

Level III Cumulative Index

- A**
- ABO. *see* accumulated benefit obligation
- absolute benchmarks, **6:136**
- absolute priority rule, **5:103**
- absolute return benchmarks, **3:400**
- absolute-return vehicles, **5:64–65**
- academic designations, **1:176**
- ACCF. *see* American Council for Capital Formation
- account(s)
- audits of, **1:257–258**
 - with beneficial ownership, **1:158**
 - defined, **6:122**
 - errors in, **1:208**
 - family, **1:80, 158, 160–161**
 - historical beta relative to, **6:142**
 - in performance calculations, **1:100**
 - temporary new, **6:243, 292**
- accountable benchmarks, **3:397n.4; 4:16n.12**
- account information, regular statements of, **1:77**
- accounting risk, **5:148–149**
- account reviews
- disclosure of, **1:257–258**
 - firm policies on, **1:77**
 - regular, **1:94**
 - systematic, **1:86**
- accrual accounting, **6:221, 222, 287**
- accrual equivalent returns, **2:243–245**
- accrual equivalent tax rates, **2:244–245**
- accrual taxes, on interest and dividends, **2:233–234**
- accrued benefits, pension liability for, **2:539–543**
- accrued defined benefits, **2:387**
- accumulated benefit obligation (ABO), **2:455**
- accumulated service, **2:455**
- accumulated value, of immunized portfolios, **4:31–33**
- accumulation
- of tax-exempt investment accounts, **2:246–247**
 - using long- vs. short-term capital gains tax rate, **2:258–260**
- accumulation phase of life (accumulation stage), **2:163–164**
- actions
- investment (*see also* Investment Analysis, Recommendations, and Actions [Standard of Professional Conduct V])
 - in AMC, **1:242, 245–248**
 - fair dealing in, **1:83–84**
 - firm policies on, **1:77**
 - impact of, **1:12–13**
 - unethical, **1:29**
 - personal, **1:55**
 - Active Accumulators, **2:113–114, 116**
 - active currency management
 - carry trade in, **3:334–336**
 - and currency risk, **3:325–326**
 - economic fundamentals in, **3:331–332**
 - example, **3:339–341**
 - technical analysis in, **3:333–334**
 - volatility trading in, **3:336–341**
 - active/immunization combination of portfolios, **4:106**
 - active investing
 - with benchmark bond indexes, **4:27–29**
 - activities of active managers, **4:27–28**
 - total return and scenario analysis, **4:28–29**
 - in equities, **4:166–167, 184–210**
 - and equity styles, **4:184–204**
 - long–short investing, **4:205–210**
 - sell disciplines, **4:210**
 - socially responsible investing, **4:204–205**
 - trading frequency, **4:210**
 - semiactive equity investing, **4:165–166, 211–213**
 - derivatives- vs. stock-based, **4:211, 213**
 - and Fundamental Law of Active Management, **4:212**
 - strategic asset allocation for, **3:251–252**
 - strategies for, **3:398**
- active investors, **2:109**
- in behavioral alpha process, **2:111–112**
 - successful, **6:83–84**
 - trading behavior of, **2:254**
- active-lives portion of pension liability, **2:455, 459, 461–462**
- active management. *see also* active currency management
- of benchmark bond indexes, **4:9, 27–28**
 - benchmarks for, **3:396, 397**
 - defined, **4:165**
 - of endowment investments, **2:486**
 - of equity investments, **4:165–166**
 - full-blown, **4:10**
 - Fundamental Law of Active Management, **4:212**
 - with index-tracking strategies, **2:355**
 - of international bond investments, **4:129–131**
 - by larger risk factor mismatches, **4:10**
 - and macro attribution, **6:154**
 - returns due to, **6:134–135**
 - semiactive, **4:165–166**
 - and semi-strong-form EMH, **2:31–32**
- active managers
- portfolio monitoring by, **6:82–84**
 - selecting, **5:10–11**
 - successful, **6:83–84**
- active/passive combination of portfolios, **4:106**
- active pension participants
- market related exposures, **2:539–543**
 - non-market related exposures, **2:544**
- active positions, benchmark, **6:143**
- active returns, **4:166; 6:156–157, 171**
- active risk, **5:152. see also** tracking error and portfolio manager allocation, **4:215–216**
- in Sharpe ratio, **6:171**
 - in tactical asset allocation, **3:179–180**
 - and tracking risk, **4:166**
 - true, **4:219–220**
