## glossary

**absolute priority doctrine** States that claims must be paid in strict accordance with the priority of each claim, regardless of the consequence to other claimants.

**account receivable** Created when a good is shipped or a service is performed, and payment for that good is not made on a cash basis, but on a credit basis.

**accounting income** Income as defined by Generally Accepted Accounting Principles (GAAP).

**accounting profit** A firm's net income as reported on its income statement.

acquiring company A company that seeks to acquire another firm.

actual, or realized, rate of return,  $\overline{\bf r}_s$  The rate of return that was actually realized at the end of some holding period.

additional funds needed (AFN) Those funds required from external sources to increase the firm's assets to support a sales increase. A sales increase will normally require an increase in assets. However, some of this increase is usually offset by a spontaneous increase in liabilities as well as by earnings retained in the firm. Those funds that are required but not generated internally must be obtained from external sources.

**aggressive short-term financing policy** Refers to a policy in which a firm finances all of its fixed assets with long-term capital but part of its permanent current assets with short-term, nonspontaneous credit.

aging schedule Breaks down accounts receivable according to how long they have been outstanding. This gives the firm a more complete picture of the structure of accounts receivable than that provided by days sales outstanding.

alternative minimum tax (AMT) A provision of the tax code that requires profitable firms to pay at least some taxes if such taxes are greater than the amount due under standard tax accounting. The AMT has provided a stimulus to leasing for those firms paying the AMT because leasing lowers profits reported to stockholders; figured at about 20% of the profits reported to stockholders.

**amortization** A noncash charge against intangible assets, such as goodwill.

**amortization schedule** An amortization schedule is a table that breaks down the periodic fixed payment of an installment loan into its principal and interest components.

**amortized loan** An amortized loan is one that is repaid in equal periodic amounts (or "killed off" over time).

**annual report** A report issued annually by a corporation to its stockholders. It contains basic financial statements, as well as management's opinion of the past year's operations and the firm's future prospects.

**annuity** An annuity is a series of payments of a fixed amount for a specified number of periods.

annuity due An annuity due is an annuity with payments occurring at the beginning of each period.

**APR** The nominal annual interest rate is also called the annual percentage rate, or APR.

**arbitrage** The simultaneous buying and selling of the same commodity or security in two different markets at different prices, thus pocketing a risk-free return.

Arbitrage Pricing Theory (APT) An approach to measuring the equilibrium risk/return relationship for a given stock as a function of multiple factors, rather than the single factor (the market return) used by the Capital Asset Pricing Model. The APT is based on complex mathematical and statistical theory, but can account for several factors (such as GNP and the level of inflation) in determining the required return for a particular stock.

**arrearages** Preferred dividends that have not been paid, and hence are "in arrears."

**asset management ratios** A set of ratios that measure how effectively a firm is managing its assets.

**assets-in-place** Refers to the land, buildings, machines, and inventory that the firm uses in its operations to produce its products and services. Also known as operating assets.

**assignment** An informal procedure for liquidating debts which transfers title to a debtor's assets to a third person, known as an assignee or trustee.

average stock's beta,  $b_A = b_M$  The beta coefficient (b) is a measure of a stock's market risk. It measures the stock's volatility relative to an average stock, which has a beta of 1.0.

**average tax rate** Calculated by taking the total amount of tax paid divided by taxable income.

balance sheet A statement of the firm's financial position at a specific point in time. It specifically lists the firm's assets on the left-hand side of the balance sheet, while the right-hand side shows its liabilities and equity, or the claims against these assets.

**Bankruptcy Reform Act of 1978** Enacted to speed up and streamline bankruptcy proceedings. This law represents a shift to a relative priority doctrine of creditors' claims.

basic earning power (BEP) ratio Calculated by dividing earnings before interest and taxes by total assets. This ratio shows the raw earning power of the firm's assets, before the influence of taxes and leverage.

**behavioral finance** A field of study that analyzes investor behavior as a result of psychological traits. It does not assume that investors necessarily behave rationally.

**benchmarking** When a firm compares its ratios to other leading companies in the same industry.

best efforts arrangement A type of contract with an investment banker when issuing stock. In a best efforts sale, the investment banker is only committed to making every effort to sell the stock at the offering price. In this case, the issuing firm bears the risk that the new issue will not be fully subscribed.

**beta coefficient, b** A measure of a stock's market risk, or the extent to which the returns on a given stock move with the stock market.

**bird-in-the-hand theory** Assumes that investors value a dollar of dividends more highly than a dollar of expected capital gains because the dividend yield component,  $D_1/P_0$ , is less risky than the g component in the total expected return equation  $\hat{r}_s = D_1/P_0 + g$ .

**Black-Scholes Option Pricing Model** A model to estimate the value of a call option. It is widely used by option traders.

bond A promissory note issued by a business or a governmental unit.

book value per share Common equity divided by the number of shares outstanding.

break-even point The level of unit sales at which costs equal revenues. Break-even analysis may be performed with or without the inclusion of financial costs. If financial costs are not included, breakeven occurs when earnings before interest and taxes equals zero. If financial costs are included, breakeven occurs when earnings before taxes equals zero.

**breakup value** A firm's value if its assets are sold off in pieces.

business risk The risk inherent in the operations of the firm, prior to the financing decision. Thus, business risk is the uncertainty inherent in a total risk sense, future operating income, or earnings before interest and taxes. Business risk is caused by many factors. Two of the most important are sales variability and operating leverage.

**call option** An option that allows the holder to buy the asset at some predetermined price within a specified period of time.

call provision Gives the issuing corporation the right to call the bonds for redemption. The call provision generally states that if the bonds are called, the company must pay the bondholders an amount greater than the par value, a call premium. Most bonds contain a call provision.

capacity option Allows a company to change the capacity of its output in response to changing market conditions. This includes the option to contract or expand production. It also includes the option to abandon a project if market conditions deteriorate too much.

**Capital Asset Pricing Model (CAPM)** A model based on the proposition that any stock's required rate of return is equal to the risk-free rate of return plus a risk premium reflecting only the risk remaining after diversification. The CAPM equation is  $\mathbf{r_i} = \mathbf{r_{RF}} + \mathbf{b_i}(\mathbf{r_M} - \mathbf{r_{RF}})$ .

capital budget Outlines the planned expenditures on fixed assets.

**capital budgeting** The whole process of analyzing projects and deciding whether they should be included in the capital budget.

**capital gain (loss)** The profit (loss) from the sale of a capital asset for more (less) than its purchase price.

**capital gains yield** Results from changing prices and is calculated as  $(P_1 - P_0)/P_{0}$ , where  $P_0$  is the beginning-of-period price and  $P_1$  is the end-of-period price.

**capital intensity ratio** The dollar amount of assets required to produce a dollar of sales. The capital intensity ratio is the reciprocal of the total assets turnover ratio.

**capital market** Capital markets are the financial markets for long-term debt and corporate stocks. The New York Stock Exchange is an example of a capital market.

capital rationing Occurs when management places a constraint on the size of the firm's capital budget during a particular period.

capital structure The manner in which a firm's assets are financed; that is, the right side of the balance sheet. Capital structure is normally expressed as the percentage of each type of capital used by the firm such as debt, preferred stock, and common equity.

capitalizing Incorporating the lease provisions into the balance sheet by reporting the leased asset under fixed assets and reporting the present value of future lease payments as debt.

**cash budget** A schedule showing cash flows (receipts, disbursements, and cash balances) for a firm over a specified period.

cash conversion cycle The length of time between the firm's actual cash expenditures on productive resources (materials and labor) and its own cash receipts from the sale of products (that is, the length of time between paying for labor and materials and collecting on receivables). Thus, the cash conversion cycle equals the length of time the firm has funds tied up in current assets.

cash discounts The amount by which a seller is willing to reduce the invoice price in order to be paid immediately, rather than in the future. A cash discount might be 2/10, net 30, which means a 2% discount if the bill is paid within 10 days, otherwise the entire amount is due within 30 days.

**Chapter 11** The business reorganization chapter of the Bankruptcy Reform Act. The chapter provides for the reorganization, rather than the liquidation, of a business.

