizers may try to improve this year's profits at the expense of future profits. But

stock price maximizers will take account of the entire stream of cash flows that the firm can generate. They are more apt to be forward looking.

12. a. This action might appear, superficially, to be a grant to former employees and thus not consistent with value maximization. However, such 'benevolent' actions might enhance the firm's reputation as a good place to work, might result in greater loyalty on the part of current employees, and might contribute to the firm's recruiting efforts. Therefore, from a broader perspective, the action may be value maximizing.

    b. The reduction in dividends to allow increased reinvestment can be consistent with maximization of current market value. If the firm has attractive investment opportunities, and wants to save the expenses associated with issuing new shares to the public, then it could make sense to reduce the dividend in order to free up capital for the additional investments.

    c. The corporate jet would have to generate benefits in excess of its costs in order to be considered stock-price enhancing. Such benefits might include time savings for executives, and greater convenience and flexibility in travel.

13. a. Increased market share can be an inappropriate goal if it requires reducing prices to such an extent that the firm is harmed financially. Increasing market share *can* be part of a well-reasoned strategy, but one should always remember that market share is not a goal in itself. The owners of the firm want managers to maximize the value of their investment in the firm.

    b. Minimizing costs can also conflict with the goal of value maximization. For example, suppose a firm receives a large order for a product. The firm should be willing to pay overtime wages and to incur other costs in order to fulfill the order, as long as it can sell the additional product at a price greater than those costs. Even though costs per unit of output increase, the firm still comes out ahead if it agrees to fill the order.

    c. A policy of underpricing any competitor can lead the firm to sell goods at a price lower than the price that would maximize market value. Again, in some situations, this strategy might make sense, but it should not be the ultimate goal of the firm. It should be evaluated with respect to its effect on firm value.

    d. Expanding profits is a poorly defined goal of the firm. The text gives three reasons:

       (i) There may be a trade-off between accounting profits in one year versus accounting profits in another year. For example, writing off a bad investment may reduce this year's profits but increase profits in future years. Which year's profits should be maximized?

(ii) Investing more in the firm can increase profits, even if the increase in profits is insufficient to justify the additional investment. In this case the increased investment increases profits, but can reduce shareholder wealth.

(iii) Profits can be affected by accounting rules, so a decision that increases profits using one set of rules may reduce profits using another.

14. The contingency arrangement aligns the interests of the lawyer with those of the client. Neither makes any money unless the case is won. If a client is unsure about the skill or integrity of the lawyer, this arrangement can make sense. First, the lawyer has an incentive to work hard. Second, if the lawyer turns out to be incompetent and loses the case, the client will not have to pay a bill. Third, the lawyer will not be tempted to accept a very weak case simply to generate bills. Fourth, there is no incentive for the lawyer to charge for hours not really worked. Once a client is more comfortable with the lawyer, and is less concerned with potential agency problems, a fee-for-service arrangement might make more sense.

15. The national chain has a great incentive to impose quality control on all of its outlets. If one store serves its customers poorly, that can result in lost future sales. The reputation of each restaurant in the chain depends on the quality in all the other stores. In contrast, if Joe's serves mostly passing travelers who are unlikely to show up again, unsatisfied customers pose a far lower cost. They are unlikely to be seen again anyway, so reputation is not a valuable asset.

    The important distinction is *not* that Joe has one outlet while the national chain has many. Instead, it is the likelihood of repeat relations with customers and the value of reputation. If Joe's were located in the center of town instead of on the highway, one would expect his clientele to be repeat customers from town. He would then have the same incentive to establish a good reputation as the chain.

16. While a compensation plan that depends solely on the firm's performance would serve to motivate managers to work hard, it would also burden them with considerable personal risk tied to the fortunes of the firm. This would be unattractive to managers and might cause them to value their compensation packages less highly; it might also elicit excessive caution when evaluating business opportunities.

17. Takeover defenses make it harder for underperforming managers to be removed by dissatisfied shareholders, or by firms that might attempt to acquire the firm. By protecting such managers, these provisions exacerbate agency problems.

18. Traders can earn huge bonuses when their trades are very profitable, but if the trades lose large sums, as in the case of Barings Bank, the trader's exposure is limited. This asymmetry can create an incentive to take big risks with the firm's (i.e., the shareholders') money. This is an agency problem.

