GLOSSARY OF INVESTMENT TERMINOLOGY

Accrued Interest

Interest on a bond (or other fixed income instrument) that has accumulated between the most recent payment and a stated date.

Active Management

The pursuit of transactions with the objective of profiting (adding value) from competitive information.

Alpha

Alpha is the risk-adjusted return of a portfolio or security. The alpha for a portfolio or security is the difference between the actual return and expected return. A positive alpha would indicate that the portfolio or security had performed better than what was implied by its relationship with the market.

Agency Bonds (Agencies)

The full faith and credit of the United States government is normally not pledged to payment of principal and interest on the majority of government agencies issuing these bonds, with maturities of up to ten years. Their yields, therefore, are normally higher than government and their marketability is good, thereby qualifying them as a low risk-high liquidity type of investment. They are eligible as security for advances to the member banks by the Federal Reserve, which attests to their standing.

Agency Trading

Act of buying or selling for the account and risk of a client. An agent acts as an intermediary between buyer and seller, undertaking no financial risk, and changing a commission (vs. principal). See also BROKER.

American Depositary Receipts (ADRs)

American Depositary Receipts are issued by an approved New York bank or trust company against the deposit of the original (foreign) shares with a European branch of the New York institution. These receipts facilitate the financing of foreign companies in this country. As foreign shares are deposited abroad, the equivalent ADRs are issued to buyers in New York. When transactions are made, the ADRs change hands, not the certificates. This eliminates the actual shipment of stock certificates between the U.S. and foreign countries.

Annualize

To express a rate of return for a period greater than one year or less than one year in terms of 12 months.

Arbitrage

A technique employed to take advantage of price differences in separate markets. This is accomplished by

	purchasing in one market for immediate sale in another at a better price. Such transactions may be executed in the same type or similar types of securities.
ARMS	Adjustable Rate Mortgage Securities. Security whose interest rate is periodically reset relative to a base index.
Asset Allocation Decision	A process that determines the optimal distribution of funds among various types of assets that offer the highest probability of consistently achieving investment objectives within the confines of a predetermined level of risk. The process often include the use of a computer model program to assist in the processing of a myriad of data.
Asset-Backed Securities	Bonds which are similar to mortgage-backed securities but are collateralized by assets other than mortgages. Commonly backed by credit card receivables, auto loans, or other types of consumer financing.
Auction Market	The system of trading securities through brokers or agents on an exchange such as the New York Stock Exchange. Buyers compete with other buyers while sellers compete with other sellers for the most advantageous price. Most transactions are executed with public customers on both sides since the specialist buys or sells for his own account primarily to offset imbalances in public supply and demand.
Barbell Strategy	A fixed income portfolio made up of short and long term securities with nothing in between. A portfolio exclusively holding one year and thirty year treasuries is an example of a barbell strategy. The opposite of a BARBELL strategy is a BULLET strategy.
Base Currency	The currency in which an investor measures returns.
Basis Point	One gradation on a 100-point scale which is used in expressing variations in the yield of bonds. A basis point is equal to one one-hundredth of a percentage point.
Bear	Someone who believes the market will decline.

Bear Market A market where prices decline sharply, often against a background of widespread pessimism. The opposite of BULL MARKET.

Beta The beta of a portfolio or security measures its sensitivity to movements in the market. A beta above one indicates above-average sensitivity to movements in the stock market, as measured by a base index, typically the S&P 500. A portfolio with a beta below one indicates less responsiveness to the general market. For example, a portfolio with a beta of 1.1 would move 10% more than the market. Because beta measures fluctuation in portfolios and securities due to market-wide events, it is also called market risk.

Bid and Asked The bid is the highest price anyone will pay for a security at a given time and the asked is the lowest price anyone is willing to sell at the same time.

Block A large holding or transaction of stock (usually 10,000 shares or more).

Blue Chip Common stock of a nationally-known company that has a long record of profit growth and dividend payment and a reputation for quality management, products, and services.

Bond Quality Ratings A system of graduation for measuring the relative investment qualities of bonds by the use of rating symbols, which range from the highest investment quality (at least investment risk) to the lowest investment quality (greatest investment risk). These ratings according to STANDARD & POOR's CORP, are A1+, highest grade; A1, high grade; A, upper medium grade; B1+, lower medium grade; B, speculative, C1+ and C1, outright speculations; C, income bonds paying no interest and the best defaulted bonds; and D1 and D, in default with the D symbol assigned to issues which appear to have little recoverable value. (See Appendix I).

Bottom-Up Manager Common stock manager who places selection emphasis on recognizing favorable characteristics of individual companies, as opposed to developing the portfolio with an emphasis on the economy and industries (a Top-Down Manager).

Broker	An agent who handles the public's orders to buy and sell securities, commodities, or other property. For this service a commission is charged. See also AGENT.
Bull	One who believes the market will rise.
Bull Market	An advancing market.
Bullet Strategy	A fixed income portfolio made up of securities with similar maturities. A portfolio exclusively holding ten year treasuries is an example of a bullet strategy. The opposite of a bullet strategy is a BARBELL strategy.
Bunds	German Government bonds.
Buy/Write Option Writing	Every owner of an option has the ability to sell the option. The seller of the option is known as an option writer. The seller receives payment for an option from the purchaser. In exchange of a call option, the seller gives the owner of the call option the right to purchase the good at a specific price, with this right lasting a specific amount of time. The seller of a put option receives payment from the purchaser and promises to buy the underlying good at a specific price and time, if the owner of the put option chooses.
Call	An option pursuant to which the seller (writer) of the option is obligated to sell, and the holder of the option has the right to purchase, the underlying security at a specified price at any time until the option expires.
Callable	A bond issue, all or part of which may be redeemed by the issuing corporation under specific terms before maturity. The term also applies to preferred shares which may be redeemed by the issuing company.
Call Options	An option to buy a specified number of shares at a definite price within a specified period of time.
Capital Gain	The positive difference between an asset's selling price and its purchase price. Realized capital gain occurs when the asset has been sold. Unrealized capital gain occurs when the asset is held in a portfolio.

Cash Equivalents	Short term investments held in lieu of cash and readily converted into cash within a short time span (i.e., CDs, commercial paper, Treasury bills, etc.).
Chart Analysis	The study of price charts in an effort to find historical patterns that will help to forecast future returns. Practitioners are often referred to as "chartists" or "technicians."
Chicago Board Options Exchange (CBOE)	The first national securities exchange for the trading of listed options.
Closing Price	The price at which the final transaction in a security took place on a particular business day. Stock prices are quoted daily in the financial pages of leading newspapers, where number of shares traded and the opening, high, low and late sale (closing) prices, plus net change from the previous day, are printed from left to right in that order.
CMO (Collateralized Mortgage Obligation)	A mortgage security with different "tranches" or maturity classes. Such an instrument can fill the predetermined need for maturities by a fund. This is one among many new terms in the growing securitization of mortgage lending. Such financial activity will greatly facilitate the boom that is taking place in housing due to the dramatic drop in interest rates. Securitization will enable pension funds to provide a far higher percentage of lendable funds than traditionally has been the experience.
Coefficient of Determination (R^2)	Measures the proportion of variation that is explained by the index to the money manager. For example, in comparing a money manager's performance to an index's performance, if the money manager has an R^2 of 79%, this means that 79% of the money manager's performance may be explained by the index.
Collar Hedge	A strategy of stabilizing investment returns between an upper and lower range to make returns consistent with the investor's goals. Typically implemented by buying a put option and selling a call option on the same asset.
Commercial Paper	Negotiable, short term, unsecured, promissory notes issued in bearer form on a discount or coupon basis by a

corporation to raise working capital for any terms up to 270 days. A direct obligation of the issuer, it is sold in multiples of $25,000, and is rated by Standard & Poor's A-1, A-2 and A-3, and by Moody's Prime 1, Prime 2 and Prime 3. The principal types are Prime Finance Paper issued by sales finance companies and certain large bank holding companies, Prime Industrial Paper issued by leading industrial corporations and Finance Paper of less than prime quality. In the case of Prime Finance Paper, the investor may specify both the issue and maturity date whereas in the case of Industrial Paper, only those maturities listed on the market are available. Interest is paid at maturity, payment is required in federal funds on the settlement date (usually at buyer's option) and payment is received by federal funds on the maturity date at the issuing corporation's bank.

Commingled Fund An investment fund in which the manager pools the assets of several trust accounts to permit a more efficient management and to reduce administrative costs.

Commission A broker's fee for buying or selling securities as an agent.

Commission Recapture Process whereby a fund receives "credits" resulting from transactions incurred by the fund's investment managers. These credits may be from commissions (equities) or spreads (fixed income).

Commodity Futures Trading Commission (CFTC) A federal regulatory agency charged and empowered under the Commodity Futures Trading Commission Act of 1974 with regulation of futures trading in all commodities.

Common Factor Risk Common factor risk is one of two components of fundamental standard error. A portfolio's common factor risk measures volatility arising from non-market events that are unique to the portfolio, such as a concentration in sectors (e.g., growth stocks, or energy stocks) or industries.

