

Index

- 2-for-1 ratio call spread, 538–40
- 2-for-1 ratio put spread, 540–42
- 3-for-1 ratios, 542–43
- 3-for-2 ratios, 542–43
- “2000 Preliminary Report for
SABMiller, The,” 374
- above-market orders, 39
- accrued interest, 234
- adjusted liabilities, 87
- adjusted net capital (ANC), 87, 88
- aggressive orders, 55
- Aggressive stocks, 159
- algorithmic trading, 49. *See also* trade
matching algorithms
- algo strategies, 134
- alkylation, 321
- alpha, 165
- alternative investment markets, 368–69,
399
 - economic indicators, 397–99
 - residential housing futures, 380–97
 - weather, 369–80
- aluminum, 328, 329
- American Petroleum Institute, 317
- American Stock Exchange (AMEX), 19,
20, 142, 145
- American terms, 106–7, 119
- anticipated cash flow, 216
- Aquila Energy, 371
- arbitrage, 120–24, 151–52, 335–37
- arbitrage breakdown, 337–40
- arbitration, 98
- ascending triangles, 435, 436–37, 452,
455
- Asian currency crisis, 185
- asset and liability (A&L) management,
202–3
- asset class
 - commodity markets, 280–81
 - residential housing futures, 391–92
- Atlantic Charter of 1941, 104
- at-the-money (ATM) call option, 507
- auction schedule, for U.S. Treasuries,
235
- Audit Department. *See* CME Audit
Department
- Australian dollar, 115, 132
- automated bookkeeping processes, 349
- automated trading systems (ATSs), 57
- average daily volume (ADV), 405–6
- basis spreads, 537, 543
- back-to-back notes, 216
- backwardation, 13, 333, 334, 335, 341
- balance sheet, supply and demand,
294–96
- Bank Charter Act of 1844 (England),
102
- Bank for International Settlements (BIS),
18, 20, 131, 194
- Bank of England, 102, 330
- bankruptcy. *See* U.S. Bankruptcy Code
- bankruptcy risk, 291
- barbells, 264–65
- bar charts, 422
- Barclays, 133
- Barclays Capital U.S. Aggregate Bond
Index, 165, 166, 285, 287
- Barclays Capital U.S. Corporate
High-Yield Bond Index, 285
- Barone-Adesi, Giovanni, 482
- Barone-Adesi/Whaley option pricing
model, 482
- barrow, 311
- base gas, 326

- baseline futures hedge, 568–69
- base metal, 328
- basis, 12, 120, 148
 - cheapest-to-deliver, 244–45
 - optionality in, 250–51
 - When Issued, 235
- basis convergence, 149–50
- basis point value (BPV), 252
 - Eurodollar futures, 190, 208–9, 210, 212, 214
 - macro hedging, 263, 264, 265
 - short-term rate of return, 261–62
 - spread ratio, 274–75
- basis point value weighted hedge, 255–60
- basis swap, 78, 348
- Basle Accord of 1988, 8, 135
- bearish trends, 423, 424, 425, 426, 427
- Bear Stearns, 388
- bear vertical call spread, 520
- bear vertical put spread, 521–22
- Bell Journal of Economics and Management Science*, 481
- below-market orders, 39
- Bernanke, Ben, 388
- beta, 166–67
- binomial option pricing model, 482, 487–94
- biomass energy, 316
- Black, Fisher, 481–82
- Black option pricing model, 482–86
- Black-Scholes-Merton option pricing model, 481, 482
- Black-Scholes option pricing model, 114, 475, 481
- block trade facility, 76–77
- boar, 311
- boar odor, 311
- bond delivery grade, 27–33
- Bond equivalent yield (BEY), 186
- Boston Options Exchange (BOX), 19, 20
- box size, 455–56
- Brazilian real, 115
- breakaway gap, 441–42
- breeding
 - cattle, 304–5
 - hogs, 311
- Brent, 317–18
- Bretton Woods Agreement, 103–6, 115, 135
- briefing.com, 402
- British Bankers Association (BBA), 24
- British Bankers Association Interest Settlement Rate, 170
- British pound, 6
 - currency futures, 22, 24
 - exchange-traded currency futures, 115, 116, 117, 119, 124–26
 - foreign exchange marketplace, 102
- brokers. *See* floor brokers and traders
- Brussels Compromise of 1993, 106
- Buffalo, New York, 4–5
- bull, 304
- bullets, 264–65
- bullion, 330
- bullish trends, 423, 424, 426
- bull vertical call spread, 518–20, 524, 525
- bull vertical put spread, 522–23, 524, 525
- bundles, 179–80, 226
- Bureau of Economic Analysis (BEA), 414
- Bureau of Labor Statistics (BLS), 397, 402, 412, 413
- Business Conduct Committee, 97–98
- butterflies, 79n, 560–62, 565
- buy-and-hold strategy, 147
- buy-sell swap, 111
- calf, 304, 306
- call markets, 71
- call options, 2–3, 113–15, 474, 572–74
- call spread
 - 2-for-1 ratio, 538–40
 - bear vertical, 520
 - bull vertical, 518–20, 524, 525
 - diagonal, 532–33
- Canadian dollar, 6, 22, 115, 132
- candlestick charts, 422–23
- capital asset pricing model (CAPM), 158–59, 286, 420
- capital charges, 87
- capital efficiencies, through
 - cross-margining, 349

- capital requirements, for CME Clearing House members, 87–88
- carry, 244, 260–61. *See also* negative carry; positive carry
- carrying charge market, 335
- Carter, Jimmy, 7
- Carvill America, 377
- Carvill Hurricane Index, 376
- cascading stops, 61–63
- Case, Karl E., 388, 400n
- Case, Shiller Weiss, Inc., 389, 393–95
- cash flows
 - anticipated, 216
 - swaps, 209–12, 213
- cash market biases, 245
- cash settlement, of futures contracts, 11–15
- cash settlement mechanism, 141–42
- cattle (live), 304–11, 358–59
- cattle inventory report, 306
- CBOT Holdings, Inc., 80
- CCP 12, 89
- Central banks, 104
- centralized counterparty clearing, 349–50
- central limit order book (CLOB), 51
- channels, 426–27. *See also* sideways channels
- Charter Bank Act (Britain), 330
- chart interpretation, 422–23
- chartist, 422
- cheapest-to-deliver (CTD), 191, 229n, 242–48
 - basis optionality and, 250–51
 - basis point value weighted hedge, 255–60
 - IRR and, 248–50
 - macro hedging, 264
 - short-term rate of return, 261, 262
 - spread ratio, 274–75
- Chicago, 1, 5, 10–11
- Chicago Board of Trade (CBOT), 1
 - capital requirements, 88
 - CME Clearing House and, 80
 - CME merger, 277n
 - commodity markets, 279, 281
 - energy products, 314
 - Eurodollar futures, 189
 - futures contracts, 5–7, 10
 - grain markets, 294, 295, 297, 298, 299, 334, 351–57
 - hurricane products, 376
 - orders, 43
 - stock index futures, 34
 - Treasury futures, 27
- Chicago Board Options Exchange (CBOE), 19, 20
- Chicago Butter & Egg Board, 5, 80
- Chicago Mercantile Exchange (CME), 1
 - capital requirements, 88
 - CBOT merger, 277n
 - Chicago Butter & Egg Board and, 80
 - CME Clearing House and, 41, 42
 - CME Globex and, 46
 - commodity markets, 279, 281, 304
 - currency futures, 21, 22
 - Eurodollar futures, 169–70, 189, 203
 - free-floating currencies, 106
 - futures contracts, 5–6, 9–10
 - IMM and, 228n
 - livestock markets, 358–60
 - orders, 43
 - Standard & Poor's 500 Index, 137, 138
 - stock index futures, 33–34
 - tradable indices, 395
- Chicago Mercantile Exchange Inc., 80
- Chicago Produce Exchange (CPE), 5
- Chicago Trust Co., 203
- Citigroup, 133
- cleared-only contracts, 77–78
- Clearing House Division. *See* CME Clearing House
- CME Audit Department, 86, 88, 90, 97, 98
- CME Clearing House, 41–42, 80, 99–100
 - cleared-only contracts, 77, 78
 - CME ClearPort and, 347, 348, 349
 - currency futures, 125
 - defaults, 91–95
 - Disaster Recovery & Business Continuity Plan, 96
 - Eurodollar futures, 189
 - exchange for physicals, 74, 75

