Corporate finance – concept questions assignment

Business

CONCEPT QUESTIONS – CHAPTER 1 1. 1 (What are the three basic questions of corporate finance? a. Investment decision (capital budgeting): What long-term investment strategy should a firm adopt? b. Financing decision (capital structure): How much cash must be raised for the required investments? c. Short-term finance decision (working capital): How much short-term cash flow does company need to pay its bills. (Describe capital structure. Capital structure is the mix of different securities used to finance a firm's investments. (How is value created? (List three reasons why value creation is difficult.

Value creation is difficult because it is not easy to observe cash flows directly. The reasons are: a. Cash flows are sometimes difficult to identify. b. The timing of cash flows is difficult to determine. c. Cash flows are uncertain and therefore risky. 1. 2 (What is a contingent claim? A contingent claim is a claim whose payoffs are dependent on the value of the firm at the end of the year. In more general terms, contingent claims depend on the value of an underlying asset. (Describe equity and debt as contingent claims. Both debt and equity depend on the value of the firm.

If the value of the firm is greater than the amount owed to debt holders, they will get what the firm owes them, while stockholders will get the difference. But if the value of the firm is less than equity, bondholders will get the value of the firm and equity holders nothing. 1. 3 (Define a proprietorship, a partnership and a corporation. A proprietorship is a business owned by a single individual with unlimited liability. A partnership is a business owned by two or more individuals with unlimited liability. A corporation is a business which is a " legal person" with many limited liability owners. What are the advantages of the corporate form of business organization? Limited liability, east of ownership transfer and perpetual succession. 1. 4 (What are the two types of agency costs? Monitoring costs of the shareholders and the incentive fees paid to the managers. (How are managers bonded to shareholders? a. Shareholders determine the membership to the board of directors, which selects management. b. Management contracts and incentives are build into compensation arrangements. c. If a firm is taken over because the firm's price dropped, managers could lose their jobs. . Competition in the managerial labor market makes managers perform in the best interest of stockholders. (Can you recall some managerial goals? Maximization of corporate wealth, growth and company size. (What is the set-of-contracts perspective? The view of the corporation as a set of contracting relationships among individuals who have conflicting objectives. 1. 5 (Distinguish between money markets and capital markets. Money markets are markets for debt securities that pay off in less than one year, while capital markets are markets for long-term debt and equity shares. What is listing? Listing refers to the procedures by which a company applies and qualifies so that its stock can be traded on the New York Stock Exchange. (What is the difference between a primary market and a secondary market? The primary market is the market where issuers of securities sell them for the first time to investors, while a secondary market is a market for securities previously issued. CONCEPT QUESTIONS – CHAPTER 2 2. 1 (What is the balance-sheet equation? Assets = Liabilities + Stockholders' equity (What three things should be kept in mind when looking at a balance sheet?

Accounting liquidity, debt vs. equity, and value vs. cost. 2. 2 (What is the income statement equation? Revenue – expenses = Income (What are the three things to keep in mind when looking at an income statement? Generally Accepted Accounting Principles (GAAP), noncash items, and time and costs. (What are noncash expenses? Noncash expenses are items included as expenses but which do not directly affect cash flow. The most important one is depreciation. 2. 3 (What is net working capital? It is the difference between current assets and current liabilities. What is the change in net working capital? To determine changes in net working capital you subtract uses of net working capital from sources of net working capital. 2. 4 (How is cash flow different from changes in net working capital? The difference between cash flow and changes in new working capital is that some transactions affect cash flow and not net working capital. The acquisition of inventories with cash is a good example of a change in working capital requirements. (What is the difference between operating cash flow and total cash flow of the firm?

The main difference between the two is capital spending and additions to working capital, that is, investment in fixed assets and " investment" in working capital. 2. 5 (How is the Statement of Cash Flows in Table 2. 4 different from cash flow of the firm in Table 2. 3? CONCEPT QUESTIONS – CHAPTER 3 3. 1 (What are the two levels of the financial planning process? The time frame and the level of aggregation. (Why should firms draw up financial plans? It accomplishes various goals: 1. It improves interactions between investment proposals for the different perating activities of the firm. 2. It provides opportunities for the firm to work through various investment and financial alternatives 3. It provides greater flexibility. 4. It avoids surprises. 3. 2 (When might the goals of growth and value maximization be in conflict and when would they be aligned? They might be in conflict if management is willing to accept negative NPV projects just for the sake of growth. They would be aligned if growth is an indeterminate goal that leads to higher value. (What are the determinants of growth? 1. Profit margin 2. Asset utilization . Payout ratio 4. Debt ratio CONCEPT QUESTIONS – CHAPTER 4 4. 1 (Define future value and present value. Future value is the value of a sum after investing over one or more periods. Present value is the value today of cash flows to be received in the future. (How does one use net present value when making an investment decision? One determines the present value of future cash flows and then subtracts the cost of the investment. If this value is positive, the investment should be undertaken. If the NPV is negative, then the investment should be rejected. 4. (What is the difference between simple interest and compound interest? With simple interest, the interest on the original investment is not reinvested. With compound interest, each interest payment is reinvested and one earns interest on interest. (What is the formula for the net present value of a project? T NPV = -C0 + (Ct /(1+I)t t= 1 4. 3 (What is a stated annual interest rate? The stated annual interest rate is the annual interest rate without consideration of compounding. (What is an effective annual interest rate? An effective annual interest rate is a rate that takes compounding into account. What is the relationship between the stated annual interest rate and the effective annual interest rate? Effective annual interest rate = (1 + (r/m))m – 1. (Define continuous compounding. Continuous compounding compounds investments every instant. 4. 4 (What are the formulas for perpetuity, growing-perpetuity, annuity, and growing annuity? Perpetuity: PV = C/r Growing Perpetuity: PV = C/(r-g) Annuity: PV = (C/r) [1-1/(1+r)T] Growing Annuity: PV = [C/(r-g)] [1-((1+g) / (1+r))T] (What are three important points concerning the growing perpetuity formula? 1. The numerator. 2.

The interest rate and the growth rate. 3. The timing assumption. (What are four tricks concerning annuities? 1. A delayed annuity. 2. An annuity in advance 3. An infrequent annuity 4. The equating of present values of two annuities. CONCEPT QUESTIONS – Appendix to Chapter 4 (How does an individual change his consumption across periods through borrowing and lending? (How do interest rate changes affect one's degree of impatience? CONCEPT QUESTIONS – CHAPTER 5 5. 2(Define pure discount bonds, level-coupon bonds, and consols. A pure discount bond is one that makes no intervening interest payments.

