

Index

- Active investing:
 definition of, 3–4
 reconciling with indexing, 5–6
- Allocation of assets:
 covered call strategy and, 117–118
 leveraged portfolios and, 46–50
- Alternative asset classes:
 including in portfolio, 247–249
 owning producer, 249–250
- American-style options:
 debit spread, 164, 165
 put, 212, 213
- Annualized percentage return,
 calculating, 72, 73
- Annual return backtests, covered call
 strategy, 113–114
- Appreciation:
 average, of index, 7
 bull call spreads and, 166–168
 converting annual to weekly, 102
 as delta, 125
- Appreciation, capturing:
 with calendar call spreads, 180
 with LEAPS call options, 134–135,
 136
 with options, 90–97
- Asset management:
 allocation of assets, 46–50, 117–118
 alternative asset classes, 247–250
 index exposure and, 261–262
 long and short strategy combination,
 257–259
 minimum investment sizes, 260–261
 objective and processes of, 255–256
 security selection, 256–257, 258
 strategy selection, 259–260
See also Security selection
- Asymmetric payoff, 102
- At-the-money (ATM) call options:
 description of, 86
 Greeks of, 123–125
 hedging costs of, 142
 LEAPS, 122–123
 three month, 192
- Auto-exercising call options, 165
- Average annual return, 113
- Backtests:
 calendar put spread strategy,
 222
 covered call strategy, 113–114
- Balvers, Ronald, 11
- Bear put spreads:
 correlated indexes using
 SIMTOOLS, 232–233
 correlated protected portfolios,
 233–235
 description of, 219–220, 226, 245
 expected returns and hedging
 analysis, 229–232
 OTM, using LEAPS, 228–229
- Bid-ask spread, 200, 201, 237
- Black, Fischer, 42
- Black-Scholes option pricing model,
 42, 54, 83–84
- Blending sectors in portfolios, 47
- Bogle, John, 2
- Book-to-Market metric, 19, 21
- Break-even points for options, 96
- Bremer, M., 12

- Brokerage accounts, margin loans and, 39–40
- Buffett, Warren, 54
- Bull call spreads:
 - appreciation and, 166–168
 - description of, 164, 165–166, 189
 - early exit from, 170–171
 - staggered exit from, 171–173
 - volatility skew and, 169–170
- Bull put spreads, 211, 220–221, 225
- Buy-and-hold strategy, index drift and, 8
- Calculating:
 - annualized percentage return, 72, 73
 - correlations, 62
 - minimum level of assets to avoid margin calls, 75
- Calendar call spreads:
 - description of, 180–182, 190
 - early exit from, 182, 183
 - fast cycling with, 200–203
 - rolling LEAPS, 224–225
 - weekly cumulative returns, 199
 - weekly strategy returns, 206–207
 - weekly volatility simulation, 204–206
- Calendar put spreads:
 - deep-in-the-money, 222–223
 - description of, 211, 220, 221–222, 226
 - See also* LEAPS calendar put spreads
- Call options:
 - ATM, 86, 122–125, 142, 192
 - auto-exercising, 165
 - basic principles of, 167
 - capturing appreciation with, 90–97
 - daily cost of, 91–94
 - delta of, 134–135
 - dividends, interest rates, and, 87
 - as hedging instruments, 107
 - as potential liabilities, 84–85
 - risk components of, 89–90
 - sale of, 87–89
 - short, 164–165
 - with strike prices, 86
 - three-month at-the-money, 192
 - time, volatility, and, 86–87
 - See also* LEAPS call options; Option analysis
- Call spreads:
 - cycling investment gains, 182, 184–187
 - description of, 163
 - as filling in over time, 171
 - long option, 192–193
 - long-term investment strategies around, 191
 - rapidly cycling gains on, 163
 - regime change and, 187–188
 - short option selection, 192
 - transaction costs and, 200, 201, 208–209
 - See also* Bull call spreads; Calendar call spreads; Diagonal call spreads
- Capital Asset Pricing Model (CAPM), 15, 18, 19
- Capturing appreciation, calendar call spreads and, 180
- Capturing appreciation with options:
 - daily cost of options, 91–94
 - overview of, 90–91
 - rolled LEAPS call options, 134–135, 136
 - uneven appreciation, 96–97
 - volatility skew, 94–96
- Cash flow, investing, 132–134
- “Cash” strategies, 259
- Center for Research of Securities Prices (CRSP), 2
- Collared portfolios, 218–219
- Compounding, 34, 184
- Conservation of risk principle, 31
- Constant asset or debt reinvestment strategy, 55–56
- Constant investment strategy, 186–187
- Constant leverage trap, 53–55
- Contingency planning, 255
- Converting annual appreciation to weekly, 102
- Correlated indexes, using SIMTOOLS, 232–233