- CME Clearing House (*continued*)
 financial and regulatory
 information sharing, 98–99
 financial safeguards, 81–88
 financial surveillance, 88–91
 foreign exchange markets, 135
 pit trading, 46
 resources, 95–96
 rule enforcement, 96–98
 stock index futures, 157
- CME ClearPort, 77, 78
 commodity markets, 279
 OTC clearing facility, 347–50
- CME Globex, 3, 9, 10
 cascading stops, 63
 CME Clearing House and, 80
 customers, 79n
 electronic trading, 37, 133, 134
 energy products, 314
 Eurodollar futures, 170
 exchange-traded currency futures,
 115, 130
 ex-pit trading, 74, 76, 77, 78
 fat finger protections, 61
 financial surveillance tools, 97
 implied spread functionality, 66,
 67, 68
 limit order book, 51
 market with protection, 54, 55
 matching orders, 53, 54
 NFPs, 398
 options markets, 69, 70, 71, 73, 472
 orders, 44, 46–50
 stock index futures, 34, 138, 145
 TED spreads, 189
 trade matching algorithms, 50
- CME Group, 1, 2
 alternative investment markets, 369
 baseline futures hedge, 568
 capital requirements, 87, 88
 cascading stops, 62
 CBOT and CME merger, 277n
 CME Clearing House and, 42, 80, 95
 CME ClearPort and, 349
 CME Globex and, 46, 49, 50
 commodity markets, 279, 281, 294
 credit default swaps, 204
 currency futures, 22
 defaults, 91, 92–93, 94–95
 Disaster Recovery & Business
 Continuity Plan, 96
 Division of Market Regulation, 90,
 96–97, 98
 economic indicators, 401
 electronic trading, 37, 38, 133, 134
 energy products, 314
 Eurodollar futures, 169
 exchange-traded currency futures,
 115, 120, 127, 129, 130
 ex-pit trading, 73, 75, 76, 77
 futures contracts, 2, 3, 9, 10–11
 grain markets, 294
 information sharing, 99
 intraday monitoring, 90
 MROC, 98
 NFPs, 398
 options, 472, 473
 options markets, 72
 orders, 43, 44
 performance bonds, 84
 precious metals, 327
 pro rata allocation, 57
 short-term interest rate futures, 24
 stock index futures, 138, 144,
 149–50, 167
 TED spreads, 184, 185, 189
 trade matching algorithms, 50
 weather, 369–70, 371, 376, 380
- CME Group Chicago HDD Index, 375
- CME Holdings, 80
- CME Housing futures and options, 381,
 392–93, 396
- CME Hurricane Index
 futures and options, 378, 380
 hurricane intensity measurement,
 377–78, 379
 hurricane products, 376
- CME Lean Hog futures, 314
- CME Lean Hog Index, 314
- CME Live Cattle futures, 307
- CME Rulebook, 79n, 93, 98
- coal, 316
- coins, 330
- coking, 321
- collar strategy, 578–79
- combination colored packs, 226

*Index***591**

- combination trading, 70
- commercial gold, 330
- commodities trading. *See* Forward contracts; Futures contracts; Futures transactions
- Commodity Exchange (COMEX), 1
 - capital requirements, 88
 - CME Clearing House and, 80
 - commodity markets, 279, 281
 - futures contracts, 7, 10
 - precious metals, 327, 330, 331, 337, 364–67
- Commodity Exchange Act (CEA), 94, 96, 292
- Commodity Futures Modernization Act (CFMA), 96
- Commodity Futures Trading
 - Commission (CFTC), 4
 - CME Clearing House and, 87, 88, 93, 94
 - electronic trading, 134
 - stock index futures, 137
 - weather, 371
- commodity indexes, 281–84
- commodity investing industry, 292–93
- commodity markets, 279, 350–51
 - asset class, 280–81
 - CME ClearPort OTC clearing facility, 347–50
 - commodity indexes, 281–84
 - commodity investing industry, 292–93
 - diversification benefit, 285–88
 - energy products, 314, 316–27
 - forward curve, 331–42
 - grain markets, 294–303
 - hedge against inflation, 284–85
 - intermarket commodity spreading, 342–47
 - livestock markets, 304–14, 315
 - perfect competition, 280
 - precious metals, 327–31
 - return attractiveness, 288–91
 - specifications, 351–67
- commodity pool operator (CPO), 292
- commodity trading advisors (CTAs), 132, 292–93
- common gap, 441
- Comprehensive Electricity Competition Act, 399n
- concentration performance bond, 85
- condors, 562–65
- conservative stocks, 159
- consolidation patterns, 429, 435–40
- Constant Maturity Treasury (CMT), 154, 156, 181
- Consumer Price Index (CPI), 277
 - commodity markets, 284–85, 289
 - economic indicators, 401, 404, 405, 413, 414
- contango, 13, 333, 334, 335, 341
- Continental Illinois Bank crisis (1984), 184–85
- Continuous Linked Settlement (CLS), 22, 119–20
- contract stacking, 223, 226
- convenience yields, 337–38
- convergence, 149–50
- conversion factor, 191, 239, 242
- conversion factor biases, 246
- conversion factor invoicing system, 239–42
- conversion factor weighted hedge, 254–55
- convexity, 212, 214–15, 508–9, 511, 572
- cooling degree day (CDD) futures, 370, 371–74
- copper, 328, 330, 331
- corn, 295, 296, 334, 351–52
- corn skew, 503
- corporate debt markets, Treasury
 - futures hedging in, 266–69
- corrective waves, 448–55
- correlation, 408–11
- cost of carry, 12–13, 332–33
- cost of carrying pricing, 151–52
- coupon-bearing securities, 231–32
 - accrued interest and settlement practices, 234
 - price/yield relationship, 232
 - quotation practices, 232–33
 - repo financing, 238
 - risk measurement, 252–53
 - “roll” and liquidity, 237–38
 - “run,” 236–37
 - Treasury auction cycle, 234–36