Common Stock Securities which represent an ownership interest in a corporation. If the company has also issued preferred stock, both common and preferred have ownership rights. The preferred normally is limited to a fixed dividend but has prior claim on dividends and, in the event of liquidation, assets. Claims of both common and preferred stockholders are junior to claims of bondholders and other creditors of the company. Common stockholders assume the greater risk, but generally exercise the greater control and may gain the greater reward in the form of dividends and capital appreciation. The terms common stock and capital stock are often used interchangeably when the company has no preferred stock.

Comparison Portfolio The portfolio used to define the return against which another portfolio is to be evaluated. For example, the performance of an active equity manager will generally be evaluated against the S&P 500 index portfolio.

Compound Interest The interest upon principal which is being increased, or augmented, periodically by interest paid on the previous amount of principal. Interest may be compounded daily, monthly, quarterly, semiannually or annually.

Compounding The arithmetic process of finding the final value of an investment or series of investments when compound interest is applied. That is, interest is earned on the interest as well as on the initial principal.

Confidence Region A statistical term defining the range of values within which we have a certain degree of confidence that a random variable will fall. A commonly used region is the 90-percent confidence region, which is such that we can expect 90 percent of the values to fall within.

Confirmation A formal memorandum given to a client detailing all data relevant to a trade made by the client. Confirmations must be sent on or before the first full business day following the trade date, except for cash transactions which must be done on the trade date.

Constraints Restrictions placed on the portfolio. Constraints can be placed on any number of portfolio characteristics such as the types of securities admitted (stocks, bonds, derivatives), investment practices (short selling, hedging), and geographical regions (South Africa).

Consumer Price Index The Consumer Price Index is the name given in both the United States and Canada to the series of numbers whose ratios measure the relative prices at various times of a selected group of goods and services which typify those bought by urban families.

Contrarian An investment manager whose style of management places emphasis on securities currently out of favor.

Convexity It is a measure of the shape of the price/yield curve relationship. Convexity explains the difference between price change estimated by a bond's DURATION and its actual price change when market yields change.

Corporate Bond An instrument written under seal whereby a corporation acknowledges a stated sum is owed, which it will repay at a specified date. It also obligates itself to pay a stipulated amount of interest to the bondholders for the privilege of using their money.

Correlation Correlation is a measure of the degree to which one variable moves relative to another variable over time.

Correlation Coefficient A statistical measure of how two variables move in relation with one another. The Correlation Coefficient can vary between -1 and +1. The square of the correlation is R^2 (coefficient of determination). Correlation is commonly used to quantify the relationship of returns across asset classes. Investors use this measure as an indicator of how a security or a portfolio will contribute to a fund's diversification.

Counterparty Risk The risk associated with one party not fulfilling its contractual obligations at a specific future date.

Covariance A measure of the degree to which two variables move together. A positive value means that on average, they move in the same direction.

Cover To liquidate an existing position. That is, to sell a long position or buy a short position.

Credit Risk This risk, like "financial risk," involves the safety of one's principal. The term is generally associated with bonds, and the risk is that the issuer will default in the payment of either principal or interest.

Cumulative Preferred Stock	Preferred stock having a provision that if one or more dividends are omitted on the preferred, the omitted dividends must be paid before any dividends may be paid on the common stock.
Cumulative Rate of Return	A compounded rate of return covering more than one year.
Current Yield	Divide the coupon rate by the current price of the bond.
CUSIP (Committee on Uniform Securities Identification Procedures)	Committee that assigns identifying numbers and codes for all securities. A security's CUSIP number is used when recording all buy and sell orders.
Custodian	A depository of securities for purposes of safekeeping. A custodian does not have a fiduciary responsibility unless the account is a "directed trust."
Cyclical Stocks	Stocks of companies which move directly with the Business Cycle; generally they advance as business conditions improve and decline when business slackens. Steel, chemical, textile and machinery stocks are often included in this category.
Dealer	A person or firm acting as a principal in buying or selling securities, usually compensated by the spread.
Debenture	Debt which is supported only by the general creditworthiness of the issuer; an unsecured bond.
Defensive Industry	An industry that is relatively unaffected by business cycles, such as the food industry or the utility industry.
Depository Trust Company (DTC)	A central securities certificate depository through which members effect security deliveries between each other, via computerized bookkeeping entries, thereby reducing the physical movement of stock certificates.
Derivative Instrument	A financial obligation that derives its precise value from the value of one or more other instruments (or assets) at the same point of time. For example, the relationship between the value of an S&P 500 futures contract (the derivative instrument in this case) is determined by the value of the

S&P 500 Index and the value of a U.S. Treasury bill that matures at the expiration of the futures contract.

Directed Brokerage Trading in which the beneficiary of an account, such as a pension plan sponsor, specifies or directs a money manager as to which brokerage firms to use in executing securities transactions.

Directed Trust A custodian with the added capability of fiduciary responsibility. Typically have investment responsibility for short term cash reserves.

Discount (1) The difference between the original offering price of a security and the price to which it may fall in the "after offering" market. (2) The amount by which a security sells below its FACE VALUE (PAR VALUE). A $1,000 par value bond selling at 95 (worth $950) would be selling at a $50 or 5% discount. The opposite of premium.

Discount Bonds Bonds which may be purchased below par (i.e., $1,000) thereby producing a higher yield to maturity and, in most cases, reducing the risk of call. As a general rule, the greater the discount, the lesser the chances of call and the greater the bond's attraction. Interest is paid upon presentation of coupon attached to the bond.

Discount Rate The interest rate the Federal Reserve Bank charges to member banks for loans. Also, the interest rate used to calculate the present value of cash flows.

Diversification The spreading of investment funds among classes of securities and localities in order to distribute the risk. It favors the maxim: "Don't put all of your eggs in one basket."

Dividend (1) The proportion of net earnings paid to its stockholders by a corporation. (2) A policyholder's share in the divisible surplus funds of an insurance company apportioned for distribution, which take the form of a refund of part of the premium on a participating policy.

Dividend Capture Program An investment management program targeted to enhance returns from investing corporate cash by purchasing high dividend stocks for corporations and other investors that have tax exemption for dividend income. Options are used to protect against stock price changes.

Dollar-Weighted Rate of Return

The dollar-weighted rate is affected by the amount and the timing of cash flows during a given period of time. This rate is an effective measure of the fund's rate of growth, giving full weight to the impact of cash flows on fund assets. The dollar-weighted rate also is referred to as the internal, discounted cash flow or the real rate of return.

DOT

Designated Order Turnaround. New York Stock Exchange's automated order entry system.

Duration

Duration is a measure of interest rate risk. The greater the duration of a bond, or a portfolio of bonds, the greater its price volatility will be in response to a change in interest rates. A bond's duration is inversely related to interest rates and directly related to time to maturity.

A table of bond maturities and durations is shown below.

	Duration vs. Maturity & Interest Rates	
Coupon:	5%	10%
Yield to Maturity:	5%	10%
Face Value of $1,000		

Years to Maturity	Duration (years)	
	5% Coupon	*10% Coupon*
1	.99	.98
3	2.82	2.66
5	4.49	4.05
10	7.99	6.54
20	12.87	9.01

EAFE

The Europe, Australia, Far East (EAFE) Stock Market Index is an unmanaged value-weighted index of more than 900 securities issued by foreign companies.

Earnings Valuation

Risk associated with recent shortcomings of a company as evidenced by weak earnings, price/book ratio, dividend cuts, and equity returns. Greater than 50 mean less-than-average success; less than 50 means greater-than-average success. (See Fundamental Equity Risk Percentiles) The Europe, Australia, Far East (EAFE) Stock Market Index is an unmanaged value-weighted index of more than 900 securities issued by foreign companies.

Earnings Variability Risk associated with a lack of stability of earnings as evidenced by variability in earnings and cash flow, and sensitivity of earnings to changes in the economy. Greater than 50 is less-than-average stability; less than 50 means greater-than-average stability. (See Fundamental Equity Risk Percentiles).

Efficient Frontier A general term for the set of optimal portfolios at differing levels of reward and risk. Each portfolio on the frontier offers the highest possible expected reward at its level of risk.

Embedded Option Present in almost all fixed income securities (Government bonds are the major exception). Almost all bonds are "callable" or "puttable" so that they have embedded calls or puts.

Employee Benefit Trust A trust that holds the assets of plans (pension, profit-sharing, stock bonus) designed for the benefit of a corporation's employees.

Equities This refers to ownership of property, usually in the form of common stocks, as distinguished from fixed income bearing securities such as bonds or mortgages.

Equity Kicker An offer of an ownership position in a deal that involves loans. Convertible features and warrants are offered as equity kickers to make securities attractive to investors.

ERISA (Employee Retirement Income Security Act of 1974) This law requires that persons engaged in the administration, supervision and management of pension monies have a fiduciary responsibility to ensure that all investment-related decisions are made (1) with the care, skill, prudence and diligence... that a prudent man...familiar with such matters would use... (2) by diversifying the investments...so as to minimize risk. This wording mandated two significant changes in traditional investment practice: (1) the age-old "prudent man" rule was replaced by the notion of a prudent "expert", (2) the notion of a prudent investment has been replaced by the concept of a prudent portfolio.