- Correlations:
 - calculating, 62
 - put options and, 217–218
- Cost of capital:
 - covered call strategy and, 118
 - determining, 87
 - equities and, 41
 - roll-forward cost and, 128
- Counterparty risk, 214
- Covered calls:
 - annual return backtests, 113–114
 - asset allocation and, 117–118
 - expected returns, 111–113
 - interest rate, cost of capital, and, 118
 - LEAPS, 141–142
 - position, taking, 110–111
 - RVX and, 118–119
 - selling, 212–213
 - as source of income, 109–110
 - VIX modifications to strategy, 114–117
- Credit, nonmarket sources of, 43–44
- Credit spreads, 164
- CRSP (Center for Research of Securities Prices), 2
- Cycling investment gains:
 - calendar call spreads and, 200–203
 - diagonal call spreads, 196–198
 - LEAPS calendar calls and, 182, 184–187
 - weekly volatility simulation, 204–206
- Deadly diagonal, 193
- Debit spreads:
 - description of, 164
 - types of, 163
 - See also* Bull call spreads; Calendar call spreads; Diagonal call spreads
- DeBondt, Werner F. M., 25
- Decay, *see* Time decay
- Deep-in-the-money, buying, and risk management, 135, 142
- Deep-in-the-money calendar put spreads, 222–223
- Delta:
 - of LEAPS put options, 224
 - of rolling LEAPS call options, 125, 127, 134–135
- Delta hedging strategy, 54
- Derivatives, availability of, 259
- Diagonal call spreads:
 - cash flow timings and, 208
 - cost and expected returns of, 194
 - creating, 193–194
 - cycling fractional and fixed, 196–198
 - description of, 173–175, 189–190
 - early exit from, 177–180
 - long/short portfolios from, 175–177, 195–196
 - reinvestment and, 198–200
 - volatility and, 198–199
- Diversification:
 - portfolio protection and, 232
 - put options and, 217–218
- Dividends:
 - call options and, 87
 - including in investment gains, 68
 - selling shares and, 38
- Dollar cost averaging, 51–52
- Dow Jones Industrial Average (DJIA):
 - as index, 18
 - monthly returns during 1976 to 1979 bear market, 13
- Dynamic hedging strategy, 54–55
- EFA (iShares Morgan Stanley Capital Index Europe and Far East), 60, 61–62
- MSCI EAFE, 257
- Efficient markets and index investing, 4–5
- Energy sector, 149, 151, 154, 160
- Equity Office Properties, 35–36
- ETFs, widely traded and well-known, 268–273
- European-style options, 165, 213
- Exercise risk:
 - bull put spreads and, 221
 - debit and credit spreads and, 164
- Exercising:
 - options, 164–165
 - put options, 212