One receives a single lump sum payment at maturity. A level-coupon bond is a combination of an annuity and a lump sum at maturity. A consol is a bond that makes interest payments forever. (Contrast the state interest rate and the effective annual interest rate for bonds paying semi-annual interest. Effective annual interest rate on a bond takes into account two periods of compounding per year received on the coupon payments. The state rate does not take this into account. 5. 3(What is the relationship between interest rates and bond prices? There is an inverse relationship. When one goes up, the other goes down. How does one calculate the yield to maturity on a bond? One finds the discount rate that equates the promised future cash flows with the price of the bond. 5. 8(What are the three factors determining a firm's P/E ratio? 1. Today's expectations of future growth opportunities. 2. The discount rte. 3. The accounting method. 5. 9(What is the closing price of Gateway, Inc. ? The closing price of Gateway, Inc. is 6 3/16. (What is the PE of Gateway, Inc. ? The PE of Gateway, Inc. is 29. (What is the annual dividend of General Motors? The annual dividend of General Motors is zero.

CONCEPT QUESTIONS – Appendix to Chapter 5 (Define the forward rate. Given a one-year bond and a two-year bond, one knows the spot rates for both. The forward rate is the rate of return implicit on a one-year bond purchased in the second year that would equate the terminal wealth of purchasing the one-year bond today and another in one year with that of the two-year bond. (What is the relationship between the one-year spot rate, the two-year spot rate and the forward rate over the second year? The forward rate f2 = [(1+r2)2 /(1+r1)] – 1 (What is the expectation hypothesis?

Investors set interest rates such that the forward rate over a given period equals the spot rate for that period. (What is the liquidity-preference hypothesis? This hypothesis maintains that investors require a risk premium for holding longer-term bonds (i. e. they prefer to be liquid or short-term investors). This implies that the market sets the forward rate for a given period above the expected spot rate for that period. CONCEPT QUESTIONS – CHAPTER 6 6. 1 (What is the NPV rule? (Why does this rule lead to good investment decisions? 6. 2(List the problems of the payback method. 1.

It does not take into account the time value of money. 2. It ignores payments after the payback period. 3. The cutoff period is arbitrary. (What are some advantages? 1. It is simple to implement. 2. It may help in controlling and evaluating managers. 6. 4(What are the three steps in calculating AAR? 1. Determine average net income. 2. Determine average investment 3. Divide average net income by average investment. (What are some flaws with the AAR approach? 1. It uses accounting figures. 2. It takes no account of timing. 3. The cutoff period is arbitrary. 6. 5(How does one calculate the IRR of a project?

Using either trial-and-error or a financial calculator, one finds the discount rate that produces an NPV of zero. 6. 6(What is the difference between independent projects and mutually exclusive projects? An independent project is one whose acceptance does not affect the acceptance of another. A mutually exclusive project, on the other hand is one whose acceptance precludes the acceptance of another. (What are two problems with the IRR approach that apply to both independent and mutually exclusive projects? 1. The decision rule depends on whether one is investing of financing. 2. Multiple rates of return are possible. What is MIRR? (What are two additional problems applying only to mutually exclusive projects? 1. The IRR approach ignores issues of scale. 2. The IRR approach does not accommodate the timing of the cash flows properly. 6. 7(How does one calculate a project's profitability index? Divide the present value of the cash flows subsequent to the initial investment by the initial investment. (How is the profitability index applied to independent projects, mutually exclusive projects, and situations of capital rationing? 1. With independent projects, accept the project if the PI is greater than 1. 0 and reject if less than 1. 0. 2.

With mutually exclusive projects, use incremental analysis, subtracting the cash flows of project 2 from project 1. Find the PI. If the PI is greater than 1.

0, accept project 1. If less than 1. 0, accept project 2. 3. In capital rationing, the firm should simply rank the projects according to their respective PIs and accept the projects with the highest PIs, subject to the budget constrain. CONCEPT QUESTIONS – CHAPTER 7 7. 1(What are the four difficulties in determining incremental cash flows? 1. Sunk costs. 2. Opportunity costs 3. Side effects. 4. (Define sunk costs, opportunity costs, side effects, and allocated costs. . Sunk costs are costs that have already been incurred and that will not be affected by the decision whether to undertake the investment. 2. Opportunity costs are costs incurred by the firm because, if it decides to undertake a project, it will forego other opportunities for using the assets. 3. Side effects appear when a project negatively affects cash flows from other parts of the firm. 4. 7. 2(What are the items leading to cash flow in any year? Cash flow from operations (revenue-operating costs-taxes) plus cash flow of investment (cost of new machines + changes in net working capital + opportunity costs). Why did we determine income when NPV Analysis discounts cash flows, not income? Because we need to determine how much is paid out in taxes. (Why is working capital viewed as a cash outflow? Because increases in working capital must be funded by cash generated elsewhere in the firm. 7. 4(What is the difference between the nominal and the real interest rate? The nominal interest rate is the real interest rate with a premium for inflation. (What is the difference between nominal and real cash flows? Real cash flows are nominal cash flows adjusted for inflation. 7. (What is the equivalent annual cost method of capital budgeting? The decision as to which of various mutually exclusive machines to buy is based on the equivalent annual cost. The EAC is determined by dividing the net present value of costs by an annuity factor that has the same life as the machines. The machine with the lowest EAC should be acquired. CONCEPT QUESTIONS – CHAPTER 8 8. 1(What is a decision tree? It is a method to help capital budgeting decision-makers evaluating projects involving sequential decisions. At every point in the tree, there are different alternatives that should be analyzed. How do decision trees handle sequential decisions? 8. 2(What is a sensitivity analysis? It is a technique used to determine how the result of a decision changes when some of the parameters or assumptions change. (Why is it important to perform a sensitivity analysis? Because it provides an analysis of the consequences of possible prediction or assumption errors. (What is a break-even analysis? It is a technique used to determine the volume of production necessary to break even, that is, to cover not only variable costs but fixed costs as well. (Describe how sensitivity analysis interacts with break-even analysis.

