Part 1
Introduction to managerial finance

Chapters in this part

Chapter 1 The role and environment of managerial finance

Chapter 2 Financial statements and analysis

Chapter 3 Cash flow and financial planning

Integrative Case 1: Track Software, Ltd.

Chapter 1
The role and environment of managerial finance

■ Instructor's resources

Overview

This chapter introduces the student to the field of finance and explores career opportunities in both financial services and managerial finance. The four basic legal forms of business organisation (sole proprietorship, partnership,close corporation and company) and their strengths and weaknesses are described, as well as the relationship between major parties in a company. The managerial finance function is defined and differentiated from economics and accounting. The chapter then summarises the three key activities of the financial manager: financial analysis and planning, investment decisions and financing decisions. A discussion of the financial manager's goals – maximising shareholder wealth and preserving stakeholder wealth – and the role of ethics in meeting these goals is presented. The chapter includes discussion of the agency problem – the conflict that exists between managers and owners in a large corporation. Money and capital markets and their major components are introduced in this chapter. The final section covers a discussion of the impact of taxation on the firm's financial activities.

This chapter, and all that follow, emphasise how the chapter content plays a vital role in the student's professional and personal life. Each chapter includes an early discussion of the relevance of the topic to majors in accounting, information systems, management, marketing, and operations. Throughout each chapter are detailed examples of how the chapter's topic relates to the student's financial life. These pedagogic tools should motivate students to quickly grasp an understanding of the chapter content and employ it in both their professional and personal lives.

Study Guide

The following **Study Guide** example is suggested for classroom presentation:

Example	Topic
1	Earnings per share
3	Income tax calculation

■ Suggested answer to chapter opening critical thinking question

What additional concerns might a chief financial officer (CFO) face when a company expands into international markets?

Wiesenhof must be aware of the differences in regional cultures as they relate to coffee drinking habits. Beyond currency risk, when expanding internationally, Wiesenhof must be aware of local tax issues, personnel considerations, as well as local bureaucracies and regulations. Recently, of course, security concerns have become increasing important in some areas of the world. These issues can vary considerably

from one area of the globe to another. Not all of these concerns fall solely upon the shoulders of the CFO, but they all have financial ramifications to the company and the CFO must be abreast of what is going on in every part of the company. Chapter 18 of this text has more to say on this topic.

■ Answers to Review Questions

1. *Finance* is the art and science of managing money. Finance affects all individuals, businesses and governments in the process of the transfer of money through institutions, markets, and instruments.

2. *Financial services* is the area of finance concerned with the design and delivery of advice and financial products to individuals, businesses, and government.

   Managerial finance encompasses the functions of budgeting, financial forecasting, credit administration, investment analysis and funds procurement for the firm. Managerial finance is the management of the firm's funds within the firm. This field offers many career opportunities, including financial analyst, capital budgeting analyst and cash manager. (*Note:* Other answers possible.)

3. Sole proprietorships are the most common form of business organisation, while companies are responsible for the majority of business receipts and profits. Companies account for the majority of business receipts and profits because they receive certain tax advantages and can expand more easily due to access to capital markets.

4. Shareholders are the true owners, through equity in ordinary and preference shares, of a company. They elect the board of directors, which has the ultimate authority to guide corporate affairs and set general policy. The board is usually composed of key corporate personnel and outside directors. The president or chief executive officer (CEO) reports to the board. He or she is responsible for day-to-day operations and carrying out policies established by the board. The owners of the corporation do not have a direct relationship with management but give their input through the election of board members and voting on major charter issues. The owners of the firm are compensated through the receipt of cash dividends paid by the firm or by realising capital gains through increases in the price of their ordinary shares.

5. The most popular form of limited liability organizations other than companies are:
   - Close corporation – members of a close corporation enjoy privileges of limited liability in terms of debts.

6. Virtually every function within a firm is in some way connected with the receipt or disbursement of cash. The cash relationship may be associated with the generation of sales through the marketing department, the incurring of raw material costs through purchasing, or the earnings of production workers. Since finance deals primarily with management of cash for operation of the firm, every person within the firm needs to be knowledgeable of finance to effectively work with employees of the financial departments.

