P

1. P/E Effect

Fundamental analysis calls on much wider range information to create portfolios than doe's technical analysis. One of the criteria is to use the price/earnings (PE) ratio information to formulate portfolios. It has been found that portfolios of low PE stocks have exhibited higher average risk-adjusted returns than high PE stocks.

2. P/E Ratio

A firm's stock price per share divided by earnings per share.

3. PAC

Planned amortization class such as collateralized mortgage option (CMO) – A security that is retired according to a planned amortization schedule, while payments to other classes of securities are slowed or accelerated. The objective is to ensure that PACs exhibit highly predictable maturities and cash flows.

4. Package

A derivative that is a portfolio of standard calls and puts, possibly combined with a position in forward contracts and the asset itself.

5. Pac-Man Strategy

In a pac-man strategy, the target firm tries to turn the tables and take over the hostile bidder. See also **Tender offer**]

6. Par Bond

A bond for which the price at issue equals the maturity value.

7. Par Coupon

The coupon rate on a par bond.

8. Par Value

The face value of a bond is called the par value. Generally, this is the amount of money that the issuer has initially borrowed and promised to repay at a future maturity date. Most US corporate bonds have a par value of \$1,000 per bond.

9. Par Yield

The coupon on a bond that makes its price equal the principal.

10. Parallel Shift In The Yield Curve

A change in interest rate where rates at all maturities change by the same amount, in the same direction, at the same time. This never actually occurs.

11. Parent Company

A firm that owns controlling interest in the stock of another firm.

12. Partial Expectation

The sum (or integral) of a set of outcomes times the probability of those outcomes. To understand the calculations of partial expectation, consider a binomial model in which the strike price is \$70, and the stock price at expiration can be \$20, \$40, \$60, or \$80, with probabilities 18, 38, 38 and 18, respectively. If a put is in the money at expiration, the stock price is either \$20, \$40, or \$60. Suppose that for these two values we sum the stock price times the probability. We obtain:

$$\sum_{S_1 < 70} PROB(S_t) \times S_t = \left(\frac{1}{8} \times \$20\right) + \left(\frac{3}{8} \times \$40\right) + \left(\frac{3}{8} \times \$40\right) + \left(\frac{3}{8} \times \$60\right) = \$40.$$

The value \$40 is clearly not an expected stock price since it is below the expected stock price (\$50). We call \$40 the *partial expectation* of the stock price conditional upon $S_t < (\$70)$.

13. Participating Swap

Allows the fixed rate to be adjusted downward during the life of the swap, depending on the rate for payments indexed to a long-term rate.

14. Partnership

A partnership brings two or more individuals together to invest their time, energy, and talents in the firm. Organizing a partnership is relatively simple, although some legal documents may be needed to spell out the percentage ownership, rights, and duties of each partner. By drawing on the strengths of two or more individuals, each can specialize in his or her own area to help the firm achieve success. Also, the combined financial resources of two or more individuals may increase the firm's ability to raise and borrow capital.

As with a proprietorship, partnership income is taxable to each partner at his or her own personal tax rate. The partnership ends upon the death of any partner; unless other arrangements have been made, firm assets may need to be sold to settle the deceased partner's estate.

As the partners presumably manage their firm, agency costs can be zero, as long as they agree on the firm's goals, work together amicably, and trust and respect each other as professionals. Should intractable differences of opinion or suspicions arise, arguments, and even court battles, can result.

Partnerships suffer from other drawbacks. As with a proprietorship, it is difficult to value and transfer ownership in a partnership. In addition, partners are *jointly and severally liable* for the debts of the partnership. That means each partner may have to pay more than his or her proportional ownership share to settle the firm's debts in case

of failure. Each partner has unlimited liability. Anyone thinking of joining a partnership should seriously consider this risk.

The liability risks just noted describe a *general* partnership. A limited partnership addresses the liability concern by identifying at least one general partner as having unlimited liability; the remaining *limited partners* face liability limited to their investment in the firm, in other words, their personal assets cannot be demanded to settle the firm's debts. However, they also are limited in that they cannot participate in the operations of the firm. Operating decisions may be made only by the general partners.

15. Passbook Savings

Nonnegotiable, small savings account evidenced by a passbook listing the account terms.

16. Passive Investment Strategy

See also Passive management]

17. Passive Management

Buying a well-diversified portfolio to represent a broad-based market index without attempting to search out mispriced securities.

18. Passive Portfolio

A market index portfolio. See also **Passive portfolio management**]

19. Passive Portfolio Management

An investment policy whereby managers make predetermined securities purchases regardless of the level of interest rates and specific rate expectation. Examples include following a laddered maturity strategy whereby a bank continuously buys 10-year securities as previously owned securities mature.

20. Pass-Through

See also Mortgage-back security

21. Pass-Through Security

Pools of loans (such as home mortgage loans) sold in one package. Owners of pass-throughs receive all principal and interest payments made by the borrowers.

22. Past-Due Loan

A loan with a promised principal and/or interest payment that has not been made by the scheduled payment data.

23. Path-Dependent Derivative

A derivative where the final payoff depends upon the path taken by the stock price, instead of just the final stock price.

24. Path-Dependent Option

An option whose payoff depends on the whole path followed by the underlying variable-not just its final value. An Asian option is an example of path-dependent option, since Asian option that has a payoff that is based on the average price over some period of time. See also **Asian option**]

25. Payable Through Drafts

Payable through drafts resemble checks; they are written orders to pay and have the physical appearance of checks. However, they are drawn directly against the issuing firm instead of a bank. The bank receives a draft first; it sends the draft to the issuing firm and awaits approval. The bank releases funds only when the corporate issuer approves specific drafts for payment. In practice, the bank generally withholds payment for one

business day and then covers the payment automatically unless directed otherwise. The issuing firm generally inspects the drafts for inaccuracies in signatures, amounts, and dates, and quickly cancels payments on issued drafts with discrepancies.

Although drafts may increase disbursement float, their main advantage lies in ensuring effective control over payments. Draft payments are popular in the insurance industry, for instance, where they allow field agents to settle claims quickly even though they lack the authority to issue checks. Drafts give the central office the flexibility to improve efficiency in field operations, yet still retain the option to block any payments deemed inappropriate.

26. Payback Method

The payback method calculates a project's payback period as a measure of how long it takes the project to pay for itself. More formally, it is the time necessary for a project to generate cash flows sufficient to recover its cost. Projects with payback periods less than a management-determined cutoff are acceptable. Projects with longer paybacks are rejected.

The payback method has none of the characteristics we want from a project selection method. First, it ignores the time value of money, summing periodic cash flows without regard for the differences in the present values of those dollars. Second, the payback method fails to account for all relevant cash flows, ignoring those that accrue after the payback period. Third, the payback period gives no indication of the absolute change in shareholder wealth due to a particular project. Finally, the decision criterion is quite subjective. The determination of an appropriate payback period is based solely upon management's opinions and perceived needs. It has no relationship to the project's required return.

Some firms use a discounted payback method, in which the payback is computed using the pre-

sent value of the cash inflows. See also **Discount** payback rule]

27. Payback Period Rule

An investment decision rule which states that all investment projects that have payback periods equal to or less than a particular cutoff period are accepted, and all of those that pay off in more than the particular cutoff period are rejected. The payback period is the number of years required for a firm to recover its initial investment required by a project from the cash flow it generates.