- Exiting:
 bull call spreads, 170–173
 calendar call spreads, 182, 183
 diagonal call spreads, 177–180
 Exposure, level of, 254–255, 261–262
- Fama, Eugene, 20, 23–24, 25. *See also*
 Three-factor model
- Financials, 60
- Forecasting returns, 27
- French, Ken, 12, 20, 23–24, 25. *See also*
 Three-factor model
- Futures:
 minimum level of investment,
 260–261
 put options and, 216–217
 as source of leverage, 41
 substituting, in leveraged index
 portfolio, 77–79
See also Covered calls
- Gains:
 including dividends in, 68
 reinvesting leveraged, 52–56
See also Cycling investment gains
- Gamma, 124
- GARCH process, 203
- Gilliland, Erik, 11
- GOX index, 257
- Greeks, 123–125
- Gross, Bill, 5
- Gross domestic products (GDP)
 growth rates, 8, 10
- Hedge, LEAPS call options and,
 145–146
- Hedging:
 analysis of, bear put spreads,
 229–232
 portfolio size and, 46
See also Call options; LEAPS call
 options; Put options
- HML (High Book-to-Market minus Low
 Book-to-Market), 19, 22
- Holding synthetic positions, 64–67
- Implied volatility (IV):
 calendar call spreads and, 201–202
 call spreads and, 200
 description of, 15, 17
 diagonal call spreads and, 199
 put options and, 212
See also VIX (volatility index)
- Index drift, 7–8, 9
- Index funds:
 computer technology and, 1–2
 widely traded and well-known
 indexes, 266–267
- Index investing, 4–6, 263–264
- Inflation, 248–249
- Interest costs, 145–146
- Interest payments, 38
- Interest rates:
 call options and, 87
 covered call calculations and, 111
 covered call strategy and, 118
 on margin loans, 39
- In-the-money (ITM) call options:
 Greeks of, 123–125
 LEAPS, 122–123
 loss calculation of, 88
 strike prices and, 86, 92
- Intrinsic value, 145
- Investment:
 active, 3–4, 5–6
 of cash flow, 132–134
 commodities and currencies as,
 247–250
 constant investment strategy,
 186–187
 definition of, 249
 of lump sums, 51–52
 minimum level of, 260–261
 underwater, 34–38
See also Cycling investment gains;
 Leveraged investments;
 Reinvestment
- iShares Morgan Stanley Capital Index
 Europe and Far East (EFA), 60,
 61–62
- iShares Russell 2000 Value ETF (IWN),
 60, 61–62
- ITM, *see* In-the-money (ITM) call
 options
- IV, *see* Implied volatility

- January effect, 12
- Jegadeesh, Narasimhan, 25
- Junk bond market, 30–31
- Kelley criterion, 185
- LEAPS calendar calls, 182, 183
- LEAPS calendar put spreads:
 - building portfolios around, 237
 - description of, 236–237, 245–246
 - historical performance of, 237–239
- LEAPS calendar spreads, 224–225
- LEAPS call options:
 - average return estimates, 130–132
 - capturing appreciation with, 134–135, 136
 - description of, 122, 145
 - Greeks and, 123–125
 - higher performance portfolios, 154, 156–157
 - indexes and strike prices, selecting, 137, 139
 - for investing cash flow, 132–134
 - market drops, volatility spikes, and, 139–140
 - predictability of, 130, 143
 - rebalancing portfolio, 153–154, 155
 - reinvestment issues, 157–158
 - roll cost prediction, 128–130
 - rolling forward, 121, 127, 151
 - rolling up, 135, 137, 138, 157–158
 - sector performance, 146–149
 - sector portfolio returns, 149–153
 - sizing portfolio, 161
 - strike price and, 145–146
 - value of two-year, after one year, 125–127
- LEAPS call spreads, 167
- LEAPS covered calls:
 - description of, 141–142
 - mid-caps and, 158–159
 - with sectors, 159–160
- LEAPS put options:
 - bear, 229–232
 - market drops and, 217
 - rolling, 223–224
 - strategies for using, 227
 - See also* Put writing with LEAPS
- LEAPS (long-term equity anticipation securities), 67
- Legging out, 171
- Leverage, sources of:
 - futures, 41
 - margin loans, 39–40
 - options, 42–43
 - other debt sources, 43–44
- Leveraged buyouts, 30
- Leveraged index portfolios:
 - adding volatility, 68–72
 - applying leverage, 63–64
 - asset allocation, 59–62
 - expected returns and reinvestment, 68, 69
 - holding synthetic positions, 64–67
 - margin calls, 74–76
 - overview of, 80–81
 - put options and, 216–217
 - random scenarios with Monte Carlo, 72–74
 - returns, 62–63
 - substituting futures in, 77–79
 - transaction costs, 67–68
 - volatility of, 63
- Leveraged investments:
 - commandments of, 39
 - in downturn, 35
 - effect of early gains on growth of, 36
 - estimated recovery of, 35
 - expected return and volatility of, 33
 - growth of 5x during ten years, 34
 - risk and, 29–31
 - ROI for, 38–39
- Leveraged portfolio management:
 - allocation issues, 46–50
 - alternative asset classes and, 247–250
 - dollar cost averaging and liquidity preference, 51–52
 - goal of, 44
 - rebalancing with leverage, 50–51
 - reinvesting gains, 52–56
 - sizing issues, 44–46