   Individuals plan, monitor, and assess the financial aspects of their activities over a given period through the consideration of cash inflows and outflows.

7. The financial manager within the mature firm must make decisions with respect to handling financial planning, acquisition of non-current assets, obtaining funds to finance non-current assets, managing working capital needs, managing the pension fund, managing foreign exchange and distribution of corporate earnings to owners.

8. Finance is often considered a form of applied economics. Firms operate within the economy and must be aware of economic principles, changes in economic activity, as well as economic policy. Principles developed in economic theory are applied to specific areas in finance. From macroeconomics comes the institutional structure in which money and credit flows take place. From microeconomics, finance draws the primary principle used in financial management, marginal analysis. Since this analysis of marginal benefits and costs is a critical component of most financial decisions, the financial manager needs basic economic knowledge.

9. Accountants operate on an accrual basis, recognising revenues at the point of sale and expenses when incurred. The financial manager focuses on the actual inflows and outflows of cash, recognising revenues when actually received and expenses when actually paid.

   The accountant primarily gathers and presents financial data; the financial manager devotes attention primarily to decision-making through analysis of financial data.

10. The two key activities of the financial manager as related to the firm's statement of financial position are:
    a. Making investment decisions: Determining both the most efficient level and the best mix of assets; and
    b. Making financing decisions: Establishing and maintaining the proper mix of short- and long-term financing and raising needed financing in the most economical fashion.

    Investment decisions concern the top part of the statement of financial position (current and non-current assets). Financing decisions deal with the bottom part of the statement of financial position (current liabilities, long-term debt and shareholders' equity).

11. Profit maximisation is not consistent with wealth maximisation due to: (1) the timing of earnings per share, (2) earnings that do not represent cash flows available to shareholders, and (3) a failure to consider risk.

12. *Risk* is the chance that actual outcomes may differ from expected outcomes. Financial managers must consider both risk and return because of their inverse effect on the share price of the firm. Increased risk may decrease the share price, while increased return is likely to increase the share price.

13. The *goal of the firm*, and therefore all managers, is to maximise shareholder wealth. This goal is measured by share price; an increasing price per share of ordinary shares relative to the share market as a whole indicates achievement of this goal.

14. *Corporate governance* refers to a system of organisational control that is used to define and establish lines of responsibility and accountability among major participants in the corporation. These participants include the shareholders, board of directors, officers and managers of the companies and other stakeholders. A company's organisational chart is an example of a broad arrangement of corporate governance. More detailed responsibilities would be established within each branch of the organisational chart.

    The Sarbanes-Oxley Act of 2002 is directed toward reducing the apparent conflicts of interest that exist in many corporate structures. The Act has many provisions, but the major thrust of the act is to reduce the number of situations in which a conflict of interest can arise and to hold management more accountable for the financial and operating information they communicated to the public.

15. In recent years the magnitude and severity of 'white collar crime' has increased dramatically, with a corresponding emphasis on prosecution by government authorities. As a result, the actions of all corporations and their executives have been subjected to closer scrutiny. This increased scrutiny of this type of crime has resulted in many firms establishing corporate ethics guidelines and policies to cover employee actions in dealing with all corporate constituents. The adoption of high ethical standards by a corporation strengthens its competitive position by reducing the potential for litigation, maintaining a positive image, and building shareholder confidence. The result is enhancement of long-term value and a positive effect on share price.

16. Market forces – for example, shareholder activism from large institutional investors – can reduce or avoid the agency problem because these groups can use their voting power to elect new directors who support their objectives and will act to replace poorly performing managers. In this way, these groups place pressure on management to take actions that maximise shareholder wealth.

    The threat of hostile takeovers also acts as a deterrent to the agency problem. *Hostile takeovers* occur when a company or group not supported by existing management attempts to acquire the firm. Because the acquirer looks for companies that are poorly managed and undervalued, this threat motivates managers to act in the best interests of the firm's owners.