28. Payer Swaption

A swaption giving the holder the right to be the fixed-rate (or fixed price) payer in the swap.

29. Paylater Strategy

Generally used to refer to option strategies in which the position buyer makes no payments unless the option moves more into the money. This is an exotic option is which the premium is paid only at expiration and only if the option is in the money.

30. Payment Date

The firm mails checks to shareholders on the payment date. See also **Dividend declaration date**]

31. Payment-in-Kind

Payment-in-kind (PIK) bonds often are issued by cash-strapped firms and firms doing leveraged buyouts. The PIK provision allows the issuer to pay coupon interest in the early years of the issue in the form of either cash or bonds with values equal to the coupon payment. Such bonds help reduce the issuer's cash outflows, but at a cost of increasing the debt. Investors also assume a risky position; unless the issuer's cash situation im-

proves, they find themselves increasing their exposure to the questionable lender.

32. Payments Pattern Approach

Describes the lagged collection pattern of receivables. For instance the probability that a 75-day-old account will still be unpaid when it is 76 days old. [See also Receivable balance pattern]

33. Payoff

The cash realized by the holder of an option or other derivatives at the end of its life.

34. Payoff Diagram

A graph in which the value of a derivative or other claim at a point in time is plotted against the price of the underlying asset.

35. Payout Phase

The payout phase usually starts at retirement, when the investor typically has several options, including the following:

- 1. Taking the market value of the shares in a lump sum payment.
- 2. Receiving a fixed annuity until death.
- 3. Receiving a variable amount of money each period that is computed according to a certain procedure.

36. Payout Ratio

Proportion of net income paid out in cash dividends.

37. Peak

The transition from the end of an expansion to the start of a contraction in business cycle.

38. Peak Exposure

For market-driven instruments, the maximum (perhaps netted) exposure expected with 95 percent confidence for the remaining life of a transaction. CreditMetrics does not utilize this figure because it is not possible to aggregate tail statistics across a portfolio, since it is not the case that these "peaks" will all occur at the same time. See also Credit-Metrics

39. Pecking Order Hypothesis

The pecking order hypothesis is a perspective based upon repeated observations of how corporations seem to raise funds over time. The theory behind this perspective was developed from the **information asymmetry** problem, namely, that management knows more about the firm and its opportunities than the financial marketplace does, and that management does not want to be forced to issue equity when stock prices are depressed. See also **Information asymmetry**]

Evidence shows that corporations mainly rely on internal funds, especially new additions to retained earnings, to finance capital budgeting projects. If they need outside financing, firms typically issue debt first, as it poses lower risk on the investor than equity and lower cost on the corporation. Should a firm approach its debt capacity, it may well favor hybrid securities, such as convertible bonds, over common stock. As a last resort, the firm will issue common equity. Thus, firms have a financing "pecking order," rather than a goal to maintain a specific target debt-to-equity ratio over time.

Under this pecking order hypothesis, financial theory has come full circle. Like Modigliani and Miller's original work, the pecking order hypothesis implies that firms have no optimal debt-to-equity ratios. Instead, they follow the pecking order, exhausting internal equity (retained earnings) first and resorting to external equity (new issues of common stock) last. Observed debt ratios represent nothing more than the cumulative result of a firm's need to use external financing over time.

Under the pecking order hypothesis, firms with high profitability should have *lower* debt ratios, as these firms' additions to retained earnings reduce their need to borrow. Under the static tradeoff hypothesis, a firm with high profitability ratios should have a lower probability of bankruptcy and a higher tax rate, thus leading to *higher* debt ratios. Most empirical evidence resolves this conflict in favor of the pecking order hypothesis; studies find that more profitable firms tend to have lower debt ratios.

What if the pecking order hypothesis is correct and the firm has no optimal capital structure? Recall that the cost of capital represents the minimum required return on capital budgeting projects. Management must determine the firm's cost of capital regardless of personal beliefs about the existence of an optimal capital structure. Target capital structure weights should reflect management's impression of a capital structure that is sustainable in the long run and that allows for financing flexibility over time. Should a firm fail to earn its cost of capital, shareholder wealth will decline.

The debate over optimal capital structure is not resolved. Empirical studies and surveys of corporate practice have supported both the static tradeoff and the pecking order theories. Part of the uncertainty over which perspective is correct comes from blends between capital structure choices that depart from "plain vanilla" debt and equity. In recent decades, firms have devised myriad financing flavors. Consequently, many firms have several layers of debt and several layers of equity on their balance sheets. Debt can be made convertible to equity; its maturity can be extended, or shortened, at the firm's options; debt issues can be made senior or subordinate to other debt issues. Likewise, equity variations exist. Preferred equity has gained popularity since it increases a firm's equity without diluting the ownership and control of the common shareholders; it also increases future financing flexibility by expanding the firm's capacity for debt issues. Firms can have different classes of common equity, providing holders with differing levels of dividend income or voting rights.

In sum, pecking order in long-term financing is a hierarchy of long-term financing strategies, in which using internally generated cash is at the top and issuing new equity is at the bottom.

40. Peer Group

Sample firms used to generate average reference data for comparison with an individual firm's performance data.

41. Pension Benefit Guarantee Corporation (PBGC)

The Employees Retirement Income Security Act (ERISA) of 1974 established the PBGC, which is a government-run insurance system that ensures that employees of companies that go bankrupt will receive their pension benefits.

42. Percentage of Sales Method

The percentage of sales method is a more complex financial planning model than the internal growth, sustainable growth, or external financing needs models. The percentage of sales method generates a set of *pro forma* or *forecasted balance sheets and income statements* for the firm. The analyst projects what will happen to the firm's accounts over time, which supports an estimate of the firm's external financing needs for a particular period.

The first step of the percentage of sales method is implied by the method's name. Using historical data, the analyst divides each balance sheet and income statement item by sales revenue. The resulting ratios are examined to see which accounts have maintained fairly constant relationships or trends with respect to sales.

The second step of the percentage of sales method is to estimate future sales levels. This estimate can rely on market research studies or on an analysis of internal or sustainable growth rates.

In the third step, the analyst can construct projected financial statements. This process begins by placing the sales forecast at the top of the income

statement. To forecast the value of income statement items having a steady or predictable relationship to sales, the analyst assumes this relationship will continue. For items that do not have a consistent relationship to sales, other assumptions will be needed to forecast their values. For example, current credit market conditions may suggest holding interest expense constant or projecting it to grow at a predetermined rate; projected taxes will reflect the firm's tax rate.

Similarly, the analyst projects balance sheet accounts based upon their relationship with sales revenue. Accounts that lack consistent relationships to sales may be assumed to be held constant or to change in a manner consistent with recent trends and future market projections.

The analyst estimates retained earnings by adding the forecasted addition to retained earnings to the existing retained earnings balance. The forecasted addition to retained earnings is the net income on the pro forma (projected) income statement less any dividends, that is:

Projected retained earnings

- = Existing retained earnings
 - + Projected net income
 - Estimated dividend payment.