Sensitivity analysis can determine how the financial break-even point changes when some factors (such as fixed costs, variable costs, or revenue) change. 8. 4 (What are the different types of real options? (Why does traditional NPV analysis tend to underestimate the true value of a capital project? CONCEPT QUESTIONS – CHAPTER 9 9. 1(What are the two parts of total return? Dividend income and capital gain (or loss) (Why are unrealized capital gains or losses included in the calculation of returns? Because it is as much a part of returns as dividends, even if the investor decides to hold onto the stock and not to realize the capital gain. What is the difference between a dollar return and a percentage return? A dollar return is the amount of money the original investment provided, while percentage return is the percentage of the original investment represented by the total return. 9. 2(What is the largest one-period return in the 77-year history of common stocks we have displayed, and when did it occur? What is the smallest return, and when did it occur? Largest common stock return: 53. 99% in 1933. Smallest common stock return: -43. 34% in 1931. (In how many years did the common stock return exceed 30 percent, and in how many years was it below 20 percent?

It exceeded 30% in 16 years. It was below 20% in 39 years. (For common stocks, what is the longest period of time without a single losing year? What is the longest streak of losing years? There are 6 consecutive years of positive returns. The longest losing streak was 4 years. (What is the longest period of time such that if you have invested at the beginning of the period, you would still not have had a positive return on your common-stock investment by the end? The longest period of time was 14 years (from 1929 to 1942). 9. 4(What is the major observation about capital markets that we will seek to explain?

That the return on risky assets has been higher on average than the return on risk-free assets. (What does the observation tell us about investors for the period from 1926 through 1994. An investor in this period was rewarded for investment in the stock market with an extra or excess return over what would have achieved by simply investing in T-bills. 9. 5(What is the definition of sample estimates of variance and standard deviation? Variance is given by Var (R) = (1 / (T-1)) (t (Rt – R)2 where T is the number of periods, Rt is the period return and R is the sample mean.

Standard deviation is given by SD = Var 1/2. For large T, (T-1) may be approximated by T. (How does the normal distribution help us interpret standard deviation? For a normal distribution, the probability of having a return that is above or below the men by a certain amount only depends on the standard deviation. CONCEPT QUESTIONS – CHAPTER 10 10. 3 (What are the formulas for the expected return, variance, and standard deviation of a portfolio of two assets? E{Rp } = Xi Ri + Xj Rj Varp = (Xi2 (Ri – Ri)2 + Xj2 (Rj – Rj)2 + 2Xi Xj (Ri – Ri) (Rj – Rj) SDp = Varp 1/2 What is the diversification effect? As long as the correlation coefficient between two securities is less than one, the standard deviation of a portfolio of two securities is less than the weighted average of the standard deviations of the individual securities. (What are the highest and lowest possible values for the correlation coefficient? +1 and -1. 10. 4 (What is the relationship between the shape of the efficient set for two assets and the correlation between the two assets? The less correlation there is between two assets the more the efficient set bends in toward the y-axis. 0. 5 (What is the formula for the variance of a portfolio for many assets? N N Varp = (([XiXj(Ri ??? Ri)(Rj ??? Rj)] I= 1 j= 1 (How can the formula be expressed in terms of a box or matrix? The terms on the diagonal of the matrix represent the variances of each term and the off-diagonal elements represent the covariances. 10. 6 (What are the two components of the total risk of a security? Portfolio risk and diversifiable risk. (Why doesn't diversification eliminate all risk? Because the variances of the portfolio asymptotically approaches the portfolio risk.

This risk is the covariance of each pair of securities, which always remains. 10. 7 (What is the formula for the standard deviation of a portfolio composed of one riskless and one risky asset? SDP =(XA2VarA)1/2 = XASDA where A is the risky asset (How does one determine the optimal portfolio among the efficient set of risky assets? This portfolio lies at the point at which a line drawn from the risk-free rate is tangent to the efficient set. 10. 8 (If all investors have homogeneous expectations, what portfolio of risky assets do they hold? The market portfolio. (What is the formula for beta?

Bi = COV(RiRm)/Var(Rm) (Why is the beta the appropriate measure of risk for a single security in a large portfolio? Because beta measures the contribution of that single security to the variance of the portfolio. 10. 9 (Why is the SML a straight line? Because investors could form homemade portfolios that dominate portfolios that don’t lie on a straight line. Buying and selling of these portfolios would then drive any outliers back to the line. (What is the Capital-Asset-Pricing model? The CAPM is a linear model that relates the expected return on an asset to its systematic risk (beta). What are the differences between the capital market line and the security market line? The SML relates expected return to beta, while the CML relates expected return to the standard deviation. The SML holds both for all individual securities and for all possible portfolios, whereas the CML holds only for efficient portfolios. CONCEPT QUESTIONS – CHAPTER 11 11. 1(What are the two basic parts of a return? 1. The expected part 2. The surprise part (Under what conditions will some news have no effect on common stock prices? If there is no surprise in the news, there will not be any effect on prices.

That is, the news was fully expected. 11. 2(Describe the difference between systematic risk and unsystematic risk. A systematic risk is any risk that affects a large number of assets, each to a greater or lesser degree. An unsystematic risk is a risk that specifically affects a single asset or a small group of assets. (Why is unsystematic risk sometimes referred to as idiosyncratic risk? Because information such as the announcement of a labor strike, may affect only some companies. 11. 3 (What is an inflation beta? A GNP beta? An interest-rate beta?

An inflation beta is a measure of the sensitivity of a stock's return to changes in the expected inflation rate. A GNP beta measures the sensitivity of a stock's return to changes in the expected GNP. An interest rate beta reflects the sensitivity of a stock's return to changes in the market interest rate. (What is the difference between a k-factor model and the market model? The main difference is that the market model assumes that only one factor, usually a stock market aggregate, is enough to explain stock returns, while a k-factor model relies on k factors to explain returns. Define the beta coefficient. The beta coefficient is a measure of the sensitivity of stock's return to unexpected changes in one factor. 11. 4(How can the return on a portfolio be expressed in terms of a factor model? It is the weighted average of expected returns plus the weighted average of each security's beta times a factor F plus the weighted average of the unsystematic risks of the individual securities. (What risk is diversified away in a large portfolio? The unsystematic risk. 11. 5(What is the relationship between the one-factor model and CAPM?

Assuming the market portfolio is properly scaled, it can be shown that the one-factor model is identical to the CAPM. 11. 7 (Empirical models are sometimes called factor models. What is the difference between a factor as we have used it previously in this chapter and an attribute as we use it in this section? A factor is generally a market wide or industry wide factor proxying the systematic risk. An attribute is related with the returns of the stocks. (What is data mining and why might it overstate the relation between some stock attribute and returns? Choosing parameters because they have been shown to be related to returns is data mining.

