

Chapter 1: Introduction to Corporate Finance

- 1.1 An argument can be made either way. At the one extreme, we could argue that in a market economy, all of these things are priced. There is thus an optimal level of, for example, unethical and /or illegal behaviour, and the framework of stock valuation explicitly includes these. At the other extreme, we could argue that these are non-economic phenomena and are best handled through the political process. Recent studies appear to indicate that value may be reduced because the corporation fails to invest in profitable investments that do not meet the new social responsible criteria.

A classic (and highly relevant) thought question that illustrates this debate goes something like this: “A firm has estimated that the cost of improving the safety of one of its products is \$30 million. However, the firm believes that improving the safety of the product will only save \$20 million in product liability claims. What should the firm do?”

- 1.2 In the corporate form of ownership, the shareholders are the owners of the firm. The shareholders elect the directors of the corporation, who in turn appoint the firm’s management. This separation of ownership from control in the corporate form of organization is what causes agency problems to exist. Management may act in its own or someone else’s best interests, rather than those of the shareholders. If such events occur, they may contradict the goal of maximizing the share price of the equity of the firm.
- 1.3 We would expect agency problems to be less severe in other countries, primarily due to the relatively small percentage of individual ownership. Fewer individual owners should reduce the number of diverse opinions concerning corporate goals. The high percentage of institutional ownership might lead to a higher degree of agreement between owners and managers on decisions concerning risky projects. In addition, institutions may be better able to implement effective monitoring mechanisms on managers than can individual owners, based on the institutions’ deeper resources and experiences with their own management. The increase in institutional ownership of stock in the United States and the growing activism of these large shareholder groups may lead to a reduction in agency problems for U.S. corporations and a more efficient market for corporate control.
- 1.4 Canadian financial institutions include chartered banks and other depository institutions—trust companies and credit unions as well as nondepository institutions—investment dealers, insurance companies, pension funds and mutual funds.

Financial markets can be classified as either money markets or capital markets. Short-term debt securities are bought and sold in money markets. Capital markets are the markets for long-term debt and shares of stock, for example the TSE.

- 1.5 Canadian Financial Markets, like all markets, are experiencing rapid globalization. The toolkit of available financial management techniques has expanded in response to a need to control volatility risk and to track complex dealing in many countries. Computer technology improvements make new financial engineering applications practical and create opportunities to combine different types of financial institutions. Financial institutions pressure authorities to deregulate in a process called the regulatory dialectic, which has allowed financial institutions to pressure for government approval for future mergers leading to industry consolidation..

These trends have made financial management in Canada much more complex and technical. In the face of increased global competition, the payoff for good financial management is great with finance becoming important in corporate strategic planning.

- 1.6 The answer below is provided for illustrative purposes only, as the data on the industries will be constantly changing. (The data below was found in July, 2010).

Industry	Number of competitors	US\$ (millions)
Aerospace & Defense	122	588,336.731
Application software	251	150,122.955
Diversified Capital Markets	8	151,082.488
Homebuilding	47	77,623.916
Personal products	77	88,406.22
Restaurants	125	183,087.015
Precious metals	132	12,126.861

From the above table, one can see that the Diversified Capital Markets industry has the fewest competitors but the third largest total sales. This might indicate that there are high barriers to entry in this industry, thereby limiting the number of competitors.

Application software has the highest number of competitors but about the middle total sales, indicating that this industry is very fragmented and very competitive.

Appendix

- 1.A1 The average tax rate is total taxes paid divided by total taxable income whereas the marginal tax rate is the extra tax payable on the next dollar earned.
- 1.A2 Personal investment income in the form of interest is taxed at the same rates as employment income. Dividend income is initially taxed at the same rate as employment income but the dividend tax credit reduces the effective tax rate on dividends for investors. Taxes on capital gains apply at 50 percent of the applicable marginal rate. However, before the 1994 Federal Budget, each individual was entitled to receive a lifetime capital gains exemption of \$100,000 net of any capital losses. From a corporate point of view, interest earned is fully taxable while dividends on common shares of other Canadian corporations are received tax-free. As with individuals, capital gains are taxed at 50 percent of the marginal rate.
- 1.A3 If the firm has an operating loss, it may be carried back to reduce net income in the three prior years and carried forward for up to seven years. In the case of capital losses, if capital losses exceed capital gains, the net capital loss may be carried back to reduce taxable capital gains in three prior years and carried forward indefinitely. An investment tax credit allows a qualified firm to subtract a set percentage of an investment directly from taxes payable.
- 1.A4 a. Ontario
 Corporation X: Taxes = $(0.165)(\$100,000) = \$16,500$
 Corporation Y: Taxes = $(0.32)(\$1,000,000) = \$320,000$
- b. The firms have different marginal tax rates. Firm X pays \$1,650 more and Firm Y, pays an additional \$3,200.

1.A5

DIVIDENDS	
Dividend	\$10,000.00
Gross up (45%)	4,500.00
Grossed-up dividends	14,500.00
Federal Tax (22%)	3,190.00
Less Federal Dividend Tax Credit (.19 x \$14,500)	(2,755.00)
Federal Tax Payable	435.00
Provincial Tax (.0915 of \$14,500)	1326.75
Less Provincial Tax credit (.0716 ´ \$14,500)	(1,038.20)
Provincial Tax Payable	288.55
Tax Payable	723.55

INTEREST	
Interest	\$10,000.00
Federal Tax (22%)	2,200.00
Provincial Tax (9.15%)	915.00
Tax Payable	\$3,115.00

CAPITAL GAINS	
Capital Gain	\$10,000.00
Federal Tax (22% x \$10,000 x 1/2)	1100.00
Provincial Tax (9.15% x \$10,000 x 1/2)	457.50
Tax Payable	\$1,557.50

After tax cash flow from Dividends = $\$10,000.00 - \$723.55 = \$9,276.45$

After tax cash flow from Interest = $\$10,000.00 - \$3,115.00 = \$6,885.00$

After tax cash flow from Capital Gains = $\$10,000.00 - \$1,557.50 = \$8,442.50$

Total (after tax) Cash Flow = \$ 24,603.95