The accounting identity requires that total assets equal total liabilities and equity; in the first pass, however, the percentage of sales method will rarely produce this equality. To balance the pro forma balance sheet, the analyst inserts a plug figure, so that:

The plug figure, sometimes labeled "external funds needed" or "external funds required," typically represents an addition to or subtraction from notes payable to restore equality to the balance sheet equation. A positive plug figure suggests that additional short-term borrowing will be needed to finance the firm's growth plans. (Of course, this need for funds also can be met by

issuing long-term debt or equity.) A negative plug figure suggests that project operating results will generate excess cash which the firm can use to reduce its short-term or long-term borrowing or to repurchase stock.

43. Percentile Level

A measure of risk based on the specified confidence level of the portfolio value distribution (e.g., the likelihood that the portfolio market falls below the 99th percentile number is 1 percent).

44. Perfect Markets

Perfectly competitive financial markets.

45. Perfectly Competitive Financial Markets

Markets in which no trader has power to change the price of goods or services. Perfect markets are characterized by the following conditions: (1) trading is costless, and access to the financial markets is free; (2) information about borrowing and lending opportunities is freely available; (3) there are many traders, and no single trader can have a significant impact of market prices.

46. Performance Shares

Shares of stock given to managers on the basis of performance as measured by earnings per share and similar criteria is a control device used by shareholders to tie management to the self-interest of shareholders.

47. Permanent Working Capital

Some working capital needs persist over time, regardless of seasonal or cyclical variations in sales. The firm will always maintain some minimum level of cash, accounts receivable, or inventory; this is permanent working capital and is usually some target percentage of sales.

48. Perpetual Option

An option that never expires.

49. Perpetual Preferred Stock

Nonmaturing preferred stock.

50. Perpetuity

A constant stream of cash flows without end. A British consol is an example. Consider a consol that pays a coupon of C dollars each year and will do so with a **discount rate** r forever. Simply applying the present value (PV) formula gives us

$$PV = \frac{C}{r}$$
.

See also Discount rate

51. Perquisites

Management amenities such as a big office, a company car, or expense-account meals. "Perks" are agency costs of equity, because managers of the firm are agents of the stockholders.

52. Personal Banker

Individual assigned to a bank customer to handle a broad range of financial services.

53. Personal Trust

An interest in an asset held by a trustee for the benefit of another person.

54. Pie Model of Capital Structure

A model of the debt-equity ratio of the firms, graphically depicted in slices of a pie that represents the value of the firm in the capital markets.

55. Plain Vanilla

A term used to describe a standard deal. The most basic type of interest rate swap is known as a "plain vanilla swap."

56. Planned Amortization Class

A collateralized mortgage obligation (CMO) that receives principal from the underlying mortgages based on a predetermined payment schedule, where the payments vary depending on whether prepayments fall inside or outside some predetermined range.

57. Planning Phase of Capital Budgeting

The planning or identification phase examines areas of opportunity or change that could offer profitable investment.

Over time, managers define and redefine the firm's mission, or "vision," and the strategies they will use to accomplish that mission. This long-term plan provides a foundation for the following 5 to 10 years of operation planning for the firm. The longterm plan is operationalized, or implemented, in the annual capital budget. To develop the capital budget, managers must find investment opportunities that fit within the overall strategic objectives of the firm. In addition, they must consider the firm's position within the various markets it serves and the likely plans of its competitors. Attractive capital budgeting projects are those that take the firm from its present position to a desired future market position. Two popular and well-known methods that managers use to identify potentially attractive capital budgeting projects are the business strategy matrix and SWOT analysis. See also B usiness strategy matrix and SWOT analysis]

58. Pledged Securities

Bank securities (either treasury or municipal securities) pledged as collateral against deposit liabilities

such as Treasury deposits, municipal deposits, and borrowing from Federal Reserve banks. These pledged securities are often held by a third party trustee and cannot be sold without a release.

59. Pledging

In pledging, the firm offers its receivables as security for a cash advance. The lender who accepts and discounts the receivables may be a commercial bank or a specialized industrial finance company.

The first step in setting up a pledging relationship is to negotiate a formal agreement between the borrower and the lender. Once the agreement has been reached and a legal contract signed, the borrower can begin to present its receivables. The lender gives the borrower the face value of the invoices less its own charges. That is, the lender buys the invoices at a discount, paying less than the amount it hopes to collect.

Almost all pledging agreements have two important provisions: the lender's right to recourse, and its right to reject invoices. In the event that the customer defaults and fails to pay the sum invoiced, the borrower is obligated to assume responsibility for the outstanding amount.

The lender also has the right to select only those invoices that it will finance and reject those it considers too risky. It is estimated that the rejection rate could reach as high as fifty percent.

Pledging, or discounting, receivables is not a cheap source of credit. During most of the 1980s, when the commercial bank lending rate varied between 8 and 15 percent, the cost of discounting was about 20 percent. Similar rate differentials exist today. In addition, the lender often charges yet another fee to cover its expenses to appraise credit risks. Consequently, this source of short-term financing is used mostly by companies that have no other source of funds open to them, primarily smaller companies. For such companies, however, this offers two advantages. First, after the initial agreement has been reached, the method is fairly informal and automatic, except for the rejection of invoices for bad risk. Second, the customer being

invoiced receives no information that the borrowing company is in financial trouble; he or she simple sends in a check in the normal way and never knows that it has been assigned to a third party. For this reason, pledging receivables is sometimes called nonnotification financing.

60. Plowback Ratio

The proportion of the firm's earnings that is reinvested in the business (and not paid out as dividends). The plowback ratio equals 1 minus the dividend payout ratio.

61. Plug

A variable that handles financial plan. See also **Percentage of sales method**]

62. PO

Principal Only. A mortgage-backed security where the holder receives only principal cash flows on the underlying mortgage pool.

63. Point

Mortgage lenders customarily charge initial service fees, known as points, at the time of the loan origination. A point is one percent of the principle of the loan.

64. Point of Sale

Electronic terminals that enable customers to directly access deposit accounts.

65. Poison Pill

Strategy by a takeover target company to make a stock less appealing to a company that wishes to acquire it. Examples of such delaying tactics, proxy defenses, or poison pills include

- 1. Provisions that require super-majorities (for example, two-thirds) of existing share-holders to approve any takeover;
- 2. The decision to place some, rather than all, board seats up for election every year, thus delaying the ability of an acquirer to control the firm;
- 3. Provisions to allow the board to authorize and issue large quantities of stock or to repurchase outstanding bonds in the event of a takeover attempt;
- 4. Provisions that stipulate expensive payouts to existing managers in the face of any successful buyout;
- 5. The establishment of advance notice requirements, so shareholders must meet deadlines for presenting business or director nominations at shareholder meetings; and
- 6. Restrictions on the ability of shareholders to call special meetings.

66. Poisson Distribution

A probability distribution that counts the number of events occurring in an interval of time, assuming that the occurrence of events is independent.

67. Poisson Process

A process describing a situation where events happen at random. The probability of an event in time Δ_t is $\lambda \Delta_t$, where λ is the rate (intensity) of the process.

68. Political Risk

Investors in nondomestic securities face a number of risks beyond those of domestic securities. Political risk can affect a bond investor in a number of ways. A foreign government may block currency exchanges, preventing the investor from repatriating coupon income.