The relation found between some attribute and returns can be accidental, thus overstated. (What is wrong with measuring the performance of a U. S. growth stock manager against a benchmark composed of English stocks? Using a benchmark composed of English stocks is wrong because the stocks included are not of the same style as those in a U. S. growth stock fund. CONCEPT QUESTIONS – CHAPTER 12 12. 2(What is the disadvantage of using too few observations when estimating beta? Small samples can lead to inaccurate estimations. (What is the disadvantage of using too many observations when estimating beta?

Firms may change their industries over time making observations from the distant past out-of-date. (What is the disadvantage of using the industry beta as the estimate of the beta of an individual firm? The operations of a particular firm may not be similar to the industry average. 12. 3(What are the determinants of equity betas? 1. The responsiveness of a firm’s revenues to economy wide movements. 2. The degree of a firm’s operating leverage. 3. The degree of a firm’s financial leverage. (What is the difference between an asset beta and an equity beta? Financial leverage. 12. (What is liquidity? Liquidity in this context means the cost of buying and selling stocks. Those stocks that are expensive to trade are considered less liquid. (What is the relation between liquidity and expected return? There is a high expected return for illiquid stocks with high trading costs. (What is adverse selection? Adverse selection occurs when individuals have ignorance about traits, trends, or other information hidden in a population. For instance, a trader may suffer from adverse selection if certain market knowledge is hidden from him but is available to some investors. What can a corporation do to lower its cost of capital? A corporation can be proactive in taking actions that will lower trading costs, thereby lowering its cost of capital. CONCEPT QUESTIONS – CHAPTER 13 13. 1(List the three ways financing decisions can create value. 1. Fool investors 2. Reduce costs or increase subsidies 3. Create a new security 13. 2 (Can you define an efficient market? It is a market where current prices reflect all available information. (Name the three foundations of market efficiencies? 13. 3 (Can you describe the three forms of the efficient-market hypotheses? 1.

Weak-from EMH postulates that prices reflect all information contained in the past history of prices. 2. Semistrong form EMH says that prices not only reflect the history of prices but all publicly available information. 3. Strong form EMH contends that prices reflect all available information, public and private (or “ inside”). (Does market efficiency mean you can throw darts at a Wall Street Journal listing of New York Stock Exchange stocks to pick a portfolio. No. All it says is that, on average, a portfolio manager will not be able to achieve excess returns on a risk-adjusted basis. What does it mean to say the price you pay for a stock is fair? It means that the stock has been priced taking into account all publicly available information. 13. 5 (What do representativeness and conservatisim mean? (What are the risks involved in arbitrage? 13. 6 (Name five empirical challenges to market efficiency. 13. 8 (What are the four implications of market efficiency for corporate finance? CONCEPT QUESTIONS – CHAPTER 14 14. 1(What is a company's book value? It is the sum of the par value, capital surplus and accumulated retained earnings. (What rights do stockholders have? 1. Voting rights for board members 2.

Proxy rights 3. Asset Participation in case of liquidation 4. Voting rights for mergers and acquisitions 5. Preemptive rights to new shares issued. (What is a proxy? It is the grant of authority by a shareholder to someone else to vote his or her shares. 14. 2(What is corporate debt? Describe its general features. Corporate debt is a security issued by corporations as a result of borrowing money and represents something that must be repaid. Its main features are: 1. It does not represent ownership interest in the firm. 2. Payment of interest on debt is tax deductible because it is considered a cost of doing business. . Unpaid debt is a liability of the firm. (Why is it sometimes difficult to tell whether a particular security is debt or equity? Because it has characteristics that are particular to both. Companies are very adept at creating hybrid securities that are considered debt by the IRS but have equity features. 14. 3(What is a preferred stock? It is a security that has preference over common stock in the payment of dividends and in the distribution of assets in the case of liquidation. (Do you think it is more like debt or equity? Preferred stock is similar to both debt and common equity.

Preferred shareholders receive a stated dividend only, and if the corporation is liquidated, preferred receive a stated dividend only, and if the corporation is liquidated, preferred stockholders get a stated value. However, unpaid preferred dividends are not debts of a company and preferred dividends not a tax deductible business expense. (What are three reasons why preferred stock is issued? 1. Because of the way utility rates are determined in regulatory environments, regulated public utilities can pass the tax disadvantage of issuing preferred stock on to their customers. 2.

Companies reporting losses to the IRS may issue preferred stock. 3. Firms issuing preferred stock can avoid the threat of bankruptcy that exists that debt financing. 14. 4 (What is the difference between internal financing and external financing? Internal financing comes from internally generated cash flows and does not require the issuing securities. (What are the major sources of corporate financing? 1. Internal financing 2. External financing (new long-term borrowing, equity) (What factors influence a firm's choices of external versus internal equity financing? 1. The general economic environment, specifically, business cycles. . The level of stock prices 3. The availability of positive NPV projects. (What pecking order can be observed in the historical patterns of long-term financing? The first form of financing is internally generated funds, then external financing; debt is used before equity. CONCEPT QUESTIONS – CHAPTER 15 15. 1 (What is the pie model of capital structure? It is a model in which the value of the firm is pictured as a pie cut into debt and equity slices. 15. 2 (Why should financial managers choose the capital structure that maximizes the value of the firm. Because this capital structure also maximizes the value of equity. 5. 3 (Describe financial leverage. It is the extent to which a company relies on debt in its capital structure. (What is levered equity? The equity of a firm that has debt in its capital structure. (How can a shareholder of Trans Am undo the company's financial leverage? By selling shares of Trans Am and buying bonds or investing the proceeds in another company's debt. 15. 4 (Why does the expected return on equity risk with firm leverage? Because increasing leverage raises the risk of equity. (What is the exact relationship between the expected return on equity and firm leverage?

Rs = ro + (ro ??? rb) (B/S) (How are market-value balance sheets set up? They are set up the same way as accounting balance sheets with assets on the left side and liabilities on the right side. However, instead of valuing assets in terms of historical values, market values are used. 15. 5 (What is the quirk in the tax code making a levered firm more valuable than an otherwise-identical unlevered firm? Interest payments are tax deductible and dividend payments are not. (What is MM Proposition under corporate taxes? VL = VU + TCB (What MM Proposition II under corporate taxes? s = p + (B/S) (1-Tc)(p-rB) CONCEPT QUESTIONS – CHAPTER 16 16. 1 (What does risk-neutrality mean? Investors are indifferent to the presence of risk. (Can one have bankruptcy risk without bankruptcy costs? Yes. When a firm takes on debt the risk of bankruptcy is always present but bankruptcy cost may not be. (Why do we say that stockholders bear bankruptcy costs? Because in the presence of bankruptcy costs, bondholders would pay less for any debt issued. This then will reduce the value of potential future dividends. 16. 2(What is the main direct cost of financial distress?