- covered call writing, 573
- cow, 304
- cow-calf stage, 305
- Cox, John, 482, 487
- Cox-Ross-Rubinstein (CRR) option
 - pricing model, 482, 487–94
- CPSS/IOSCO Task Force on Securities Settlement Systems, 82
- cracking, 321
- crack spreads, 343–45
- credit default swap (CDS), 204
- credit quality, of interest rate swaps, 203–4
- credit risk, for interest rate swaps, 200
- cross rates, 108–10, 115
- cross-margining, 85–86, 349
- crossover point, 250
- crowd, 45
- crude oil, 316, 317–23, 339, 340, 344–45, 360–61
- crush spreads, 342–43
- currency futures, 6, 21–24, 101, 135–36
 - Bretton Woods Agreement, 103–6
 - deliverable versus non-deliverable, 119–20
 - exchange-traded futures and options, 115–30
 - fair value concept and arbitrage, 120–24
 - foreign exchange market, evolution of, 101–3
 - foreign exchange market, growth and trends, 130–35
 - hedging with, 126–30
 - mechanics of, 115–19
 - options, 130, 473
 - OTC trading vehicles, 106–15
 - spread trading, 124–26
 - See* foreign currency futures
- currency options, OTC, 112–15
- Currenex, 133
- customer account default, 91–92
- customer funds, segregation of, 86–87
- Customer protection, by CME Clearing House, 95–96
- cyclical spread patterns, for stock index futures, 153–56
- Czech koruna, 115
- daily high-low range, 408
- daily net change, 407–11
- Danish krone, 132
- DCO Risk Committee, 89
- debit horizontal, 526
- debit spread, 520
- defaults, 91–95
- deliverable currency futures, 119–20
- delivery grade, of bonds and notes, 27–33
- delivery practices, for Treasury futures, 238–51
- delta hedging, 71–72
- delta measures, 505–8, 513
- delta-neutral hedge, 579–81
- derivatives. *See* OTC derivatives
- Derivatives Clearing Organization (DCO), 96
- derivatives markets, regulatory landscape of, 15–21
- descending triangles, 435, 437, 438–39, 452, 455
- Deutsche Bank, 133
- Deutsche Bank Liquid Commodity Index (DBLCI), 283
- Deutsche Bourse, 9
- diagonal call spread, 532–33
- diagonal put spread, 533–36
- diagonal spreads, 531–32, 536–37
- diagonal (wedge) triangles, 435, 440, 446, 447
- Disaster Recovery & Business Continuity Plan, 96
- discount factors, calculation of, 206, 227, 228, 230
- distillation, 318, 321
- diversification benefit, of commodity markets, 285–88
- Division of Market Regulation, 90, 96–97, 98
- Donchian, Dick, 292
- dot-com bubble, 185
- double threes, 448, 452–55
- double top or bottom, 429, 432, 433
- Dow, Charles, 419–21, 444
- Dow Jones Industrial Average (DJIA), 6, 21, 420

- stock index futures, 152, 153
- stock index futures, 33, 34, 35
- Dow Jones-UBS Commodity Index (DJ-UBS Index), 281, 282, 283, 284
 - diversification benefit, 285, 286, 287
 - return attractiveness, 290
- Dow theory, 419–22
- Drake, Edwin, 317
- Dresdner, 133
- drop, 305, 313
- Durable Goods Orders, 401, 413–14
- duration, 252–53, 265–66
- Earth Satellite Corporation (EarthSat), 371
- EBS, 133
- economic benefits, of residential housing futures, 393–95
- economic indicators, 401, 412
 - alternative investment markets, 397–99
 - descriptions of, 412–14
 - reasons for, 402–4
 - trading volumes, 404–7
 - volatility: daily net change, 407–11
- effective date, 196
- electronic communication networks (ECNs), 133, 145
- electronic trading, of futures, 37–39
- eligible contract participants (ECPs), 77, 284
- Elizabeth I (England), 102
- Elliott, Ralph Nelson, 420, 421, 422, 438, 443–44, 445, 451
- Elliott Wave Principle: Key to Market Behavior* (Elliott), 443
- Elliott wave theory, 421, 436, 443
 - corrective waves, 448–55
 - fives and threes, 443–44
 - impulse wave variations, 444–47
- E-micro currency contracts, 115
- E-mini DJIA, 34, 139, 141
- E-mini Nasdaq 100, 33, 34, 139, 141, 143, 146, 147, 157
- E-mini S&P 500 futures, 33–34, 138
 - average daily volume, 405, 406
 - beta, 166
 - CME Globex, 47–48
 - daily net change, 407, 408, 409, 411
 - economic indicators, 415n
 - fat finger protections, 61
 - intermarket spread, 157
 - limit order book, 51–53
 - market with protection, 54
 - pricing, 148
 - quotation practices, 140
 - specifications, 139
 - stock index futures, 142–47
 - stock index hedge ratio, 160–61
- E-mini S&P Mid-Cap 400, 34, 139, 141
- E-mini stock index futures, 142–47
- employment reports, 397
- energy consumption (U.S.), 316
- energy products, 314, 316
 - energy sources and uses, 316
 - forward curve, 339, 340
 - natural gas, 325–27
 - NYMEX, 360–64
 - petroleum and petroleum byproducts, 317–24
- energy sources and uses, 316
- enforcement powers, of CME Clearing House, 97–98
- Enron Capital & Trade Resources, 371
- equity index spread performance, 155
- esoteric weather products, 380
- eSpeed, 133
- Establishment Survey, 397
- EUREX, 9
- Euro
 - currency futures, 22, 24
 - exchange-traded currency futures, 121, 127–29
 - notional value, 132
- Eurodollar, 6
- Eurodollar curve, interpolation of, 216–19, 220
- Eurodollar futures, 24, 25, 26–27, 169, 215
 - activity (November 30, 2004), 172–73
 - average daily volume, 405, 406
 - butterfly spreads, 79n
 - daily net change, 407, 408, 409
 - economic indicators, 415n