**Chapter 7** The chapter of the Bankruptcy Reform Act that provides for the liquidation of a firm to repay creditors.

characteristic line Obtained by regressing the historical returns on a particular stock against the historical returns on the general stock market. The slope of the characteristic line is the stock's beta, which measures the amount by which the stock's expected return increases for a given increase in the expected return on the market.

classified stock Sometimes created by a firm to meet special needs and circumstances. Generally, when special classifications of stock are used, one type is designated "Class A", another as "Class B", and so on. For example, Class A might be entitled to receive dividends before dividends can be paid on Class B stock. Class B might have the exclusive right to vote.

clientele effect The attraction of companies with specific dividend policies to those investors whose needs are best served by those policies. Thus, companies with high dividends will have a clientele of investors with low marginal tax rates and strong desires for current income. Similarly, companies with low dividends will attract a clientele with little need for current income and who often have high marginal tax rates.

**closely held corporation** Refers to companies that are so small that their common stocks are not actively traded; they are owned by only a few people, usually the companies' managers.

**coefficient of variation, CV** Equal to the standard deviation divided by the expected return; it is a standardized risk measure that allows comparisons between investments having different expected returns and standard deviations.

**collection policy** The procedure for collecting accounts receivable. A change in collection policy will affect sales, days sales outstanding, bad debt losses, and the percentage of customers taking discounts.

**combination lease** Combines some aspects of both operating and financial leases. For example, a financial lease which contains a cancellation clause—normally associated with operating leases—is a combination lease.

**commercial paper** Unsecured, short-term promissory notes of large firms, usually issued in denominations of \$100,000 or more and having an interest rate of somewhat below the prime rate.

**commodity futures** Futures contracts which involve the sale or purchase of various commodities, including grains, oilseeds, livestock, meats, fiber, metals, and wood.

common stockholders' equity (net worth) The capital supplied by common stockholders—capital stock, paid-in capital, retained earnings, and, occasionally, certain reserves. Paid-in capital is the difference between the stock's par value and what stockholders paid when they bought newly issued shares.

**comparative ratio analysis** Compares a firms own ratios to other leading companies in the same industry. This technique is also known as benchmarking.

compensating balance (CB) A minimum checking account balance that a firm must maintain with a bank to compensate the bank for services rendered or for making the loan, generally equal to 10% to 20% of the loans outstanding.

composition Creditors voluntarily reduce their fixed claims on the debtor by accepting a lower principal amount, reducing the interest rate on the debt, accepting equity in place of debt, or some combination of these changes.

**compounding** The process of finding the future value of a single payment or series of payments.

computer/telephone network A computer/telephone network, such as Nasdaq, consists of all the facilities that provide for security transactions not conducted at a physical location exchange. These facilities are, basically, the communications networks that link buyers and sellers.

**congeneric merger** Involves firms that are interrelated but do not have identical lines of business. One example is Prudential's acquisition of Bache & Company.

conglomerate merger Occurs when unrelated enterprises combine, such as Mobil Oil and Montgomery Ward

**conservative short-term financing policy** Refers to using permanent capital to finance all permanent asset requirements, as well as to meet some or all of the seasonal demands.

**consol** Another term for perpetuity. Consols were originally bonds issued by England in 1815 to consolidate past debt.

**continuous probability distribution** Contains an infinite number of outcomes and is graphed from  $-\infty$  and  $+\infty$ .

**conversion price** The effective price per share of stock if conversion occurs; the par value of the convertible security divided by the conversion ratio.

**conversion ratio** The number of shares of common stock received upon conversion of one convertible security.

**conversion value** The value of the stock that the investor would receive if conversion occurred; the market price per share times the conversion ratio.

**convertible bond** Security that is convertible into shares of common stock, at a fixed price, at the option of the bondholder.

**convertible currency** A currency that can be traded in the currency markets and can be redeemed at current market rates.

convertible security Bonds or preferred stocks that can be exchanged for (converted into) common stock, under specific terms, at the option of the holder. Unlike the exercise of warrants, conversion of a convertible security does not provide additional capital to the issuer.

**corporate alliance** A cooperative deal that stops short of a merger; also called a strategic alliance.

**corporate bond** Debt issued by corporations and exposed to default risk. Different corporate bonds have different levels of default risk, depending on the issu-

ing company's characteristics and on the terms of the specific bond.

corporate risk management Relates to the management of unpredictable events that have adverse consequences for the firm. This effort involves reducing the consequences of risk to the point where there would be no significant adverse impact on the firm's financial position.

**corporate valuation model** Defines the total value of a company as the value of operations plus the value of nonoperating assets plus the value of growth options.

**corporation** A corporation is a legal entity created by a state. The corporation is separate and distinct from its owners and managers.

**correlation** The tendency of two variables to move together.

correlation coefficient,  $\rho$  (rho) A standardized measure of how two random variables covary. A correlation coefficient ( $\rho$ ) of +1.0 means that the two variables move up and down in perfect synchronization, while a coefficient of -1.0 means the variables always move in opposite directions. A correlation coefficient of zero suggests that the two variables are not related to one another; that is, they are independent.

cost of common stock,  $r_s$  The return required by the firm's common stockholders. It is usually calculated using Capital Asset Pricing Model or the dividend growth model.

cost of new external common equity, r<sub>e</sub> Project's financed with external equity must earn a higher rate of return, because the project must cover the flotation costs. Thus, the cost of new common equity is higher than that of common equity raised internally by reinvesting earnings.

cost of preferred stock,  $r_{ps}$ . The return required by the firm's preferred stockholders. The cost of preferred stock,  $r_{ps}$ , is the cost to the firm of issuing new preferred stock. For perpetual preferred, it is the preferred dividend,  $D_{ps}$ , divided by the net issuing price,  $P_n$ .

**costly trade credit** Credit taken in excess of free trade credit whose cost is equal to the discount lost.

**coupon interest rate** Stated rate of interest on a bond, defined as the coupon payment divided by the par value

**coupon payment** Dollar amount of interest paid to each bondholder on the interest payment dates.

**coverage ratio** Similar to the times-interest-earned ratio, but it recognizes that many firms lease assets and also must make sinking fund payments. It is found by adding earnings before interest, taxes, depreciation, and amortization and lease payments, then dividing this

total by interest charges, lease payments, and sinking fund payments over 1 minus the tax rate.

**cramdown** Bankruptcy court–mandated reorganization plans which are binding on all parties.

**credit policy** The firm's policy on granting and collecting credit. There are four elements of credit policy, or credit policy variables: credit period, credit standards, collection policy, and discounts.

**crossover rate** The cost of capital at which the NPV profiles for two projects intersect.

**cumulative preferred dividends** A protective feature on preferred stock that requires all past preferred dividends to be paid before any common dividends can be paid.

**current ratio** Indicates the extent to which current liabilities are covered by those assets expected to be converted to cash in the near future; it is found by dividing current assets by current liabilities.

**current yield (on a bond)** The annual coupon payment divided by the current market price.

days sales outstanding (DSO) Used to appraise accounts receivable and indicates the length of time the firm must wait after making a sale before receiving cash. It is found by dividing receivables by average sales per day.

DCF (discounted cash flow) techniques The net present value (NPV) and internal rate of return (IRR) techniques are discounted cash flow (DCF) evaluation techniques. These are called DCF methods because they explicitly recognize the time value of money.

**dealer market** In a dealer market, a dealer holds an inventory of the security and makes a market by offering to buy or sell. Others who wish to buy or sell can see the offers made by the dealers and can contact the dealer of their choice to arrange a transaction.

**debenture** An unsecured bond, and as such, it provides no lien against specific property as security for the obligation. Debenture holders are, therefore, general creditors whose claims are protected by property not otherwise pledged.

**debt ratio** The ratio of total liabilities to total assets, it measures the percentage of funds provided by creditors.

**decision trees** A form of scenario analysis in which different actions are taken in different scenarios.

**declaration date** The date on which a firm's directors issue a statement declaring a dividend.

**default risk** The risk that a borrower will not pay the interest and/or principal on a loan as it becomes due. If the issuer defaults, investors receive less than the

promised return on the bond. Default risk is influenced by both the financial strength of the issuer and the terms of the bond contract, especially whether collateral has been pledged to secure the bond. The greater the default risk, the higher the bond's yield to maturity.

**default risk premium (DRP)** The risk that a borrower will not pay the interest and/or principal on a loan as they become due. Thus, a default risk premium (DRP) is added to the real risk-free rate to compensate investors for bearing default risk.

**defensive merger** Occurs when one company acquires another to help ward off a hostile merger attempt.

**depreciation** A noncash charge against tangible assets, such as buildings or machines. It is taken for the purpose of showing an asset's estimated dollar cost of the capital equipment used up in the production process.

derivative Claims whose value depends on what happens to the value of some other asset. Futures and options are two important types of derivatives, and their values depend on what happens to the prices of other assets. Therefore, the value of a derivative security is derived from the value of an underlying real asset or other security.