Eurodollar	US dollar denominated deposits held in banks outside the US, typically in Europe. Often used to settle international transactions.
Ex-Dividend	A synonym for "without dividend." The buyer of a stock selling ex-dividend does not receive the recently declared dividend. Every dividend is payable on a fixed date to all shareholders recorded on the books of the company as of a previous date of record.
Excess Return	The amount by which the return of a portfolio exceeds the return of a benchmark.
Exchange	Any place where security or commodity transactions take place.
Exchange Rates	The price of one currency stated in terms of another currency by bankers, dealers and financial markets.
Expected Rate of Return	The expected rate of return on an asset or portfolio is the weighted arithmetic average of all possible outcomes, where the weights are the probabilities that each outcome will occur. It is the expected value or mean of a probability distribution.
Expected Return	Expected return is the total return one expects for bearing market risk (or beta risk). Higher volatility (or beta) implies higher expected returns.
Face Value	The value of a bond that appears on the face of the bond, unless the value is otherwise specified by the issuing company. Face value is ordinarily the amount that the issuing company promises to pay at maturity. Face value is not an indication of market value. Sometimes referred to as par value.
Fail	The failure of a seller to deliver securities to the purchaser or to a specified place of delivery as contracted.
Fail Float	This term refers to the cash balance remaining when security transactions are not consummated on contractual settlement date by delivery of the securities.
Fannie Mae	A common name for the Federal National Mortgage Association.

Federal Farm Credit System (FFCH)

In the United States, a network of federally chartered financial institutions designed to provide credit-related services to the agricultural and farming sectors of the economy. In total, this government-sponsored enterprise comprises approximately 100 financial institutions that serve all 50 states and Puerto Rico. Unlike commercial banks, the banks in this system do not take deposits, nor do they usually borrow from other banks. Instead, these banks raise funds by issuing farm credit debt securities on a worldwide basis in the domestic and global capital markets. Although the debt securities are not guaranteed by the U.S. government, the FFCS possesses a farm credit insurance fund, which would supply principal and interest payments should a system bank go bankrupt. System institutions are federally chartered under the Farm Credit Act and are subject to supervision, examination and regulation by a federal agency, the Farm Credit Administration.

Fed Funds

Deposit liabilities of the Federal Reserve Banks. A draft issued on a Federal Reserve bank is cash in the sense that it can be converted into a deposit at a Federal Reserve bank.

Federal Home Loan Bank System (FHLB)

An organization created by the Federal Home Loan Bank Act of 1932 to increase the amount of funds available for lending institutions who provide mortgages and similar loan agreements to individuals. This system was created in response to the depressive economic conditions of the era, which had impaired the U.S. banking system. Also referred to as the "FHL Bank System". Having served its original objectives well, the FHLB system now primarily focuses on increasing the amount of loanable funds available for affordable housing and community development projects. It continues to have a material impact on housing and development financing, offering funds to member institutions at rates that are usually lower than commercially competitive prices.

Federal Home Loan Mortgage Corporation (Freddie Mac)

The Federal Home Loan Mortgage Corporation, also know as “Freddie Mac,” is a federally chartered stockholder corporation created by Congress in 1970 to foster liquidity by creating a secondary market for conventional mortgages. FHLMC guarantees the timely payment of interest and the ultimate payment of principal on its payment of pass-through mortgage securities. FHLMC stock is listed of the New York Stock Exchange.

Federal National Mortgage Association (Fannie Mae) The Federal National Mortgage Association is a government-sponsored corporation established by Congress in 1938, owned entirely by private stock-holders to serve as a secondary market for Federal Housing Administration, Veteran's Administration or Farmers Home Administration insured or guaranteed mortgages. The Association provides liquidity on mortgage investments by buying mortgages from financial institutions such as savings and loan associations and life insurance companies when investment funds are in short supply and selling mortgages when funds are plentiful. To finance its operations, it issues debentures, bonds and common stock, the latter being bought by institutions who sell mortgages to Fannie Mae, as well as by private investors. FNMA stock is listed of the New York Stock Exchange. The bonds and debentures are highly liquid investments which enjoy an active secondary market and have varying maturities out to 25 years. Fannie Maes come in bearer form only, in amounts of $10,000, up to $500,000. The maturities on these securities vary and interest is paid semiannually by coupon.

Federal Reserve Board Also known as the "Fed." The governing arm of the Federal Reserve System which seeks to regulate the economy through the implementation of MONETARY POLICY.

Fiduciary An individual or trust institution given the duty of acting for the benefit of another.

Financial Risk Risk associated with leverage as evidenced by debt to equity and fixed charges coverage. Greater than 50 indicates more-than-average leverage; less than 50 indicates less-than-average leverage. (See Fundamental Equity Risk Percentiles).

Fiscal Policy Federal taxation and spending policies designed to level out the business cycle, achieve full employment, maintain price stability, and sustain economic growth.

Fiscal Year A corporation's accounting year. Due to the nature of their particular business, some companies do not use the calendar year for their bookkeeping. A typical example is the department store which finds December 31 too early a date to close its books after the Christmas rush. For that reason, many stores wind up their accounting year January 31. Their fiscal year, therefore, runs from February 1 of one year through January 31 of the next. The fiscal year of other companies may run from July 1 though the following June 30. Most companies, though, operate on a calendar year basis.

Fixed Rate Mortgages A loan made on real property that has a constant interest rate over the life of the loan.

Floating Interest Rate An interest rate which fluctuates with changes in an established index, such as the prime rate.

Floor Broker A member of an exchange who executes orders on the floor of the exchange to buy or sell any listed securities.

Forward Contract A cash market transaction in which two parties agree to the purchase and sale of a commodity at some future time under such conditions as the two agree. In contrast to futures contracts, the term of forward contract are not standardized; a forward contract is not transferable and usually can be canceled only with the consent of the other party, which often must be obtained for consideration and under penalty; and forward contracts are not traded in federally designed contract markets.

Forward Interest Rate The prevailing interest rate for a contract in a specific future, "forward," time period.

Fourth Market The trading of securities directly from one institutional investor to another without the services of a brokerage firm.

Freddie Mac Trade name for the Federal Home Loan Mortgage Corporation.

Frontrunning — The unethical, and in some cases illegal, practice of a broker placing his own order in front of a customer order that he anticipates will move the market.

Fundamental Beta — A portfolio or security's fundamental beta is calculated from 48 balance sheet, income statement and market-related data items. Up to five years of historical information is used.

Fundamental Equity Risk Percentiles (Six Categories) — The fundamental risk percentiles measure the investment thrust or tilt of the equity portion of a portfolio. Six categories of fundamental risk are formed from 48 balance sheet, income statement and market-related data items. The values calculated for each category are percentiles and range from 1 to 99. Percentile values greater than 50, which is the mean for the 1,000 largest NYSE companies (capitalization weighted), indicate above average risk attributed to that risk category. Percentile values less than 50 indicate below average risk. (See Earnings Valuation, Earnings Variability, Financial Risk, Growth Concentration, Market Variability, Size and Maturity).

Fundamental Standard Error — The fundamental standard error of a portfolio or a security is measured using balance sheet, income statement, industry, and market-related data. See also standard error, individual factor risk, and common factor risk.

Fund of Funds — Fund that is comprised of investments in other funds. These funds offer enhanced diversification but add another layer of management expenses.

Futures Contract — A transferable agreement to make or take delivery of a standardized minimum quality grade, during a specific month, under terms and conditions established by a federally designated contract market upon which trading is conducted.

GAAP (Generally Accepted Accounting Principles) — Conventions, rules, and procedures that define accepted accounting practice, including broad guidelines as well as detailed procedures.

Geometric Mean The n^{th} root of the product of n observations. It is the appropriate mean to use when averaging annual rates of return, compounded annually, over time. The geometric mean will always be less than, or equal to, the arithmetic mean.

Gilts United Kingdom Government bonds.

Ginnie Mae Trade name for the Government National Mortgage Association.

Ginnie Mae Pass-Through Securities Under this program, principal and interest payments collected on mortgages in specified pools are "passed through to holders of GNMA-guaranteed certificates after deduction of servicing and guaranty fees. Actual maturity of these certificates is 40 years, but the average life is approximately 12 years because of prepayments. The minimum denomination of certificates is $25,000 and issuance is in registered form only. Ginnie Maes offer investors an opportunity to participate in "pools" of government-guaranteed or insured mortgages without having to be concerned with extensive documentation and paperwork normally associated with mortgage type investments.

Colloquial for Government National Mortgage Association (GNMA).

Government Sponsored Enterprises (GSE) Privately held corporations with public purposes created by the U.S. Congress to reduce the cost of capital for certain borrowing sectors of the economy. Members of these sectors include students, farmers and homeowners. GSEs carry the implicit backing of the U.S. Government, but they are not direct obligations of the U.S. Government. For this reason, these securities will offer a yield premium over Treasuries. Examples of GSEs include: Federal Home Loan Bank, Federal Home Loan Mortgage Corporation (Freddie Mac), Federal Farm Credit Bank, Resolution Funding Corporation, and The Student Loan Marketing Association.

Government National Mortgage Association (Ginnie Mae)

The Government National Mortgage Association is a wholly owned government corporation within the department of Housing and Urban Development. GNMA was created to support a secondary market in government insured and guaranteed mortgages. The Association guarantees the timely payment of principal and interest on its securities which are backed by the full faith and credit of the US government.