    Institutional investors are a powerful source of shareholder involvement in the monitoring of managers to reduce the agency problem. Institutions hold large quantities of shares in many of the corporations in their portfolio. Managers of these institutions should be active in the monitoring of management and vote their shares for the benefit of the shareholders. The power of institutional investors far exceeds the voting power of individual investors.

17. Firms incur *agency costs* to prevent or minimise agency problems. It is unclear whether they are effective in practice. The four categories of agency cost are *monitoring expenditures* incurred by the owners for audit and control procedures, *bonding expenditures* to protect against the potential consequences of dishonest acts by managers, *structuring expenditures* that use managerial compensation plans to provide financial incentives for managerial actions consistent with share price maximisation, and *opportunity costs* resulting from the difficulties typically encountered by large organisations in responding to new opportunities.

The agency problem and the associated agency costs can be reduced by a properly constructed and followed corporate governance structure. The structure of the governance system should be designed to institute a system of checks and balances to reduce the ability and incentives of management to deviate from the goal of shareholder wealth maximisation.

Structuring expenditures are currently the most popular way to deal with the agency problem – and also the most powerful and expensive. Compensation plans can be either incentive or performance plans. *Incentive plans* tie management performance to share price. Managers may receive share options giving them the right to purchase shares at a set price. This provides the incentive to take actions that maximise share price so that the price will rise above the option's price level. This form of compensation plan has fallen from favour recently because market behaviour, which has a significant effect on share price, is not under management's control. As a result, *performance plans* are more popular today. With these, compensation is based on performance measures, such as earnings per share (EPS), EPS growth, or other return ratios. Managers may receive *performance shares* and/or *cash bonuses* when stated performance goals are reached.

In practice, recent studies have been unable to document any significant correlation between CEO compensation and share price.

18. The key participants in financial transactions are *individuals, businesses, and governments*. These parties participate both as suppliers and demanders of funds. Individuals are net suppliers, which means that they save more rands than they borrow, while both businesses and governments are net demanders since they borrow more than they save. One could say that individuals provide the excess funds required by businesses and governments.

19. *Financial markets* provide a forum in which suppliers of funds and demanders of loans and investments can transact business directly.

    Primary market is the name used to denote the fact that a security is being issued by the demander of funds to the supplier of funds. An example would be Microsoft Corporation selling new ordinary shares to the public.

    Secondary market refers to the trading of securities among investors subsequent to the primary market issuance. In secondary market trading, no new funds are being raised by the demander of funds. The security is trading ownership among investors. An example would be individual 'A' buying ordinary shares of Microsoft through a broker from individual 'B'.

    Financial institutions and financial markets are not independent of each other. It is quite common to find financial institutions actively participating in both the money market and the capital market as both suppliers and demanders of funds. Financial institutions often channel their investments and obtain needed financing through the financial markets. This relationship exists since these institutions must use the structure of the financial marketplace to find a supplier of funds.

20. The *money market* is a financial relationship between the suppliers and demanders of short-term debt securities maturing in one year or less, such as RSA Treasury bills, commercial paper, and negotiable certificates of deposit. The *Eurocurrency market* is the international equivalent of the SA money market and is used for short-term bank time deposits denominated in dollars or other major currencies.

21. The *capital market* is a financial relationship created by a number of institutions and arrangements that allows the suppliers and demanders of long-term funds (with maturities greater than one year) to make transactions. The key securities traded in the capital markets are bonds plus ordinary and preference shares.

22. The broker market consists of national and regional securities exchanges. These organisations provide a location, such as the Johannesburg Stock Exchange, to bring together the buyers and sellers of debt and equity. They create a continuous market for securities, allocate scarce capital, determine and publicise security prices, as well as aid in new financing.

    By contrast, dealer markets are electronic markets for the buyers and sellers of securities not listed on the major exchanges. In a broker market, physical trading locations are replaced by security dealers who offer to buy or sell securities at stated bid/ask prices. Dealers buy securities from clients, sell them to other dealers, who in turn sell them to their clients.

