Mini Case (p.45)

Assume that you recently graduated and have just reported to work as an investment advisor at the brokerage firm of Balik and Kiefer Inc. One of the firm's clients is Michelle Della Torre, a professional tennis player who has just come to the United States from Chile. Della Torre is a highly ranked tennis player who would like to start a company to produce and market apparel she designs. She also expects to invest substantial amounts of money through Balik and Kiefer. Della Torre is very bright, and she would like to understand in general terms what will happen to her money. Your boss has developed the following set of questions you must answer to explain the U.S. financial system to Della Torre.

A. Why is corporate finance important to all managers?

Corporate finance provides managers the ability to identify and select strategies, and projects. Additionally it allows for managers to forecast funding requirements for their company, and creates the ability to plan strategies for acquiring funds.

B. Describe the organizational forms a company might have as it evolves from a start-up to a major corporation. List the advantages and disadvantages of each form.

Typically businesses begin as sole proprietorships or partnerships which are unincorporated businesses. Business takes this form because it is easy and inexpensive to form. (chp1 pg6) Because of the limitations of proprietorships, and partnerships such as difficulty raising capital, unlimited liability, and inability to transfer ownership they mature into corporations. In contrast a corporation has unlimited life, allows for easy transferability of ownership, and limited liability. (chp1 pgs 7 & 8)

C. How do corporations go public and continue to grow? What are agency problems? What is corporate governance?

A corporation can go public through an initial public offering (IPO) allowing anyone to purchase shares of the company on open stock exchanges. A company continues to grow by demonstrating increasing value. Value is continued generation of cash flows and/or consistently decreasing the cost of capital.

Agency problem is the plausible conflict of interest that might exist between management and stakeholders. Meaning there must be measures in place to prevent management from acting on behalf of their own interests, and not on behalf of the owners. Some methods can consist of offering stock options to management incentivizing growth.

Corporate governance is the “set of rules that control the company’s behavior towards its directors, managers, employees, shareholders, creditors, customers, competitors, and community.” (pg 11)

D. What should be the primary objective of managers?

Manager’s primary objective is stockholder wealth maximization. Normatively, managers should always have the best interests of all stakeholders in mind with each decision they make on behalf of the firm.

1 Do firms have any responsibilities to society at large?

Firms are entities holding legal and ethical responsibility. Being held accountable to society often times by the court of public opinion. What might legal, might not be good for business.
2 Is stock price maximization good or bad for society?

Stock price maximization is the goal to increase publicly traded stock prices as high as possible. The increase of a stock price itself has no moral ground. The decisions that management might make in the effort to achieve stock price maximization could be bad or good for society. An economist would argue increasing stock prices can increase the purchasing power of a nation as well as standards of living effectively benefiting society. Or the economist could be smart and not argue this and keep it to himself.

“The actions that maximize intrinsic stock value also benefit society by (1) To a large extent, the owners of stock are society. (2) Consumer benefits. (3) Employee benefits.” (p15)

3 Should firms behave ethically?

Yes, it is in a corporation’s best interests to behave ethically. In a global economy where corporations are answerable to the court of public opinion acting unethically can easily result in bankruptcy, or the lesser damaging of brand equity.

E. What three aspects of cash flows affect the value of any investment?

(1) Sales revenues, (2) operating costs and taxes, and (3) required new investments in operating capital.

F. What are free cash flows?

“Free cash flows (FCFs) are the cash flows available for distribution to all of a firm’s investors (shareholders and creditors) after the firm has paid all expenses (including taxes) and has made the required investments in operations to support growth.” (p73)

G. What is the weighted average cost of capital?

The weighted average cost of capital is the rate of return required by investors. The lower the weighted average cost of capital is, potentially, the more valuable a company is.

H. How do free cash flows and the weighted average cost of capital interact to determine a firm’s value?

The greater the free cash flows, and the lower the weighted average cost of capital is the more a company is valued. Free cash flows are divided by the WACC to determine a company’s value.

I. Who are the providers (savers) and users (borrowers) of capital? How is capital transferred between savers and borrowers?