Legal and administrative costs of liquidation or reorganization. (What are the indirect costs of financial distress? Those that arise because of an impaired ability to conduct business. (Who pays the costs of selfish strategies? Ultimately, the stockholders. 16. 4 (List all the claims to the firm's assets.

Payments to stockholders and bondholders, payments to the government, payments to lawyers, and payments to any al all other claimants to the cash flows of the firm. (Describe marketed claims and nonmarketed claims. Marketed claims are claims that can be sold or bought in capital markets.

Nonmarketed claims are claims that cannot be sold in capital markets. (How can a firm maximize the value of its marketed claims? By minimizing the value of nonmarketed claims such as taxes. 16. 5 (Do managers have an incentive to fool investors by issuing additional debt? 16. 6 (What are agency costs? Costs that arise from conflicts of interest between managers bondholders and stockholders. (Is there a cost to issuing additional debt? (Why are shirking and perquisites considered an agency cost of equity? Because managers will act in their own best interests rather than those of shareholders. What empirical evidence suggests that managers signal information through debt levels? (How do agency costs of equity affect the firm’s debt-equity ratio? The optimal debt-equity ratio is higher in a world with agency costs than in a world without such costs. (What is the Free Cash Flow Hypothesis? We might expect to see more wasteful activity in a firm capable of generating large cash flows. 16. 7(What is the pecking-order theory? This theory states that when a firm seeks new capital it faces ‘ timing’ issues of new stock. (What are the problems of issuing equity according to this theory?

The theory implies that only overvalued firms have an incentive to issue equity and given market reactions to a stock issue, virtually no firm will issue equity. The model results in firms being financed virtually entirely by debt. Moderating the pure theory and we would predict that debt should be issued before equity. If a firm expects to fund a profitable project in the future it will start to accumulate a cash reservoir today, thus avoiding the need to go to the capital markets. 16. 8 (How do growth opportunities decrease the advantage of debt financing?

Growth implies significant equity financing, even in a world with low bankruptcy costs. To eliminate the potential increasing tax liability resulting from growing EBIT, the firm would want to issue enough debt so that interest equals EBIT. Any further increase in debt would, however, lower the value of the firm in a world with bankruptcy costs. 16. 10 (List the empirical regularities we observe for corporate capital structure? 1. Most corporations have low debt ratios. 2. Changes in financial leverage affect firm value. 3. There are differences in the capital structure of different industries. What are the factors to consider in establishing a debt-equity ratio? 1. Taxes 2. Financial distress costs 3. Pecking order and financial slack. CONCEPT QUESTIONS – CHAPTER 17 17. 1 (How is the APV method applied? APV is equal to the NPV of the project (i. e. the value of the project for an unlevered firm) plus the NPV of financing side effects. (What additional information beyond NPV does one need to calculate A| PV? NPV of financing side effects (NPVF); 17. 2 (How is the FTE Method applied? FTE calls for the discounting of the cash flows of a project to the equity holder at the cost of equity capital. What information is needed to calculate FTE? Levered cash flow and the cost of equity capital. 17. 3 (How is the WACC method applied? WACC calls for the discounting of unlevered cash flows of a project (UCF) at the weighted average cost of capital, WACC. 17. 4 (What is the main difference between AAPV and WACC? WACC is based upon a target debt rate and APV is based upon the level of debt. (What is the main difference between the FTE approach and the two other approaches? FTE uses levered cash flow and other methods use unlevered cash flow. (When should the APV method be used? When the level of debt is known in each future period. When should the FTE and WACC approaches be used? When the target debt ratio is known. CONCEPT QUESTIONS – CHAPTER 18 18. 2 (Describe the procedure of a dividend payment. 1. Dividends are declared: The board of directors passes a resolution to pay dividends. 2. Date of record: Preparation of the list of shareholders entitled to dividends. 3. Ex-Dividend date: A date before the date of record when the brokerage firm entitles stockholders to receive the dividend if they buy before this date. 4. Date of payment: Dividend checks are sent to stockholders. (Why should the price of a stock change when it goes ex-dividend?

Because in essence the firm is reducing its value by the amount paid out in cash for the dividend. 18. 3 (How can an investor make homemade dividends? By selling shares of the stock. (Are dividends irrelevant? If we consider a perfect capital market, dividend policy, and therefore the timing of dividend payout, should be irrelevant. (What assumptions are needed to show that dividend policy is irrelevant? 1. Perfect markets exist. 2. Investors have homogeneous expectations 3. This investment policy of the firm is fixed. 18. 4 (In a perfect capital market are repurchases preferred to dividends? What are five reasons for preferring repurchases to dividends in the real world? 18. 5 (List four alternatives to paying a dividend with excess cash. (Indicate a problem with each of these alternatives. 18. 6 (What are the real-world factors favoring a high-dividend policy? 1. Desire for current income 2. Resolution of uncertainty 3. Brokerage and other transactions costs 4. Fear of consumption out of principal 18. 7 (What are tax clienteles? Different types of shareholders that prefer one kind of dividend policy due to difference in tax brackets. CONCEPT QUESTIONS – Appendix to Chapter 18 (What is a stock dividend?

A stock split? Stock dividend is a dividend in the form of stocks. In a stock split, each shareholder receives additional shares of stock for each one held originally. (What is the value of a stock dividend and a stock split? It can be positive, zero or negative. The possible benefits are lowered commission in stock trades within the proper trading range. The costs are related to the financial procedures. CONCEPT QUESTIONS – CHAPTER 19 19. 1 (Describe the basic procedures in a new issue. 1. Obtain approval of the Board of Directors. 2. File registration statement with the SEC 3. Distribute prospectus . Determine offer price 5. Place tombstone advertisements. (What is a registration statement? A document filed with the SEC containing information relevant to the offering. 19. 3 (Describe a firm commitment underwriting and a best-efforts underwriting. In a firm commitment underwriting, the underwriter buys the entire issue and then resells it. In a best efforts underwriting, the underwriter is only legally bound to use " best efforts" to sell the securities at the agreed upon offering price. (Suppose that a stockholder calls you up out of the blue and offers to sell you some shares of a new issue.

