

# Commonly Used Notation

$b$	Retention or plowback ratio	$r_f$	The risk-free rate of interest
$C$	Call option value	$r_M$	The rate of return on the market portfolio
<b>CF</b>	Cash flow	<b>ROE</b>	Return on equity, incremental economic earnings per dollar reinvested in the firm
$D$	Duration	$S_p$	Sharpe ratio, also called the reward-to-volatility ratio; the excess expected return divided by the standard deviation
$E$	Exchange rate	$t$	Time
$E(x)$	Expected value of random variable $x$	$T_p$	Treynor's measure for a portfolio, excess expected return divided by beta
$F$	Futures price	$V$	Intrinsic value of a firm, the present value of future dividends per share
$e$	2.718, the base for the natural logarithm, used for continuous compounding	$X$	Exercise price of an option
$e_{it}$	The firm-specific return, also called the residual return, of security $i$ in period $t$	$y$	Yield to maturity
$f$	Forward rate of interest	$\alpha$	Rate of return beyond the value that would be forecast from the market's return and the systematic risk of the security
$g$	Growth rate of dividends	$\beta$	Systematic or market risk of a security
$H$	Hedge ratio for an option, sometimes called the option's delta	$\rho_{ij}$	Correlation coefficient between returns on securities $i$ and $j$
$i$	Inflation rate	$\sigma$	Standard deviation
$k$	Market capitalization rate, the required rate of return on a firm's stock	$\sigma^2$	Variance
<b>ln</b>	Natural logarithm function	<b>Cov(<math>r_i, r_j</math>)</b>	Covariance between returns on securities $i$ and $j$
$M$	The market portfolio		
$N(d)$	Cumulative normal function, the probability that a standard normal random variable will have value less than $d$		
$p$	Probability		
$P$	Put value		
<b>PV</b>	Present value		
$P/E$	Price-to-earnings multiple		
$r$	Rate of return on a security; for fixed-income securities, $r$ may denote the rate of interest for a particular period		