23. In addition to the SA capital markets, companies can raise debt and equity funds in capital markets located in other countries. The *Eurobond market* is the oldest and largest international debt market. Corporate and government bonds issued in this market are denominated in dollars or other major currencies and sold to investors outside the country in whose currency the bonds are denominated. Foreign bond markets also provide companies with the opportunity to tap other capital sources. Companies or governments issue bonds denominated in the local currency and sold only in that home market. The *international equity market* allows companies to sell blocks of shares to investors in several countries, providing a diversified investor base and additional opportunities to raise larger amounts of capital.

24. An *efficient market* will allocate funds to their most productive uses due to competition among wealth-maximising investors. Investors determine the price of assets through their participation in the financial markets. Changes in supply and demand continually impact prices in an efficient market.

25. The *ordinary income* of a company is income earned through the sale of a firm's goods or services. Taxes on company's ordinary income are a fixed percentage. A *capital gain* occurs when a capital asset is sold for more than its initial purchase price. Capital gains are added to ordinary income and taxed at the regular corporate rates. RR26. When a company declares the dividend, it needs to retain a certain percentage of the dividends before the dividends are paid to the shareholder. This withholding tax needs to be paid to SARS

27. The tax deductibility of company's expenses reduces their actual after-tax cost. A company's interest is a tax-deductible expense, while dividends are not.

Suggested answer to critical thinking question for Focus on Practice

The share price of BRKA has never been split to make the shares more affordable to average investors. Why might the company refuse to split its shares to make them more affordable to average investors?

The primary reason that Berkshire Hathaway does not split the price of its ordinary shares is because Warren Buffett's philosophy is that a share split is meaningless financially and only serves as a way to lower the share price so that more investors are able to purchase the shares. Mr. Buffett has stated his belief that true investors are long-term investors who hold a share through thick and thin. With fewer shareholders, there are less people that the company management must answer to and investors who can afford the steep price of the Berkshire Hathaway shares are likely to be serious individual investors or institutional investors such as mutual funds.

Suggested answer to critical thinking question for Focus on Ethics

List three of four basic ethics 'lessons' that might be said to form the basis of your ethical foundation.

Students will have a variety of ethics lessons. Use their experiences as an opportunity to highlight the importance of ethical conduct.

Answers to Warm-up exercises

E1-1. Comparison of advantages and disadvantages of a partnership vs. incorporation.

Answer: While Jack and Ann disagree over whether or not their firm should incorporate or remain as a partnership, each form of business organisation has its advantages and disadvantages. One advantage of a partnership is that income is taxed at each partner's individual tax while companies rate is 29% The company is allowed to retain accumulated taxable income.

While taxation of income is a key factor in deciding which form of business organisation to select, two other factors are also important. In a partnership, each partner has **unlimited liability** and may have to cover debts of other partners while corporate owners have limited liability that guarantees that they cannot lose more than they have invested in the corporation. The third major consideration is **ease of transfer of the business**. Partnerships are harder to transfer and are technically dissolved when a partner dies while a corporation can have a very long life with ownership readily transferred through the sale of shares.

If a third party was asked to decide which legal form of business A&J Tax Preparation should take, it would be useful to have the following information:

- Marital status and tax situation of each partner
- Expectation of the longevity of the firm
- Age of the current owners
- Current plan of succession
- Risk tolerance of the owners
- Expectation of future tax law changes
- Capital needs of the firm
- Growth prospects of the firm
- Reasons for each partner's view of the preferred form of ownership

E1-2. Sunk costs

Answer: Marginal cost-benefit analysis ignores sunk costs, so the R2.5 million is irrelevant to the current decision that must be made. At this point there are two questions that must be answered. First, will the R10,000 additional investment generate a *PV* of expected revenue that will exceed the R10,000 investment? In other words, will the project generate a positive net *PV*? If it does, the project must be considered further to see if it is the best use of capital. If the firm has a need to ration capital, the project must then be compared to other projects competing for the limited capital to see if it is viable. The fact that the project's technology has been surpassed by new technology does not immediately disqualify the project since new technology does not ensure a positive cost-benefit result. In this case, a small R10,000 investment might avoid a heavy expenditure in new technology. Depending upon the industry, however, failure to keep up with competitors can be devastating. The key may well lie in the description 'the project has little chance to be viable', which indicates that approving the R10,000 is likely to be throwing good money after bad.