69. Pooling of Interests

The general idea motivating the pooling treatment is that the business combination was not a purchase-sale transaction but rather a combining of interests. Hence, the prior accounting valuations are maintained and merely added together for the combined firm. Moreover, from an accounting standpoint, the two firms are considered to have been joined from day one and the accounting reports are restated as if they had been joined.

70. Portfolio Analysis

A portfolio is any combination of assets or investments. A firm can be considered a portfolio of capital budgeting projects.

Expected Return on a Portfolio

The expected rate of return on a portfolio, $E(R_p)$, is simply the weighted average of the expected returns, $E(R_i)$, of the individual assets in the portfolio:

$$E(R_p) = \sum_{i=1}^n w_i E(R_i),$$

where w_i is the weight of the *i*th asset, or the proportion of the portfolio invested in that asset. The sum of these weights must equal 1.0.

 $E(R_i)$ is used to stand for the expected return on a risky asset. Whenever risk exists, the actual return is not known beforehand. We know that there is an asset which, for all intents and purposes, is considered risk-free: the Treasury bill or T-bill. Let R_f denote the nominal return on a risk-free asset. Since it has no risk, the expected nominal T-bill return is the same as its actual return.

Variance and Standard Deviation of Return on a Portfolio

The total risk of a portfolio can be measured by its variance or the standard deviation of its returns.

Lower portfolio variability arises from the benefits of **diversification**. See also **Diversification**] The benefits of diversification are greatest when asset returns are strongly negatively correlated, that is, when they tend to move in opposite directions over time.

Portfolio variance is affected not only by the variance of each asset's return but also by **covariances** between returns. See also **Covariance** The variance of a two-asset portfolio is computed by summing the squared weights of each asset times the asset's variance and then adding a term to capture the covariance of the two assets:

$$\sigma_p^2 = w_1^2 \sigma_1^2 + w_2^2 \sigma_2^2 + 2w_1 w_2 \operatorname{cov}(R_1, R_2),$$

where w_1 and w_2 are weights associated with first and second security respectively. σ_1^2 and σ_2^2 are variance for first and second security, respectively. Cov (R_1, R_2) represents covariance between R_1 and R_2 .

We can also express the portfolio variance in terms of the **correlation** coefficient as **See** also **Correlation**

$$\sigma_p^2 = w_1^2 \sigma_1^2 + w_2^2 \sigma_2^2 + 2w_1 w_2 \rho_{12} \sigma_1 \sigma_2,$$

where ρ_{12} represents the correlation coefficient between R_1 and R_2 .

The standard deviation of the portfolio's returns is simply the square root of this variance.

71. Portfolio Cushion

In general, portfolio insurance can be thought of as holding two portfolios, the first portfolio can be viewed as the safe or riskless portfolio with value equal to the level of protection desired. This level is called the floor and is the lowest value the portfolio can have. For certain strategies this can be held constant or allowed to change over time as market conditions or needs change. The second portfolio consists of the difference between the total value of the portfolio and the floor, commonly called the portfolio cushion. These assets consist of a leveraged position in risky assets. To insure the portfolio,

the cushion should be managed as never to fall below zero in value because of the limited-liability property of common stock.

72. Portfolio Immunization

Making a portfolio relatively insensitive to interest rates.

73. Portfolio Insurance

The practice of using options or dynamic hedge strategies to provide protection against investment losses while maintaining upside potential. In addition, it can use an appropriate mix of treasury bills and security to create a payoff pattern identical to the pattern of an option on the underlying security. This kind of artificial option can be used to perform portfolio insurance. See also Rubinstein (1985) for details]

74. Portfolio Management

Process of combining securities in a portfolio tailored to the investor's preferences and needs, monitoring that portfolio, and evaluating its performance.

75. Portfolio Opportunity Set

The expected return-standard deviation pairs of all portfolios that can be constructed from a given set of assets.

76. Position Limit

The maximum position a trader (or group of traders acting together) is allowed to hold.

77. Positive Covenant

Part of the indenture or loan agreement that specifies an action that the company must abide by.

78. Positive Float

The firm's bank cash is greater than its book cash until the check's presentation.

79. Post

Particular place on the floor of an exchange where transactions in stocks listed on the exchange occur.

80. Post Audit

The major proportion of control phase for capital budgeting process is the post audit of the project, through which past decisions are evaluated for the benefit of future capital expenditure.

81. Power Option

An option where the payoff is based on the price of an asset raised to a power. For example, a power option for call can be defined as $(S^b - K^b, 0)$, where S and K are stock price per share and exercise price per share respectively; b is the power.

82. Preauthorized Check System

A preauthorized check (PAC) system is a type of cash collection arrangement that may be more useful to firms such as insurance, finance, leasing, and mortgage companies. The PAC is a commercial instrument that is used to regularly transfer funds between demand deposit accounts. Through such a preauthorized indemnification agreement, the collecting firm is authorized to draw a check at specified intervals and in specified amounts on the customer's demand deposit account. An example is a monthly mortgage payment. The PAC reduces mail, processing, and collection float and ensures that the company gets its money by a specified date.

83. Preferred Habitat Theory

Investors prefer specific maturity ranges but can be induced to switch if premiums are sufficient. In other words, markets are not so segmented that an appropriate premium cannot attract an investor who prefers one bond maturity to consider a different one. See also Market segmentation theory]

84. Preferred Stock

A type of stock whose holders are given certain priority over common stockholders in the payment of dividends. Usually the dividend rate is fixed at the time of issue. Preferred stockholders normally do not receive voting rights.

85. Premium Bonds

When a bond's price exceeds its par value, it is said to be selling at a *premium*, and it is called a premium bond. In most cases where the bond sells at a premium, interest rates have fallen after the bond's issue.

The price of a premium bond will fall as it nears maturity if the market rate remains the same, since at maturity its price will equal its par value.

86. Premium on a Bond

Difference between the price of a bond and its par value when the price is higher. When the price is lower than the par value, then this difference is the discount on a bond.

87. Premium on an Option

The forward rate either will be at a discount or a premium to the spot rate. A currency is selling at a premium if it can purchase more units of foreign currency in the forward market than in the spot market. See also **discount**]

88. Prepaid Forward Contract

A forward contract calling for payment today and delivery of the asset or commodity at a time in the future.

89. Prepaid Forward Price

The price the buyer pays today for a prepaid forward contract.

90. Prepaid Swap

A swap contract calling for payment today and delivery of the asset or commodity at multiple specified times in the future.

91. Prepayment Function and Model

A function estimating the prepayment of principal on a portfolio of mortgages in terms of other variables. Refinancing and housing turnover are two principal sources for prepayment. There are several prepayment models to estimate the rate of prepayment. The most well-known model is the model developed by public security association.

92. Prepayment Penalties

Prepayment penalties, which lender charges borrower for his (or her) prepayment on mortgage, are deigned to compensate for the uncertainty in asset management caused by a prepayment. Lenders face potentially large volumes of prepayments if market yields fall and borrowers with fixed mortgage rates refinance their homes at lower rates.

93. Prepayment Speed

The percentage of the outstanding principal that is prepaid above and beyond normal amortization. See also **Prepayment function and model**]

94. Present Value

The present value of a cash flow is the amount which, if it were invested today at r percent per year for n years, would grow to equal the future cash flow. The present value (PV) represents the maximum price we are willing to pay today in order to receive the future cash flow, FV.