Growth

A percentile ranking where 100 represents those companies with the greatest earnings growth potential, and 1 consists of those companies with the lowest.

Growth Concentration

Risk associated with growth-oriented companies. Measured by dividend payout, dividend yield, growth in assets, and earnings/price ratio. Greater than 50 means more-than-average growth; less than 50 means less-than-average growth. (See Fundamental Equity Risk Percentiles).

Global Depository Receipts (GDRs)

Global Depository Receipts are bank certificates issued in more than one country for shares in a foreign company. The shares are held by a foreign branch of an international branch. The shares trade as domestic shares, but are offered for sale globally through the various bank branches. GDRs are financial instruments used by private markets to raise capital denominated in either U.S. dollars or Euros. A GDR is very similar to an American Depository Receipt.

Guaranteed Investment Contract (GIC)

An investment contract entered into with an insurance company which guarantees the repayment of principal and a compound interest return. Terms of the contract and maturities vary from company to company, and over time, within the same company.

Hedge

To reduce risk. Typically refers to holding a group of securities which will offset risks inherent in another group of securities. May be executed by taking a futures position equal and opposite to an existing or anticipated cash position, or by shorting a security similar to one in which a long position has been established.

High-Yield Bond	Also known as Junk Bonds, these fixed income instruments have a rating of BB or lower and pay a higher yield to compensate for their greater credit risk.
Historical Beta	A portfolio or security's historical beta is calculated from monthly historical excess returns (returns above the 90-day T-bill rate) of the security relative to monthly historical excess returns for the S&P 500 over a five-year period.
Historical Performance	A record of past performance on a managed portfolio, usually quarterly. Used in connection with a comparison portfolio to analyze accomplishment (value added).
Historical Standard Error	The historical standard error of a portfolio or a security is calculated using the historical excess of returns of the portfolio or security relative to the historical excess returns of the S&P 500 over the last five years. Standard error measures the component of variability not explained by beta.
Immunization	The design of a bond portfolio to achieve a target level of return in the face of changing reinvestment rates and price levels. It is the combining of short and long term bonds in the same portfolio to produce a predictable rate of return regardless of movements in interest rates.
In-the-Money (Option)	A CALL (PUT) option where the STRIKE PRICE is less than (more than) the price of the underlying security.
Indenture	A formal agreement between an issuer of bonds and the bondholder. The agreement covers such areas as (1) form of the bond, (2) amount of the issue, (3) any property pledged, (4) protective covenants, and (5) any redemption rights or call privileges.
Index Fund	A fund (or account) comprised of securities the characteristics of which will produce a return which will replicate (or substantially replicate) a designated securities index.
Index Option	An option based on the market value of a particular group of stocks. Unlike stock options, index options, when exercised, are settled in cash.

Individual Factor Risk	Individual factor risk is one to two components of fundamental standard error. A portfolio's individual factor risk arises from events unique to the individual companies in the portfolio, such as labor strikes, mergers, unexpected earnings movements, and so forth. Portfolios that do not heavily under- and over-weight particular industries or sectors will have relatively higher levels of individual factor risk relative to common factor risk.
Industry Grouping	Collective grouping of companies within an industry (industrials, transportation, utilities). Performance of a company is typically measured against its peers in the same industry.
Information Ratio	Mathematically, the ratio of a manager's EXCESS RETURN (ALPHA) divided by the STANDARD DEVIATION of that excess return. It is a measure of the value added by an active manager.
Interest Rate Parity	ARBITRAGE process based on relative interest rates across countries.
Interest Rate Risk	When interest rates rise, the market value of fixed income contracts (such as bonds) declines. Similarly, when interest rates decline, the market value of fixed income contracts increases. Interest rate risk is the risk associated with these fluctuations.
Internal Rate of Return	Term analogous to the familiar yields to maturity on a bond. The internal rate of return is the rate of discount which makes the net present value of an investment equal to zero.
Introducing Broker	A broker that sells execution services, but does not have its own trading staff or capabilities.
Institutional Broker	Broker who buys and sells securities for banks, mutual funds, insurance companies, pension funds, or other institutional clients.
Inverted Yield Curve	A YIELD CURVE where short term interest rates are above long term interest rates.
Investment Adviser	A person generally required to register with the SEC who provides advice to the public concerning the purchase or sale of securities.

Investment Advisers Act of 1940

As amended in 1960, a law which establishes a pattern of regulation of investment advisers and is similar in many respects to Securities Exchange Act provisions governing the conduct of brokers and dealers. It requires, with certain exceptions, that persons or firms who engage for compensation in the business of advising others with respect or their securities transactions shall register with the commission and conform their activities to statutory standards designed to protect the interests of investors.

Investment Consultant

An individual, or firm, who provides investment advice for a fixed fee, a fee based upon a percentage of assets, or a fee derived from brokerage commissions. Such advice generally includes portfolio constraints analysis, performance objectives setting, asset allocation counsel and investment manager evaluation, selection and monitoring services. It may, or may not, include performance measurement services.

Investment Policy Statement

The statement of policy is the communication of a risk policy to the fund's investment manager(s). It states unambiguously the degree of investment risk which fiduciaries are willing to undertake with pension trust assets. A statement of investment policy differs importantly from a statement of investment objectives. An investment policy prescribes acceptable courses of action; a policy can be acted upon, implemented. An investment objective (such as a performance standard) is a desired result. A manager cannot implement an objective; he can only pursue a course of action, consistent with investment policy, which he believes offers a reasonable likelihood of realizing the objective.

IPO

Acronym for Initial Public Offering. First equity offer of a private firm going public.

Last Sale

The last price at which a transaction in a security took place on a certain day or a particular time during a trading session.

Lehman Brothers Aggregate Index
Is composed of securities from Lehman Brothers Government/Corporate Bond Index, Mortgage-Backed securities Index and Yankee Bond Index and is generally considered to be representative of all unmanaged domestic, dollar denominated fixed-rate investment grade bonds with maturities greater than one year.

Lehman Brothers Government/ Corporate Bond Index
Composed of approximately 5,000 publicly issued corporate and U.S. government debt rated Baa or better, with at least one year to maturity. The index is weighted by the market value of the issues included in the index.

Lehman Brothers Intermediate Gov't/ Corporate Bond Index
Is composed of all bonds in the Lehman Brothers Govt./Corp. Index with maturities between 1 and 9.99 years. The index in unmanaged and weighted by the market value of the issues in the index.

Lending Securities
A practice whereby owners of securities either directly or indirectly lend their securities to primary brokerage firms for a fee, and against which either cash, securities or a letter of credit is pledged to protect the lender. Securities are borrowed to cover fails of deliveries, cover short sales, provide proper denominations and enable brokerage firms to engage in arbitrage trading activities.

LIBOR
Acronym for London Interbank Offered Rate. This is the short term (30 to 90 days) rate at which banks will lend to each other in London.

Limit Order
An order to buy or sell a security at a specific or better price.

Liquidity
The ease of converting an asset to cash.

Liquid Market
A market in which there is a sufficiently large number of daily trades so that most reasonably-sized buy and sell orders can be executed without significantly moving prices.

Long
Typically signifies an ownership position in securities with the actual certificate or record of ownership held by the investor and/or the investor's custodian. Also signifies a

position in a security or the market which will benefit from rising market values.

Long Bond In general, a bond that matures in more than 10 years; in Wall Street parlance, the "long bond" is the 30-year Treasury.

Management Fee The fee charged by the investment manager for supervision of investment. Generally quoted in terms of a percent of assets.

Market Arbitrage The simultaneous purchase and sale of the same security in different markets to take advantage of a price disparity existing between the two markets.

Mark to Market The valuation of open positions at prevailing settlement prices. If a position is marked to the market, there is no distinction between realized and unrealized gains (or losses).

Market Capitalization The market value of all outstanding shares. It represents the value of a company's equity to all investors. It is calculated as the number of shares outstanding times the price per share.

Market Indices See Appendix III

Market Order Order to buy or sell a security at the best immediately attainable price. Most orders executed on exchanges are market orders.

Market Risk BETA. Also called systematic risk.

Market Timing Decisions on when to buy or sell securities in light of economic factors (e.g., interest rate fluctuations) or technical indicators (e.g., trading volume.)

Market Value The current or prevailing price of a security or commodity as indicated by current market quotations, and, therefore the price at which additional amounts can presumably be purchased or sold.

Market Variability Risk associated with price variability, share turnover, and other trading statistics. Greater than 50 is above-average variability; less than 50 is below-average variability. (See Fundamental Equity Risk Percentiles)

Master Trust A pooling of one sponsor's assets, which may include multiple managers and multiple plans, into a single trust entity.

Mean Also called arithmetic mean, or average. It is the simple average of a series of observations. it measures the central value, or expected value, of the variable. The mean of a series of "n" numbers is the sum of the numbers, divided by n.

Median The value (rate of return, market sensitivity, etc.) that exceeds one-half of the values in the population and that is exceeded by one-half of the values. The median has a percentile rank of 50.

Member Firm A securities brokerage firm having one or more partners or officers who are members of The New York Stock Exchange.

Modern Portfolio Theory The theory of portfolio optimization which accepts the risk/reward trade-off for total portfolio return as the crucial criterion. Derived by Markowitz's pioneering application of statistical decision theory to portfolio problems.