E1-3. Cash flow vs. accrued profits

Answer: It is not unusual for a firm to be profitable yet experience a cash crunch. The most common cause is when expenses have a shorter due date than expected revenue. In such cases the firm must arrange short term financing to meet its debt obligations before the revenue arrives. If the forthcoming cash crunch is not a new situation for this firm, management should probably consider going ahead with the year-end party if it is important to employee morale and the future success of the firm as long as adequate short-term funding can be arranged. On the other hand, if the firm has not experienced such a cash crunch before, there may be larger problems looming ahead and it would be unseemly to spend cash on a party when it would be better spent meeting the debt obligations of the firm.

E1-4. Agency costs

Answer: Agency costs are the costs borne by shareholders to maintain a governance structure that ensures against dishonest acts of management and gives managers the financial incentive to maximise share price. One example of agency costs is share options, which are used to provide an incentive for managers to work diligently for the benefit of the firm. Tips are similar to share options in that they are offered as rewards for good service much as share options are used to reward managers, presumably based on their good performance – which subsequently leads to a higher share price. The Donut Shop, Inc. example does not represent a clear case of agency costs because it is the management itself that has instituted the 'No-tips' policy and the employees have responded with reduced performance. By banning tips, the management has created a situation where an agency cost may be necessary to provide an incentive for employees to resume their former level of performance.

One solution that may work for Donut Shop, Inc. is to institute a profit-sharing plan that reaches down to the employee level where the slowdown and inefficiency are occurring. A profit-sharing plan is designed to motivate the employees and could alleviate the aggravation caused by the no-tip policy, but must be clearly identified as the replacement to tipping in order to be effective. A profit sharing plan is usually viewed by the employees as a reward for good performance, but does not have the immediacy of the positive effect that an employee gets from a tip.

It is unclear from the case whether the new no-tip policy is a company-wide policy or simply the actions of a few branch managers. However, the real solution here is to recognise that the no-tip policy has created an unnecessary backlash that can be alleviated by reversing management's position without incurring the additional costs of revising the current employee benefit plan and paying out a portion of corporate profits.

E1-5. Share dividends vs. interest

Answer: While 100% of corporate interest income is taxed at ordinary income tax rates, dividends are not a tax-deductible expense..

■ Solutions to Problems

P1-1. LG 1: Liability comparisons

Basic

a. Ms Harper has unlimited liability.

b. Ms Harper has unlimited liability.

c. Ms Harper has limited liability, which guarantees that she cannot lose more than she invested.

P1-2. LG 2, 4: Marginal cost-benefit analysis and the goal of the firm

Intermediate

a.

Benefits from new robotics	R560,000
Benefits from existing robotics	400,000
Marginal benefits	R160,000

b.

Initial cash investment	R220,000
Receipt from sale of old robotics	70,000
Marginal cost	R150,000

c.

Marginal benefits	R160,000
Marginal cost	150,000
Net benefits	R 10,000

d. Ken should recommend that the company replace the old robotics with the new robotics. The net benefit to shareholders is positive which should make the shareholders better off.

e. Ken should consider more than just net benefits. He should incorporate the important points of timing, cash flow, and risk, three important factors to determining the true impact on shareholders' wealth.

P1-3. LG 2: Annual income versus cash flow for a period

Basic

a.

Income	R760,000
Cost of sales	300,000
Net profit	R460,000

b.

Cash receipts	R690,000
Cost of goods sold	300,000
Net cash flow	R390,000

c. The cash flow statement is more useful to the financial manager. The accounting net income includes amounts that will not be collected and, as a result, do not contribute to the wealth of the owners.