To solve for PV, the present value, we obtain

$$PV = FV_n \times \left[\frac{1}{(1+r)^n} \right].$$

Like future values, present values are additive as long as the present values occur at the same point in time. If a problem involves several future cash flows, one can easily find their total present value simply by adding the individual present values at time zero.

95. Present Value Factor

Factor used to calculate an estimate of the present value of an amount to be received in a future period. Calculated as $1(1+r)^n$, where r is the discount rate; and n is the number of compounding periods. See also **Present value**]

96. Price Participation

The extent to which an equity-linked note benefits from an increase in the price of the stock of index to which it is linked.

97. Price Risk

It is one of the components of the interest rate risk, another component is the coupon-reinvestment risk. Price risk occurs if interest rate change before the target date and the bond is sold prior to maturity. At that time the market price will differ from the value at the time of purchase. If rate increase after the purchase date, the price the bond would be sold at would be below what had been anticipated. If the rate decline, the realized price would be above what had been expected. Increase in interest rates will reduce the market value of a bond below its par value. However it will increase the return from the reinvestment of the coupon interest payment. Conversely, decrease in interest will increase the market value of a bond above its par value but decrease the return on the reinvestment of the coupons. In order for a bond to be protected from the change in interest rate after the purchase. The price risk and coupon reinvestment must offset each other.

98. Price Takers

Individuals who responds to rates and prices by acting as though they have no influence on them.

99. Price Value of a Basis Point

The change in the value of a fixed-income asset resulting from a one basis point change in the asset's yield to maturity. One basis point represents 0.25 percent.

100. Price Volatility

A factor that is the single most important variable affecting the speculative value of the option is the price volatility of the underlying stock. The greater the probability of significant change in the price of the stock, the most likely it is that the option can be exercised at a profit before expiration.

101. Price/Earnings Ratio (P/E Ratio)

The ratio of a stock's price to its earnings per share. Also referred to as the PE multiple. The P/E ratio tells us how much stock purchasers must pay per dollar of earnings that the firm generates. See also Market value ratios

102. Price-to-Book-Value Ratio

See Market value ratios

103. Price-Variable Cost Margin

A factor affecting business risk is the firm's ability to maintain a constant, positive difference between price and per-unit variable cost:

$$Margin = \frac{Price\ per\ unit-variable\ cost\ per\ unit}{Price}.$$

This is one of the factors used to determine the business risk. See also **Business risk**]

104. Price-Weighted Index

In a price-weighted index the basic approach to sum the prices of the component securities used in the index and divide this sum by the number of components; in other worlds, to compute a simple arithmetic average. The Dow-Jones Industrial Average (DJIA) is the most familiar index of this type. To allow for the impact of stock splits and stock dividends, which could destroy the consistency and comparability of price-weighted index data over time, an adjustment of either the reported price data or the divisor itself is required. See also **Dow Jones Industrial Average Index**]

105. Pricing Grid

A schedule of credit spreads listed by credit rating that are applied to either a loan or Credit-Sensitive Note (CSN) upon an up(down) grade of the obligor of issuer. If the spreads are specified at market level, then such terms reduce the volatility of the value across all non-default credit quality migrations by keeping the instrument close to par.

106. Primary Capital

The sum of common stock, perpetual preferred stock, surplus, undivided profits, contingency and other capital reserves, valuation reserves, mandatory convertible securities, and minority interest in consolidated subsidiaries at a bank.

107. Primary Market

The primary market is the market for original securities, or first-time issues. For example, a corporation first sells its stock to the public in an initial public offering. Such a sale is a primary market transaction. If, after additional growth, the firm determines that it needs more equity capital, it can sell another new issue of stock in the primary market. In general, whenever a firm raises money by selling shares, bonds, commercial paper, or other securities to investors, it does so in pri-

mary market transactions. Government issues of Treasury bills and bonds, as well as state and local government security issues, also occur in the primary market.

108. Prime Rate

The rate of interest charged by commercial banks vary in two ways: the general level of interest rates varies over time, and, at any given time, different borrowers pay different rates because of varying degrees of creditworthiness. The base rate for most commercial banks traditionally has been the prime rate, although in times of soaring market interest rates, some of the larger banks experiment with marginal pricing schemes. The prime rate is the rate that commercial banks charge their most creditworthy business customers for short-term borrowing. The financial press splashes news of any change in this rate across the front page. Congress and the business community speculate about the prime's influence on economic activity, because it is the baseline rate for loan pricing in most loan agreements.

In the latter part of 1971, a large, money-center bank instituted a floating prime rate linked by a formula to the market-determined commercial paper rate. The formula required weekly reviews of the prime rate, with adjustments in minimum steps of one-eighth of a percentage point. The formula kept the prime approximately 50 basis points above the average rate on 90-day commercial paper placed through dealers. The choice of the commercial paper rate reflected the ease of substituting short-term bank loans for commercial paper. Historically, the prime has served as a base line for loan pricing; a loan contract might state its interest rate as "prime plus two" or "120 percent of prime."

However, as the banking industry has begun to price its loans and services more aggressively, the prime rate has become less important. As the use of the prime rate has declined, compensating balances have become less popular, as well. The current trend is to price a loan at a rate above the bank's marginal cost of funds, which typically is reflected by the interest rate on a certificate of deposit. The bank adds an interest-rate margin to this cost of funds, and the sum becomes the rate it charges the borrower. This rate changes daily, in line with the bank's money market rates.

109. Primitive Security, Derivative Security

A primitive security is an instrument such as a stock or bond for which payments depend only on the financial status of its issuer. A derivative security is created from the set of primitive securities to yield returns that depend on factors beyond the characteristics of the issuer and that may be related to prices of other assets.

110. Principal

The value of a bond that must be repaid at maturity. Also called the face value or the par value.

111. Principal Components Analysis

A multivariate analysis aimed at finding a small number of factors that describe most of the variation in a large number of correlated variables. (Similar to a factor analysis).

112. Principal-Agent Problem

The principals, or owners of the firm hire agents, or managers, to run the firm in the best interests of the principals. But ethical lapses, self-interest, or the owners' lack of trust in the managers can lead to conflicts of interest and suspicions between the two parties. This problem in corporate governance is called the principal-agent problem.

The shareholders of a firm elect a board of directors. In theory, the board's role is to oversee managers and ensure that they are working in the best interests of the shareholders. In practice, however, the board often has a closer relationship with management than with the shareholders. For example, it is not unusual for the firm's top execu-

tives to sit on the firm's board of directors, and the firm's top executives often nominate candidates for board seats. These relationships can obscure loyalties and make the board a toothless watchdog for shareholders' interest.

Managers, acting as agents, may pursue their own self-interest by increasing their salaries, the size of their staffs, or their perquisites (better known as "perks"), which might include club memberships and the use of company planes or luxurious company cars. Management, in conjunction with the Board, may seek to fend off takeovers that would allow shareholders to sell their shares at a price above the current market price, or they may try to preempt such merger or acquisition attempts by seeking changes in the corporate charter that would make such takeovers difficult to pursue.