- Leverage ratio, 32–34, 78–79
- Liquidity, and index investing, 6
- Long and short strategy combination
 - on index, 257–259
- Long-term equity anticipation
 - securities (LEAPS), 67, 122. *See also* LEAPS call options
- Losing money, 184
- “Lottery ticket” effect, 38
- Lump sums, investing, 51–52

- Management, definition of, 255. *See also* Asset management; Leveraged portfolio management
- Managing leveraged portfolios, *see* Leveraged portfolio management
- Margin calls:
 - rolled LEAPS call options and, 132
 - synthetics and, 74–76
- Margin loans, as source of leverage, 39–40
- Margin requirements for LEAPS put options, 244
- Market-cap weighted index, 7
- Market cycles, 12–14
- Market drops:
 - calendar put spreads and, 222
 - LEAPS call options and, 140
 - LEAPS put options and, 217
- Markowitz, Harry M., 6–7
- Marquering, Henk A., 12
- Martingale, 7
- MDY, *see* Standard & Poor’s 500 Midcap
- Mean reversion, 8, 10, 11
- Merton, Robert C., 42
- Meyerson, Roger, 233
- Migrations of stock, 23–24
- Miller, Merton, 29–30, 31
- Minimum level of assets to avoid
 - margin calls, formula for, 75
- Minimum level of investment, 260–261

- Modeling:
 - stock returns, 27
 - volatility, 203
- Modigliani, Franco, 30
- Momentum:
 - description of, 10–11
 - performance and, 25, 26
- Monte Carlo analysis of leveraged
 - index portfolio, 72–74
- Monthly returns of calls, 103–106
- Mutual funds, performance of,
 - compared to index funds, 5

- Naked short calls, 111–112
- NASDAQ-100 (NDX or QQQQ):
 - boom and bust cycle of, 14
 - description of, 18
 - implied volatility of, 262
- 999-line normal distribution, 103
- Noise, 7–8
- Noyce, Robert, 1–2

- October 1987 stock market crash, 13, 54–55
- Option analysis:
 - marginal returns, 99–100
 - monthly returns of calls, 103–106
 - out-of-the-money calls, 100–103
 - overview of, 98–99
 - volatility and, 105–106
- Option pricing, Black-Scholes model
 - of, 42, 54, 83–84
- Options:
 - American-style, 164, 165, 212–213
 - break-even points for, 96
 - capturing appreciation with, 90–97
 - daily cost of, 91–94
 - dividends, interest rates, and, 87
 - European-style, 165, 213
 - as potential liabilities, 84–85
 - risk components of, 89–90
 - rolling forward, 121, 127
 - sale of, 87–89
 - as sources of leverage, 42–43
 - with strike prices, 86
 - time, volatility, and, 86–87