19. a. A fixed salary means that compensation is (at least in the short run) independent of the firm's success.

b. A salary linked to profits ties the employee's compensation to this measure of the success of the firm. However, profits are not a wholly reliable way to measure the success of the firm. The text points out that profits are subject to differing accounting rules, and reflect only the current year's situation rather than the long-run prospects of the firm.

c. A salary that is paid partly in the form of the company's shares means that the manager earns the most when the shareholders' wealth is maximized. This is therefore most likely to align the interests of managers and shareholders.

d. Stock options create great incentives for managers to contribute to the firm's success. In some cases, however, stock options can lead to agency problems. For example, a manager with many options might be tempted to take on a very risky project, reasoning that if the project succeeds the payoff will be huge, while if it fails, the losses are limited to the lost value of the options. Shareholders, in contrast, bear the losses as well as the gains on the project, and might be less willing to assume the risk.

20. Even if a shareholder could monitor and improve managers' performance, and thereby increase the value of the firm, the payoff would be small, since the ownership share in a large corporation is very small. For example, if you own $10,000 of GM stock and can increase the value of the firm by 5 percent, a very ambitious goal, you benefit by only: $(0.05 \times \$10{,}000) = \$500$.

In contrast, a bank that has a multimillion-dollar loan outstanding to the firm has a large stake in making sure that the loan can be repaid. It is clearly worthwhile for the bank to spend considerable resources on monitoring the firm.

21. Long-term relationships can encourage ethical behavior. If you know that you will engage in business with another party on a repeated basis, you will be less likely to take advantage of your business partner if an opportunity to do so arises. When people say "what goes around comes around," they recognize that the way they deal with their associates will influence the way their associates treat them. When relationships are short-lived, however, the temptation to be unfair is greater since there is less reason to fear reprisal, and less opportunity for fair dealing to be reciprocated.

22. As the text notes, the first step in doing well is doing good by your customers. Businesses cannot prosper for long if they do not provide to their customers the products and services they desire. In addition, reputation effects often make it in the firm's own interest to act ethically toward its business partners and employees since the firm's ability to make deals and to hire skilled labour depends on its reputation for dealing fairly.

In some circumstances, when firms have incentives to act in a manner inconsistent with the public interest, taxes or fees can align private and public interests. For example, taxes or fees charged on pollution make it more costly for firms to pollute, thereby affecting the firm's decisions regarding activities that cause pollution. Other "incentives" used by governments to align private interests with public interests include: legislation to provide for worker safety and product, or consumer, safety, building code requirements enforced by local governments, and pollution and gasoline mileage requirements imposed on automobile manufacturers.

23. Some customers might consider this practice unethical. They might view the firm as gouging its customers during heat waves. On the other hand, the firm might try to convince customers that this practice allows it to charge *lower* prices in cooler periods, and that over long periods of time, prices even out. Whether customers and firms have an "implicit contract" to charge and pay stable prices is something of a cultural issue.

24. This website provides information on the various types of business structures. However, to find out some details on rules and regulations, ask your students to go http://www.canadabusiness.ca/eng/guide/1282/. On this page are links to various provincial sites for registering sole proprietorships and partnerships and also registering corporations. On investigation, some links are better than others.

Rules and regulations governing different forms of business share similarities and differences across provinces. For example, to learn about Prince Edward Island's rules for sole proprietorships, partnerships and corporations, click on "Corporate Services - Business Name Registration (Prince Edward Island)" and then click on "Learn more" which takes you to the website of the Department of Justice and Public Safety, Government of Prince Edward Island. http://www.gov.pe.ca/jps/index.php3?number=1027252&lang=E. To get information about Partnership, click on "Business Name Registration – Partnership". In Prince Edward Island, partnerships are governed by the Partnership Act. Within 3 months of forming a partnership, a declaration of partnership must be registered (cost $65) which is valid for three years. In Quebec however, a declaration of registration with the applicable fees is required within 60 days following the day on which the business is started.