“In aggregate, individuals are net savers… nonfinancial corporations are net borrowers in the aggregate.” (pg19-20) There are three ways savers transfer money to borrowers: Direct transfers of money and securities. Indirect transfers often times through investment banks underwrite financial instruments on behalf of borrowers and sell them to savers. Lastly, financial intermediaries, such as banks or mutual funds transfer money from savers to borrowers simply by performing profitable business.
J. What do we call the price that a borrower must pay for debt capital? What is the price of equity capital? What are the four most fundamental factors that affect the cost of money, or the general level of interest rates, in the economy?

The price that a borrower must pay for debt capital is the interest rate. The price of equity capital is called the cost of equity, “and it consists of the dividends and capital gains stockholders expect.” (pg 29)

The four most fundamental factors that affect the cost of money, or the general level of interest rates, in the economy are (1) production opportunities, (2) time preferences for consumption, (3) risk, and (4) inflation.

K. What are some economic conditions (including international aspects) that affect the cost of money?

The economic conditions (including international aspects) that affect the cost of money are: “(1) Federal Reserve policy; (2) the federal budget deficit or surplus; (3) the level of business activity; and (4) international factors, including the foreign trade balance, the international business climate, and exchange rates.” (pg 30)

L. What are financial securities? Describe some financial instruments.

Financial securities are instruments that are sold by financial institutions to variety of clients, institutional, retail, private, and otherwise. Financial securities can be generalized into three different types (1) debt, (2) equity, (3) derivatives.

Some financial instruments are: Treasury bills, certificates of deposits (cd’s), and money market accounts are all lower interest (rate of return) instruments which are low risk and can be FDIC insured guaranteeing no loss of principal.

Mortgages, Muni Bonds, Corporate bonds, consumer credit cards, and commercial loans

And the most common type of equity is common stocks.

M. List some financial institutions

Some U.S. financial institutions: Bank of America, Citibank, JP Morgan Chase, Goldman Sachs, Fannie Mae, Freddie Mac, Fidelity, Janus, Vanguard, E-trade, Calpers, Federal reserve, AIG, and American Express


Financial institution types: Investment banks and brokerages, Savings and Loans Associations, Credit Unions, Commercial banks, Mutual Funds, Hedge Funds, Private equity funds, Life Insurance and Pension funds, and Regulatory Agencies.

N. What are some different types of markets?

Physical asset markets, spot markets and futures markets, money and capital markets, mortgage markets and consumer credit markets, world, national, regional, and local markets, primary markets and secondary markets, and private markets and public markets.
O. How are secondary markets organized?

Secondary markets are either physical locations like the New York Stock Exchange, and the CBOT (Chicago Board of Trade) or computer/telephone networks like the Nasdaq. Secondary markets are open outcry or auction systems where buyers and sellers are matched together to create deals at agreed upon prices. Additionally dealer markets, and electronic communications networks (ECN) are secondary markets where market orders are fulfilled electronically.

1. List some physical location markets and some computer/telephone networks.

Some physical location markets are: the New York Stock Exchange, the American Stock Exchange (AMEX), and the Chicago Board of Trade (the CBOT).

Some computer/telephone networks are: Instinet, Archipelago, and Eurex.

2. Explain the differences between open outcry auctions, dealer markets, and electronic communications networks (ECNs).

Open outcry auctions are physical location exchanges where traders actually meet in a pit and sellers and buyers communicate with one another through shouts and hand signals.

Dealer markets are run by “market makers” who keep inventory of stock (or other financial instruments) by listing bids and ask quotes given a spread given the speed at which the market is moving (wider the spread, the faster the market is moving); however, computerized systems keep trade of traders the “market maker” matches traders.

Electronic communications networks are automatic trading networks where buyers and sellers are marched immediately.

P. Briefly explain mortgage securitization and how it contributed to the global economic crisis.

The global economic crisis can be broken into three parts just like anything: (1) beginning, (2) middle, and (3) end. First sub-prime standards were established in the mid-1990s allowing for less than credit worthy borrowers to start purchasing homes. With lower fundamental loan standards in lending risk exposure in mortgage securitization became prevalent.