- active trading, tax drag and, **2:254, 258**
- actual cost value policy, **2:419**
- actual extreme events, scenario analysis with, **5:172**
- actuaries, **2:409**
- adaptive markets hypothesis (AMH), **2:41**
- Additional Compensation Arrangements [Standard IV(B)], **1:116–117**
- application of the standard, **1:116–117**
 - compliance procedures, **1:116**
 - guidance, **1:116**
 - text of, **1:17, 116**
- additive formulation of return objective, **3:185–186**
- adequate compliance procedures, **1:119–121**
- adjustment bias. *see* anchoring and adjustment bias
- administrative fees, **6:257–258, 287**
- ad valorem fees, **4:223, 229–230**
- advanced life deferred annuities (ALDAs), **2:426**
- Adventurer (BB&K classification), **2:110**
- adverse selection risk, **2:409; 6:19**
- advertise-to-draw-liquidity trading focus, **6:39, 40**
- advertising
- and availability bias, **2:68**
 - GIPS guidelines for (*see* GIPS Advertising Guidelines)
- advice. *see* financial advice
- adviser-client relations, **2:117–120**
- client expectations, **2:118**
 - consistency of approach, **2:118**
 - and estate planning, **2:272**
 - financial goals, **2:118**
 - limitations of risk tolerance questionnaires, **2:119–120**
 - mutual benefits, **2:119**
- advisers, selecting, **1:129**
- after-tax accumulations and returns, **2:232–245**
- accrual equivalent returns, **2:243–245**
 - accrual equivalent tax rates, **2:244–245**
 - blended tax environments, **2:239–243**
 - after tax returns, **2:241**
 - future long term accumulation, **2:242–243**
 - for investor types, **2:254–255**
 - simple tax environments, **2:232–239**
 - accrual taxes on interest and dividends, **2:233–234**
 - cost basis, **2:237–238**
 - deferred capital gains, **2:234–237**
 - returns-based taxes, **2:232–237**
 - wealth-based taxes, **2:238–239**
 - and tax-exempt accounts vs. TDAs, **2:248–250**

- after-tax asset allocation
 in estate planning, 2:292–293
 and investment accounts, 2:247–248
 after-tax liquidation value, 2:326
 after-tax mean–variance optimization, 2:260
 after-tax returns, 2:241; 6:280–283
 after-tax wealth, 2:225–226
 age, workforce, 2:461–462
 age effects, hedge fund, 5:77
 agent options, 1:154
 agents, as trading focus, 6:38–40
 aggregate family portfolios, 2:291–293
 aging, behavioral changes and, 2:117
 AIMR. *see* Association for Investment Management and Research
AIMR Performance Presentation Standards Handbook, 6:210, 211
 AIMR-PPS. *see* Association for Investment Management and Research Performance Presentation Standards
Aktiengesellschaft (AG), 5:34
 Albania, 2:304
 ALCO. *see* asset/liability risk management committee
 ALDAs. *see* advanced life deferred annuities
 algorithmic execution systems, 6:42–45
 implementation shortfall strategies, 6:43–44
 opportunistic participation strategies, 6:44–45
 simple logical participation strategies, 6:43
 specialized strategies, 6:45
 algorithmic trading, 6:40–47
 classification of algorithmic execution systems, 6:42–45
 defined, 6:40
 growth of, 6:41–42
 reasoning behind logical participation strategies, 6:45–47
 allocation(s). *see also* asset allocation equities
 for indexes, 4:200–201
 for pension funds, 4:163
 minimum lot, 1:88–89
 trade allocation procedures, 1:85, 257
 transaction, 1:87–88
 Allocation Effects strategy, 6:154–155
 Allocation/Selection Interaction return, 6:160
 all-or-nothing options, 3:357
 allowed range, rebalancing to, 6:93–94
 all-risks homeowner's insurance policy, 2:418
 Allstate Corporation, 2:505, 506
 ALM approach. *see* asset/liability management approach
 alpha. *see also* behavioral alpha (BA) process
 and absolute-return investing, 5:64
 alpha and beta separation, 4:221
 and core-satellite investing, 5:13
 in currency overlay programs, 3:327
 defined, 4:205
ex post, 6:168–170
 in fixed-income manager selection, 4:141
 Jensen's, 6:168
 in long–short investing, 4:205–206
 portable, 4:206, 221
 in semiactive equity investing, 4:211–213
 and semi-strong-form EMH, 2:32
 tax, 2:251
 zero-alpha mutual funds, 2:58–59
 alpha core, 5:13
 alpha research, 3:8
 alternative investments, 5:5–130