- Euro (*continued*)
 - hedging techniques, 206, 208–15
 - implied spread functionality, 67
 - interest rate swap market, 193–204
 - pricing relationship, 204–6, 207
 - specifications, 171
 - swap pricing and hedging, 215–28
 - TED spreads, 184–93
 - trading spreads, 64–65
 - yield curve shape, speculation on, 180–84
- Eurodollar futures market, 169–70
 - implied forward rates (IFRs), 175–76
 - packs and bundles, 179–80
 - pricing and quotation, 170, 171, 172–73
 - strips, 178–79
 - yield curve reflection of, 177–78
 - yield curve shape, 170–71, 174–75
- Eurodollar Interbank Time Deposit, 170
- EuroFX futures, 73
 - exchange-traded currency futures, 115, 116, 117, 119, 121–24, 127
 - options on, 508–9
- Euronext, 9
- European Currency Unit (ECU), 106
- European Economic Community (EEC), 106
- European Monetary System (EMS), 106
- European terms, 106–7, 119
- exchange for physicals (EFPs), 74–76, 77, 133
- exchange for risk (EFR), 74
- exchange for swap (EFS), 74, 77
- exchange of futures for related positions (EFRPs), 74, 76
- exchange rates, 107–8
- Exchange Rule 606, 98
- Exchange Rulebook. *See* CME Rulebook
- exchange-traded currency futures, 115
 - deliverable versus non-deliverable, 119–20
 - fair value concept and arbitrage, 120–24
 - hedging with, 126–30
 - mechanics of, 115–19
 - options on, 130
 - spread trading, 124–26
- exchange-traded funds (ETFs), 15, 21, 75, 76, 142–47
- exhaustion gap, 442–43
- expanding triangles, 435, 439–40
- expectations, expressed in pricing curves, 333–35
- expiration dates, contract stacking by, 223, 226
- ex-pit trading, 73–78
- extrinsic value, 477–78
- failure, 447
- fair value, 476
 - concept, 120–24
 - stock index futures, 148–49, 150
- fan-up, 428
- farrowed, 311, 312
- fat finger protection, 60–61
- Federal Open Market Committee (FOMC), 153, 181, 183, 270, 272, 402
- Federal Reserve, 7
 - commodity markets, 284
 - NFPs, 397, 412
 - Regulation T, 143
 - residential housing futures, 386–88, 399–400n
 - STIRs, 229n
 - swap spreads, 188
 - yield curve, 271
 - yield curve shape, 181
- Federal Reserve Flow of Funds data, 380
- feed grains. *See* grain markets
- feedlot stage, 305
- FIFO (first in, first out), 38
 - orders, 56–57
 - pro rata allocations, 58, 59
 - resting orders, 56
- fifth wave extension, 446, 447
- fifth wave failure, 447, 448
- filled gap, 441
- filters, 427
- financial futures contracts, 1, 21
 - bond and note delivery grade, 27–33
 - currency futures, 21–24

- long-term interest rate futures, 27
- origins and development of, 6–8
- short-term interest rate futures, 24–27
- stock index futures, 33–35
- financial information sharing, 98–99
- financial integrity, 81–82
- financial safeguards
 - CME Clearing House, 81–88
 - futures transactions, 41–42
- financial sureties, 349–50
- financial surveillance, 88–91
- financial surveillance tools, 97
- finishing stage
 - cattle, 305
 - hogs, 311–12
- Fiserv CSW Inc. (CSW), 381, 388, 389, 392, 400n
- fives and threes, 421, 422, 443–44
- fixed coupon rate, 219, 221
- Fixed Income Clearing Corporation, 86
- fixed interest rate, 194, 197–98, 210, 211
- flags, 435–36
- flats, 448, 449–51, 453, 454
- floating interest rate, 194, 197–98, 210, 211
- floor brokers and traders, 36–37, 45
- food grains. *See* grain markets
- forecast error, 403–4, 410, 411
- forecasts
 - hedging and, 577–78
 - option trading strategies and, 565–66
- foreign exchange futures (FX futures). *See* currency futures
- foreign exchange market
 - evolution of, 101–3
 - growth and trends, 130–35
 - See also* currency futures
- foreign exchange rates, 107–8
- foreign exchange swaps, 111–12
- Formal Trade Crossing Requirements, 71
- forward contracts, 4–5, 110–11
- forward curve, 331–42
- forward FX swap, 111
- forward points, 121
- forward swap, 196
- fractional distillation, 318, 321
- free-floating currencies, 105–6
- Friedman, Milton, 115
- frost, 380
- fundamental analysis, 417–18
- fungible, 2, 280
- futures commission merchant (FCM), 40
- futures contracts, 2–4
 - Chicago, 10–11
 - derivatives markets, regulatory landscape of, 15–21
 - historical development of, 4–10
 - physical delivery versus cash settlement, 11–15
 - pricing on, 481–82
 - regulatory landscape of, 16
 - See also* alternative investment markets; CME Clearing House; commodity markets; currency futures; economic indicators; Eurodollar futures; exchange-traded currency futures; financial futures contracts; hedging; options; option spreads; option trading strategies; stock index futures; technical analysis; trade matching algorithms; U.S. Treasury futures
- futures margins, 40–41
- futures markets, 1–2, 418–19
- futures spread movement, 536
- futures transactions, 35–36
 - acceptable orders, 39–40
 - electronic trading, 37–39
 - financial safeguards, 41–42
 - margin requirements, 40–41
 - multilateral clearing system, 40
 - open outcry, 36–37
- Fxall, 133
- FX Connect, 133
- FX futures. *See* currency futures
- FX swaps, 111–12
- gamma measures, 505, 508–10, 513
- Gann, W. D., 425
- gap, 441
- gasoline, 323–24, 338–39, 344–45, 362–63
- general Electric (GE) corporate bond, 267

- generic swap agreement, terms of, 195–96
- geothermal energy, 316
- German mark, 6
- gilt, 311
- gold, 327–28, 329–30
 - currency futures and, 101–2, 104
 - COMEX, 364–65
 - commodity markets, 288–89
 - real value of, 288
- gold bars, 330
- gold coins, 330
- gold futures, 337
- Goldman Sachs, 146
- gold reserves, 330
- gold standard, 102–3
- gold-to-silver ratio, 346–47
- government-sponsored entities (GSEs), 393
- grain forward contracts, 4–5
- grain markets, 294–303
 - CBOT, 351–57
 - forward curve, 338
- grains, categorization of, 294
- Great Debasement, 102
- Great Depression, 103
- Great Society, 104
- Greenspan, Alan, 19, 386–87
- gross domestic product (GDP), 401, 414
- Group of Thirty, 82
- guts
 - long, 553–56
 - short, 556–58
 - strangles and straddles, 558–59
- head, 304
- head and shoulders (H&S) formation, 429–31
- heating degree day (HDD) futures, 370, 371–75
- heating oil, 323–24, 338–39, 344–45, 363–64
- hedge funds, 134
- hedge ratio (HR), 127
 - basis point value weighted hedge, 255–60
 - calculation of, 213, 267
 - CTD and, 229n
 - Eurodollar futures, 191
 - macro hedging, 264, 265
 - stock index, 159–63
 - U.S. Treasury futures, 254,
- hedges, 4
 - basis point value, 255–60
 - conversion factor weighted 254–55
- hedging, 568, 581–82
 - baseline futures hedge, 568–69
 - call options, yield enhancement with, 572–74
 - collar strategy, 578–79
 - commodity markets, 284–85
 - corporate debt markets, 266–69
 - currency futures, 126–30
 - delta, 71–72
 - delta-neutral hedge, 579–81
 - Eurodollar futures, 206, 208–15
 - in-the-money and out-of-the-money options, 575–77
 - macro, 262–69
 - put options, buying protection with, 569–72
 - stock index futures, 158–63
 - strategies and forecasts, 577–78
 - swap cash flows, 209–12, 213
 - swaps, 221–23, 224, 225, 226–28
 - weather futures, 375
- heifer, 304
- Henry Hub, 325, 327, 348, 361–62
- high-cap stock market cycles, 154
- historic volatility, 494–97
- hogs, lean, 311–14, 359–60
- holding period, 147
- home finance trends, 386
- Hong Kong dollar, 132
- horizontal put spread, 529–30
- horizontal spreads, 526–29
 - diagonal call spread, 532–33
 - diagonal put spread, 533–36
 - diagonal spread, 531–32
 - futures spread movement, 536
 - horizontal put spread, 529–30
 - underlying futures spread, 531
 - verticals and diagonals, 536–37
- Hot Spot, 133
- Housing Affordability Index, 383, 384
- housing affordability, 382–84