**detachable warrant** A warrant that can be detached and traded separately from the underlying security. Most warrants are detachable.

**devaluation** The lowering, by governmental action, of the price of its currency relative to another currency. For example, in 1967 the British pound was devalued from \$2.80 per pound to \$2.50 per pound.

**development bond** A tax-exempt bond sold by state and local governments whose proceeds are made available to corporations for specific uses deemed (by Congress) to be in the public interest.

**discount bond** Bond prices and interest rates are inversely related; that is, they tend to move in the opposite direction from one another. A fixed-rate bond will sell at par when its coupon interest rate is equal to the going rate of interest, r<sub>d</sub>. When the going rate of interest is above the coupon rate, a fixed-rate bond will sell at a "discount" below its par value. If current interest rates are below the coupon rate, a fixed-rate bond will sell at a "premium" above its par value.

discount on forward rate Occurs when the forward exchange rate differs from the spot rate. When the forward rate is below the spot rate, the forward rate is said to be at a discount.

**discounted cash flow (DCF) method** A method of valuing a business that involves the application of capital budgeting procedures to an entire firm rather than to a single project.

**discounted payback period** The number of years it takes a firm to recover its project investment based on discounted cash flows.

**discounting** The process of finding the present value of a single payment or series of payments.

**distribution policy** The policy that sets the level of distributions and the form of the distributions (dividends and stock repurchases).

**diversifiable risk** Refers to that part of a security's total risk associated with random events not affecting the market as a whole. This risk can be eliminated by proper diversification. Also known as company-specific risk.

**divestiture** The opposite of an acquisition. That is, a company sells a portion of its assets, often a whole division, to another firm or individual.

**dividend irrelevance theory** Holds that dividend policy has no effect on either the price of a firm's stock or its cost of capital.

dividend reinvestment plan (DRIP) Allows stockholders to automatically purchase shares of common stock of the paying corporation in lieu of receiving cash dividends. There are two types of plans—one involves only stock that is already outstanding, while the other involves newly issued stock. In the first type, the dividends of all participants are pooled and the stock is purchased on the open market. Participants benefit from lower transaction costs. In the second type, the company issues new shares to the participants. Thus, the company issues stock in lieu of the cash dividend.

dividend yield Defined as either the end-of-period dividend divided by the beginning-of-period price, or the ratio of the current dividend to the current price. Valuation formulas use the former definition.

**Du Pont chart** A chart designed to show the relationships among return on investment, asset turnover, the profit margin, and leverage.

**Du Pont equation** A formula which shows that the rate of return on equity can be found as the product of the profit margin times the total assets turnover times the equity multiplier.

**EBITDA** Earnings before interest, taxes, depreciation, and amortization.

**ECN** In an ECN (electronic communications network), orders from potential buyers and sellers are automatically matched, and the transaction is automatically completed.

**economic life** The number of years a project should be operated to maximize its net present value; often less than the maximum potential life.

Economic Value Added (EVA) A method used to measure a firm's true profitability. EVA is found by taking the firm's after-tax operating profit and subtracting the annual cost of all the capital a firm uses. If the firm generates a positive EVA, its management has created value for its shareholders. If the EVA is negative, management has destroyed shareholder value.

effective (or equivalent) annual rate (EAR or EFF) The effective annual rate is the rate that, under annual compounding, would have produced the same future value at the end of 1 year as was produced by more frequent compounding, say quarterly. If the compounding occurs annually, the effective annual rate and the nominal rate are the same. If compounding occurs more frequently, the effective annual rate is greater than the nominal rate.

**efficient frontier** The set of efficient portfolios out of the full set of potential portfolios. On a graph, the efficient frontier constitutes the boundary line of the set of potential portfolios.

Efficient Markets Hypothesis (EMH) States (1) that stocks are always in equilibrium and (2) that it is impossible for an investor to consistently "beat the market." The EMH assumes that all important information regarding a stock is reflected in the price of that stock.

**efficient portfolio** Provides the highest expected return for any degree of risk. The efficient portfolio is that which provides the lowest degree of risk for any expected return.

**embedded options** Options that are a part of another project. Also called real options, managerial options, and strategic options.

**entrenchment** Occurs when a company has such a weak board of directors and has such strong antitakeover provisions in its corporate charter that senior managers feel there is very little chance that they will be removed.

**equilibrium** The condition under which the intrinsic value of a security is equal to its price; also, its expected return is equal to its required return.

**ESOP** (employee stock ownership plan) A type of retirement plan in which employees own stock in the company.

**euro** The currency used by the nations in the European Monetary Union.

**Eurobond** Any bond sold in some country other than the one in whose currency the bond is denominated. Thus, a U.S. firm selling dollar bonds in Switzerland is selling Eurobonds.

**Eurodollar** A U.S. dollar on deposit in a foreign bank or in a foreign branch of a U.S. bank. Eurodollars are used to conduct transactions throughout Europe and the rest of the world.

**exchange rate** Specifies the number of units of a given currency that can be purchased for one unit of another currency.

**exchange rate risk** Refers to the fluctuation in exchange rates between currencies over time.

**ex-dividend date** The date when the right to the dividend leaves the stock. This date was established by stockbrokers to avoid confusion and is four business days prior to the holder-of-record date. If the stock sale is made prior to the ex-dividend date, the dividend is paid to the buyer. If the stock is bought on or after the ex-dividend date, the dividend is paid to the seller.

**exercise price** The price stated in the option contract at which the security can be bought (or sold). Also called the strike price.

**exercise value** Equal to the current price of the stock (underlying the option) less the strike price of the option.

**expectations theory** States that the slope of the yield curve depends on expectations about future inflation rates and interest rates. Thus, if the annual rate of inflation and future interest rates are expected to increase, the yield curve will be upward sloping; the curve will be downward sloping if the annual rates are expected to decrease.

**expected rate of return,**  $\hat{\mathbf{r}}_{s}$  The rate of return expected on a stock given its current price and expected future cash flows. If the stock is in equilibrium, the required rate of return will equal the expected rate of return.

**extension** A form of debt restructuring where creditors postpone the dates of required interest or principal payments, or both.

extra dividend A dividend paid, in addition to the regular dividend, when earnings permit. Firms with volatile earnings may have a low regular dividend that can be maintained even in low-profit (or high-capital-investment) years, and then supplement it with an extra dividend when excess funds are available.

fairness The standard of fairness states that claims must be recognized in the order of their legal and contractual priority. In simpler terms, the reorganization must be fair to all parties.

Fama-French three-factor model Includes one factor for the excess market return (the market return minus the risk-free rate), a second factor for size (defined as the return on a portfolio of small firms minus the return on a portfolio of big firms), and a third factor for the book-to-market effect (defined as the return on a portfolio of firms with a high book-to-market ratio minus the return on a portfolio of firms with a low book-to-market ratio).

**FASB Statement 13** The Financial Accounting Standards Board statement (November 1976) that spells out in detail the conditions under which a lease must be capitalized and the specific procedures to follow.

**feasibility** The standard of feasibility states that there must be a reasonably high probability of successful rehabilitation and profitable future operations.

**feasible set** Represents all portfolios that can be constructed from a given set of stocks; also known as the attainable set.

**financial futures** Provide for the purchase or sale of a financial asset at some time in the future, but at a price established today. Financial futures exist for Treasury bills, Treasury notes and bonds, certificates of deposit, Eurodollar deposits, foreign currencies, and stock indexes.

**financial intermediary** An intermediary that buys securities with funds that it obtains by issuing its own securities. An example is a common stock mutual fund that buys common stocks with funds obtained by issuing shares in the mutual fund.

**financial lease** Covers the entire expected life of the equipment; does not provide for maintenance service, is not cancellable, and is fully amortized.

**financial leverage** The extent to which fixed-income securities (debt and preferred stock) are used in a firm's capital structure. If a high percentage of a firm's capital structure is in the form of debt and preferred stock, then the firm is said to have a high degree of financial leverage.

**financial merger** A merger in which the companies will not be operated as a single unit and no operating economies are expected.

**financial risk** The risk added by the use of debt financing. Debt financing increases the variability of earnings before taxes (but after interest); thus, along with business risk, it contributes to the uncertainty of net income and earnings per share. Business risk plus financial risk equals total corporate risk.

**financial service corporation** A corporation that offers a wide range of financial services such as brokerage operations, insurance, and commercial banking.

**fixed assets turnover ratio** Measures how effectively the firm uses its plant and equipment. It is the ratio of sales to net fixed assets.