Other examples of principal-agent relationships that one may relate to: voters (principals) elect officeholders (agents) to work in the best interest of the public; but political action committee (PAC) contributions to political campaigns may affect politician's actions if elected. Investors (principals) trust the advice of stockbrokers (agents) when investing their savings; but many stockbrokers earn their paycheck by generating commissions on trading. Accountants and lawyers (agents) often bill their clients (principals) by the number of hours they work, irrespective of whether the client's tax bill was minimized or the court case was won.

113. Principle of Diversification

Highly diversified portfolios will have negligible unsystematic risks. In other words, unsystematic risks disappear in portfolios, and only systematic risks survive.

114. Private Placement

Firms in the *Fortune* 500 obtain over one-half of their long-term debt from private sources. These private sources include loans from banks and finance companies, as well as private placements of

debt. If the largest US firms with access to the public debt market do most of their long-term borrowing in the private market, smaller public and private firms rely on privately arranged loans even more heavily.

A private placement or sale of debt is similar to a private placement of equity. The borrower and lenders negotiate the terms of the placement: the amount of the loan, its interest rate, the timing of cash flows, lender security, and covenants. An investment bank may act as a broker to help place the private debt with accredited investors (those who meet SEC rules regarding net worth and investment experience). Most privately placed debt matures in 5 to 20 years and pays fixed interest rates.

Large insurance companies and pension funds are major purchasers of private debt. These lenders typically have long investment horizons and low liquidity needs, so they are ideal private placement investors.

By avoiding the need to register securities with the SEC, a borrower can save on some of the upfront expenses of issuing debt securities. Lack of registration, however, makes private placements less liquid than publicly issued bonds. Some market participants have attempted to increase the liquidity of the private placement market, such as NASDAQs PORTAL (Private Offering, Resale, and Trading through Automated Linkage) system. Even with such trading, private placements can be bought and sold only among accredited investors. Due to the lack of public disclosure, the investing public is not allowed under SEC rules to trade or invest in private placements.

At year-end 1991, almost every one of the industrial firms with investment-grade SR bond ratings had total firm assets exceeding \$500 million. This statistic suggests that most small firms are shut out of the public capital markets because of those markets' aversion to below-investment-grade issues. Private placements play a major role in financing growth and expansion for many of these small-sized and medium-sized firms. Private placements do this without imposing excessive

interest expenses. The effect of liquidity risk appears to be reduced by a number of different factors, including long investment horizons and little need for immediate liquidity by the investors, such as life insurers; the freer flow of information that occurs during negotiations; the ability to negotiate covenants; and the access that lenders have to firm-specific information (including discussions with top management and on-site plant visits) as they conduct their due diligence analysis. Should default occur, the ability to renegotiate terms and conditions also easier than in the case of a default on a public issue.

115. Private Placement of Equity

A private placement raises funds by allowing outside private investors to purchase shares in the firm. Such a deal may be difficult to arrange, however, as any new investor(s) may suspect the original owners' motives and question their ability to successfully invest the funds to create future value. Arrangements for private placements may be made by a business broker or an investment banker, who earns a commission for finding a qualified investor. To limit the cost and ensure the compatibility of the new owners, current shareholders also may seek additional investors among their friends, relatives, and other contacts.

A private placement of equity can provide needed new capital, but only at the cost of diluting ownership. The original owners now must share control, voting rights, and company profits with additional investors. In addition, there is the problem of placing a value on the firm's privately held common stock. Private firms typically lack audited financial statements and other safeguards that reduce agency costs. Thus, new investors may resist paying what the current owners feel is a fair price for their equity. Equity investments in private firms can impose a great deal of liquidity risk because no well-developed secondary market trades shares in firms that are not publicly owned. In recent years, the Securities and Exchange Commission (SEC) has taken some steps to increase liquidity in the private placement market. Nonetheless, a great deal of liquidity risk still remains for investors in private firms.

116. Pro Forma Financial Statements

Financial statements with projected of forecasted balance sheet and income statement data. In addition, it also includes forecasts of stock price per share, earnings per share, dividend per share, new equity issues and new debt issues. See also **Percentage of sales method**]

117. Probability Distribution

See Normal distribution]

118. Probability of Default

See Default probability]

119. Probate

Legal act of submitting a will before a court to verify authenticity of the document.

120. Problem Loans

Loan currently in default or expected to obtain default status.

121. Processing Float

See Float]

122. Product Differentiation

Product differentiation can generate positive net present values. Differentiation comes form consumers' belief in a difference between firms' products. Differentiation leads to an imperfect market where a firm can set prices above marginal costs, thus giving the firm some competitive advantage over its rivals. Potential sources of differentiation include advertising and promotion expenditures, marketing skills, brand loyalty, $R\mathbf{D}$, and quality differences.

123. Profit

The payoff less the future value of the original cost to acquire the position. In accounting, profit refers the net income which is the last item of an income statement.

124. Profit Diagram

A graph plotting the profit on a position against a range of prices for the underlying asset. This diagram is frequently used in analyzing option strategy.

125. Profit Margin

Profits divided by total operating revenue. The net profit margin (net income divided by total operating revenue) and the gross profit margin (earnings before interest and taxes divided by the total operating revenue) reflect the firm's ability to produce a good or service at a high or low cost.

Higher profit margins generate more net income, larger additions to retained earnings, and faster growth, when all else is held constant. Should growth outpace the planned rate, the firm can seek to finance the unexpected growth by raising its prices and/or reducing expenses in an attempt to increase its profit margin. If growth falls short of the planned rate, the firm may have to reduce prices, and therefore its profit margin, to stimulate sales. See also **Profitability ratios**]

126. Profitability Index

A discounted cash flow technique for evaluating capital budgeting projects is the profitability index (*PI*), also called the *benefit/cost ratio*. The *PI* method computes the ratio between the present values of the cash flows and initial investment as:

$$PI = \frac{Present \ value \ of \ the \ cash \ flows}{Initial \ cost}$$
$$= \frac{\sum_{t=1}^{N} \frac{CF_t}{(1+r)^t}}{I}.$$

The *PI* measures the relative benefits of undertaking a project, namely the present value of benefits received for each dollar invested. A *PI* of 2, for example, means that the project returns \$2 for every \$1 invested, in present value terms. Since it would be foolish to invest in a project that returns less than a dollar for every dollar invested, the profitability index has a naturally objective decision rule: *The firm should accept a project that has a profitability index greater than 1.0 and reject a project that has a PI less than 1.0.*

The relationship between *PI* and NPV should be clear. Whenever NPV is positive, *PI* exceeds 1.0. Likewise, whenever NPV is negative, *PI* is less than 1.0. Thus, as with the NPV and IRR, the NPV and *PI* always on which projects will enhance shareholder wealth and which will diminish it. Therefore, the NPV, IRR, and *PI* always will agree as to whether a project should be accepted or rejected.

The profitability index considers all relevant cash flows, accounts for the time value of money, and specifies an objective decision criterion. Like IRR, however, *PI* measures *relative* project attractiveness; it indicates which projects add to shareholder wealth, but it gives little insight as to the amount of the change. Thus, like IRR, *PI* rankings of the attractiveness of mutually exclusive projects may differ from NPV rankings.