- housing agencies, 185
- housing boom and bust, 382
- housing futures. *See* residential housing futures
- housing stock, 384–86
- Hungarian forint, 115
- Hunt Brothers, 288
- Hurricane Andrew, 376
- Hurricane Charley, 378
- hurricane intensity measurement, 377–78, 379
- Hurricane Katrina, 376, 378
- hurricane products, 376
- hydroelectric energy, 316
- IBM, 194, 229n
- ICE Futures, 9
- IMM Index, 24, 170
- IMM swap, 205
- implied forward rates (IFRs), 175–76, 198–99
- implied repo rate (IRR), 248–50
- implied spread functionality, 66–69
- implied volatility, 494–95, 500–502
- impulse waves
 - fives and threes, 421, 422, 443–44
 - variations on, 444–47
- income augmentation, 572–74
- industrial gold, 330
- industrial silver, 331
- inflation
 - commodity correlation with, 285
 - gold and, 288
 - hedging against, 284–85
- Inflation-Indexed Treasury Securities, 277
- inflation risk, 291
- information sharing
 - CME Clearing House, 89
 - financial and regulatory, 98–99
- ingots, 330, 331
- initial margins, 40
- insolvency law protections, 93–95
- inspection, 89
- Institute for Supply Management (ISM)
 - Index, 401, 407, 413
- institutional risk managers, 8
- integer restrictions, 57–58
- Intercontinental Exchange (ICE), 318
- IntercontinentalExchange (ICE), 9
- interest rate derivatives marketplace
 - global growth of, 194
 - turnover in, 195
- interest rate futures, 6
 - long-term, 27
 - short-term, 24–27
- interest rates, 7–8
- interest rate swap market, 193–204
- interest rate swaps (IRSs), 6, 112, 210
- intermarket commodity spreading, 342–47
- Intermarket Financial Surveillance Group (IFSG), 89, 99
- intermarket spread, weighting of, 156–57
- Intermarket Surveillance Group (ISG), 99
- intermediate-term trends, 420–21
- International Crude Oil Market Handbook* (2008), 318
- International Information Sharing Memorandum of Understanding, 89
- International Member Fund (IMF), 104
- International Monetary Market (IMM), 6, 205, 228n
- International Petroleum Exchange (IPE), 9, 318
- International Securities Exchange (ISE), 19, 20
- International Swap and Derivatives Association (ISDA), 199, 200
- interpolation, 216–19, 220
- in-the-money options, 113, 474, 507, 575–77
- intraday monitoring, 89–90
- intraday trading techniques, 455–59
- intrinsic value, 476
- iridium, 328
- iron, 328
- irregular flat, 449, 450–51
- ISM Index, 401, 407, 413
- Israeli shekel, 115

- Japanese candlestick charts, 422–23
 Japanese yen, 6, 22, 23, 24
 exchange-traded currency futures,
 115, 116, 117, 118, 119, 124–26,
 129–30
 historic volatility, 499, 500
 implied volatility, 501, 502
 notional value, 132
 skew, 504
 jewelry, 331
 Johnson, Lyndon B., 7, 104
 Joint Audit Committee (JAC), 89, 99
Journal of Financial Economics, 481–82
Journal of Political Economy, 481

 Kansas City Board of Trade (KCBT),
 137, 297
 Kantha, Lakshmi, 377
 key reversal day, 434
 Koch Supply & Trading 371
 Kohn, Don, 387

 lead, 328, 330
 Lead Market Maker (LMM), 59–60
 lean hogs, 311–14, 359–60
 Legal Department (CME Clearing
 House), 97
 Lehman Aggregate Bond Index, 391,
 392
 Lehman Government/Corporate Bond
 Index, 285
 Lehman High-Yield Bond Index, 285
 leverage, for stock index futures,
 143–44
 leverage comparisons, 559
 limit bid order, 50
 limit order, 39, 50
 limit order book, 50–53
 limit sell order, 50–51
 liquefied natural gas (LNG), 325
 liquidity, 237–38
 liquid petroleum gas (LPG), 321
 live cattle, 304–11, 358–59
 livestock markets, 304–14
 CME, 358–60
 forward curve, 338
 local traders, 44
 log-normal distribution, 494

 London Conference (1933), 103
 London Interbank Offer Rate (LIBOR),
 64
 Eurodollar futures, 196, 198, 205,
 208, 216–17, 230n
 forward curve, 332
 stock index futures, 162, 165, 166
 yield comparisons, 185
 London International Financial Futures
 Exchange (LIFFE), 9
 London Metals Exchange (LME), 329
 long butterflies, 565
 long condor, 562–65
 long guts, 553–56
 long hedge, 129
 long put hedge, 572, 575
 long straddle, 544–47
 long strangle, 549–51
 long-term interest rate futures, 27
 long-term trends, 420–21

 M1 money supply, 402
 Macaulay duration, 253
 macro hedging, 262–69
 maintenance margins, 41
Managed Account Reports (MAR), 293
 managed futures, 292
 margin, 83
 margin requirements, for futures, 40–41
 market break, 432–33
 market gaps, 435
 market if touched order, 39
 market indicators. *See* economic
 indicators
 marketings, 306
 Market Maker Allocation, 59–60, 71
 market makers, 36–37, 38
 market on close (MOC) orders, 40
 market on open (MOO) orders, 40
 market orders, 39
 Market Regulation Department. *See*
 Division of Market Regulation
 Market Regulation Oversight
 Committee (MROC), 98
 market regulation, by CME Clearing
 House, 90
 market turner, 57, 58–59
 market with protection, 54–55

- mark-to-market (MTM), 14, 40, 41, 82–83, 119, 349
- Marthaler, Tom, 203
- mass quotes, 69–70
- matching. *See* trade matching
 - algorithms
- matching orders, 46, 53–54
- mathematical pricing models, 481
- McKinley, William, 346–47
- MCSI EAFE, 166
- mean reversion, 497–500
- meatpacking plants, 305, 312–13
- Melamed, Leo, 5–6, 106, 115, 135
- Merrill Lynch, 277n
- Merrill Lynch Commodity Index extra (MLCX), 283
- Merton, Robert, 481
- metals. *See* precious metals
- metropolitan statistical areas (MSAs), 395, 397
- Mexican peso, 6, 115
- minimum allocations, 57, 58
- mining, 328, 330–31
- Minneapolis Grain Exchange (MGE), 297
- minor trends, 420–21
- modified duration, 253
- money market instruments, BPV of, 209
- Money market yields (MMYs), 185–86
- money supply, 402
- Moody's A Corporate Bond Index, 154, 156
- moving average (MA), 459–71
- MSCI EAFE, 33
- multilateral clearing system, 40

- Nasdaq, 142, 145
- Nasdaq 100, 6, 21, 33, 34, 35, 152, 153
- Nasdaq Global Select Market, 80
- National Association of Realtors (NAR), 382, 383, 384, 391
- National Futures Association (NFA), 4, 99
- natural gas, 316, 322, 325–27, 361–62
- nearly futures contracts, 4–5
- near-term trends, 420–21
- neckline, 430–31
- negative carry, 13, 120, 148, 260–61