**fixed exchange rate system** The system in effect from the end of World War II until August 1971. Under the system, the U.S. dollar was linked to gold at the rate of \$35 per ounce, and other currencies were then tied to the dollar.

floating exchange rate system System currently in effect where the forces of supply and demand are allowed to determine currency prices with little government intervention.

**floating-rate bond** A bond whose coupon payment may vary over time. The coupon rate is usually linked to the rate on some other security, such as a Treasury security, or to some other rate, such as the prime rate or LIBOR.

**flotation cost, F** Those costs occurring when a company issues a new security, including fees to an investment banker and legal fees.

**foreign bond** A bond sold by a foreign borrower but denominated in the currency of the country in which the issue is sold. Thus, a U.S. firm selling bonds denominated in Swiss francs in Switzerland is selling foreign bonds.

**foreign trade deficit** A deficit that occurs when businesses and individuals in the U.S. import more goods from foreign countries than are exported.

**forward contract** A contract to buy or sell some item at some time in the future at a price established when the contract is entered into.

**forward exchange rate** The prevailing exchange rate for exchange (delivery) at some agreed-upon future date, usually 30, 90, or 180 days from the day the transaction is negotiated.

**founders' shares** Stock owned by the firm's founders that have sole voting rights but restricted dividends for a specified number of years.

free cash flow (FCF) The cash flow actually available for distribution to all investors after the company has made all investments in fixed assets and working capital necessary to sustain ongoing operations.

free trade credit Credit received during the discount period.

friendly merger Occurs when the target company's management agrees to the merger and recommends that shareholders approve the deal.

 $FVA_N$  The ending value of a stream of equal payments, where N is the number of payments of the annuity.

**FVIFA**<sub>I,N</sub> The future value interest factor for an ordinary annuity of N periodic payments paying I percent interest per period.

**FVIF**<sub>LN</sub> The future value interest factor for a lump sum left in an account for N periods paying I percent interest per period.

 $FV_N$  (future value) The ending amount in an account, where N is the number of periods the money is left in the account.

**going public** The act of selling stock to the public at large by a closely held corporation or its principal stockholders.

**golden parachute** A payment made to executives that are forced out when a merger takes place.

greenmail Targeted share repurchases that occur when a company buys back stock from a potential acquirer at a higher than fair-market price. In return, the potential acquirer agrees not to attempt to take over the company.

growth option Occurs if an investment creates the opportunity to make other potentially profitable investments that would not otherwise be possible, including options to expand output, options to enter a new geographical market, and options to introduce complementary products or successive generations of products.

guideline lease Meets all of the Internal Revenue Service (IRS) requirements for a genuine lease. If a lease meets the IRS guidelines, the IRS allows the lessor to deduct the asset's depreciation and allows the lessee to deduct the lease payments. Also called a tax-oriented lease.

**hedging** A transaction which lowers a firm's risk of damage due to fluctuating commodity prices, interest rates, and exchange rates.

**holder-of-record date** If a company lists the stockholder as an owner on the holder-of-record date, then the stockholder receives the dividend.

**holding company** A corporation formed for the sole purpose of owning stocks in other companies. A holding company differs from a stock mutual fund in that holding companies own sufficient stock in their operating companies to exercise effective working control.

**holdout** A problematic characteristic of informal reorganizations where all of the involved parties do not agree to the voluntary plan. Holdouts are usually made by creditors in an effort to receive full payment on claims.

horizon value The value of operations at the end of the explicit forecast period. It is equal to the present value of all free cash flows beyond the forecast period, discounted back to the end of the forecast period at the weighted average cost of capital.

**horizontal merger** A merger between two companies in the same line of business.

**hostile merger** Occurs when the management of the target company resists the offer.

**hurdle rate** The project cost of capital, or discount rate. It is both the rate used in discounting future cash flows in the net present value method and the rate that is compared to the internal rate of return.

**improper accumulation** The retention of earnings by a business for the purpose of enabling stockholders to avoid personal income taxes on dividends.

**income bond** Pays interest only if the interest is earned. These securities cannot bankrupt a company, but from an investor's standpoint, they are riskier than "regular" bonds.

income statement Summarizes the firm's revenues and expenses over an accounting period. Net sales are shown at the top of each statement, after which various costs, including income taxes, are subtracted to obtain the net income available to common stockholders. The bottom of the statement reports earnings and dividends per share.

**incremental cash flow** Those cash flows that arise solely from the asset that is being evaluated.

**indentures** A legal document that spells out the rights of both bondholders and the issuing corporation.

**independent projects** Projects that can be accepted or rejected individually.

indexed, or purchasing power, bond The interest rate of such a bond is based on an inflation index such as the consumer price index (CPI), so the interest paid rises automatically when the inflation rate rises, thus protecting the bondholders against inflation.

**indifference curve** The risk/return trade-off function for a particular investor; reflects that investor's attitude toward risk. An investor would be indifferent between any pair of assets on the same indifference curve. In risk/return space, the greater the slope of the indifference curve, the greater is the investor's risk aversion.

**inflation premium (IP)** The premium added to the real risk-free rate of interest to compensate for the expected loss of purchasing power. The inflation premium is the average rate of inflation expected over the life of the security.

**informal debt restructuring** An agreement between the creditors and troubled firm to change the existing debt terms. An extension postpones the required payment date, while a composition is a reduction in creditor claims.

information content, or signaling, hypothesis A theory that holds that investors regard dividend changes

as "signals" of management forecasts. Thus, when dividends are raised, this is viewed by investors as recognition by management of future earnings increases. Therefore, if a firm's stock price increases with a dividend increase, the reason may not be investor preference for dividends but expectations of higher future earnings. Conversely, a dividend reduction may signal that management is forecasting poor earnings in the future.

**initial public offering (IPO)** Occurs when a closely held corporation or its principal stockholders sell stock to the public at large.

**initial public offering (IPO) market** Going public is the act of selling stock to the public at large by a closely held corporation or its principal stockholders, and this market is often termed the initial public offering market.

I<sub>NOM</sub> The nominal, or quoted, interest rate.

**insiders** The officers, directors, and major stockholders of a firm.

**interest rate parity** Holds that investors should expect to earn the same return in all countries after adjusting for risk.

**interest rate risk** Arises from the fact that bond prices decline when interest rates rise. Under these circumstances, selling a bond prior to maturity will result in a capital loss; the longer the term to maturity, the larger the loss.

internal rate of return (IRR) method The discount rate that equates the present value of the expected future cash inflows and outflows. IRR measures the rate of return on a project, but it assumes that all cash flows can be reinvested at the IRR rate.

**international bond** Any bond sold outside of the country of the borrower. There are two types of international bonds: Eurobonds and foreign bonds.

intrinsic (fundamental) value,  $\hat{P}_0$  The present value of a firm's expected future free cash flows.

**inventory conversion period** The average length of time to convert materials into finished goods and then to sell them; calculated by dividing total inventory by sales per day.

**inventory turnover ratio** Sales divided by inventories.

**inverted (abnormal) yield curve** A downward-sloping yield curve.

**investment banker** A middleman between businesses and investors. Investment banking houses assist in the design of corporate securities and then sell them to investors in the primary markets.

**investment timing option** Gives companies the option to delay a project rather than implement it immediately. This option to wait allows a company to reduce the uncertainty of market conditions before it decides to implement the project.

**investment grade bond** Securities with ratings of Baa/BBB or above.

**joint venture** Involves the joining together of parts of companies to accomplish specific, limited objectives. Joint ventures are controlled by the combined management of the two (or more) parent companies.

**junk bond** High-risk, high-yield bond issued to finance leveraged buyouts, mergers, or troubled companies.

**lessee** The party leasing the property.

lessee's analysis Involves determining whether leasing an asset is less costly than buying the asset. The lessee will compare the present value cost of leasing the asset with the present value cost of purchasing the asset (assuming the funds to purchase the asset are obtained through a loan). If the present value cost of the lease is less than the present value cost of purchasing, the asset should be leased. The lessee can also analyze the lease using the IRR approach or the equivalent loan method.

**lessor** The party receiving the payments from the lease (that is, the owner of the property).

**lessor's analysis** Involves determining the rate of return on the proposed lease. If the internal rate of return of the lease cash flows exceeds the lessor's opportunity cost of capital, the lease is a good investment. This is equivalent to analyzing whether the net present value of the lease is positive.

**leveraged buyout (LBO)** A transaction in which a firm's publicly owned stock is acquired in a mostly debt-financed tender offer, and a privately owned, highly leveraged firm results. Often, the firm's own management initiates the LBO.