Mortgage securitization is when investment bank packages a group of loans together and sells them as investments. Unfortunately institutional investors did not perform due diligence and even retail investors invested in products they did not understand. The most common form of mortgage securitization and the form which had the most meaningful part in the global crisis were CDO’s.

CDO’s or collateralized debt obligations began to flourish in all shapes, sizes, and risk tolerances. This provided the framework for the failure to cause global ramifications. Lastly, the end, with six factors (1) low rates, (2) high risk, (3) incentives to drive short-sided business, (4) over-valued appraisals, (5) conflicts of interest in regulatory bodies, and (6) insurance companies not appropriately hedging risk all contributed to the global economic crisis.
### 2.6 Statement of Retained Earnings

In its most recent financial statements, Newhouse Inc. reported $50 million of net income and $810 million of retained earnings. The previous retained earnings were $780 million. How much in dividends was paid to shareholders during the year?

<table>
<thead>
<tr>
<th>Statement of Retained Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newhouse Inc.</td>
</tr>
<tr>
<td>Statement of Retained Earnings</td>
</tr>
<tr>
<td>For year ended in December, 2012</td>
</tr>
</tbody>
</table>

| Retained earnings, beginning balance | $780,000,000.00 |
| Add: Net income | $50,000,000.00 |
| | $830,000,000.00 |
| Less: Dividends paid | $20,000,000.00 |
| Retained earnings, ending balance | $810,000,000.00 |

Dividends paid to shareholders during the year = $830m - $810m = $20 million.

### 2.7 Corporate Tax Liability (calculate tax liability and AT income)

The Taley Corporation had a taxable income of $365,000 from operations after all operating costs but before (1) interest charges of $50,000, (2) dividends received of $15,000, (3) dividends paid of $25,000, and (4) income taxes. What are the firm's income tax liability and its after-tax income? What are the company's marginal and average tax rates on taxable income?

| Taxable income | $365,000 |
| Less: interest | $50,000 |
| Add: dividends $15,000 |
| $330,000 |

Taxable Income $365,000
Less: Interest $50,000
Add: Taxable portion of dividends: $4,500
Taxable Income: $319,500

Tax computation: $22,250 + ($219,500*39%) = $107,855

Taxable Income = $319,500
Less taxes 107,555
Plus: 10,500
Net at Income: $222,145

Average Rate: 33.76%
Marginal = 39%
Taley Corporation tax rate (table 2-6 corporate tax rates as of January 2008)

<table>
<thead>
<tr>
<th>Amount</th>
<th>Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100,000</td>
<td>$22,250</td>
</tr>
<tr>
<td>$230,000</td>
<td>$89,700</td>
</tr>
<tr>
<td>$330,000</td>
<td>$111,950</td>
</tr>
</tbody>
</table>

\[22,250 + ((330,000-100,000) \times 0.39) = 22,250 + 89,700 = 111,950\]

Firm's income tax liability = $111,950

After-tax income = $330,000 - $111,950 = $218,050

Marginal tax rate = 39% (given)

Average tax rate = $111,950 / $330,000 = 33.92%

2.9 Corporate After-Tax Yield (muni, corp, PS)

The Shrieves Corporation has $10,000 that it plans to invest in marketable securities. It is choosing among AT&T bonds, which yield 7.5%, state of Florida muni bonds, which yield 5% (but are not taxable), and AT&T preferred stock, with a dividend yield of 6%. Shrieves's corporate tax rate is 35%, and 70% of the dividends received are tax exempt. Find the after-tax rates of return on all three securities.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>yield</th>
<th>after-tax rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT&amp;T bonds</td>
<td>7.50%</td>
<td>4.88%</td>
</tr>
<tr>
<td>Florida muni</td>
<td>5.00%</td>
<td>5.00%</td>
</tr>
<tr>
<td>AT&amp;T preferred</td>
<td>6.00%</td>
<td>5.37%</td>
</tr>
</tbody>
</table>

AT&T bond after-tax rate = 7.50% \times (1-0.35) = 4.88%

AT&T preferred stock after-tax rate = 6.00% \times (1-(0.30*0.35)) = 5.37%