- neutral trends, 423
- Newton, Sir Isaac, 102
- New York Board of Trade (NYBOT), 9
- New York Mercantile Exchange (NYMEX), 1, 10
 - capital requirements, 88
 - cleared-only contracts, 77
 - CME Clearing House, 80
 - CME ClearPort, 347
 - commodity markets, 279, 281
 - energy products, 314, 318, 322–23, 327, 360–64
 - orders, 43
- New York Stock Exchange (NYSE), 9, 142, 145
- New York Stock Exchange Arca (NYSE Arca), 20
- New Zealand dollar, 115, 132
- nickel, 328, 330
- Nixon, Richard M., 104, 105
- noble metals, 328
- non-deliverable currency futures, 119–20
- non-deliverable forwards (NDFs), 111, 120
- Nonfarm Payrolls (NFPs)
 - economic indicators, 401, 402, 407, 410, 411, 412
 - residential housing futures, 397–99
 - yield curve shape, 184
- non-par payment (NPP), 210, 214–15
- non-par swaps, 196
- nonpattern gap, 441
- normal distribution, 494
- normal flat correction, 449
- Norwegian krone, 115, 132
- note delivery grade, 27–33
- notification, 89
- notional value, 17, 18–19
- novation, 40
- nuclear energy, 316
- NYMEX Holdings, Inc., 77, 347

- obligations, unsatisfied, 92–93
- offal, 313
- Office of Federal Housing Enterprise Oversight (OFHEO), 388, 391

- oil. *See* petroleum and petroleum byproducts
- one cancels the other (OCO) orders, 40
- open access policy, of CME Globex, 48–50
- open competition, for stock index futures, 144–45
- open outcry, 36–37, 44–46
- optionality, in basis, 250–51
- options, 9, 472–76
 - binomial model, 487–94
 - Black model, 482–86
 - CME Housing, 392–93, 396
 - CME Hurricane Index, 378, 380
 - currency futures, 112–15
 - delta measures, 505–8
 - exchange-traded currency futures, 130
 - futures, pricing on, 481–82
 - gamma measures, 508–10
 - historic volatility, 494–97
 - implied volatility, 494–95, 500–502
 - in-the-money and out-of-the-money, 575–77
 - mathematical pricing models, 481
 - mean reversion, 497–500
 - NFPs, 398–99
 - overview, 512–13
 - performance measurement, 504–5
 - pricing, 476–77
 - short-term rates, 480–81
 - smile or skew, 503–4, 505
 - TED spreads, 18–23
 - term until expiration, 479–80
 - theta measures, 510–11
 - time value, 477–79
 - vega measures, 511–12
 - volatility, 480
 - See also* call options; hedging; put options
- Options Clearing Corporation (OCC), 85, 86
- options markets, 69–73
- option spreads, 70, 514–15
 - bear vertical call spread, 520
 - bear vertical put spread, 521–22
 - bull vertical call spread, 518–20
 - bull vertical put spread, 522–23
 - option trade-offs, 515–17
 - vertical, 517–18, 523–25
 - See also* horizontal spreads; weighted spreads
- option trade-offs, 515–17
- option trading strategies, 514, 566–67
 - horizontal spreads, 526–37
 - option spreads, 514–25
 - specialty strategies, 559–66
 - weighted spreads, 537–59
- orders, 39–40, 43–44, 78–79
 - CME Globex, 46–50
 - executing, 45–46
 - ex-pit trading, 73–78
 - open outcry/pit trading, 44–46
 - options markets, 69–73
 - trade matching algorithms, 50–69
- ore, 328
- oscillators, 467–71
- osmium, 328
- OTC clearing facility. *See* CME ClearPort OTC clearing facility
- OTC currency options, 112–15
- OTC currency trading vehicles, 106
 - foreign exchange swaps, 111–12
 - OTC currency options, 112–15
 - outright forwards, 110–11
 - spot, 106–10
- OTC derivatives, 9
 - capital requirements, 88
 - cleared-only contracts, 77–78
 - CME Clearing House and, 87
 - CME ClearPort and, 348, 349
 - commodity markets, 279
 - notional value of, 17, 18–19, 20
 - regulatory landscape of, 15, 16, 18–19
 - turnover in, 20
 - weather, 371
- out-of-the-money options, 474, 507, 575–77
- outright forwards, 110–11
- out-trade, 37, 46
- Pacific Stock Exchange (PCX), 19, 20
- packs, 179–80, 226
- palladium, 327, 330

- passive orders, 55–56
- pattern gap, 441
- pennants, 435–36
- percentage retracement, 428
- perfect competition, 280
- performance, hedging, 226–28
- performance bonds, 83–85
- performance measurement, for options, 504–5
- period dependent, 287
- petroleum and petroleum byproducts, 316, 317–24, 339, 340, 360–64
- petroleum crack spread, 343–45
- Philadelphia Fed Index, 401, 414
- Philadelphia Stock Exchange (PHLX), 19, 20
- physical delivery, of futures contracts, 11–15
- pig, 311, 312, 313
- pit trading, 44–46
- pivot point analysis, 458–59
- placements, 306
- platinum, 327, 330
- Plaza Hotel Accord of 1985, 8
- point and figure charting, 455–58
- Polish zloty, 115
- portable alpha strategies, 163–67
- portfolio duration, 265–66
- Portfolio Evaluation Services (CSW), 390
- positive carry, 12, 13, 120, 148, 260–61
- pound sterling, 102, 132
- PowerShares QQQ. *See* QQQQ
- Prechter, Robert, 443, 444
- precious metals, 327–31, 364–67
- preferencing system, 38
- present values
 - balancing, 207
 - fixed and floating payments, 211
- price banding, 55, 61
- price gaps, 440–43
- price/yield relationship, 232
- pricing
 - anticipated cash flow versus back-to-back notes, 216
 - cost of carrying, 151–52
 - Eurodollar futures, 170, 171, 172–73, 204–6, 207
 - grain, 303
 - interest rate swaps, 198–99
 - mathematical models, 481
 - options, 476–77, 481–82
 - stock index futures, 140, 147–52
 - See also* swap pricing
- pricing curves, expectations expressed in, 333–35
- primal cuts, 305
- primary trends, 420–21
- Probable Cause Committee, 97
- Produce Exchange Butter & Egg Board, 5
- proprietary account default, 91
- pro rata allocation, 57–59
- protection, put options for, 569–72
- pure gold, 330
- put-call parity, 485
- put options, 2–3, 113–15, 474–75, 569–72
- put spread, 2-for-1 ratio, 540–42
 - bear vertical, 521–22
 - bull vertical, 522–23, 524, 525
 - diagonal, 533–36
 - horizontal, 529–30
- QQQQ, 142–43, 145, 146, 147
- quants, 134
- quick and dirty Treasury/Eurodollar spreads, 189
- quotation practices
 - coupon-bearing securities, 232–33
 - Eurodollar futures market, 170, 171, 172–73
 - stock index futures, 139–41
 - U.S. Treasury futures, 229n
- rate of return, short-term, 260–62
- ratio spreads, 537
 - 2-for-1 call, 538–40
 - 2-for-1 put, 540–42
 - 3-for-1 and 3-for-2, 542–43
 - comparison of, 543
- RBOB Gasoline, 323–24, 362–63
- ReAdvisory Group of Carvill America, 377
- rectangle, 440
- REdex Library, 389