P1-4. LG 1: Personal finance: Cash flow statement

a. Total cash inflow: R450 + R4,500 = R4,950

Total cash outflow: R1,000 + R500 + R800 + R355 + R280 + R1,200 + R222 = R4,357

b. Net cash flow: R4,950 – R4,357 = R593

c. If Jane is facing a shortage, she could cut back on some of her discretionary items, including clothing, dining out, and gas (i.e., travel less).

d. If Jane has a surplus in August, she should compare these cash flows to those of other months and verify that August's cash flows are typical. She may for instance, observe the existence of large motor vehicle insurance bills or tendency to spend more during the Christmas holiday season. If she has such needs, Jane will want to save the R593 in a money market security, where she is unlikely to face a decline in investment. If her August net cash flow is not needed to pay anticipated bills, she should invest in a diversified portfolio.

P1-5. LG 4: Identifying agency problems, costs, and resolutions

Intermediate

a. In this case the employee is being compensated for unproductive time. The company must pay someone to take her place during her absence. Installation of a time clock that must be punched by the receptionist every time she leaves work and returns would result in either: (1) her returning on time or (2) reducing the cost to the firm by reducing her pay for the lost work.

b. The costs to the firm are in the form of opportunity costs. Money budgeted to cover the inflated costs of this project proposal is not available to fund other projects that may help to increase shareholder wealth. Make the management reward system based on how close the manager's estimates come to the actual cost rather than having them come in below cost.

c. The manager may negotiate a deal with the merging competitor that is extremely beneficial to the executive and then sell the firm for less than its fair market value. A good way to reduce the loss of shareholder wealth would be to open the firm up for purchase bids from other firms once the manager makes it known that the firm is willing to merge. If the price offered by the competitor is too low, other firms will up the price closer to its fair market value.

d. Generally part time or temporary workers are not as productive as full-time employees. These workers have not been on the job as long to increase their work efficiency. Also, the better employees generally need to be highly compensated for their skills. This manager is getting rid of the highest cost employees to increase profits. One approach to reducing the problem would be to give the manager performance shares if they meet certain stated goals. Implementing a share incentive plan tying management compensation to share price would also encourage the manager to retain quality employees.

P1-6. LG 6: Corporate taxes

Basic

a. Firm’s tax liability on R92,500

Total taxes due =

92 500 x 29%

= R26,825

b. After-tax earnings: R92,500 – R26,825 = R65,675

c. Average tax rate: R19,700 ÷ R92,500 = 21.3%

d. Marginal tax rate: 34%

P1-7. LG 6: Average corporate tax rates

Basic

a.

R10,000: Tax liability: R10,000 × 0.0 = R0
After-tax earnings: R10,000 – R0 = R10,000

R80,000: Tax liability: R80,000 – R43,000 = R37,000

R37,000 x 10% = R3,700
= Total tax

After-tax earnings: R80,000 – R3,700 = R76,300

R500,000: Tax liability: R25,700 + [0.29 x (R500,000 – R300,000) + [0.34 × (R500,000 – R335,000)]

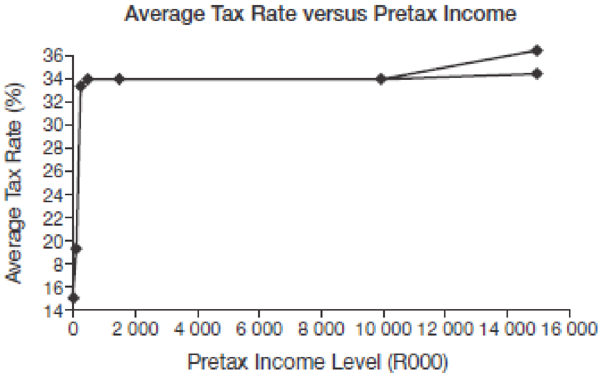
R25,700 + (0.29 × R200,000)

R25,700 + R58,000 + R56,100

R83,700 = Total tax

After-tax earnings: R500,000 – R83,700 = R416,300

b.