**leveraged lease** The lessor borrows a portion of the funds needed to buy the equipment to be leased.

**limited liability partnership** A limited liability partnership (LLP), sometimes called a limited liability company (LLC), combines the limited liability advantage of a corporation with the tax advantages of a partnership.

**limited partnership** A partnership in which limited partners' liabilities, investment returns, and control are limited, while general partners have unlimited liability and control.

**line of credit** An arrangement in which a bank agrees to lend up to a specified maximum amount of funds during a designated period.

**liquidation in bankruptcy** The sale of the assets of a firm and the distribution of the proceeds to the creditors and owners in a specific priority.

**liquidity** Liquidity refers to a firm's cash and marketable securities position and to its ability to meet maturing obligations. A liquid asset is any asset that can be quickly sold and converted to cash at its "fair" value. Active markets provide liquidity.

**liquidity premium (LP)** A liquidity premium is added to the real risk-free rate of interest, in addition to other premiums, if a security is not liquid.

**liquidity ratio** A ratio that shows the relationship of a firm's cash and other current assets to its current liabilities

**long hedges** Occur when futures contracts are bought in anticipation of (or to guard against) price increases.

**lumpy assets** Those assets that cannot be acquired smoothly, but require large, discrete additions. For example, an electric utility that is operating at full capacity cannot add a small amount of generating capacity, at least not economically.

managerial options Options that give opportunities to managers to respond to changing market conditions. Also called real options.

margin requirement The margin is the percentage of a stock's price that an investor has borrowed in order to purchase the stock. The Securities and Exchange Commission sets margin requirements, which are the maximum percentage of debt that can be used to purchase a stock.

marginal tax rate The tax rate on the last unit of income.

market multiple method Applies a market-determined multiple to net income, earnings per share, sales, book value, or number of subscribers, and is a less precise method than discounted cash flow.

market portfolio A portfolio consisting of all stocks.

market risk That part of a security's total risk that cannot be eliminated by diversification; measured by the beta coefficient.

market risk premium,  $RP_M$  The difference between the expected return on the market and the risk-free rate.

Market Value Added (MVA) The difference between the market value of the firm (that is, the sum of the market value of common equity, the market value of debt, and the market value of preferred stock) and the book value of the firm's common equity, debt, and preferred stock. If the book values of debt and preferred stock are equal to their market values, then MVA is also equal to the difference between the market value of equity and the amount of equity capital that investors supplied.

market value ratios Relate the firm's stock price to its earnings and book value per share.

maturity date The date when the bond's par value is repaid to the bondholder. Maturity dates generally range from 10 to 40 years from the time of issue.

maturity matching Refers to matching the maturities of debt used to finance assets with the lives of the assets themselves. The debt would be amortized such that the outstanding amount declined as the asset lost value due to depreciation.

maturity risk premium (MRP) The premium that must be added to the real risk-free rate of interest to compensate for interest rate risk, which depends on a bond's maturity. Interest rate risk arises from the fact that bond prices decline when interest rates rise. Under these circumstances, selling a bond prior to maturity will result in a capital loss; the longer the term to maturity, the larger the loss.

merger The joining of two firms to form a single firm.

moderate net operating working capital policy A policy that matches asset and liability maturities. It is also referred to as the maturity matching, or self-liquidating approach.

modified internal rate of return (MIRR) method Assumes that cash flows from all projects are reinvested at the cost of capital as opposed to the project's own IRR. This makes the modified internal rate of return a better indicator of a project's true profitability.

**money market** A financial market for debt securities with maturities of less than 1 year (short-term). The New York money market is the world's largest.

money market fund Mutual funds that invest in short-term debt instruments and offer their investors check-writing privileges; thus, they are essentially interest-bearing checking accounts.

Monte Carlo simulation analysis A risk analysis technique in which a computer is used to simulate probable future events and thus to estimate the profitability and risk of a project.

**mortgage bond** A bond for which the corporation pledges certain assets as security. All such bonds are written subject to an indenture.

multinational (global) corporation A corporation that operates in two or more countries.

municipal bond Issued by state and local governments. The interest earned on most municipal bonds is exempt from federal taxes, and also from state taxes if the holder is a resident of the issuing state.

municipal bond insurance An insurance company guarantees to pay the coupon and principal payments should the issuer of the bond (the municipality) default. This reduces the risk to investors who are willing to accept a lower coupon rate for an insured bond issue compared to an uninsured issue.

mutual fund A corporation that sells shares in the fund and uses the proceeds to buy stocks, long-term bonds, or short-term debt instruments. The resulting dividends, interest, and capital gains are distributed to the fund's shareholders after the deduction of operating expenses. Some funds specialize in certain types of securities, such as growth stocks, international stocks, or municipal bonds.

**mutually exclusive projects** Projects that cannot be performed at the same time. A company could choose either Project 1 or Project 2, or it can reject both, but it cannot accept both projects.

National Association of Securities Dealers (NASD) An industry group primarily concerned with the operation of the over-the-counter (OTC) market.

**natural hedge** A transaction between two counterparties where both parties' risks are reduced.

**net advantage to leasing (NAL)** The dollar value of the lease to the lessee. It is, in a sense, the net present value of leasing versus owning.

**net cash flow** The sum of net income plus noncash adjustments.

net operating working capital (NOWC) Operating current assets minus operating current liabilities. Operating current assets are the current assets used to support operations, such as cash, accounts receivable, and inventory. They do not include short-term investments. Operating current liabilities are the current liabilities that are a natural consequence of the firm's operations, such as accounts payable and accruals. They do not include notes payable or any other short-term debt that charges interest.

**net present value (NPV) method** The present value of the project's expected future cash flows, discounted at the appropriate cost of capital. NPV is a direct measure of the value of the project to shareholders.

**net working capital** Current assets minus current liabilities.

**new issue market** The market for stock of companies that go public.

**nominal (quoted) interest rate, I\_{NOM}** The rate of interest stated in a contract. If the compounding occurs annually, the effective annual rate and the nominal rate are the same. If compounding occurs more frequently, the effective annual rate is greater than the nominal rate. The nominal annual interest rate is also called the annual percentage rate, or APR.

**nominal rate of return,**  $r_n$  Includes an inflation adjustment (premium). Thus if nominal rates of return are used in the capital budgeting process, the net cash flows must also be nominal.

**nominal risk-free rate of interest,** r<sub>RF</sub> The real risk-free rate plus a premium for expected inflation. The short-term nominal risk-free rate is usually approximated by the U.S. Treasury bill rate, while the long-term nominal risk-free rate is approximated by the rate on U.S. Treasury bonds.

nonnormal cash flow projects Projects with a large cash outflow either sometime during or at the end of their lives. A common problem encountered when evaluating projects with nonnormal cash flows is multiple internal rates of return.

**nonoperating assets** Include investments in marketable securities and noncontrolling interests in the stock of other companies.

**nonpecuniary benefits** Perks that are not actual cash payments, such as lavish offices, memberships at country clubs, corporate jets, and excessively large staffs.

**NOPAT (net operating profit after taxes)** The amount of profit a company would generate if it had no debt and no financial assets.

**normal cash flow projects** A project with one or more cash outflows (costs) are followed by a series of cash inflows.

**normal yield curve** When the yield curve slopes upward, it is said to be "normal," because it is like this most of the time.

off-balance sheet financing A financing technique in which a firm uses partnerships and other arrangements to effectively borrow money but avoid reporting the liability on its balance sheet. For example, for many years neither leased assets nor the liabilities under lease contracts appeared on the lessees' balance sheets. To correct this problem, the Financial Accounting Standards Board issued FASB Statement 13.

**open outcry auction** A method of matching buyers and sellers where the buyers and sellers are face-to-face, with each stating the prices at which they will buy or sell.

operating capital The sum of net operating working capital and operating long-term assets, such as net plant and equipment. Operating capital also is equal to the net amount of capital raised from investors. This is the amount of interest-bearing debt plus preferred stock plus common equity minus short-term investments. Also called total net operating capital, net operating capital, or net operating assets.

**operating company** A company controlled by a holding company.

**operating current assets** The current assets used to support operations, such as cash, accounts receivable, and inventory. It does not include short-term investments.

operating current liabilities The current liabilities that are a natural consequence of the firm's operations, such as accounts payable and accruals. It does not include notes payable or any other short-term debt that charges interest.