- refining, 318, 321
- Regulation T, 143
- Regulatory Division. *See* Division of Market Regulation
- regulatory information sharing, 98–99
- regulatory landscape, of derivatives markets, 15–21
- relative strength index (RSI), 469–71
- relative value, 254
- relative volatility, 254
- renewable energy sources, 316
- repo financing, 238
- reporting requirements, 89
- Request for Cross (RFC), 71, 72, 79n
- Request for Quotes (RFQs), 71, 79n
- reset dates, 196
- residential housing futures, 380–81
 - asset class, 391–92
 - CME Housing futures and options, 392–93, 396
 - economic benefits, 393–95
 - Fed action, 386–88
 - home finance trends, 386
 - housing affordability, 382–84
 - housing boom and bust, 382
 - housing stock, 384–86
 - S&P/Case-Shiller Home Price Indices, 388–91
 - tradable indices, 395–97
- resistance, 424, 425–26
- Resolution Trust Corporation (RTC), 8
- resources, of CME Clearing House, 95–96
- resting orders, allocation among, 55–56
- Retail Sales, 401, 412–13
- retail speculators, 8
- return attractiveness, in commodity markets, 288–91
- Reuters, 133
- Reuters/Jefferies CRB Index, 283
- reversal patterns, 429–35
- reverse collar, 579
- reverse probability, 261
- rhodium, 328
- risk bucket approach, 202–3
- risk management
 - coupon-bearing securities, 254–62
 - HDDs and CDDs, 373–76
 - Risk Management Group (CME Clearing House), 97
 - risk measurement, for coupon-bearing securities, 252–53
 - risk reviews, for CME Clearing House members, 90–91
 - risks, systematic and unsystematic, 420
 - Rogers International Commodity Index (RICI), 283
 - “roll,” 237–38
 - roll returns, 340–42
 - Ross, Stephen, 482, 487
 - rounded bottom, 429, 432–33, 434
 - rounds, 330
 - Rubinstein, Mark, 482, 487
 - rule enforcement, by CME Clearing House, 96–98
 - “run,” 236–37
 - runaway gap, 442
 - running correction, 451
 - Russell 200, 6
 - Russian debt default (1997–1998), 185
 - Russian ruble, 115
 - ruthenium, 328
 - Saffir-Simpson Index, 377, 378
 - Salomon Brothers, 277n
 - Samuelson, Paul, 338
 - Samuelson effect, 338
 - S&P 500, 6, 21
 - commodity markets, 285, 286, 287, 290
 - residential housing futures, 391, 392
 - stock index futures, 33, 34, 35, 137, 138, 152, 153–54, 156, 165, 166
 - S&P 500 Depositary Receipts (SPDRs), 142, 143, 144, 145, 146, 147
 - S&P/Case-Shiller 10-City Composite Index, 391, 392
 - S&P/Case-Shiller Composite Home Price Index, 397
 - S&P/Case-Shiller Home Price Indices, 381, 388–91
 - S&P/Case-Shiller New York Home Price Index, 395, 397
 - S&P/GSCI Index, 281–82, 284
 - CME ClearPort and, 348

- diversification benefit, 285, 286, 287
- forward curve, 341–42
- return attractiveness, 289, 290
- S&P Mid-Cap 400, 21, 34, 35, 152, 153–54, 156, 157
- savings and loan (S&L) institutions, 1980s collapse of, 8
- scalpers, 36–37
- Scholes, Myron, 481
- secondary trends, 420–21
- securities, regulatory landscape of, 16. *See also* coupon-bearing securities
- Securities and Exchange Commission (SEC), 4, 87, 137
- segregation, of customer funds, 86–87
- Self-Regulatory Organizations (SROs), 10, 99
- sell-buy swap, 111
- Separate Trading of Registered Interest and Principal on Securities (STRIPS), 237, 277–78n
- settlement date, 196
- settlement practices, for coupon-bearing securities, 234
- Shiller, Robert J., 388, 400n
- short call hedge, 574, 576
- short guts, 556–58
- short hedge, 129
- short put hedge, 571
- short straddle, 547–49
- short strangle, 549, 551–53
- short-term interest rate (STIR) futures, 24–27, 229n
- short-term rate of return, 260–62
- short-term rates, 480–81
- sideways channels, 435
- sideways trends, 423
- significance, 408–11
- silver, 101, 102, 327–28, 330–31, 366–67. *See also* gold-to-silver ratio
- silverware, 331
- Singapore Exchange Ltd. (SGX), 9
- skew, 503–4, 505
- skip date, 234
- skip-skip date, 234
- skip-skip-skip date, 234
- slaughter
- cattle, 305
- hogs, 312–13
- small-cap stock market cycles, 154
- smile, 503–4, 505
- Smithsonian Agreement, 105
- snowfall, 380
- solar energy, 316
- South African rand, 115
- Southern Co. Energy Marketing, 371
- sovereign risk, 290–91
- sow, 311, 312
- soybean oil and meal, 303, 342–43, 344, 355–57
- soybeans, 298–303, 354–55
- special opening quotation (SOQ), 141–42
- specialist system, for stock index futures, 144–45
- specialty option trading strategies, 559–66
- spike top, 429, 433–35
- spot, 106–10, 122
- spot-next FX swap, 111
- spread ratio, 274–75
- spreads, 63–66
 - crack, 343–45
 - crush, 342–43
 - currency futures, 124–26
 - horizontal spreads, 526–37
 - implied functionality, 66–69
 - options, 70, 514–25
 - stock index futures, 152–57
 - swap, 187–88
 - TED, 184–93
 - weighted, 189–91, 537–59
- spring wheat, 296
- stacking, 223, 226
- Standard & Poor's 500. *See* S&P 500
- Standard Portfolio Analysis of Risk (SPAN), 84
- statistician, 422
- steers, 304
- sterling silver, 331
- stock index futures, 33–35, 137, 167–68
 - E-minis versus exchange-traded funds, 142–47
 - hedging with, 158–63

