### Chapter 1: Introduction to Corporate Finance

**Questions and Problems:**

* 1. In the absence of agency problems, managers act in the best interest of shareholders and make decisions to maximize shareholders’ wealth. They create value from the capital budgeting, financing, and liquidity activities. For example, managers create value by buying assets that generate more cash than they cost.

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 TSX.

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.

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.

**Appendix 1A: Taxes**

**Questions and Problems:**

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 twenty 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 = (0.15)($100,000) = $15,000

Corporation Y: Taxes = (0.265)($1,000,000) = $265,000

1. The firms have different marginal tax rates. Firm X pays $1,500 more and Firm Y, pays an additional $2,650.

1.A5

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| DIVIDENDS |  |
| Dividend | $10,000.00 |
| Gross up (38%) | 3,800.00 |
| Grossed–up dividends | 13,800.00 |
| Federal Tax (33%) | 4,554.00 |
| Less Federal Dividend Tax Credit (.150198 x $13,800) | (2,072.73) |
| Federal Tax Payable | 2,481.27 |
| Provincial Tax (.1316 of $13,800) | 1,816.08 |
| Less Provincial Tax credit (.1 × $13,800) | (1,380.00) |
| Provincial Tax Payable | 436.08 |
| Tax Payable | 2,917.35 |

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| INTEREST |  |
| Interest | $10,000.00 |
| Federal Tax (33%) | 3,300.00 |
| Provincial Tax (13.16%) | 1,316.00 |
| Tax Payable | $4,616.00 |

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| CAPITAL GAINS |  |
| Capital Gain | $10,000.00 |
| Federal Tax (33% x $10,000 x 1/2) | 1,650.00 |
| Provincial Tax (13.16% x $10,000 x 1/2) | 658.00 |
| Tax Payable | $2,308.00 |

After tax cash flow from Dividends = $10,000.00 – $2,917.35 = $7,082.65

After tax cash flow from Interest = $10,000.00 – $4,616.00 = $5,384.00

After tax cash flow from Capital Gains = $10,000.00 – $2,308 = $7,692.00

Total (after tax) Cash Flow = $20,158.65