Modified Duration The percentage change in the price of a fixed income security that results from a change in yield, multiplied by negative one (see DURATION).

Monetary Policy Includes the tools by which the Fed attempts to control the money supply, and hence, growth in the economy. These include: (1) Open Market Operations -- the buying/selling of bonds which, in turn, alters bank reserves, bank credit and economic activity, (2) Reserve Requirements -- the mandate requiring banks to hold in the form of cash (in the vault or at the Fed) a percentage of their demand deposits, and (3) the Discount Rate -- the rate at which banks pay to borrow funds from the Fed. (See FISCAL POLICY).

Mortgage-Backed Securities Bonds which are a general obligation of the issuing institution but are also collateralized by a pool of mortgages.

Mortgage Pass-Through Securities — A security consisting of a pool of residential mortgage loans with monthly distribution of 100% of the interest and principal to the investor. There are nongovernment-sponsored issues of these securities, as well as the government versions, Freddie Macs and Ginnie Maes.

MUTUAL FUND CLASSES:

Class A Shares — These "traditional" shares come with an up-front fee (FRONT-END LOAD) with lower on-going EXPENSE RATIOS and usually no BACK-END LOADS.

Class B Shares — These mutual fund shares charge a BACK-END LOAD, usually payable if the fund is sold within four to six years, and they carry a higher EXPENSE RATIO than the Class A shares.

Class C Shares — Sometimes called "Level-Load" shares, these carry neither BACK-END nor FRONT-END LOADS; rather, they have higher EXPENSE RATIOS.

MUTUAL FUND LOADS/FEES:

Front-End Load — Sales charge applied to an investment at the time of initial purchase.

Back-End Load — Redemption charge an investor pays when withdrawing money from a fund.

Expense Ratio — The annual amount, expressed as a percentage of total investment, that shareholders pay for mutual fund operating and management fees. The ratio commonly ranges from 0.2% to 2.0%.

12b-1 Fees — Also known as "Sales and Marketing Fees," they function as an annual load.

Short-Term Redemption Fees — Sometimes confused with a BACK-END LOAD, these fees do not impact fund expenses and serve to discourage rapid turnover from one fund to another. The intent of the fee is to dampen turnover, thereby both mitigating the need for cash and decreasing the explicit costs of buying and selling securities.

NASD — The National Association of Securities Dealers, Inc. An association of brokers and dealers in the over-the-counter securities business organized to "adopt, administer and enforce rules of fair practice and rules to prevent fraudulent and manipulative acts and practices, and in general to promote just and equitable principles of trade for the protection of investors."

NASDAQ An automated information network which provides brokers and dealers with price quotations on securities traded over the counter. NASDAQ is an acronym for National Association of Securities Dealers Automated Quotations.

New York Stock Exchange An unincorporated, voluntary association founded in 1792 and existing under a written constitution and bylaws. Membership must be approached by a Committee on Admissions and is obtained by purchasing a SEAT from a retiring, deceased or expelled member. Privileges include the right to buy and sell securities on the trading floor of the exchange for one's own account or for others.

New York Stock Exchange Composite Index A capitalization-weighted index of all stocks listed on the New York Stock Exchange. The value of the index varies with the aggregate value of the common equity of all companies with common stick listed on the NYSE.

Nominal Return The nominal return on an asset is the rate of return in monetary terms, i.e., unadjusted for any change in the price level. The nominal return is contrasted with the real return which is adjusted for changes in the price level.

Non-Market Risk Standard error. Also called unsystematic risk, unique risk, and residual risk. It measures the volatility of returns of securities in a portfolio not related to the movement of the market in general.

Normal Distribution The familiar bell-shaped curve. It is symmetric with approximately two-thirds of all outcomes falling within +/- one standard deviation.

Normal Portfolio A portfolio of stocks with weights that reflect the investment manager's style and weightings strategy, and is used in performance measurement and risk analysis.

OAS Acronym for option-adjusted spread. In fixed income securities, it is the expected yield spread over treasuries using assumptions regarding interest rate volatility.

Option An agreement or privilege which conveys the right to buy (receive) or sell (deliver) a specific security or property at a stipulated price and within a stated period of time. If not exercised during that time, the money paid for the option (but no more than that amount) is forfeited.

Option Expiration Date The date the put or call option expires.

Over the Counter A market for securities made up of securities dealers who may or may not be members of a securities exchange. Over the counter is mainly a market made over the telephone. Thousands of companies have insufficient shares outstanding, stockholders or earnings to warrant application for listing on the New York Stock Exchange, Inc. Securities of these companies are traded in the over-the-counter market between dealers who act either as principals or as brokers for customers. The over-the-counter market is the principal market for U.S. government and municipal bonds.

Passive Management A management procedure that does not generate superior information. A typical example of passive management is the maintenance of index funds. Here, the process is known to all, there is no superior information. The opposite of passive management is active management.

Pass-Through Securities These represent undivided interests in pools of mortgages. The sponsoring organizations, for example, the Government National Mortgage Association (GNMA), passes through interest and principal payments to the certificate holders as these payments are received on a monthly basis. This results in an uneven cash flow because of prepayments caused by foreclosures or delinquent payments. Pass-through securities are offered by private organizations also.

P/E The weighted equity P/E is based on current price and trailing 12 months earnings per share (ESP).

Performance Attribution The process of attributing portfolio returns to causes. It decomposes past performance into components that can then be analyzed.

Performance Index A "total return" index of investment performance. A performance index differs from the popular market indexes (or so-called averages such as the Dow Jones Industrial Average) in that the popular measures do not include the return derived from dividends and other distributions to shareholders.

Performance Measurement The process of computing experienced performance in a portfolio in order to measure the manager's contribution.

Point In the case of shares of stock, a point means $1. If ABC shares rise three points, each share has risen $3. In the case of bonds, a point means $10, since a bond is quoted as a percentage of $1000. A bond which rises three points gains 3% of $1000, or $30 in value. An advance of 87 to 90 would mean an advance in dollar value from $870 to $900 for each $1000 bond. In the case of market averages, the word means merely that and no more. If, for example, the Dow Jones Industrial Average rises from 3870.25 to 3871.25, it has risen a point. A point in this average, however, is not equivalent to $1.

Portfolio Optimization Starting with a universe of securities or asset classes that has been valued in terms of (a) expected return, (b) variances of expected return and (c) covariance of return with every other security under consideration, the process of portfolio optimization involves selecting the portfolio that minimizes risk for a given level of return. In practice, the computerized optimization programs can impose manifold constraints on the characteristics of the resultant portfolio. A typical constraint would be that the resultant portfolio have no more than a given weight in a portfolio asset class.

Preferred Stock Class of capital stock that pays dividends at a specified rate and that has preference over common stock in the payment of dividends and the liquidation of assets. Preferred Stock does not usually carry voting rights.

Prepayment Risk Risk that the rate which mortgages are repaid for a pool of mortgages is different than when the MORTGAGE BACKED SECURITY was purchased.

Prime Rate The minimum rate on bank loans set by commercial banks and granted only to top business borrowers. It is affected by overall business conditions, the availability of reserves, the general level of money rates, and it may vary geographically. Lending rates are also greatly influenced by the size of the loan; the largest loans naturally command the lowest rates.

Principal Trade A transaction in which a security firm buys or sells for its own account.

Private Placement Usually associated with debt instruments where marketability is not required, but not always the case, the private placement of a loan with an institutional investor such as a pension fund or insurance company precludes the borrower from any SEC registration requirements, eliminates problems connected with changing market interest rates and provides the investor with a higher interest rate and often a tailor-made maturity that might be difficult for him to obtain in a public offering.

Program Trading Computer driven purchase and sale of a basket of securities. Typical employed in arbitrage opportunities arising from short term mis-pricing of securities on different exchanges. An example is selling short stock index futures on the Chicago Mercantile Exchange and the simultaneous acquisition of a basket of securities simulating the S&P 500 index on the floor of the New York Stock Exchange.

Prudent Man Rule A common-law standard application to the investment of trust funds. Briefly stated: "All that can be required of a trustee in the investment of trust funds is that he conduct himself faithfully and exercise sound discretion. He is to observe how men of prudence, discretion and intelligence manage their own affairs, not in regard to speculation, but in regard to the permanent disposition of their funds, considering the probable income as well as the probable safety of the capital to be invested." (IF Trustees Handbook, 1970 ed.). Under ERISA, the prudent man rule has been replaced with the prudent "expert."

Purchasing Power Parity The theory that a basket of goods should have the same value in any country. Currencies should adjust to maintain this relationship. Evidence has shown that violations of this theory have persisted for long periods of time.

Puts and Calls - Options

Options, better known as puts and calls, give one the right to buy or sell a stated amount of stock at the stated price within a specified period of time, regardless of the market price of the stock. A call is an option contract to buy (from the writer of the call) shares of stock at a stated price, expiring on the stated date. A put is an option contract to sell shares of stock at a stated price, expiring on a stated date. Options may be traded on the Chicago Board Options Exchange (CBOE), thereby providing standardization of securities option contracts and trading practices.