Do you think the issue will do better or worse than average? It will probably do worse because otherwise it would have been oversold and there would be no need for the broker to try to sell it to you. 19. 4 (What are some reasons that the price of stock drops on the announcement of a new equity issue? 1. Managers are disinclined to issue stock when the share price is below their estimate of intrinsic value. Equity offerings signal that management considers the share price high. 2. Equity offerings are more likely when the firm is over-levered. 19. 5 (Describe the costs of a new issue of common stock. . Spread: The difference between the offering price and what the underwriter pays the issuing company. 2. Other direct expenses: Filing fees, legal fees and taxes. 3. Indirect expenses: Management time spent analyzing the issuance. 4. Abnormal returns: The drop in the current stock price by 1% to 2% in a seasoned new issue of stock. 5. Underpricing: Setting the offering price below the correct value in an initial new issue of stock. 6. Green shoe option: The underwriter’s right to buy additional shares at the offer price to cover overallotments. What conclusions emerge from an analysis of Table 19. 5? 1. There are substantial financial economies of scale. 2. Direct costs are somewhat greater than indirect ones. 3. Higher costs for best efforts offers. 4. More underpricing for firm commitment than for best efforts offers. 5. Both direct and indirect costs are higher for initial offerings than for seasoned ones. 19. 6 (Describe the details of a rights offering. In a rights offering, each shareholder is issued an option to buy a specified number of shares from the firm at a specified price within a certain time frame.

These rights are often traded on securities exchanges or over the counter. (What are the questions that financial management must answer in a rights offerings? 1. What price should existing shareholders pay for a share of new stock? 2. How many rights will be required to purchase one share of stock? 3. What effect will the rights offering have on the price of the existing stock?

(How is the value of a right determined? Value of one right = Rights-on stock price – ex-rights stock price = (Ex-rights price – Subscription price) / (rights/share) = (Rights-on price – Subscription price) / (rights/share+1) 9. 7 (What are the several kinds of dilution? 1. Dilution of ownership 2. Dilution of market value 3. Dilution of book value (Is dilution important? True dilution, of ownership or market value, is very important because it is an economic loss to current shareholders. Book value dilution, on the other hand, is irrelevant. (Why might a firm prefer a general cash offering to a rights offering? 1. Underwriters provide insurance regarding the amount raised by the firm regardless of true stock value. 2. Proceeds are available sooner. 3. Underwriters will provide wider distribution of ownership 4.

Underwriters provide consulting advice. 19. 8 (Describe shelf registration. It is registration allowed by Rule 415 of the SEC whereby a corporation registers stock that will be sold within two years of registration. (What are the arguments against shelf registration? 1. The costs of new issues might go up because underwriters may be unable to provide as much information to potential investors as would be true otherwise. 2. It may cause “ market overhand” which will depress market prices. 19. 9 (What are the different sources of venture-capital financing?

Private partnerships and corporations, large industrial or financial corporation, and wealthy families and individuals. (What are the different stages for companies seeking venture capital financing? Seed money, start-up, and then first through fourth round financing as the company gets off the ground. (What is the private equity market? The private equity market involves the issuance of securities to a small number of private investors or certain qualified institutional investors. (What is Rule 144A? Rule 144A establishes a legal framework for the issuance of private securities to qualified institutional investors.

CONCEPT QUESTIONS – CHAPTER 20 20. 2 (Do bearer bonds have any advantage? Why might Mr. “ I Like to Keep My Affairs Private” prefer to hold bearer bonds? They have the advantage of secrecy. (What advantages and what disadvantages do bondholders derive from provisions of sinking funds? They provide additional security as an early warning system if sinking fund payments are not made. But if interest rates are high, the company will buy the bonds from the market, and if rates are low, it will use the lottery, exercising an option that makes sinking fund bonds less attractive to bondholders. What is a call provision? What is the difference between the call price and the stated price? It is an option that allows the company after a certain number of years to repurchase the bonds at the call price. This option will only be exercised if interest rates drop. The difference between the call price and the stated price is the call premium. 20. 3 (What the advantages to a firm of having a call provision? If interest rates go down and the market bond prices are higher than the call price, the firm can exercise its call option and buy the bonds at less than the market price. What are the disadvantages to bondholders of having a call provision? If the firm decides to exercise its option, bondholders will have to sell their bonds to the firm at less than the market price. 20. 4 (List and describe the different bond rating classes. 1. Investment grade | AAA/Aaa to BBB/Baa: extremely strong to adequate capacity to pay interest and principal. 2. Speculative BB/Ba to CC/Ca: slightly to extremely speculative capacity to pay interest and principle. 3. C: Debt not currently paying interest 4. D: Debt in default. (Why don’t bond prices change when bond ratings change?

The bond ratings are based on publicly available information and therefore may not provide information that the market did not have before the change. (Are the costs of bond issues related to their ratings? Investment ??? grade issues have much lower direct costs than non-investment grade issues. 20. 5 (Create an idea of an unusual bond and analyze its features. The text provides an example of an unusual bond; income bonds are a hybrid between debt and equity. For the firm interest is tax deductible, but the payment depends on income rather than being fixed.

This feature makes it riskier than normal bonds, and although the tax deductibility may make them appear cheaper, the market prices them according to risk as well. 20. 6 (What are the differences between private and public bond issues? 1. Direct private placement of long-term debt does not require SEC registration. 2. Direct placement is more likely to have more restrictive covenants. 3. Distribution costs are lower for private bonds. 4. It is easier to renegotiate a private placement because there are fewer investors. (A private placement is more likely to have restrictive covenants than is a public issue. Why?

It is arranged between a firm and a few financial institutions, such as banks or insurance companies, that are very much interested in avoiding the transfer of wealth from them to stockholders. It is easier for a few financial institutions to renegotiate restrictive covenants if circumstances change. CONCEPT QUESTIONS ??? CHAPTER 21 21. 1 (What are some reasons that assets like automobiles would be leased with operating leases, whereas machines or real estate would be leased with financial leases? 1. Operating leases have a cancellation option that protects the lessee from technological obsolescence in the case of equipment. 2.

The service provided by the lessor in an operating lease eliminates the problem of retraining employees to service the new equipment or the problem of repairs in the case of a person leasing a car. ??? What are the differences between an operating lease and a financial lease? 1. Operating leases are not fully amortized. 2. In an operating lease the lessor maintains and insures the leased asset. With financial leases the lessee must do both himself. 3. Operating leases have a cancellation option. 21. 2(Define capital lease. Capital leases meet at least one of the following: 1. Transfer of ownership by the end of the lease term. 2.