**operating lease** Provides for both financing and maintenance. Generally, the operating lease contract is written for a period considerably shorter than the expected life of the leased equipment and contains a cancellation clause; sometimes called a service lease.

operating leverage The extent to which fixed costs are used in a firm's operations. If a high percentage of a firm's total costs are fixed costs, then the firm is said to have a high degree of operating leverage. Operating leverage is a measure of one element of business risk, but does not include the second major element, sales variability.

**operating merger** Occurs when the operations of two companies are integrated with the expectation of obtaining synergistic gains. These may occur due to economies of scale, management efficiency, or a host of other reasons.

**opportunity cost** A cash flow that a firm must forgo to accept a project. For example, if the project requires the use of a building that could otherwise be sold, the market value of the building is an opportunity cost of the project.

**opportunity cost rate** The rate of return available on the best alternative investment of similar risk.

**optimal distribution policy** The distribution policy that maximizes the value of the firm by choosing the optimal level and form of distributions (dividends and stock repurchases).

**optimal dividend policy** The dividend policy that strikes a balance between current dividends and future growth and maximizes the firm's stock price.

**optimal portfolio** The point at which the efficient set of portfolios—the efficient frontier—is just tangent to the investor's indifference curve. This point marks the highest level of satisfaction an investor can attain given the set of potential portfolios.

**option** A contract that gives its holder the right to buy or sell an asset at some predetermined price within a specified period of time.

**ordinary (deferred) annuity** An annuity with a fixed number of equal payments occurring at the end of each period.

**original issue discount (OID) bond** In general, any bond originally offered at a price significantly below its par value.

par value The nominal or face value of a stock or bond. The par value of a bond generally represents the amount of money that the firm borrows and promises to repay at some future date. The par value of a bond is often \$1,000, but can be \$5,000 or more.

parent company Another name for a holding company. A parent company will often have control over many subsidiaries.

**partnership** Exists when two or more persons associate to conduct a business.

payables deferral period The average length of time between a firm's purchase of materials and labor and the payment of cash for them. It is calculated by dividing accounts payable by credit purchases per day (cost of goods sold/365).

payback period The number of years it takes a firm to recover its project investment. Payback does not capture a project's entire cash flow stream and is thus not the preferred evaluation method. Note, however, that the payback does measure a project's liquidity, and hence many firms use it as a risk measure.

**payment (PMT)** Equal to the dollar amount of an equal, or constant cash flow (an annuity).

**payment date** The date on which a firm actually mails dividend checks.

**pegged exchange rates** Refers to the rate fixed against a major currency such as the U.S. dollar. Consequently, the values of the pegged currencies move together over time

percent of sales method Many items on the income statement and balance sheets are assumed to increase proportionally with sales. As sales increase, these items that are tied to sales also increase, and the values of these items for a particular year are estimated as percentages of the forecasted sales for that year.

**perfect hedge** A hedge in which the gain or loss on the hedged transaction exactly offsets the loss or gain on the unhedged position.

**periodic rate,**  $I_{PER}$  The rate charged by a lender or paid by a borrower each period. It can be a rate per year, per 6-month period, per quarter, per month, per day, or per any other time interval (usually 1 year or less).

permanent net operating working capital The NOWC required when the economy is weak and seasonal sales are at their low point. Thus, this level of NOWC always requires financing and can be regarded as permanent.

**perpetuity** A series of payments of a fixed amount that last indefinitely.

**physical location exchanges** Exchanges, such as the New York Stock Exchange, that facilitate trading of securities at a particular location.

**poison pill** Shareholder rights provisions that allow existing shareholders in a company to purchase additional shares of stock at a lower than market value if a potential acquirer purchases a controlling stake in the company.

**political risk** Refers to the possibility of expropriation and the unanticipated restriction of cash flows to the parent by a foreign government.

**pooling of interests** A method of accounting for a merger in which the consolidated balance sheet is constructed by simply adding together the balance sheets of the merged companies. This is no longer allowed.

**portfolio** A group of individual assets held in combination. An asset that would be relatively risky if held in isolation may have little, or even no, risk if held in a well-diversified portfolio.

**post-audit** The final aspect of the capital budgeting process. The post-audit is a feedback process in which the actual results are compared with those predicted in the original capital budgeting analysis. The post-audit has several purposes, the most important being to improve forecasts and improve operations.

**precautionary balance** A cash balance held in reserve for random, unforeseen fluctuations in cash inflows and outflows.

**preemptive right** Gives the current shareholders the right to purchase any new shares issued in proportion to their current holdings. The preemptive right enables current owners to maintain their proportionate share of ownership and control of the business.

preferred stock A hybrid that is similar to bonds in some respects and to common stock in others. Preferred dividends are similar to interest payments on bonds in that they are fixed in amount and generally must be paid before common stock dividends can be paid. If the preferred dividend is not earned, the directors can omit it without throwing the company into bankruptcy.

**premium bond** Bond prices and interest rates are inversely related; that is, they tend to move in the opposite direction from one another. A fixed-rate bond will sell at par when its coupon interest rate is equal to the going rate of interest, r<sub>d</sub>. When the going rate of interest is above the coupon rate, a fixed-rate bond will sell at a "discount" below its par value. If current interest rates are below the coupon rate, a fixed-rate bond will sell at a "premium" above its par value.

**premium on forward rate** Occurs when the forward exchange rate differs from the spot rate. When the forward rate is above the spot rate, it is said to be at a premium.

**prepackaged bankruptcy (pre-pack)** A type of reorganization which combines the advantages of informal workouts and formal Chapter 11 reorganization.

**price/cash flow ratio** Calculated by dividing price per share by cash flow per share. This shows how much investors are willing to pay per dollar of cash flow.

price/earnings (P/E) ratio Calculated by dividing price per share by earnings per share. This shows how much investors are willing to pay per dollar of reported profits.

**primary markets** Markets in which newly issued securities are sold for the first time.

**priority of claims in liquidation** Established in Chapter 7 of the Bankruptcy Act. It specifies the order in which the debtor's assets are distributed among the creditors.

**private markets** Markets in which transactions are worked out directly between two parties and structured in any manner that appeals to them. Bank loans and private placements of debt with insurance companies are examples of private market transactions.

**private placement** The sale of stock to only one or a few investors, usually institutional investors. The advantages of private placements are lower flotation costs and greater speed, since the shares issued are not subject to Securities and Exchange Commission registration.

**pro forma (projected) financial statement** Shows how an actual statement would look if certain assumptions are realized.

**probability distribution** A listing, chart, or graph of all possible outcomes, such as expected rates of return, with a probability assigned to each outcome.

**professional corporation (PC)** Has most of the benefits of incorporation but the participants are not relieved of professional (malpractice) liability. Known in some states as a professional association (PA).

**profit margin on sales** Calculated by dividing net income by sales; gives the profit per dollar of sales.

**profitability index** Found by dividing the project's present value of future cash flows by its initial cost. A profitability index greater than 1 is equivalent to a positive net present value project.

**profitability ratios** A group of ratios which show the combined effects of liquidity, asset management, and debt on operations.

**progressive tax** Tax system in which the higher one's income, the larger the percentage paid in taxes.

**project cost of capital** The risk-adjusted discount rate for that project.

project financing Arrangements used to finance mainly large capital projects such as energy explorations, oil tankers, refineries, utility power plants, and so on. Usually, one or more firms (sponsors) will provide the equity capital required by the project, while the rest of the project's capital is supplied by lenders and lessors. The most important aspect of project financing is that the lenders and lessors do not have recourse against the sponsors; they must be repaid from the project's cash flows and the equity cushion provided by the sponsors.

**promissory note** A document specifying the terms and conditions of a loan, including the amount, interest rate, and repayment schedule.

**prospectus** Summarizes information about a new security issue and the issuing company.

**proxy** A document giving one person the authority to act for another, typically the power to vote shares of common stock.

**proxy fight** An attempt to take over a company in which an outside group solicits existing shareholders' proxies, which are authorizations to vote shares in a shareholders' meeting, in an effort to overthrow management and take control of the business.

**public markets** Markets in which standardized contracts are traded on organized exchanges. Securities that are issued in public markets, such as common stock and corporate bonds, are ultimately held by a large number of individuals.

**public offering** An offer of new common stock to the general public.

**publicly owned corporation** Corporation in which the stock is owned by a large number of investors, most of whom are not active in management.

**purchase accounting** A method of accounting for a merger in which the merger is handled as a purchase. In this method, the acquiring firm is assumed to have "bought" the acquired company in much the same way it would buy any capital asset.