P1-9. LG 6: Interest versus dividend income

Intermediate

a. Tax on operating earnings: R490,000 × 0.40 tax rate = R196,000

b. and c

	(b) Interest income	(c) Dividend income	
Before-tax amount	R20,000	R20,000	
Less: Applicable exclusion	0	14,000	(0.70 × R20,000)
Taxable amount	20,000	6,000	
Tax (40%)	8,000	2,400	
After-tax amount	12,000	17,600	

d. The after-tax amount of dividends received, R17,600, exceeds the after-tax amount of interest, R12,000, due to the 70% corporate dividend exclusion. This increases the attractiveness of share investments by one corporation in another relative to bond investments.

e. Total tax liability:

Taxes on operating earnings (from **(a)**)	R196,000
+ Taxes on interest income (from **(b)**)	8,000
+ Taxes on dividend income (from **(c)**)	2,400
Total tax liability	R206,400

P1-10. LG 6: Interest versus dividend expense

Intermediate

a.

EBIT	R40,000
Less: Interest expense	10,000
Earnings before taxes	R30,000
Less: Taxes (40%)	12,000
Earnings after taxes*	R18,000

*This is also earnings available to ordinary shareholders.

b.

EBIT	R40,000
Less: Taxes (40%)	16,000
Earnings after taxes	R24,000
Less: Preferred dividends	10,000
Earnings available for ordinary shareholders	R14,000

P1-11. LG 6: Capital gains taxes

Basic

a. Capital gain:

Asset X = R2,250 – R2,000 = R250

Asset Y = R35,000 – R30,000 = R5,000

b. Tax on sale of asset:

Asset X = R250 × 0.50 = R125 x 0.4 = R50

Asset Y = R5,000 × 0.50 = R2,500 x 0.4 = R1,000

P1-12. LG 6: Capital gains taxes

Basic

(a) and (b)

Asset	Sale price (1)	Purchase price (2)	Capital gain (1) – (2) (3)	Tax [(3) × 0.50] x 0.4 (4)
A	R3,400	R3,000	R400	R80
B	12,000	12,000	0	0
C	80,000	62,000	18,000	73,600
D	45,000	41,000	4,000	800
E	18,000	16,500	1,500	300

P1-13. LG 4: Ethics problem

Intermediate

Maximising shareholder wealth, or the share price, involves carefully evaluating each decisions impact on cash flow amount, timing, and risk. However, that statement includes nothing that directly incorporates the ethical aspect of decisions. The phrase ‘subject to ethical constraints’ implies that there are ethical facets of business decisions that may or may not be a significant part of a decision’s cash flow projections. Think of all decisions being sifted through an ‘ethical filter’ – some decisions are unethical and do not make it through the filter, while others are ethical and pass through the filter. Examples of ethical considerations that might enter into decisions include not exaggerating product quality or durability, correcting environmental problems even though regulators or the general public would never know about them, and not exaggerating future cash flow projections in order to get a lower interest rate on a bank loan or bond issue. Each of these examples may decrease the size or delay the timing of cash inflows, or increase the riskiness of future cash flows – thereby reducing the share price relative to what it could have been had one acted unethically. No doubt you have thought of other examples as well.

■ Case

Assessing the goal of Sports Products, Inc

1. Maximisation of shareholder wealth, which means maximisation of share price, should be the primary goal of the firm. Unlike profit maximisation, this goal considers timing, cash flows, and risk. It also reflects the worth of the owners’ investment in the firm at any time. It is the value they can realize should they decide to sell their shares.

2. Yes, there appears to be an agency problem. Although compensation for management is tied to profits, it is not directly linked to share price. In addition, management’s actions with regard to pollution controls suggest a profit maximisation focus, which would maximise their earnings, rather than an attempt to maximise share price.

3. The firm's approach to pollution control seems to be questionable ethically. While it is unclear whether their acts were intentional or accidental, it is clear that they are violating the law – an illegal act potentially leading to litigation costs – and as a result are damaging the environment, an immoral and unfair act that has potential negative consequences for society in general. Clearly, Sports Products has not only broken the law but also established poor standards of conduct and moral judgment.

4. From the information given there appears to be a weak corporate governance system. The fact that management is able to measure and reward their performance on profits indicates that no one is watching out for the shareholders. Loren and Dale's concerns indicate that employees apparently have an interest in the long-run success of the firm. Allowing the continuation of pollution violations is also apparently escaping the interest and control ability of others who should be monitoring the firm.