Quasi-Public Corporation

A type of corporation in the private sector that is backed by a branch of government that has a public mandate to provide a given service. Most quasi-public corporations were originally started as government agencies, but have since become separate entities. It is not uncommon to see the shares of this type of corporation trade on major stock exchanges, which allows individual investors to gain exposure to the company's profit. For example, the Federal National Mortgage Association (Fannie Mae) is regarded as a quasi-public corporation because it operates as an independent corporation. This company operates under a congressional charter that aims to increase the availability and affordability of homeownership, but is not treated as any part of the government. Contrary to popular opinion, employees of quasi-public corporations do not work for the government

Quantitative Analysis

Analysis dealing with measurable factors as distinguished from such qualitative considerations as management character. Examples of quantitative considerations include the value of assets, the cost of capital, and projected patterns of sales, costs, and profitability.

Quartile

Grouping of statistics in four equal sections. Performance measurement results are commonly grouped into "quartiles;" that is, first quartile would include those funds ranking from one to 25 in a sample of 100 funds.

R-Squared

The percentage of the portfolio's total return explained by the market risk level, i.e., the portfolio's beta. For example, a portfolio with an R^2 of .95 is 95% diversified. Most actively managed institutional accounts have R^2s that fall between .80 and .97.

R^2 forecast: A portfolio R^2 forecast is derived from its fundamental and from its standard error forecast. The forecast is for the next quarter (See R-squared).

Real Estate Investment Trusts (REITs): Trusts, somewhat like mutual funds, which invest in real estate loans (mortgages and trust deeds) and/or have equity interests in real estate. Ninety percent of its income must be paid out to shareholders if the REIT wants to qualify for tax exemption.

Real Return: An inflation adjusted return. See NOMINAL RETURN.

Real Terms: How purchasing power is affected by inflation.

Record Date: The date on which you must be registered as a shareholder on the stock book of a company in order to receive a declared dividend or, among other things, to vote on company affairs.

Repo: Short hand for repurchase agreement. Repos are short term collateralized financing. It is an agreement of one party to sell a security at a specific price to a second party and a simultaneous agreement by the first party to buy the security back at a specified later date. The first party is said to be "repo-ing" while the second party is "reverse repo-ing".

Risk: Any chance of loss.

Risk Aversion: A measure of an investor's attitude towards risk. A high risk aversion translates into a low tolerance or comfort with risk.

Risk Free Asset: Typically a noncallable, default free bond such as a short term government security. While such an asset is not risk free in an inflation sense, it is (under the rationale that the government can always print money) risk free in a dollar sense.

Risk Free Return: A theoretical return that is earned with perfect certainty; it is without risk. We approximate the risk free return with 91 day Treasury bill yields.

Risk (Investment): Uncertainty associated with future investment returns achieved over time and historically is related to the variability of returns. The risk characteristics of any investment are also generally related to the investments expected return.

Risk-Reward Spectrum A construct used to illustrate that (in a rational marketplace) higher and higher anticipated rewards are always accompanied by incremental increases in risk (measured as the deviations between expected and actual results). The left end of the spectrum represents the lowest risk investment - typically short term government obligations. Moving to the right on the spectrum - through a continuum of common stock investments - each incremental increase in expected return is accompanied by an incremental increase in risk.

Rule 144A A safe harbor exemption from the registration requirements of Section 5 of the 1933 Act for resales of certain restricted securities to qualified institutional buyers, which are commonly referred to as "QIBs". This rule specifies procedures by which certain issuers could wave the onerous registration requirement and streamline the process of bringing securities to market. Eligibility for the exemption demanded the satisfaction of certain elements. Specifically, securities must be underwritten: they must eligible for clearing through DTC (Depository Trust Company); they must have a prospectus; they must receive a credit rating from on the established bond rating agencies and they can be sold to professional investors (Qualified Institutional Buyers).

Russell 1000 Large Stock Index An unmanaged index of the largest 1000 companies ranked by market capitalization.

Russell 2000 Small Stock Index Is generally considered to be representative of unmanaged small capitalization stocks in U.S. markets. It represents stocks that rank from 1001 to 3000 in market capitalization.

Safe Harbor Provision in a law that excuses liability if the attempt to comply in good faith can be demonstrated.

Salomon Brothers Broad Investment Grade Bond Index The "Broad Index" universe spans the "available" market for U.S. Treasury/agency securities, investment grade corporate bonds (BBB or better) and mortgage pass-through securities. The index is calculated on a market weighted basis. It is designed to provide a reliable and fair benchmark for bond managers.

Sallie-Mae - Student Loan Marketing Association

A publicly traded company that is the largest provider of educational loans in the U.S. Along with providing student loans, Sallie Mae purchases student loans from the original lenders and provides financing to state student-loan agencies. Sallie Mae was originally formed in 1972 as a government enterprise but as of 2004 is a completely independent publicly traded company. Sallie Mae is traded on the NYSE with the ticker symbol SLM.

Salomon Brothers Corporate Bond Index

This index consists of publicly issued, non-convertible corporate bonds rated AA or AAA that have at least $2.5 million par value outstanding. It is a value weighted, total return index including approximately 800 issues with average maturities of 12 years or greater. The Corporate Bond Index is subdivided into a series of indices based on quality and maturity.

Seasoned Mortgage

A mortgage in which periodic payments have been made, for a relatively long period of time, and in which the borrower's pattern of punctuality is well established.

SEC

A regulatory body established by the Congress in 1933 to help protect the rights of investors, it administers the Securities and Exchange Act of 1933 which is designed to regulate the issuance of new securities, the Securities and Exchange Act of 1934 which is designed to regulate security trading on national security exchanges, the Trust Indenture Act of 1939 which defines the responsibilities of corporate bond trustees, the Investment Company Act of 1940 which regulates publicly held investment funds, the Investment Advisers Act of 1940 which regulates investment advisers and the Public Utility Holding Company Act of 1935 which is designed to eliminate public abuses in that field.

Secondary Mortgage Market

The process of lenders selling their mortgages in bulk, with continually fluctuating interest rates, comprises the

Secondary Mortgage market; FNMA buys huge blocks of mortgages, providing liquidity for primary lenders.

Securities Acts Federal laws enforced by the Securities and Exchange Commission to protect investors; they include the Investment Advisers Act, Investment Company Act, Securities Act of 1933, Securities Exchange Act of 1934, Trust Indenture Act and Public Utilities Holding Company Act.

Securities and Exchange Commission (SEC) An organization created by an act of Congress entitled the "Securities Exchange Act of 1934." The SEC is an independent, bipartisan, quasi-judicial agency of the U.S. government. The laws administered by the Commission relate in general to the field of securities and finance and seek to provide protection for investors and the public in their securities transactions.

Securitization Creating an investment security backed by assets which otherwise are not publicly traded. For example, home mortgages are often securitized and remarketed in bundles as mortgage backed securities.

Security Any note, stock, Treasury stock, bond, debenture, evidence of indebtedness, certificate of interest or participation in any profit-sharing agreement, collateral-trust certificate, preorganization certificate or subscription, transferable share, investment contract, voting trust certificate, certificate of deposit for security, fractional undivided interest in oil, gas or other mineral rights or, in general, any interest or instrument commonly known as a "security," or any certificate of interest or participation in, temporary or interim certificate for, receipt for, guarantee of, or warrant or right to subscribe to or purchase any of the foregoing.

Selectivity A measure of a fund manager's ability to choose stocks that outperform the market. Selectivity is determined by the difference between a fund's actual rate of return and its market equivalent rate of return.

Sensitivity The degree to which a portfolio's fluctuations are more or less volatile than market fluctuations.

Settlement An arrangement between brokerage houses for the payment or receipt of cash or securities. It represents the final consummation of a securities transaction and is handled through the stock clearing corporation.

Settlement Date The date on which the final consummation of a securities transaction takes place and payment is made, usually four full business days following the date of trade.

Settlement Price A price, based on that day's closing price or range of closing prices, used in determining the next day's price limits, and in invoicing of deliveries to be made due to filing of notice of intention to deliver on that day. Because there frequently is no one "closing price" in commodity trading, but a range of closing prices, and because the settlement price is based on that closing range, it also is frequently used informally by the trade as a reference point for analysis of closing market conditions.

Share One of the equal parts into which the capital stock of a corporation is divided. It represents the owner's proportion of interest in the company and is issued to him in the form of a stock certificate.

Sharpe Ratio A measure of an asset's or portfolio's risk adjusted return. The return is divided by the risk to obtain the risk adjusted return.

Short (1) Generally, as a noun, one who has sold futures contracts (or the cash commodity, depending on the market under discussion) and has not yet offset that position. As a verb, the action of taking a position in which one has sold futures contracts (or made a forward contract for the sale of the cash commodity) without taking the offsetting action. For example, if you had no position and you sold five contracts, your action would be "shorting the futures," and you would then be a "short." However, if your previous position was one of having bought five contracts (i.e., "being long five"), and you then sold five contracts to offset that position, your second action would not be referred to as "shorting," because your position when the second action was concluded would be zero. Short is also used with similar meanings as an adjective and adverb. (2) In commercial paper loan futures, then *short* is defined as the party who contracts to deliver cash and to take delivery of paper.