 asset allocation with, 3:207–208
 commodities, 5:44–57
 benchmarks, 5:46–47
 historical performance, 5:47–50
 interpretation issues, 5:50–51
 investment characteristics, 5:51–54
 market for, 5:45–46
 in portfolios, 5:55–57
 common features, 5:7
 defined, 3:195; 5:7
 distressed securities, 5:95–105
 bankruptcy process, 5:102–104
 benchmarks, 5:97
 example, 5:104–105
 historical performance, 5:97–98
 interpretation issues, 5:98
 investment characteristics, 5:98–99
 market for, 5:95–96
 in portfolios, 5:99–102
 evaluation of, 5:10–11
 hedge funds, 5:57–85
 about, 5:57–58
 benchmarks, 5:62–65, 71–72
 due diligence, 5:77–79
 fund effects, 5:75–77
 historical performance, 5:65–68
 interpretation issues, 5:67, 69–71
 investment characteristics, 5:72–73
 market for, 5:58–61
 performance evaluations, 5:79–85
 in portfolios, 5:73–75
 investors' goals for, 5:6
 low-return environments, 5:9
 managed futures, 5:86–95
 benchmarks, 5:87–88
 historical performance, 5:88–89
 interpretation issues, 5:89–90
 investment characteristics, 5:90–91
 market for, 5:86–87
 performance persistence, 5:93
 in portfolios, 5:91–93
 strategic asset allocation, 5:93–95
 practice problems, 5:108–121
 private equity, 5:27–44
 about, 5:27–28
 benchmarks, 5:36
 due diligence, 5:42–44
 historical performance, 5:36–37
 interpretation issues, 5:37
 investment characteristics, 5:37–41
 market for, 5:29–36
 in portfolios, 5:41–42
 real estate, 5:13–26
 benchmarks, 5:15–17
 due diligence, 5:26
 historical performance, 5:17–18
 interpretation issues, 5:18
 investment characteristics, 5:19–20
 market for, 5:13–15
 in portfolios, 5:21–26
 smoothed data for, 3:14–16
 solutions to problems, 5:122–130
 traditional vs., 5:7–13
 Alternative Investments Management Association, 5:77–78
 Altman-NYU Salomon Center Defaulted Public Bond and Bank Loan Index, 5:97
 A.M. Best, 2:493
 Amazon, Inc., 6:52
 AMC. *see* Asset Manager Code of Professional Conduct
 American Council for Capital Formation (ACCF), 2:245–246
 American Express, 2:454
 American options, 5:178, 272
 American Stock Exchange (AMEX), 5:17, 273n.3
 American style swaptions, 5:385, 390, 392
 AMH. *see* adaptive markets hypothesis
 amygdala, 2:20
 analysts, biases of, 2:125–136
 in conducting research, 2:133–136
 conservatism bias, 2:53–54
 and management's influence on analysis, 2:131–133
 overconfidence in forecasting skills, 2:126–131
 analytical method, 5:155–160
 anchoring and adjustment bias, 2:63, 94–95, 332
 consequences of, 2:63
 detection and methods of overcoming, 2:63
 diagnostic questions, 2:87, 93
 and forecasting, 2:132–133
 and market bubbles, 2:143
 and momentum effect, 2:140
 anchoring trap, 3:21
 anchor points, 2:63
 angel investors, 5:31
 Anglo-Saxon law, 2:158
 annualized return, 6:132
 annuities, 2:422–431; 3:260. *see also specific types, e.g.*: fixed annuities
 advantages and disadvantages of, 2:426–428
 appropriateness of, 2:429–431
 classifications of, 2:423–426
 advanced life deferred annuities, 2:426
 deferred fixed annuities, 2:424
 deferred variable annuities, 2:423–424
 immediate fixed annuities, 2:424–426
 immediate variable annuities, 2:424
 comparing, 2:426
 from insurance companies, 2:494
 as non-publicly traded marketable assets, 2:389
 parties to, 2:423
 payout methods of, 2:428–429
 tax benefits of, 2:429
 annuitization, 2:427

- anomalies. *see* market anomalies
- AO approach to asset allocation. *see* asset-only approach to asset allocation
- Apple Corporation, 4:186; 5:38
- applicable law
and Code/Standards, 1:22–23
on confidentiality, 1:102
in firm policy, 1:77
global, 1:23–25
and investment products, 1:23–25
providing information on, 1:27
- appraisal, performance. *see* performance appraisal
- appraisal data, capital market expectations and, 3:14–16
- appreciation, of gifted assets, 2:290, 291
- appropriateness
of annuities, 2:429–431
of benchmarks, 6:135, 140–141
of life insurance, 2:416
- approval, for outside compensation, 1:117
- arbitrage
defined, 5:214
distressed debt, 5:99–100
limited, 2:35–36
for pension funds, 2:252–253
- arbitrageurs, 6:34
- Archipelago Exchange, 6:42