Bargain purchase price option. 3. Lease term at least 75 percent of asset's economic life. 4. PV (lease payments) at least 90 percent of asset's fair value. ??? Define operating lease. " Operating lease" is a general term applied to leases which are typically not fully amortized, are maintained by the lessor, and have a cancellation option. 21. 3(What are the IRS guidelines for treating a lease contract as a lease for tax purposes? Very generally, the guidelines are set up to identify lease contracts which are purely a tax dodge. 21. 5(How should one discount a riskless cash flow? At the after-tax riskless interest rate. 21. (Summarize the good and bad arguments for leasing. Good Arguments: a. Leasing reduces taxes because firms are in different tax bracket. b. Leasing reduces uncertainty by eliminating the residual value risk. c. Leasing lowers transactions costs by reducing the changes of ownership of an asset over its useful life. Bad Arguments: a. Leasing improves accounting income and the balance sheet if leases are kept off the books. b. Leasing provides 100% financing, but secured equipment loans require an initial down payment. c. There are special reasons like government appropriations for acquisitions and circumventing bureaucratic firms.

CONCEPT QUESTIONS – CHAPTER 22 22. 2 (What is a call option? A call option is a contract that gives the owner the right to buy an asset at a fixed price within a certain time period. (How is a call option's price related to the underlying stock price at the expiration date? If the stock is " in the money" (above the striking price), stock price and option price are linearly related. If it's " out of the money", the call option is worthless. 22. 3 (What is a put option? A put option is a contract that gives the owner the right to sell an asset at a fixed price within a certain time period. How is a put option related to the underlying stock price at expiration date? If the stock is " in the money" (below the striking price), stock price and option price are linearly related. If it's " out of the money", the put option is worthless. 22. 6 (What is a put-call parity? The theorem says that because a call's payoff is the same as payoffs from a combination of buying a put, buying the underlying stock and borrowing at the risk-free rate, the call and the combination should be equally priced. 22. 7 (List the factors that determine the value of options? 1. Exercise price . Maturity 3. Price of the underlying asset 4. Variability of the underlying asset 5. Interest rate (Why does a stock's variability affect the value of options written on it? The more variable the stock the higher the possibility that it will go over the exercise price in the case of a call or under the exercise price in the case of a put. The variability increases the changes of the stocks price extremes. 22. 8 (How does the two-state option model work? It uses the fact that buying call can be made equivalent to buying the stock and borrowing to determine option value. What is the formula for the Black-Scholes option-pricing model? C= SoN(d1) – Ee-rftdN(d2) Where d1 = [ln(S/E) + d(rf + (1/2)(2)t] / ((2t)1/2 d2 = d1 – ((2t)1/2 22. 9 (How can the value of the firm be expressed in terms of call options? Bondholders own the firm and have written a call to stockholders with an exercise price equal to the promised interest payment. (How can the value of the firm be expressed in terms of put options? Stockholders own the firm and have purchased a put option from the bondholders with an exercise price equal to the promised interest payment. How does put-call parity relate these two expressions? A call option’s payoff is the same as the payoff from a combination of buying a put, buying the underlying stock and borrowing at the risk-free rate. Consequently, puts and calls can always be stated in terms of the other. 22. 12 (Why are the hidden options in projects valuable? Even the best laid plans of men and mice often go astray. The option to adapt plans to new circumstances is a valuable asset. CONCEPT QUESTIONS – CHAPTER 23 23. 1 (Why do companies issue options to executives of they cost the company more than they are worth to the executive?

Why not just give cash and split the difference? Wouldn’t that make both the company and executive better off? One of the purposes to give stock options to CEOs (instead of cash) is to bond the performance of the firm’s stock with the compensation of the CEO. In this way, the CEO has an incentive to increase shareholder value. 23. 2(What are the two options that many businesses have? Most businesses have the option to abandon under bad conditions and the option to expand under good conditions. (Why does a strict NPV calculation typically understate the value of a firm or a project?

Virtually all projects have embedded options, which are ignored in NPV calculations and likely leads to undervaluation. CONCEPT QUESTIONS – CHAPTER 24 24. 2 (What is the key difference between a warrant and a traded call options? When a warrant is exercised, the number of shares increases. Also, the Warrant is an option sold by the firm. (Why does dilution occur when warrants are exercised? Because additional shares of stock are sold to warrant holders at a below market price. (How can the firm hurt warrant holders?

The firm can hurt warrant holders by taking any action that reduces the value of the stock. A typical example would be the payment of abnormally high dividends. 24. 4 (What are the conversion ratio, the conversion price, and the conversion premium? The conversion ratio is the number of shares received for each debenture. The conversion price is equivalent to the price which the holders of convertible bonds pay for each share of common stock they receive. The conversion premium is the excess of the conversion price over the common stock price. 24. 5 (What three elements make up the value of a convertible bond.

Convertible bond value = Greater of (straight bond value and conversion value) plus option value. (Describe the payoff structure of convertible bonds? It is the value of the firm if the value of the firm is less than total face value. It is the face value if the total face value is less that the value of the firm but greater than its conversion value. It is the conversion value if the value of the firm and the conversion value are greater than total face value. 24. 6 (What is wrong with the simple view that it is cheaper to issue a bond with a warrant or a convertible feature because the required coupon is lower?

In an efficient capital market the difference between the market value of a convertible bond and the value of straight bond is the fair price investors pay for the call option that the convertible or the warrant provides. (What is wrong with the Free Lunch story? This story compares convertible financing to straight debt when the price falls and to common stock when price rises. (What is wrong with the Expensive Lunch story? 24. 7 (Why do firms issue convertible bonds? 1. To match cash flows, that is, they issue securities whose cash flows match those of the firm. 2. To bypass assessing the risk of the company (risk synergy).

The risk of company start-ups is hard to evaluate. 3. To reduce agency costs associated with raising money by providing a package that reduces bondholder-stockholder conflicts. 24. 8 (Why will convertible bonds not be voluntarily converted to stock before expiration? Because the holder of the convertible has the option to wait and perhaps do better than what is implied by current stock prices. ??? When should firms force conversion of convertibles? Why? Theoretically conversion should be forced as soon as the conversion value reaches the call price because other conversion policies will reduce shareholder value.

If conversion is forced when conversion values are above the call price, bondholders will be allowed to exchange less valuable bonds for more valuable common stock. In the opposite situation, shareholders are giving bondholders the excess value. CONCEPT QUESTIONS ??? CHAPTER 25 25. 1(What is a forward contract? An agreement to trade at a set price in the future. ??? Give examples of forward contracts in your life. A forward contract is formed when you contract an artisan to construct a banjo and agree to pay him $1, 200 on delivery. 25. 2(What is a futures contract?