Short Sale Short sales are made by people who expect the market to go down. In a regular securities transaction, shares are bought first and sold later. In a short sale transaction, the sale comes first, the purchase later. A short sale is effected by borrowing stock through a broker and selling it at current market price. The proceeds of the sale are then held as collateral for the loan of the stock. To close out the short position the borrowed stock must be replaced. This is done by buying an equivalent number of shares at the then current market price. If a short sale is made at $100 and the short can later be closed by buying the stock at $90, there will be $10 per share profit (before any intervening interest on the loan and repayment of any individual income).

Simulation The procedure in which a model is constructed of a process and then operated so that the characteristics of the true process can be examined.

Soft Dollars Commission dollars utilized by investment mangers to purchase independent research.

Stochastic Simulation A simulation where some of the variables in the model are random (stochastic).

Size A percentile ranking where 1 represents the smallest companies and 100 the largest.

Size and Maturity Risk associated with concentration in small or immature companies. Greater than 50 means smaller companies; less than 50 means larger companies. (See Fundamental Equity Risk Percentiles).

Soft Dollars Brokerage commissions which are used to purchase goods or services.

Specialist A member of the New York Stock Exchange, Inc. who has two functions: first, to maintain an orderly market insofar as reasonably practicable in the stocks in which he is registered as a specialist. In order to maintain an orderly market, the exchange expects the specialist to buy or sell for his own account, to a reasonable degree, when there is a temporary disparity between supply and demand. Second, the specialist acts as a broker's broker. When a commission broker on the exchange floor receives a limit order, say, to buy at $50 a stock then selling at $60 , he cannot wait at the post where the stock is traded to see if the price reaches the specified level. So he leaves the order with the specialist, who will try to execute it in the market if and when the stock declines to the specified price. At all times the specialist must put his customers' interests above his own. There are about 350 specialists on the NYSE.

Specific Risk Uncertainty in the return of an asset that arises from events that are specific to that firm. It is unrelated or, at most, distantly related, to events that impact other firms.

Spot Refers to the characteristic of being available for immediate (or nearly immediate) delivery. An outgrowth of the phrase "on the spot," it usually refers to a cash market price for stocks of the physical commodity that are available for immediate delivery, or conversely and depending upon the noun it modifies, the stocks themselves that are available for delivery if transactions are usually grouped into two kinds -spot and forward contracts. However, "spot" is also sometimes used in reference to the futures contract of the current month, in which case trading is still "futures" trading but delivery is possible at any time.

Spread The difference between the bid price and the asked (offering) price. When a stock is quoted "50 bid, offered at 52," a two point spread is said to exist.

Standard Deviation Standard deviation is a measure of the "dispersion" of a set of numbers around a central point. If the standard deviation is small, the frequency distribution is concentrated within a narrow range of values. For a "normal" distribution, about two-thirds of the observations will fall within one standard deviation of the mean.

Standard Error The standard error of a portfolio or a security measures the return volatility caused by events which are unique to the portfolio. Standard error or nonmarket risk is comprised of two components: common and individual factor risk. As a portfolio's standard error increases, the range of probable portfolio returns widens. For example, a portfolio with a standard error of 4% is expected to experience a return which will fall within 4% of the portfolio's expected return 2 out of 3 times. Most actively managed portfolios have standard errors between 2% and 6% per quarter.

Standard Error Forecast The standard error forecast for a portfolio is the average of the fundamental and historical standard error. The standard error forecast is the projection of next quarter's standard error.

Standard & Poors 500, Equal Weighted

An index of the same stocks as those in the S&P 500, but with equal dollar investments in each issue.

Standard & Poor's 500 Stock Price Index

The primary objective of the S&P 500 is to be the performance benchmark for the U.S. equity markets. It is important to note, however, that the S&P 500 does not contain the 500 largest stocks. Although many of the stocks in the Index are among the largest, there are also many relatively small companies in the Index. This is because the 500 is a "bottom-up" Index constructed by industry groups. Important industry groups within the U.S. economy are identified and then a representative sample of stocks within each important industry group are allocated to the Index. The Index can therefore be used as a proxy for the whole market and also for individual industry groups. The Index was founded in 1923, although there were only 233 companies in the Index at the time.

Stock Option Contract

A negotiable contract paid for in advance, which gives the purchaser the right to buy (call) or sell (put) usually 100 shares of the stock named in the contract at a fixed price during a period running from a minimum of 21 days to a year or more.

Stockholder

The owner of one or more shares of corporate stock who is entitled to: (1) a proportionate share of the issuing company's undivided assets, (2) dividends when declared by the directors, (3) the right of proportionate voting power and, frequently, (4) the opportunity to subscribe to additional stock before public offerings are made.

Straddle

Either a long or short position in a call and a put on the same stock with the same expiration date and the same exercise price.

Straight Bonds

As opposed to income or convertible bonds. Bonds conforming to the standard description (i.e., unquestioned right to repayment of principal at a specified future date; unquestioned right to fixed interest payments on stated dates; and no right to either additional interest, interest in assets or profits or voice in management).

Street Name	Securities belonging to a client of a brokerage firm registered in the name of the firm. Easily negotiable.
Strike Price	In options, the agreed upon price at which the underlying security may be bought or sold.
Strips	Separate Trading of Registered Interest and Principal of Securities. The practice of selling separate bond interest payments, known as stripping. Institutions buying Treasury securities are able to request that each semiannual interest payment and the principal be registered separately by Federal Reserve banks. Each payment may then be sold as a zero-coupon bond.
Swap	An agreement whereby two parties exchange terms. For example, one party can swap a fixed rate payment stream for a variable rate payment stream.
Systematic Risk	Tendency of the asset price to move along with the market index. The measure of systematic risk is widely known as "beta." If beta is one (1.0), the asset price tends to fall in the same proportion that the market falls, other things being equal, and to rise by the same proportion that the market rises. If beta is 1.5, the asset price tends to fall (or rise) proportionally by one and one-half times as much as the market falls (or rises).
Synthetic Security	Combination of two or more securities whose investment returns are nearly identical to those of a single security such as a bond and call option synthesizing a convertible bond.
Tactical Asset Allocation	Shifting percentages of portfolios among stocks, bonds, and cash, depending on the relative attractiveness of the respective markets.
Technical Analysis	An approach to analysis of futures markets and future trends of commodity prices which examines the technical factors of market activity. Technical analysts normally examine patterns of price change, rates of change and changes in volume of trading and open interest, often by charting, in hope of being able to predict and profit from future trends. Contrasted with fundamental analysis.
Thin Market	A market in which there are comparatively few bids to buy or offers to sell or both. The phrase may apply to a single security or to the entire stock market. In a thin market,

price fluctuations between transactions are usually larger than when the market is liquid. A thin market in a particular stock may reflect lack of interest in that issue or a limited supply of or demand for stock in the market.

Third Market The trading of listed securities in the over-the-counter market.

Time-Weighted Rate of Return One method of computing rates of return is called the time-weighted rate of return. It is the investment performance of a unit of assets held continuously for the entire time period measured. This rate provides an effective standard for comparing the performance of different funds, in which cash flow could vary considerably. The money manager usually cannot control the timing or the amount of contributions to the fund. Because the time-weighted rate reduces the impact of money flows into or out of the fund, it is a fairer means of appraising the fund manager's ability to make the fund assets perform.

Top-Down Manager Investment manager that selects stocks by first looking at trends in the general economy and next by selecting industries and finally companies that will benefit from those trends.

Trade Date Day on which a transaction is executed.

Trading Effect Measures the impact of quarterly trading on portfolio returns determined by comparing the actual portfolio return with that of the buy-and-hold portfolio. The buy-and-hold return is used to illustrate the results that would have been obtained if the manager had maintained the initial holdings throughout the period.

Transaction Costs The costs incurred when securities are exchanged for other securities.

Treasury Bills The safest and most liquid investment next to cash, Treasury bills are short term direct obligations to the U.S. government and are usually issued with maturities of three months, six months or one year. Bills are offered in bearer form and therefore cannot be registered in any legal name. They are issued in amounts of $10,000 and up, in multiples of $5,000, and there is a $10 subscription charge on auction purchases by the purchasing broker or bank. Bills do not bear a stated interest rate. The interest is calculated by taking the difference between the discount price, date of purchase and the face amount (par) collected at maturity. The yield is figured on a 360 day basis, versus 365 days for interest bearing securities, using the actual number of days remaining in the life of the issue. A conversion table is used to make this calculation. In addition to the three month, six month and one year bills, the Treasury also offers Tax Anticipation Bills called TABS when it has special needs for cash usually due to seasonal demands. These bills mature generally a week after a corporation income tax date and are acceptable at par on the tax date.

Treasury Bonds These very liquid government-guaranteed issues have maturities from five to 30 years, are limited by statute to a 4 1/4% coupon interest rate except for ten billion, which may be issued without regard to any interest rate ceiling, are available in coupon or registered form, are issued either for cash or in an exchange for rights offering, pay interest semiannually and are available on the market at a dollar price plus accrued interest in amounts from $500 up to round lots of $100,000 or more.

Treasury Notes These readily marketable obligations of the U.S. Treasury are issued at par in coupon form, enjoy an active trading market in volume, have maturities of one to seven years, pay interest semiannually, and the outstanding notes are noncallable and, of course, are guaranteed as to principal and interest payments by the United States government. There being no statutory limit on the amount of interest the Treasury can pay on notes, these issues are fully competitive with other money market instruments.