- Options Industry Council, 265
- Organization, definition of, 256
- Out-of-the-money (OTM) call options:
 - description of, 100–103
 - hedging costs of, 142
 - selling, 86
- Out-of-the-money (OTM) put options, 212
- Pastor, Lubos, 25
- Patterns in index, 11–12
- Performance:
 - momentum and, 25, 26
 - other factors in, 25, 27
 - rebalancing portfolios and, 50
 - small cap and value premium, 19–23
 - stock migration, 23–24
- Portfolio insurance, 54–55
- Portfolio management:
 - allocation issues, 46–50
 - alternative asset classes and, 247–250
 - dollar cost averaging and liquidity preference, 51–52
 - goal of, 44
 - rebalancing with leverage, 50–51
 - reinvesting leveraged gains, 52–56
 - sizing issues, 44–46
- Portfolios:
 - collared, 218–219
 - of Fama and French, 24
 - LEAPS calendar put spreads and, 237
 - long/short, from diagonal call spreads, 175–177, 195–196
 - protecting, 215–216, 232
 - rolled LEAPS call strategy and, 137, 139
 - See also* Leveraged index portfolios; Portfolio management; Rebalancing portfolios
- Portfolio simulations, 37
- Position liquidation, probability of, 78
- Predictability:
 - of markets, 12–14
 - of put writing with LEAPS, 244
 - of rolled LEAPS call options, 130, 143
- Producer, investing in, 249–250
- Profit:
 - bull put spreads and, 221
 - calendar put spreads and, 222
 - short-term covered calls and, 109–110
- ProShares ETF (SSO):
 - analysis of, 250–252
 - learning from, 253–255
 - multiplier leverage effect, 252–253
- Protecting portfolios, 215–216, 232
- Put options:
 - bear put spreads and, 219–220
 - cost of, 213–215
 - description of, 212
 - diversification, correlation, and, 217–218
 - futures, leverage, and, 216–217
 - protecting portfolios, 215–216
 - selling, 212–213
 - strategies using, 211
 - uses of, 225
- Put option spreads:
 - bull, 211, 220–221, 225
 - calendar, 211, 221–223, 226
 - types of, 220–221
- Put writing with LEAPS:
 - description of, 239, 246
 - expected returns, 239–241
 - scenarios, 241–245
- QQQQ (NASDAQ-100):
 - boom and bust cycle of, 14
 - description of, 18
 - implied volatility of, 262
- Random portfolio simulations, 37
- Rapid cycling strategy, weekly volatility simulation, 204–206
- Reality, facing, 256
- Rebalancing portfolios:
 - daily, 251
 - LEAPS call options, 153–154, 155
 - with leverage, 50–51
- Regime change, 14, 187–188

- Reinvestment:
 - constant asset or debt reinvestment strategy, 55–56
 - diagonal call spreads and, 198–200
 - gains from call spreads, 185–186
 - leveraged gains, 52–56
 - ProShares ETF and, 253–254
 - rolling LEAPS call strategy and, 157–158
- Renting stock, 122
- Return on investment (ROI), for leveraged investments, 38–39
- Risk:
 - counterparty, 214
 - debit and credit spreads and, 164
 - diagonal call spreads and, 197
 - exercise, 164, 221
 - leverage and, 33
 - leveraged investments and, 29–31
 - of options, 89–90
 - put-writing strategies and, 246
 - See also* Risk management
- Risk-free rate, 112
- Risk management:
 - buying deep-in-the-money and, 135
 - leveraged investments and, 29–31
 - overview of, 6–7
- Rm-Rf, 19, 22
- Roll-forward cost:
 - of call options, 128–130, 151
 - of LEAPS put options, 223–224
- Rolling LEAPS calendar spreads, 224–225
- Rolling LEAPS call options, *see* LEAPS call options
- Rolling LEAPS put options, 223–224
- Rolling option forward, 121, 127
- Rolling up LEAPS call options, 135, 137, 138, 157–158
- Russell 2000 small-cap index, 257
- Russell 2000 Value index futures, 77
- R VX (volatility index), 110–111, 118–119
- Same-day sale, 67
- Scholes, Myron, 42
- Seasonal affect to returns, 12
- Sectors:
 - blending in portfolios, 47
 - LEAPS covered calls with, 159–160
 - performance of, 146–149
 - portfolio returns of, 149–153
- Sector SPDRs, 146, 256–257, 268
- Security selection:
 - challenges of, 3
 - ETFs, 268–273
 - indexes, 266–267
 - overview of, 256–257, 258
- Selling:
 - out-of-the-money call options, 86
 - put options, 212–213
 - short options, 220
 - single option, 87–89
- Sharpe, William F., 6
- Sharpe ratio, 186
- Short call options, 164–165
- Short-term covered calls, profitability of, 109–110
- Short-term strategies, assumptions of, 190
- Siegel, Jeremy, 14
- SIMTOOLS (Excel plug-in), 233
- Size of leveraged portfolios, 44–46
- SmallCap 600 index, 257
- Small cap premium, 19–24
- SMB (Small minus Big), 19, 22
- S&P 500, *see* Standard & Poor's 500 Index
- Specialization in active investing, 4
- Speed bumps:
 - description of, 219–220
 - expected returns and hedging analysis, 229–232
 - using, 228–229
- S&P 500 ETF (SPY), 43, 48, 49, 61–62
- Spread positions, value of, 166
- SSO, *see* ProShares ETF
- Standard deviations of returns, 105
- Standard & Poor's 500 Index:
 - as accidental success, 3
 - creation of, 1
 - owning, 256–257