127. Profitability Ratios

Profitability ratios show the ability of a firm to use its sales, assets, and equity to generate returns. The profit margin, or return on sales, represents the proportion of each sales dollar that becomes profit or net income to the firm. The return on assets ratio, or ROA (sometimes called return on investment, or ROI), measures how efficiently the firm

uses its total assets to generate income. Profit margin and return on assets are computed as:

$$\begin{aligned} \textit{Profit margin} &= \frac{\textit{Net income}}{\textit{Sales}} \\ \textit{Return on assets} &= \frac{\textit{Net income}}{\textit{Total assets}}. \end{aligned}$$

The return on assets ratio can be broken into two components; it equals the product of the profit margin and total asset turnover ratio:

$$\begin{aligned} \textit{Return on assets } (\textit{ROA}) &= \textit{Profit margin} \\ &\times \textit{Total asset turnover} \\ &\frac{\textit{Net income}}{\textit{Assets}} = \frac{\textit{Net income}}{\textit{Sales}} \times \frac{\textit{Sales}}{\textit{Total assets}}. \end{aligned}$$

This ratio gives two general strategies by which a firm can generate a high ROA. A firm can have a high profit margin with a low turnover (which is often the case for a jewelry store) or a low profit margin with a high turnover (which is often the case for a supermarket).

The return on equity ratio (ROE) measures profitability with respect to the stockholders' investment in the firm. It is computed as:

$$ROE = \frac{Net \ income}{Total \ equity}$$
.

Like return on assets, ROE can be broken down into component parts to improve insight into the means by which the firm generates income. The return on equity is identical to return on assets multiplied by the equity multiplier:

$$\frac{\textit{Net income}}{\textit{Total equity}} = \frac{\textit{Net income}}{\textit{Total assets}} \times \frac{\textit{Total assets}}{\textit{Total equity}}.$$

Since ROA is itself comprised of two other ratios, we obtain:

$$ROE = Profit\ margin imes Asset\ turnover \ imes Equity\ multiplier; \ rac{Net\ income}{Total\ equity} = rac{Net\ income}{Sales} imes rac{Sales}{Total\ assets} \ imes rac{Total\ assets}{Total\ equity}.$$

This analysis shows that a firm's return on equity may change from one year to the next or may differ from a competitor's ROE as a result of differences in profit margin, asset turnover, or leverage. Unlike the other measures of profitability, ROE directly reflects a firm's use of leverage, or debt. If a firm assumes more liabilities to finance assets, the equity multiplier will rise and holding other factors constant, the ROE will increase. This leveraging of a firm's return on equity does not imply greater operating efficiency, only a greater use of debt financing. Setting an optimum proportion of debt is part of the capital structure decision.

Breaking ROE into its component parts is called Du Pont analysis, named after the company that popularized the technique. By examining differences in the components of ROE either over time or across firms, an analyst can gain information about the strengths and weaknesses of firms. Du Pont analysis can break ROE into its components and illustrate how the components can, in turn, be broken into their constituent parts for analysis. Thus, an indication that a firm's ROE has increased as a result of higher turnover can lead to study of the turnover ratio, using data from several years, to determine if the increase has resulted from higher sales volume, better management of assets, or some combination of the two.

It seems obvious that an analyst should prefer higher profitability ratios to lower profitability ratios. Still, the analyst must examine financial statements to determine the reasons for rising profitability and to verify that it represents truly good news about a firm. In an inflationary environment, for example, higher profitability may come from increases in sales revenues due to higher prices, while many expenses (such as FIFO inventory, depreciation, and interest expense) may be based upon historical costs. Higher profits and profitability ratios also could occur because of reductions in **R** spending or advertising expenses; such reductions may benefit the bottom line in the short run, but cutbacks in technological innovation and marketing may hurt the firm in the long run.

Changing from one generally accepted accounting principle to another also may have the effect of

raising revenue, reducing expenses, and increasing profit without any real change in firm operations. Higher profits also may arise from extraordinary items, such as a successful lawsuit, or from asset sales; the analysis should remove special items from net income to obtain a clearer picture of firm profitability. The analyst always should compare several consecutive financial reports and, once again, read the financial statement footnotes to confirm that higher profitability really does represent better firm performance, and not inflation, cosmetic expense slashing, changes in GAAP, or nonrecurring items.

128. Program Trading

Coordinated buy orders and sell orders of entire portfolios, usually with the aid of computers, often to achieve index arbitrage objectives. It encompasses several modern investment strategies. The narrowest definition, of program trading is the simultaneous placement of buy and sell orders for group of stock totaling 1 million or more. A common and controversial form of program trading is the simultaneous trading of stock and stock futures to profit from the change in the spread between the two, sometimes called index arbitrage.

129. Project Finance

Project finance is a technique where it is appropriate to use project-specific financing costs as required rates of return. This technique has gained popularity in recent years; it has been used to finance a variety of projects, including oil and gas development projects, RD partnerships, and factory construction.

Project finance makes sense when a project's accounts are separated from the firm's other asset and cash flow accounts. Additionally, the project's assets must be financed by specific sources of funds whose only recourse in the case of default or project failure is to the assets of the project; in other words, the sponsoring firm is not liable for the debts of the project. Such a project also must have a definite termination time, rather than oper-

ating as a going-concern. In such cases, we can compare the project-specific financing costs to the projects returns. Returns in excess of project costs accrue to the parent firm's shareholders.

130. Projected Benefit Obligation (PBO)

PBO is a measure of sponsor's pension liability that includes projected increases in salary up to the expected age of retirement.

131. Promissory Note

Basically, a promissory note is an IOU in which the buyer promises to pay the seller a certain amount by the specified date for a designated order, all in writing and signed by the buyer.

132. Proprietorship

Proprietorships outnumber all other forms of business organizations in the US. A proprietorship is simply a business owned by one person. Setting up a business is fairly simple and inexpensive – seldom more complicated than applying for a city or state license. All income is taxed as personal income to the proprietor. Depending on this person's filing status and income level, this can be an advantage or a disadvantage. For example, depending upon the owner's level of taxable Income, a proprietorship may owe more or less tax than a corporation with the same level of taxable income.

As the firm has one owner, this person's expertise determines much of the success of the firm. If additional expertise is needed, the owner must hire someone. The life of the proprietorship ends when the owner dies; in general, a proprietorship is not an asset that can be easily valued and sold.

Agency costs are nil in proprietorships, as the manager is the owner, and he or she presumably will make decisions that reflect his or her best interests. The ability to raise capital income is limited to the owner's personal wealth and credit line (although generous friends or relatives may help him or her).

Proprietorships have unlimited liability, which makes the proprietor solely responsible for all debts of the business. Should bankruptcy occur, the owner's personal assets – financial holdings, cars, house – may be forfeited to settle any debts. Losses may exceed what the proprietor has invested in the firm.

133. Prospectus

To offer stock for sale, the firm distributes a prospectus, which contains much of the same information that appears in the SEC filing. During the waiting period, the firm can distribute a **red herring** to prospective investors. See also **Red herring**]

134. Protective Covenant

A provision specifying requirements of collateral, sinking fund, dividend policy, etc., designed to protect the interests of bondholders.

135. Protective Put

Purchase of stock combined with a put option that guarantees minimum proceeds equal to the put's exercise price.

136. Proxy

A grant of authority by the shareholder to transfer his or her voting rights to someone else.