Triple Witching Hour The last hour of trading on the four Fridays that the quarterly expirations take place in S&P Index Futures, S&P Index Options and ordinary stock options. Frenetic trading takes place resulting in weird gyrations in the prices of securities. The increase in trading activity is related to arbitrageurs executing program trades.

Trust A fiduciary relationship in which the owner of an asset transfers legal title to a trustee that keeps or uses the asset for the benefit of another person.

Trustee An individual or institution that holds the legal title to an asset and administers it for the benefit of another person.

T-Test The T-test is a measure of the statistical significance of alpha. The T-test equals alpha divided by standard error. Numbers above 2.0 indicate statistically significant alphas. Consistently positive alphas indicate superior investment judgment.

Turnover The sum of purchases and sales divided by two and expressed as a percent of the total portfolio market value.

Universe The list of all assets eligible for inclusion in a portfolio.

Unsystematic Risk Standard error.

Value Line Composite Average The unweighted geometric average of the percent changes of the approximately 1,700 stocks included in the index. More than 90% of the stocks are NYSE-listed.

Variability Variability measures the fluctuations in rates of return. These measurements frequently are used as proxies for risk management.

Variable Rate or Adjustable Rate Mortgage The interest rate and the buyer's monthly payment fluctuate, depending on interest rates in the economy.

Variance A measure of variability based on squared deviations of individual observations from the mean value of the distribution. Its square root is the standard deviation.

Venture Capital Fund Investment vehicle organized to raise capital for start-up companies or firms in the early stages of developing products and services. Investors in these funds expect higher rates of return due to the greater risks involved in investing in companies at this stage of development.

Weighting The specification of the relative importance of each of a group of items that are combined. For example, stocks included in indexes may be equally weighted or weighted according to value

Wilshire 5000 Equity Index An all equity, capitalization-weighted index comprising all NYSE, ASE and approximately 2,000 OTC securities.

While the precise number of stocks in the index varies from period to period, the index contains about 5,000 issues.

Yield — The current yield of a security is the current indicated annual dividend rate divided by current price.

Yield Curve — Graphical representation of interest rates available for each maturity from 3 months out to 30 years.

Yield-to-Maturity — The discount rate that equates the present value of cash flows, both principal and interest, to market price.

Zeros — A fixed income security with no coupon (no interest payments). Purchase price of the security is discounted below par and redeemed at maturity for face value.

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BOND RATINGS

The following summarizes the highest four ratings used by the Standard & Poor's Corporation ("S&P") for bonds:

AAA	Debt rated AAA has the highest rating assigned by S&P. Capacity to pay interest and repay principal is extremely strong.
AA	Debt rated AA has a very strong capacity to pay interest and repay principal and differs from AAA issues only in a small degree. The "AA" rating may be modified by the addition of a plus or minus sign to show relative standing within the AA rating category.
A	Debt rate A has a strong capacity to pay interest and repay principal although it is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than debt in higher rated categories.
BBB	Debt rated BBB is regarded as having an adequate capacity to pay interest and repay principal. Whereas it normally exhibits adequate protection parameters, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity to pay interest and repay principal for debt in this category than for those in higher rated categories.

To provide more detailed indications of credit quality, the AA, A and BBB ratings may be modified by the addition of a plus or minus sign to show relative standing within these major rating categories.

The following summarizes the highest four ratings used by Moody's Investors Service, Inc. ("Moody's") for bonds:

Aaa	Bonds that are rated Aaa are judged to be of the best quality. They carry the smallest degree of investment risk and are generally referred to as "gilt edge". Interest payments are protected by a large or by an exceptionally stable margin and principal is secure. While the various protective elements are likely to change, such changes as can be visualized are most unlikely to impair the fundamentally strong position of such issues.
Aa	Bonds that are rated Aa are judged to be of high quality by all standards. Together with the Aaa group they comprise what are generally known as high grade bonds. They are rated lower than the best bonds because margins of protection may not be as large as in Aaa securities or fluctuation of protective elements may be of greater amplitude or there

may be other elements present which make the long-term risks appear somewhat larger than in Aaa securities.

A Bonds that are rated B possess many favorable investment attributes and are to be considered upper medium grade obligations. Factors giving security to principal and interest are considered adequate, but elements may be present which suggest a susceptibility to impairment sometime in the future.

Baa Bonds that are rated Baa are considered medium grade obligations, i.e., they are neither highly protected nor poorly secured. Interest payments and principal security appear adequate for the present but certain protective elements may be lacking or may be characteristically unreliable over any greater length of time. Such bonds lack outstanding investment characteristics and in fact have speculative characteristics as well.

Moody's applies numerical modifiers (1, 2 and 3) with respect to corporate bonds rated As, A and Baa. The modifier 1 indicated that the bond being rated ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates that the bond ranks in the he lower end of its generic rating category with regard to municipal bond, those bonds in the Aa, A and Baa groups which Moody's believes possess the stronger investment attributes are designated by the symbols Aa1, A1 or Baa1, respectively.

The following summarizes the highest four ratings used by Duff & Phelps Credit Rating Co. ("D&P") for bonds:

AAA Debt rated AAA is of the highest credit quality. The risk factors are considered to be negligible, being only slightly more than for risk-free U.S. Treasury debt.

AA Debt rated AA is of high credit quality. Protection factors are strong. Risk is modest but may vary slightly from time to time because of economic conditions. The AA rating may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating category.

A Bonds that are rated A have protection factors which are average but adequate. However risk factor are more variable and greater in periods of economic stress.

BBB Bonds that are rated BBB have below average protection factors but are still considered sufficient for prudent investment. Considerable variability in risk during economic cycles.

To provide more detailed indications of credit quality, the AA, A and BBB rating may be modified by the addition of a plus or minus sign to show relative standing within these major categories.

Appendix II

SWAPS

Plain Vanilla Swap	A contract in which two parties agree to a periodic exchange of interest payments for a set length of time based on a specified principal (nominal).
Counterparties	The two principals in a swap transaction. One is a fixed payer; the other is the fixed receiver.
Notional Principal	The agreed upon principal to which the interest rates are applied when determining the cash flows.
Interest Rate Swap	A contract in which two parties agree to a periodic exchange of interest payments for a set length of time based on a specified notional principal. Party A pays Party B (the counterparty) a fixed rate and Party B pays a variable rate such as LIBOR (London Interbank Offer Rate). In an interest rate swap, the fixed payer is quoted a fixed rate plus a spread, in exchange for a floating rate. For example, Party A, the fixed payer, and Party B, the fixed receiver, are quoted 6% fixed rate for a six month LIBOR. Party A agrees to pay Party B the fixed amount for a five year period, and Party B agrees to pay Party A the six month LIBOR rate adjustable over the five year period. In an interest rate swap, notional principal does not change hands, but for this example the notional principal, on which the interest payments are based, will be $10 million. During the first six months, Party A has agreed to pay Party B (180/360 days times 6%), or 3% of the notional principal, $300,000. Party B has agreed to pay Party A (180/360 days times LIBOR 5%), or 2.5% of the notional principal, $250,000. The net amount is paid, so in this first six month period, Party A pays Party B $50,000. Six months later, Party A is scheduled to pay Party B (180/360 days times 6%), or 3% of the notional principal, $300,000. Now, the six month LIBOR rate is 6.2%, so Party B has agreed to pay Party A (180/360 days times LIBOR 6.2%), or 3.1% of notional principal, which is $310,000. The net amount is paid, so in this second six-month period, Party B pays Party

A $10,000. These transactions continue until the contract expires.

The major purpose of swaps is to increase or decrease duration and exposure to interest rates at a lower transaction cost than the marketplace.

Currency Swap

At origination of the contract, the two counter parties exchange principal. Principal amounts are equivalent at current spot exchange rate, and the counter parties exchange interest payments on the principal. Payments may be based on a fixed or floating interest rate. If Party A loaned dollars and borrowed pounds, Party A pays interest in pounds and receives dollars. At maturity, original principals are returned.

For example, the notional principal is £20 million and the $34.4 million. The fixed rate is 8.65% on a semi-annual bond, and the six-month LIBOR will be the floating rate. The first settlement date is 181 days away and the Dollar LIBOR is initially 5.75%. Party A is the fixed/pound payer and Party B is the fixed/pound receiver.

In the initial exchange of cash flows, Party A will pay Party B $34.4 million, and Party B pays Party A £20 million. At the first settlement, Party A pays Party B, £857,890, which is the notional principal (£20 million) times the interest rate (.0865 times 181/365 days). Party B pays Party A $994,494, which is the notional principal ($34.4 million) times the interest rate (.0575 times 181/365 days).

At the second settlement, 184 days later, the six-month LIBOR rate is 6%. Party A pays Party B £876,849, which is the notional principal (£20 million) times the interest rate (.0865 times 184/365 days). Party B pays Party A $1,060,667, which is the notional principal ($34.4 million) times the interest rate (.06 times 184/365 days).

At terminal settlement, in addition to last exchange of interest payments, Party B returns Party A's $34.4 million, and Party A returns Party B's £20 million.

The main purpose of currency swaps is to speculate on the direction of currency spot rates and protect assets. To understand the currency exposure, think about the final return of principals. The party receiving the expensive currency will be the winner and the other party will be the loser.