- stock index futures (*continued*)
 - mechanics of, 137–42
 - portable alpha strategies, 163–67
 - pricing, 147–52
 - spread trading, 152–57
- stock index hedge ratio, 159–63
- stock options, 15
- stop limit orders, 62
- stop orders, 39, 61–63
- stop with protection order, 62
- storage, theory of, 332
- straddles
 - long, 544–47
 - short, 547–49
 - strangles and guts, 558–59
- straight pro rata allocations, 57
- strangles
 - long, 549–51
 - short, 549, 551–53
 - straddles and guts, 558–59
- strips, 178–79, 202
- stub rate movement, 230n
- Substitution (SUB), 77
- supply and demand balance sheet, 294–96
- supply and demand considerations, 245
- support, 424, 425–26
- swap agreement, generic, 195–96
- swap pricing, 215
 - contract stacking, 223, 226
 - Eurodollar futures, 221–23
 - fixed coupon rate, 219, 221
 - interpolation, 216–19, 220
 - pricing anticipated cash flow versus back-to-back notes, 216
- swaps
 - asset and liability management versus, 202–3
 - hedging cash flows of, 209–12, 213
 - quoting, 196–98
 - U.S. rates, 197
 - See also* foreign exchange swaps; interest rate swap market
- swap spreads, 187–88
- swap transaction structure, 194–95
- Swedish krona, 115, 132
- Swiss franc, 6, 22, 24
- exchange-traded currency futures, 115, 116, 117, 119, 124
 - notional value, 132
- symmetrical triangles, 435, 436, 437, 453, 455
- synthetic long call, 577
- synthetic short futures position, 578
- systematic risks, 420
- Systems Development (CME Clearing House), 97
- technical analysis, 416–17, 471
 - chart interpretation, 422–23
 - consolidation patterns, 435–40
 - Dow theory, 419–22
 - Elliott wave theory, 443–55
 - fundamental analysis and, 417–18
 - futures markets and, 418–19
 - intraday trading techniques, 455–59
 - moving averages, 459–71
 - price gaps, 440–43
 - reversal patterns, 429–35
 - trend-following systems, 459
 - trends, 423–29
- tech stock market cycles, 154
- TED spreads. *See* Treasury/Eurodollar (TED) spreads
- temporary liquidity facility, 92
- terminal value, 476
- term until expiration, 479–80
- theory of storage, 332
- theta measures, 510–11, 513
- Three-Month Eurodollar Interbank Time, 14
- time value, 477–79
- time value decay, 515, 516
- tom-next swap, 111
- tradable indices, 395–97
- trade date, 196
- trade matching, 46, 53–54
- trade matching algorithms, 50
 - cascading stops, 61–63
 - fat finger protection, 60–61
 - FIFO, 56–57
 - implied spread functionality, 66–69
 - limit order book, 50–53

- market maker allocation, 59–60
- market with protection, 54–55
- matching orders, 53–54
- pro rata allocation, 57–59
- resting orders, allocation among, 55–56
- trading spreads, 63–66
- traders. *See* floor brokers and traders; local traders
- trading costs, for stock index futures, 145–47
- trading floor, 36–37
- trading pit, 44–45. *See also* pit trading
- trading spreads. *See* spread trading
- Trading Technologies X Trader, 134
- trading volumes, 404–7
- traditional investment strategy, 164–65
- Treasury auction cycle, 234–36
- Treasury/Eurodollar (TED) spreads, 184–93
- Treasury futures. *See* U.S. Treasury futures
- Treasury Inflation-Protected Securities (TIPS), 235
- trend-following systems, 459
- trendline, 424, 427–28
- trends, 420–21, 423–29, 443–44, 446
- triangles
 - consolidation patterns, 435, 436–40
 - Elliott wave theory, 446, 447, 448, 451–53, 455
- triple threes, 448, 452–55
- triple top or bottom, 429, 431–32
- UBS, 133
- underground natural gas storage, 326
- underlying futures spread, 531, 534
- Unified Clearing Group, 89, 99
- United Nations Monetary and Financial Conference, 103
- U.S. Bankruptcy Code, 93–94
- U.S. Census Bureau, 383, 412, 413
- U.S. Department of Agriculture (USDA)
 - Cattle on Feed report, 306, 307
 - Cold Storage report, 313
 - grain markets, 298, 300–302
 - livestock markets, 306, 307, 308–10, 313, 314
 - Livestock Slaughter report, 306
 - National Daily Direct Hog Prior Day Reported-Slaughtered Swine Report, 314
 - World Ag Outlook Board, 295
- U.S. Department of Commerce, 414
- U.S. Department of Energy, 322, 326
- U.S. dollar, 104
 - exchange-traded currency futures, 116, 119, 120, 122–24, 127–29
 - notional value, 132
- U.S. Geological Survey, 329
- U.S. Populist Party, 346
- U.S. Treasury, 104, 185, 235
- U.S. Treasury contracts, summary of, 240–41
- U.S. Treasury futures, 6, 27–33, 231, 276–77
 - coupon-bearing securities, 231–38
 - coupon-bearing securities risk measurement, 252–53
 - delivery practices, 238–51
 - macro hedging with, 262–69
 - quotation practices, 229n
 - risk management with, 254–62
 - spreads, 79n
 - yield curve trading with, 269–76
- See also* Treasury/Eurodollar (TED) spreads
- unmatched trades, 46
- unsatisfied obligation, 92–93
- unsystematic risks, 420
- utility, of interest rate swaps, 200–201
- Value Line Composite Average (VLCA), 6, 137
- variation margins, 41
- vega measures, 511–12, 513
- vertical option spreads, 517–18
 - bear vertical call spread, 520
 - bear vertical put spread, 521–22
 - bull vertical call spread, 518–20
 - bull vertical put spread, 522–23
 - horizontals and diagonals, 536–37
 - selection of, 523–25

- Vietnam War, 104
- volatility
 - coupon-bearing securities, 252, 253
 - daily net change, 407–11
 - forward curve, 338–39
 - historic, 494–97
 - implied, 494–95, 500–502
 - options, 480
- volatility-driven strategies, 543–44
- volatility plays, 559
- volatility skew, 503–4, 505
- volatility trades, 544
- Volcker, Paul, 7, 402
- vol quotes, 73
- V top, 429, 433–35
- wave extensions, 445
- weather, 369–70
 - CME hurricane index futures and options, 378, 380
 - esoteric products, 380
 - heating and cooling degree day futures, 371–73
 - historical market developments, 370–71
 - hurricane intensity measurement, 377–78, 379
 - hurricane products, 376
 - risk-management applications, 373–76
- wedge triangles, 435, 440, 446, 447
- weight, 124
- weighted hedge, basis point value, 255–60
- weighted spreads, 537–38
 - 2-for-1 ratio call spread, 538–40
 - 2-for-1 ratio put spread, 540–42
 - 3-for-1 and 3-for-2 ratios, 542–43
 - backspreads, 543
 - long guts, 553–56
 - long straddle, 544–47
 - long strangle, 549–51
 - short guts, 556–58
 - short straddle, 547–49
 - short strangle, 551–53
 - straddles, strangles, and guts, 558–59
 - volatility-driven strategies, 543–44
- weighting
 - intermarket spread, 156–57
 - spreads, 189–91
- Weiss, Allan N., 400
- West Texas Intermediate (WTI), 317, 318, 322–23
- Whaley, Robert, 482
- wheat, 296–98, 352–53
- When Issued basis, 235
- Wilder, Wellis, 469
- wind energy, 316
- winter wheat, 296–97
- working gas, 325
- World Ag Outlook Board, 295
- World Bank, 194, 229n
- World War I, 103
- World War II, 103
- yield comparisons, 185–86
- yield curve
 - Eurodollar futures reflection in, 177–78
 - steepening, 271–74
 - Treasury futures trading, 275–76
- yield curve shape
 - Eurodollar futures market, 170–71, 174–75
 - speculation on, 180–84
- yield curve trading, with coupon-bearing securities, 269–76
- yield enhancement, with call options, 572–74
- yields, convenience, 337–38
- zigzag, 448, 449, 452–55
- zinc, 328, 330