137. Proxy Contest

Attempt to gain control of a firm by soliciting a sufficient number of stockholder votes to replace the existing management.

138. Prudent Man Rule

Requirement that a fiduciary exercise discretion, prudence, and sound judgment in managing the assets of a third party.

139. Public Issue

Sales of securities to the public.

140. Public Offering, Private Placement

A *public offering* consists of bonds sold in the primary market to the general public; a *private placement* is sold directly to a limited number of institutional investors [See also Private placement]

141. Public Warehousing

Public warehousing, sometimes called terminal warehousing, is similar to **field warehousing**, except that the physical inventory is transferred to and stored in a warehouse operated by an independent warehousing company instead of in a segregated section of the borrower's premises. See also **Field warehousing**] The mechanics of the financing arrangement remain the same: no inventory is released to the borrower until it repays the corresponding part of the loan. Warehouse financing is very common in the food and lumber industries. Canned goods, in particular, account for almost 20 percent of all public warehouse loans; however, almost any nonperishable and easily marketable commodity may be used.

142. Publicly Traded Option

A publicly traded option is an agreement between two individuals who have no relationship with the corporation whose shares underlie the option. When a publicly traded option is exercised, money and shares are exchanged between the individuals and the corporation receives no funds. [See also Warrant]

143. Pull-to-Par

The reversion of a bond's price to its par value at maturity.

144. Purchase Accounting

An accounting method for acquisitions in which the assets and liabilities of the combined firm reflect a revaluation of assets and liabilities of the subject firms, thus recognizing the value of goodwill and other intangibles. See also **Purchase method**]

145. Purchase Method

The purchase method of accounting for business combinations corresponds to the basic accounting principles for the acquisition of assets. However, in the case of business combinations, the procedure is complicated because several assets and liabilities may be acquired and more than cash may be given. Also, the excess of the price paid for the acquired asset over its book value is reflected as goodwill on the balance sheet of the acquiring firm and is amortized over a period not exceeding 40 years. Goodwill is not deductible for tax purposes, so the net result of the purchase method is a decrease in accounting earnings without the corresponding tax benefits. Hence, the purchase method is not favored by acquiring firms.

146. Purchased Call

A long position in a call. It refers to buy a call which is available in the market.

147. Purchased Put

A long position in a put. It refers to buy a put which is available in the market.

148. Purchasing Power Parity (PPP)

The purchasing power parity relates the changes in exchange rates to the relative differences in the respective rates of inflation among nations. In other words, it implies that the exchange rate adjusts to keep purchasing power constant among currency. For example, if the expected inflation rate in England is 10 percent and the expected inflation rate in the US is 5 percent, one would expect the interest rate in England to be 5 percent higher than a comparable rate in the US. Likewise, one would expect the English pound sterling to depreciate by 5 percent relative to the US dollar. Without these relationships, an arbitrageur could make a riskless profit by buying or selling a spot currency in the foreign exchange market, investing in the money market with the more favorable interest rate, and hedging these transactions by selling or buying the currency forward for a similar time period. This procedure, called interest rate arbitrage, links the foreign exchange market to the money market. See also Interest rate parity

149. Purchasing-Power Risk

The variability of return caused by inflation, which erodes the real value of the return. Purchasing power risk is related to the possible shrinkage in the real value of a security even though its normal value is increasing. For example, if the nominal value of a security goes from \$100 to \$200. The owner of this security is pleased because the investment has doubled in value. But suppose that, concurrent with the value increase of 100 percent, the rate of inflation is 200 percent, that is, a basket of goods costing \$100 when the security was purchased now costs \$300. The investor has a "money illusion" of being better off in nominal terms. The investment did increase from \$100 to \$200; nevertheless, in real terms, whereas the \$100 at time zero could purchase a complete basket of goods, after the inflation only 23 of a basket can now be purchased. Hence, the investor has suffered a loss of value.

150. Pure Discount Bond

Bonds that pay no coupons and only pay back face value at maturity. Also referred to as "bullets" and "zeros." See also **Discount bond**]

151. Pure Play Method

The pure play method estimates the beta of the proposed project based on information from firms that are in similar lines of business as the project.

If the capital budgeting project involves an expansion to another country, perhaps a firm in that country will qualify as a pure play. The project's systematic risk can be estimated by regressing the foreign firm's stock market returns on those of a US market index. The foreign firm's stock returns should be adjusted for exchange rate fluctuations, so exchange rate risk is included in the analysis.

The main drawback to the pure play method is that the analyst must find one or more publicly traded firms that are close proxies to the project under review. Only for publicly traded firms can the analyst find stock return data from which to estimate beta. The ideal proxy firms are single-product firms so the analysis can focus on the systematic risk of the particular project under consideration. A firm with many different product lines will complicate the comparison, as its betas will reflect the systematic risk of the firm's overall product mix, rather than the project's line of business.

152. Pure Yield Pickup Swap

In a pure yield-pickup swap, there is no expectation of market changes but a simple attempt to increase yield. Basically, two bonds are examined to establish their difference in yield to maturity, with a future adjustment to consider the impact of interim reinvestment of coupons at an assumed rate of return between now and the maturity date.

153. Put

A put is an option to sell a fixed number of shares of common stock. It is a right instead of an obligation.

154. Put Bond

A bond that the holder may choose either to exchange for par value at some date or to extend for a given number of years.

155. Put Option

A put option gives the holder the right to sell a certain number of shares of common stock at a price on or before the expiration date of the option. In purchasing a put, the owner of the shares has bought the right to sell those shares by the expiration date at the exercise price. As with calls, one can create, or write, a put, accepting the obligation to buy shares.

156. Put Provision

Gives holder of a floating-rate bond the right to redeem his or her note at par on the coupon payment date.

157. Putable Bonds

Putable bonds (sometimes called retractable bonds) allow investors to force the issuer to redeem them prior to maturity. Indenture terms differ as to the circumstances when an investor can "put" the bond to the issuer prior to the maturity date and receive its par value. Some bond issues can be put only on certain dates. Some can be put to the issuer in case of a bond rating downgrade. Still others, nicknamed *super poison puts*, are putable only in the case of an event such as a merger, leveraged buyout, or major financial restructuring and subsequent rating downgrade below investment qual-

ity (BBB). In any of these situations, bond investors would suffer a loss of value as the bond's yield would have to rise and its price fall to compensate for the increase in credit risk. The put option allows the investor to receive the full face value of the bond, plus accrued interest. Since this protection is valuable, investors must pay extra for it. Issuers can lower their debt costs by attaching put provisions to their bond issues.

158. Put-Call-parity

A relationship stating that the difference between the premiums of a call and a put with the same strike price and time to expiration equals the difference between the present value of the forward price and the present value of the strike price.

$$C + Xe^{-rT} = P + S,$$

where C is defined as the call price per share; X is the strike price; P is the put price per share; S is the stock price per share; S is the risk-free rate and S is the constant period.

159. Puttable Bond

A bond where the holder has the right to sell it back to the issuer at certain predetermined times for a predetermined price share.

160. Puttable Swap

A swap where one side has the right to terminate the swap early. On the other hand, if a swap which one party has the option to extend the life of swap beyond the specified period is called extendable swap.