- patterns in, 12
- stability of, 18
- Standard & Poor's 500 Midcap (MDY):
 - description of, 60
 - rolled LEAPS call option cashflows, 154, 156
 - rolled LEAPS call option cash flows with sold call, 158–159
 - summary statistics, 61–62
- Stochastic process, 203
- Stock migration, 23–24
- Stock substitution, LEAPS call options as, 139–140
- Story stocks, 248
- Strategic plan, 255, 256
- Strategy selection, 259–260
- Strike prices:
 - call options and, 86
 - LEAPS call options and, 137, 139, 145–146
 - LEAPS covered call strategy and, 141
 - lowering, to make call options more valuable, 99–100
 - put writing with LEAPS and, 244
 - roll-forward cost and, 128
- Submartingale, 7
- Substituting futures in leveraged index portfolio, 77–79
- Sweeny, R., 12
- Swensen, David, 50
- Synthetic positions, holding, 64–67
- Synthetics:
 - creating, 59
 - leverage and, 42–43
 - margin calls and, 74–76
 - transaction costs and, 67
- Tax shield, 30
- Tech sector, 149, 151, 153, 160
- Thaler, Richard, 25
- Theta:
 - diagonal call spreads and, 177–180
 - of rolling LEAPS call options, 124, 125
- Three-factor model, 19, 106
- Time:
 - extending, to make call options more valuable, 99–100
 - nonlinear relationship between price and, 87
- Time decay:
 - of LEAPS call options, 122
 - measuring, for call options, 91–92
 - as theta, 124, 125
- Time value, 145
- Titman, Sheridan, 25
- Trading strategy, noise and, 8
- Transaction costs:
 - call spreads and, 200, 201, 208–209
 - for leveraged index portfolio, 67–68
 - rebalancing and, 251–252
- Trump, Donald, 36
- Ultra S&P 500 ProShares ETF (SSO):
 - analysis of, 250–252
 - learning from, 253–255
 - multiplier leverage effect, 252–253
- Underwater investments, 34–38
- Uneven appreciation, 96–97
- Unpredictability of markets, 12–14
- Upward drift, 7–8, 9
- Value-at-Risk metric, 45
- Value premium, 19–24
- Vanguard S&P 500 Fund, 2–3
- Vega, 124, 125
- Vertical spreads:
 - appreciation and, 166–168
 - description of, 164, 165–166, 189
 - early exit from, 170–171
 - staggered exit from, 171–173
 - volatility skew and, 169–170
- VIX (volatility index):
 - call options and, 105–106, 110
 - description of, 17
 - modifications to covered call strategy based on, 114–117
- Volatility:
 - adding to leveraged index portfolio, 68–72
 - calendar call spreads and, 181
 - call options and, 105–106

Volatility (*Continued*)

description of, 14–17
diagonal call spreads and, 178, 180
forecasting returns and, 27
hedging cost and, 260
LEAPS call options and, 122–123,
139, 140
of leveraged index portfolio, 63
modeling, 203
options and, 86–87
profit margin and, 85
rebalancing portfolios and, 50
roll-forward cost and, 128–130
weekly simulation, rapid cycling
strategy, 204–206

See also Implied volatility; VIX
(volatility index)

Volatility skew:

bull call spreads and, 169–170
call options and, 94–96
collars and, 218
LEAPS call options and, 127

Weekly returns, generating, 102

Wilshire Value ETF, 38

Wu, Yangru, 11

XLB (materials index), 159–160

Zell, Sam, 36