5. Some specific recommendations for the firm include:
   - Tie management, and possibly employee, compensation to share price or a performance-based measure and make sure that all involved own shares and have a stake in the firm. Being compensated partially on the basis of share price or another performance measure, and owning shares in the firm will more closely link the wealth of managers and employees to the firm's performance.
   - Comply with all federal and state laws, as well as accepted standards of conduct or moral judgment.
   - Establish a corporate ethics policy, to be read and signed by all employees.
   - Set up a corporate governance system that has as its basis the oversight and welfare of all the stakeholders in the firm.

   (Other answers are, of course, possible.)

Spreadsheet Exercise

The answer to Chapter 1's Monsanto spreadsheet problem is located in the Instructor's Resource Center at *www.prenhall.com/irc*.

■ Group exercises

Notes for Adopters

The motivation for these group exercises is to place the learning goals of each chapter within the context of a fictitious firm while giving students a valuable set of teamwork skills. Creativity is encouraged, while the strong links of each assignment to a real-world, shadow firm should ground each group's work in reality. Any of these assignments and their deliverables can be modified to better fit within an adopter's course goals as they were designed with an eye toward flexibility of use. The learning through these exercises should be something students enjoy, being both applicable to the real world and less confining than traditional homework.

The first issue for adopters to address is group composition and size. Should students self-separate or be divided by their instructor? How big should the groups be? This is a semester-long assignment and students will need to get along with their fellow group members. If students choose their own groups it may, though not always, reduce the incidence of intra-group squabbles. Diversity within the groups might then be sacrificed, however. One strategy is to ask students to first pair-off. The instructor can then join

the pairs into groups of 4. This pairing of the pairs could be done randomly through a number-in-the-hat selection process, as could the entire group setup.

Group size does matter and these exercises were designed for a work-load spread across a minimum of 3 students. Larger groups would lessen the homework load, however, the issue of free-riding is often more prevalent in larger groups where slackers can hide. Management of larger groups is also more challenging for the participants. The suggested group size is between 3–5 students. Group leadership is another issue.

The best situation might be rotating the CEO/leader where each group member has several opportunities to be in charge. Lastly, these exercises were designed to allow students freedom but with the responsibility of working somewhat independent of their instructor. In this vein the instructions for each assignment have been written to be relatively self-explanatory.

Chapter 1

This first chapter asks students to name their fictitious firm and describe its business. As this firm is going public students are asked to explain why it is appropriate for them to go public, and also discuss different managerial roles within the corporation. The group must choose a shadow firm to follow. This publicly-traded firm should be in an industry related to their fictitious firm.

The most important counsel students could get at the outset is to spend time making these initial decisions. Later work is going to build on these choices and careful choosing is paramount. For example, in choosing the shadow firm, students should pick a well-established firm whose information, including financials, will be easily found. This also impacts their decisions regarding their own fictitious firm. Throughout many of the subsequent chapters students will be taking real-world information from their shadow firm and applying it to their fictitious firm; dressing their own firm with the clothes of the shadow firm. Students should feel comfortable in these clothes, so encouraging them to choose industries they're familiar with, or interested in, is helpful.

■ Integrative Case 1: Track Software, Ltd.

Integrative Case 1, Track Software, Ltd, places the student in the role of financial decision-maker to introduce the basic concepts of financial goal-setting, measurement of the firm's performance, and analysis of the firm's financial condition. Since this seven-year-old software company has cash flow problems, the student must prepare and analyse the statement of cash flows. Interest expense is increasing, and the firm's financing strategy should be evaluated in view of current yields on loans of different maturities. A ratio analysis of Track's financial statements is used to provide additional information about the firm's financial condition. The student is then faced with a cost/benefit trade-off: Is the additional expense of a new software developer, which will decrease short-term profitability, a good investment for the firm's long-term potential? In considering these situations, the student becomes familiar with the importance of financial decisions to the firm's day-to-day operations and long-term profitability.