**purchasing power parity** Implies that the level of exchange rates adjusts so that identical goods cost the same in different countries. Sometimes referred to as the "law of one price."

**put option** Allows the holder to sell the asset at some predetermined price within a specified period of time.

**PV** (present value) The value today of a future payment, or stream of payments, discounted at the appropriate rate of interest. PV is also the beginning amount that will grow to some future value.

 $\mbox{PVA}_{N}$  The value today of a future stream of equal payments (an annuity).

 $PVIF_{I,N}$  The present value interest factor for a lump sum received N periods in the future discounted at I percent per period.

**PVIFA**<sub>I,N</sub> The present value interest factor for an ordinary annuity of N periodic payments discounted at I percent interest per period.

quick, or acid test, ratio Found by taking current assets less inventories and then dividing by current liabilities.

real options Occur when managers can influence the size and risk of a project's cash flows by taking different actions during the project's life. They are referred to as real options because they deal with real as opposed to financial assets. They are also called managerial options because they give opportunities to managers to respond to changing market conditions. Sometimes they are called strategic options because they often deal with strategic issues. Finally, they are also called embedded options because they are a part of another project.

real rate of return,  $r_r$  Contains no adjustment for expected inflation. If net cash flows from a project do not include inflation adjustments, then the cash flows should be discounted at the real cost of capital. In a similar manner, the internal rate of return resulting from real net cash flows should be compared with the real cost of capital.

real risk-free rate of interest, r\* That interest rate which equalizes the aggregate supply of, and demand for, riskless securities in an economy with zero inflation. The real risk-free rate could also be called the pure rate of interest since it is the rate of interest that would exist on very short-term, default-free U.S. Treasury securities if the expected rate of inflation were zero.

**realized rate of return,**  $\bar{r}$  The actual return an investor receives on his or her investment. It can be quite different than the expected return.

**receivables collection period** The average length of time required to convert a firm's receivables into cash. It is calculated by dividing accounts receivable by sales per day.

red herring (preliminary) prospectus A preliminary prospectus that may be distributed to potential buyers prior to approval of the registration statement by the Securities and Exchange Commission. After the registration has become effective, the securities, accompanied by the prospectus, may be offered for sale.

**redeemable bond** Gives investors the right to sell the bonds back to the corporation at a price that is usually close to the par value. If interest rates rise, investors can redeem the bonds and reinvest at the higher rates.

refunding Occurs when a company issues debt at current low rates and uses the proceeds to repurchase one of its existing high coupon rate debt issues. Often these are callable issues, which means the company can purchase the debt at a lower than market price.

**registration statement** Required of companies by the Securities and Exchange Commission before the securities can be offered to the public. This statement is used to summarize various financial and legal information about the company.

reinvestment rate risk Occurs when a short-term debt security must be "rolled over." If interest rates have fallen, the reinvestment of principal will be at a lower rate, with correspondingly lower interest payments and ending value.

**relative priority doctrine** More flexible than absolute priority. Gives a more balanced consideration to all claimants in a bankruptcy reorganization than does the absolute priority doctrine.

relaxed net operating working capital policy A policy under which relatively large amounts of cash, marketable securities, and inventories are carried and under which sales are stimulated by a liberal credit policy, resulting in a high level of receivables.

**reorganization in bankruptcy** A court-approved attempt to keep a company alive by changing its capital structure in lieu of liquidation. A reorganization must adhere to the standards of fairness and feasibility.

repatriation of earnings The cash flow, usually in the form of dividends or royalties, from the foreign branch or subsidiary to the parent company. These cash flows must be converted to the currency of the parent, and thus are subject to future exchange rate changes. A foreign government may restrict the amount of cash that may be repatriated.

replacement chain (common life) approach A method of comparing mutually exclusive projects that have unequal lives. Each project is replicated such that they will both terminate in a common year. If projects with lives of 3 years and 5 years are being evaluated, the 3-year project would be replicated 5 times and the 5-year project replicated 3 times; thus, both projects would terminate in 15 years.

**required rate of return, r**<sub>s</sub> The minimum acceptable rate of return considering both its risk and the returns available on other investments.

**reserve borrowing capacity** Exists when a firm uses less debt under "normal" conditions than called for by the trade-off theory. This allows the firm some flexibility to use debt in the future when additional capital is needed.

**residual distribution model** States that firms should pay dividends only when more earnings are available than needed to support the optimal capital budget.

**residual value** The market value of the leased property at the expiration of the lease. The estimate of the residual value is one of the key elements in lease analysis.

**restricted net operating working capital policy** A policy under which holdings of cash, securities, inventories, and receivables are minimized.

**restricted voting rights** A provision that automatically deprives a shareholder of voting rights if the shareholder owns more than a specified amount of stock.

**retained earnings** The portion of the firm's earnings that have been saved rather than paid out as dividends.

**return on common equity (ROE)** Found by dividing net income by common equity.

**return on invested capital (ROIC)** Net operating profit after taxes divided by the operating capital.

**return on total assets (ROA)** The ratio of net income to total assets.

**revaluation** Occurs when the relative price of a currency is increased. It is the opposite of devaluation.

**revolving credit agreement** A formal, committed line of credit extended by a bank or other lending institution.

rights offering Occurs when a corporation sells a new issue of common stock to its existing stockholders. Each stockholder receives a certificate called a stock purchase right giving the stockholder the option to purchase a specified number of the new shares. The rights are issued in proportion to the amount of stock that each shareholder currently owns.

**risk arbitrage** Refers to the practice of purchasing stock in companies (in the context of mergers) that may become takeover targets.

**risk aversion** A risk-averse investor dislikes risk and requires a higher rate of return as an inducement to buy riskier securities.

**risk premium for Stock i, RP**<sub>i</sub> The extra return that an investor requires to hold risky Stock i instead of a risk-free asset.

risk-adjusted discount rate Incorporates the riskiness of the project's cash flows. The cost of capital to the firm reflects the average risk of the firm's existing projects. Thus, new projects that are riskier than existing projects should have a higher risk-adjusted discount rate. Conversely, projects with less risk should have a lower risk-adjusted discount rate.

**roadshow** Before an IPO, the senior management team and the investment banker make presentations to potential investors. They make presentations in 10 to 20 cities, with three to five presentations per day, over a 2-week period.

**S corporation** A small corporation that, under Subchapter S of the Internal Revenue Code, elects to be taxed as a proprietorship or a partnership yet retains limited liability and other benefits of the corporate form of organization.

sale-and-leaseback A type of financial lease in which the firm owning the property sells it to another firm, often a financial institution, while simultaneously entering into an agreement to lease the property back from the firm.

salvage value The market value of an asset after its useful life.

**scenario analysis** A shorter version of simulation analysis that uses only a few outcomes. Often the outcomes are for three scenarios: optimistic, pessimistic, and most likely.

seasonal effects on ratios Seasonal factors can distort ratio analysis. At certain times of the year a firm may have excessive inventories in preparation of a "season" of high demand. Therefore, an inventory turnover ratio taken at this time as opposed to after the season will be radically distorted.

**secondary market** Markets in which securities are resold after initial issue in the primary market. The New York Stock Exchange is an example.

**secured loan** A loan backed by collateral, often for inventories or receivables.

Securities and Exchange Commission (SEC) A government agency which regulates the sales of new securities and the operations of securities exchanges. The SEC, along with other government agencies and self-regulation, helps ensure stable markets, sound brokerage firms, and the absence of stock manipulation.

securitization The process whereby financial instruments that were previously thinly traded are converted to a form that creates greater liquidity. Securitization also applies to the situation where specific assets are pledged as collateral for securities, and hence assetbacked securities are created. One example of the former is junk bonds; an example of the latter is mortgage-backed securities.

**Security Market Line (SML)** Represents, in a graphical form, the relationship between the risk of an asset as measured by its beta and the required rates of return for individual securities. The SML equation is essentially the Capital Asset Pricing model,  $r_i = r_{RF} + b_i(r_M - r_{RF})$ .

semistrong form of market efficiency States that current market prices reflect all publicly available information. Therefore, the only way to gain abnormal returns on a stock is to possess inside information about the company's stock.

sensitivity analysis Indicates exactly how much net present value will change in response to a given change in an input variable, other things held constant. Sensitivity analysis is sometimes called "what if" analysis because it answers this type of question.

**shelf registration** Frequently, companies will file a master registration statement and then update it with a short-form statement just before an offering. This procedure is termed shelf registration because companies put new securities "on the shelf" and then later sell them when the market is right.