Provinces usually require that a name search be done prior to a business being registered as a partnership or sole proprietor (eg. Quebec or PEI). However, if a sole proprietor is starting a business under their first and last names, they may not be required to register the business. Registration requirements are usually less stringent or, at times, even exempt, for sole proprietorships named after the proprietor (first and last name). However, if the business name doing not include the owners full name then registration is usually required.

Provinces have similar rules for forming corporations. Prior to incorporation, a name search is required. The search could be Canada wide or just within a particular province. Typically, provinces also require registration fees (eg. PEI or

Saskatchewan). Also corporations must file annual returns with the appropriate provincial authorities, failing to do so could result in the corporation's name being struck from the Register of Corporations.

In general, while provinces enjoy the authority to regulate businesses within their jurisdictions and may have differing statutes on occasion, closer examination indicates that the rules and regulation are actually quite similar.

Turning to the question of how not-for-profit organizations differ from the for-profit structures, the same basic information on not-for-profit organizations is provided on each province's website, under the heading "Not-for-Profit Organization vs. Other Business Structures". The most basic information is found at "FAQs – LawNow" (http://www.law-nonprofit.org/faq.htm). The key point: a not-for-profit organization cannot be organized for commercial purposes and members, the not-for-profit equivalent of shareholders, must not benefit personally as investors. Unlike shareholders who are entitled to receive dividends from the profits generated in the pursuit of business, the members of a not-for-profit cannot receive any financial gain from the organization.

Not-for-profits can be set up as not-for-profit corporations, providing separation between management and members and limited liability for its members. These benefits are similar to those for shareholder of for-profit corporations. More information on not-for-profit corporations is provided by Industry Canada, found at http://www.ic.gc.ca/eic/site/ic1.nsf/eng/h_00076.html

25. *Careers in Finance*. Here are examples of two areas of employment in finance:

Corporate Finance- The "Corporate Finance" career refers to a broad range of finance jobs involved with operating a company. The main tasks of those in corporate finance including finding the money to run the business, investing in projects and working capital, acquisitions of other businesses, managing surplus cash and collection of bills.

The list of jobs, click on "Job Options", include the treasurer, the senior person responsible for managing the company's finances. More junior positions include financial analysts who do much of the analytical work to evaluate alternatives, credit managers, who establish and implement policies for granting credit to customers and the collection of bills, and cash managers, who are responsible for managing the company's cash.

You might work for a large multinational company or a smaller player with high growth prospects. Responsibility can come fast and your problem-solving skills will be put to work quickly in corporate finance.

Skills required for a successful career in corporate finance: The skill set for a successful corporate finance career includes strong problem solving skills, requiring both analytical and intuitive analysis, ability to function in a team environment, excellent people skills and willingness to take initiative.

NOTE: Although salary data is provided on the website, no date is given for these salary data. My sense is that this database has not been updated recently. I would not put a lot of faith in the salary figures.

Commercial Banking- providing banking services to individuals, small businesses and large organizations. Jobs in banking can be exciting and offer excellent opportunities to learn about the variety of business activities in which today's banks participate, interact with people, and build up a clientele. So, for instance, at the branch level you may be interacting constantly with customers as a teller. You may work in other areas of the bank's business as well such as mortgage financing, loans, trade credit, leasing, credit card banking and international finance.

Skills required for a successful career in the banking industry: You should have a good understanding of the bank's overall business and how your role fits in with the needs of the business. Many large banks engage in a wide variety of international financing activities. It is not surprising, therefore, that individuals with "international" exposure, training, language skills, etc. tend to do well in such environments. Other attributes required to do well in the banking sector may include accounting and writing skills, integrity of character and a sound work ethic, good communication skills and people management skills, etc.

Salary Range
Bachelor's degree - $24,000- $38,000
Master's degree- $30,000- $50,000 (and above)

26. This question provides students with a website for exploring career information provided by the Government of Canada. The answer to the first part of the question is whatever the students learn about their interests and careers that are associated with these interests.
From the homepage of the workingincanada.gc.ca, for instance type "Financial Managers" and click on the Financial Managers search result. You will find the description of the occupation with its NOC code and also some relevant job titles. From here, you can click on "Choose this occupation" and then choose your province or territory to get the detailed information about your selected occupation, such as job postings, average wage, outlook and prospects, licence and certification, main duties, job and skill requirements, and education and training.