Futures contracts are like forward contracts except that: 1. They are traded on organized exchanges. 2. They let the seller choose when to make delivery on any day during the delivery month. 3. They are marked to market daily. ??? How is a futures contract related to a forward contract? In both contracts, it is the obligation of both the buyer and seller to settle the contract at the future date. ??? Why do exchanges require futures contracts to be marked to the market? Because there is no accumulation of loss, the mark to the market convention reduces the risk of default. 25. (Define short and long hedges. A short futures hedge involves selling a futures contract. A long futures hedge involves buying a futures contract. ??? Under what circumstances is each of the two hedges used? Short hedges are used when you will be making delivery at a future date and wish to minimize the risk of a drop in price. Long hedges are used when you must purchase at a future date and wish to minimize the risk of a rise in price. ??? What is a rolling stock strategy? A rolling stock strategy involves buying a short-term futures contract and simultaneously selling a long-term futures contract.

After the short-term elapses, the rolling stock involves buying another short-term futures contract. The strategy is implemented over a series of short-term contracts. 25. 4(How are forward contracts on bonds priced? The same as any other cash flow stream ??? as the sum of discounted cash flows: P FORW. CONT= (1 + r1)[(t= 1 (It/(1+rt)t + PAR/(1 + rT)T] ??? What are the differences between forward contracts on bonds and futures contracts on bonds? Futures contracts on bonds have the following characteristics: 1. They are traded on organized exchanges. 2. The seller can make delivery on any day during the month. . They are marked to market daily. ??? Give examples of hedging with futures contracts on bonds. Your partnership has just leased commercial space in a downtown hotel to a department store chain. The lessee has agreed to pay $1 million per year for 8 years. You can hedge the risk of a rise in inflation (and hence a fall in the value of the lease contract) over this period by forming a short hedge in the T-bond futures market. 25. 5(What is duration? The weighted average maturity of a cash flow stream in present value terms. ??? How is the concept of duration used to reduce interest rate risk?

By matching the duration of financial assets and liabilities, a change in interest rates has the same impact on them value of the assets and liabilities. 25. 6(Show that a currency swap is equivalent to a series of forward contracts. Assume the swap is for five year at a fixed term of 100 million DM for $50 million each year. This is equivalent to a series of forward contracts. In year one, for example, it is equivalent to a one-year forward contract of 100 million DM at 2 DM/$. CONCEPT QUESTIONS ??? CHAPTER 26 26. 2(What is the difference between net working capital and cash?

Net working capital includes not only cash, but also other current assets minus current liabilities. ??? Will net working capital always increase when cash increases? No. There are transactions such as collection of accounts receivable that increase cash but leave net working capital unchanged. Any transaction that will increase cash but produce a corresponding decrease in another current asset account or an increase in a current liability will have the same effect. ??? List the potential uses of cash. 1. Acquisition of capital 2. Acquisition of marketable securities 3. Acquisition of working capital . Payment of dividends 5. Retirement of debt 6. Payment for labor, management and services rendered ??? List the potential sources of cash. 1. Sale of services or merchandise 2. Collection of accounts receivable 3. Issuance of debt or stock 4. Sale of marketable securities 5. Sale of fixed assets 6. Short-term bank loans 7. Increased accrued expenses, wages, or taxes. 26. 3(What does it mean to say that a firm has an inventory-turnover ratio of four? It means that on average the inventory is kept on hand for (365 days per year/4 times per year) = 91. 25 days. Describe operating cycle and cash cycle. What are the differences between them? The operating cycle is the period of time from the acquisition of raw material until the collection of cash from sales. It includes conversion of raw materials into finished goods, inventories, sales and collection of accounts receivable. The cash cycle is the period of time from the cash payment for raw materials to the collection of cash. The difference between the two is the accounts payable stage, the time between the acquisition of raw materials and the cash payment for them. 6. 4(What keeps the real world from being an ideal on where net working capital could always be zero? A long-term rise is sales level will result in permanent investment in current assets. In addition, any day-to-day and month-to-month fluctuation in the level of sales will produce a nonzero NWC. (What considerations determine the optimal compromise between flexible and restrictive net-working-capital policies? 1. Cash reserves: How much cash does management want? 2. Matching of asset and liability maturity (maturity hedging) 3.

Term structure: The difference between short-term and long-term interest rates 26. 5 (How would you conduct a sensitivity analysis for Fun Toys' net cash balance? By determining the net cash balance under different scenario assumptions ??? changing factors that will affects net cash balance and figuring out the result. ??? What could you learn from such an analysis? It will give you an idea of what the range of net cash balances will be under the different scenarios and how sensitive the net cash balance is to each of the factors that affect it. 26. 6 (What are the two basic forms of short-term financing?

Unsecured bank borrowing and secured bank borrowing. ??? Describe two types of secured loans. 1. Accounts receivable financing. In this type of borrowing, accounts receivable are either assigned or factored. In the latter case receivables are actually sold at a discount. 2. Trust receipt. This is one of the three types of inventory loans in which the borrower holds the inventory in " trust" for the lender. CONCEPT QUESTIONS ??? CHAPTER 27 27. 1 (What is the transactions motive, and how does it lead firms to hold cash?

It is the necessity to hold cash for disbursements to pay wages, trade debts, taxes and dividends. A firm that does not have cash for these transactions will not be able to meet its obligations. Because cash inflows and outflows are seldom synchronized, firms need cash balances to serve as a buffer. ??? What is a compensating balance? It is the amount of cash banks require firms to keep permanently in their accounts to compensate the bank for services rendered. 27. 2 (What is a target cash balance? It is a firm's desired level of cash holdings to satisfy the transactions and compensating balance needs. What are the strengths and weaknesses of the Baumol model and the Miller- Orr model? The Baumol model is a very simple and straightforward model with sensible conclusions, but it assumes a constant disbursement rate, lack of cash receipts during the projected period, and makes no allowance for " safety stock. " It also assumes discrete, certain cash flows. The Miller-Orr model improves the understanding of the problem by determining the relationships among the different variables, but it neglects other factors that affect the target cash balance. 27. 3 (Describe collection and disbursement float.

Collection float is the time that elapses from the moment the customer mails the payment until cash is received. Disbursement float is the time that elapses from the moment a company mails a check and the time cash is withdrawn from the company's bank account. ??? What are lockboxes? Concentration banks? Wire transfers? Lockboxes are postal boxes strategically located in such a way that the mailing time from customers to the box is minimized. The firm's bank has direct access to the boxes, and thus in-house handling is eliminated and collection float is reduced.

Concentration banks are regional banks in which the company has accounts and to which it sends excess cash at the end of the day. In this fashion checks obtained from nearby customers can be collected daily. Wire tran