**short hedges** Occur when futures contracts are sold to guard against price declines.

sinking fund Facilitates the orderly retirement of a bond issue. This can be achieved in one of two ways: (1) the company can call in for redemption (at par value) a certain percentage of bonds each year or (2) the company may buy the required amount of bonds on the open market.

**sole proprietorship** A business owned by one individual.

**spin-off** Occurs when a holding company distributes the stock of one of the operating companies to its shareholders, thus, passing control from the holding company to the shareholders directly.

spontaneously generated funds Funds generated if a liability account increases spontaneously (automatically) as sales increase. An increase in a liability account is a source of funds, thus funds have been generated. Two examples of spontaneous liability accounts are accounts payable and accrued wages. Note that notes payable, although a current liability account, is not a spontaneous source of funds since an increase in notes payable requires a specific action between the firm and a creditor.

**spot rate** The exchange rate which applies to "on the spot" trades, or, more precisely, exchanges that occur two days following the day of trade (in other words, current exchanges).

**spread** The difference between the price at which an underwriter sells the stock in an initial public offering and the proceeds that the underwriter passes on to the issuing firm; the fee collected by the underwriter. It is often about 7% of the offering price.

**stand-alone risk** The risk an investor takes by holding only one asset.

**standard deviation,**  $\sigma$  A statistical measure of the variability of a set of observations. It is the square root of the variance.

**statement of cash flows** Reports the impact of a firm's operating, investing, and financing activities on cash flows over an accounting period.

**statement of retained earnings** Shows how much of the firm's earnings were retained in the business rather than paid out in dividends. Note that retained earnings represents a claim against assets, not assets per se. Firms retain earnings primarily to expand the business, not to accumulate cash in a bank account.

**stepped-up exercise price** A provision in a warrant that increases the strike price over time. This provision is included to prod owners into exercising their warrants.

**stock dividend** Increases the number of shares outstanding, but at a slower rate than splits. Current shareholders receive additional shares on some proportional basis. Thus, a holder of 100 shares would receive 5 additional shares at no cost if a 5% stock dividend were declared.

**stock option** Allows its owner to purchase a share of stock at a fixed price, called the exercise price, no matter what the actual price of the stock is. Stock options always have an expiration date, after which they cannot be exercised.

**stock repurchase** Occurs when a firm repurchases its own stock. These shares of stock are then referred to as treasury stock.

**stock split** Current shareholders are given some number (or fraction) of shares for each stock share owned. Thus, in a three-for-one split, each shareholder would receive three new shares in exchange for each old share, thereby tripling the number of shares outstanding. Stock splits usually occur when the stock price is outside of the optimal trading range.

**strategic options** Options that often deal with strategic issues. Also called real options, managerial options, or embedded options.

**stretching accounts payable** The practice of deliberately paying accounts late.

**strike price** The price stated in the option contract at which the security can be bought (or sold). For example, if the underlying stock sells for \$50 and the strike price is \$20, the exercise value of the option would be \$30. Also called the exercise price.

**strong form of market efficiency** Assumes that all information pertaining to a stock, whether public or inside information, is reflected in current market prices. Thus, no investors would be able to earn abnormal returns in the stock market.

**structured note** A debt obligation derived from another debt obligation. Permits a partitioning of risks to give investors what they want.

subordinated debenture Debentures that have claims on assets, in the event of bankruptcy, only after senior debt as named in the subordinated debt's indenture has been paid off. Subordinated debentures may be subordinated to designated notes payable or to all other debt.

**sunk cost** A cost that has already occurred and is not affected by the capital project decision. Sunk costs are not relevant to capital budgeting decisions.

**swap** An exchange of cash payment obligations. Usually occurs because the parties involved prefer someone else's payment pattern or type.

**sweetener** A feature that makes a security more attractive to some investors, thereby inducing them to accept a lower current yield. Convertible features and warrants are examples of sweeteners.

synergy Occurs when the whole is greater than the sum of its parts. When applied to mergers, a synergistic merger occurs when the postmerger earnings exceed the sum of the separate companies' premerger earnings.

**takeover** An action whereby a person or group succeeds in ousting a firm's management and taking control of the company.

target capital structure The relative amount of debt, preferred stock, and common equity that the firm desires. The weighted average cost of capital should be based on these target weights.

target cash balance The desired cash balance that a firm plans to maintain in order to conduct business.

**target company** A firm that another company seeks to acquire.

tax loss carryback and carryforward Ordinary corporate operating losses can be carried backward for 2 years or forward for 20 years to offset taxable income in a given year.

tax preference theory Proposes that investors prefer capital gains over dividends, because capital gains taxes can be deferred into the future but taxes on dividends must be paid as the dividends are received.

**taxable income** Gross income less a set of exemptions and deductions that are spelled out in the instructions to the tax forms individuals must file.

temporary net operating working capital The NOWC required above the permanent level when the economy is strong and/or seasonal sales are high.

**tender offer** The offer of one firm to buy the stock of another by going directly to the stockholders, frequently over the opposition of the target company's management.

**term structure of interest rates** The relationship between yield to maturity and term to maturity for bonds of a single risk class.

**time line** A graphical representation used to show the timing of cash flows.

times-interest-earned (TIE) ratio Determined by dividing earnings before interest and taxes by the interest charges. This ratio measures the extent to which operating income can decline before the firm is unable to meet its annual interest costs.

total assets turnover ratio Measures the turnover of all the firm's assets; it is calculated by dividing sales by total assets.

**trade credit** Debt arising from credit sales and recorded as an account receivable by the seller and as an account payable by the buyer.

**trade deficit** Occurs when a country imports more goods from abroad than it exports.

**trade discounts** Price reductions that suppliers offer customers for early payment of bills.

transactions balance The cash balance associated with payments and collections; the balance necessary for day-to-day operations.

**Treasury bond** Bonds issued by the Federal government that are not exposed to default risk. Sometimes referred to as government bonds.

**trend analysis** An analysis of a firm's financial ratios over time. It is used to estimate the likelihood of improvement or deterioration in its financial situation.

underwritten arrangement A type of contract with an investment banker when issuing stock. An investment banker agrees to buy the entire issue at a set price and then resells the stock at the offering price. Thus, the risk of selling the issue rests with the investment banker.

**value drivers** The four value drivers are the growth rate in sales (g), operating profitability (OP = NOPAT/ Sales), capital requirements (CR = Capital/Sales), and the weighted average cost of capital (WACC).

**value-based management** Managing a firm with shareholder value in mind. It typically involves use of a model of shareholder value, like the corporate value model.

**value of operations** The present value of all the future free cash flows that are expected from current assets-in-place and the expected growth of assets-in-place when discounted at the weighted average cost of capital.

variance,  $\sigma^2$  A measure of the distribution's variability. It is the sum of the squared deviations about the expected value.

**venture capitalist** The manager of a venture capital fund. The fund raises most of its capital from institutional investors and invests in start-up companies in exchange for equity.

**vertical merger** Occurs when a company acquires another firm that is "upstream" or "downstream"; for example, an automobile manufacturer acquires a steel producer.

warrant A call option issued by a company allowing the holder to buy a stated number of shares of stock from a company at a specified price. Warrants are generally distributed with debt, or preferred stock, to induce investors to buy those securities at lower cost.

weak form of market efficiency Assumes that all information contained in past price movements is fully reflected in current market prices. Thus, information about recent trends in a stock's price is of no use in selecting a stock.

weighted average cost of capital (WACC) The weighted average of the after-tax component costs of capital—debt, preferred stock, and common equity. Each weighting factor is the proportion of that type of capital in the optimal, or target, capital structure.

white knight A friendly competing bidder which a target management likes better than the company making a hostile offer; the target solicits a merger with the white knight as a preferable alternative.

window dressing A technique employed by firms to make their financial statements look better than they really are.

working capital A firm's investment in short-term assets—cash, marketable securities, inventory, and accounts receivable.

**workout** Voluntary reorganization plans arranged between creditors and generally sound companies experiencing temporary financial difficulties. Workouts typically require some restructuring of the firm's debt.

**yield curve** The curve that results when yield to maturity is plotted on the Y axis with term to maturity on the X axis.

yield to call (YTC) The rate of interest earned on a bond if it is called. If current interest rates are well below an outstanding callable bond's coupon rate, the YTC may be a more relevant estimate of expected return than the YTM, since the bond is likely to be called.

**yield to maturity (YTM)** The rate of interest earned on a bond if it is held to maturity.

**zero coupon bond** Pays no coupons at all, but is offered at a substantial discount below its par value and hence provides capital appreciation rather than interest income.