- ARCH time-series models. *see* autoregressive conditional heteroskedasticity time-series models
- Argentina
currency crisis, 3:76, 206
debt default, 4:88
in Hague Conference, 2:304
inflation-protected bonds, 3:196
interest income taxation, 2:227
market integration, 3:43
tax-advantaged savings accounts, 2:246
tax regime, 2:231, 347
trade partners, 3:82
- arithmetic mean return, geometric vs., 3:24
- Arnott, Robert D., 2:537
- arrival price strategy, 6:43–44
- Asia. *see also* MSCI EAFE (Europe, Australasia, and Far East) Index; *specific countries*
economic indicators, 3:81–82
inflation, 3:56
interest rate swap spreads, 4:80
- Asian financial crisis (1997–1998), 4:76
- and “buy-and-hold” investors, 4:79
- conditional return correlations in, 3:203
- and currency values, 3:98
- emerging market debt, 4:138
- as exogenous shock, 3:73
- and inflation, 3:56
- international interactions in, 3:74, 78
- and sector rotation, 4:87, 88
- and “story” disagreement, 4:78–79
- ultra-long maturities in, 4:84
- ask price, 6:10
- ask size, 6:10
- aspirational risk bucket, 2:334, 335
- aspiration levels, 2:23
- asset allocation, 3:175–302
adjusting, 5:241–248
after-tax, 2:247–248, 292–293
asset classes for, 3:193–208
alternative investments, 3:207–208
inflation-protected bonds, 3:195–197
international assets, 3:197–207
specifying, 3:194–195
and availability bias, 2:68
- behaviorally-modified, 2:81–96
about, 2:82–83
amount to moderate or adapt, 2:84–86
case studies, 2:86–96
guidelines, 2:83–84
and investment policy development, 2:81–82
- and currency risk, 3:321
defined, 3:177–178
and endowment bias, 2:79
and equity market risk, 5:380–383
- equity total return swaps in, 4:183–184
- and futures, 5:241–250
adjusting asset allocation, 5:241–248
pre-investing in asset classes, 5:248–250
- glide path, 2:121
- for global credit bond portfolio management, 4:87–88
- human capital in, 2:440–443; 3:253–258
- importance of, 3:180–182
- for individual investors, 2:188–199
case studies, 2:188–196
examples, 2:188–191, 193–196
Monte Carlo simulation, 2:196–199
process of elimination for, 2:188–196
- investor objectives for, 3:182–193
and asset-only vs. ALM approaches, 3:182–185
and investor behavior, 3:191–193
return objectives, 3:185–187
risk objectives, 3:187–191
- market indexes for, 3:403
- optimization of, 3:211–251
ALM approach, 3:241–249
Black–Litterman approach, 3:231–238
experience-based approaches, 3:249–251
mean–variance approach, 3:211–230
Monte Carlo simulation, 3:239–241
with resampled efficient frontier, 3:230–231
- practice problems, 3:285–295
and risk reduction, 2:443–446
simulations of, 2:196
solutions to problems, 3:296–302
statements of, 2:192–193
steps in, 3:208–211
- strategic
asset-only vs. ALM approaches, 3:182–185
defined, 3:177
implementing, 3:251–253
for individual investors, 3:253–261
for institutional investors, 3:262–275
managed futures in, 5:93–95
- real estate in, 5:25–26
and return objectives, 3:185–187
and risk objectives, 3:187–191
and systematic risk, 3:178–179
tactical vs., 3:179–180
- and sustainability of spending rates, 2:285–287
- tactical, 3:275–282
adding value with, 6:82
defined, 3:177
equity swaps in, 4:184
global adjustments in, 3:279–281
investment decisions for, 3:281–282
strategic vs., 3:179–180
tolerance bands for, 6:92–93
- asset allocation reviews, 3:209–211
- asset-based models of equity market, 3:155–159
- Asset Category strategy, 6:152–153
- asset class(es), 3:193–208
of alternative investments, 3:207–208
for asset allocation, 2:195; 3:193–208
concentrated positions in, 2:323–324
corridors for, 6:91–93
forecasting returns of, 3:87–102
cash and equivalents, 3:87–88
common shares, 3:91–95
currencies, 3:97–98
defaultable debt, 3:90
emerging market bonds, 3:90
and exchange rates, 3:98–101
and government intervention, 3:102
and historical capital market expectations, 3:95–97
inflation-indexed bonds, 3:90–91
nominal default-free bonds, 3:89–90
real estate, 3:95
- foreign exchange as, 3:326, 327
- human capital as, 2:442
- inflation/deflation effects for, 3:59
- of inflation-protected bonds, 3:195–197
- of international assets, 3:197–207
in Monte Carlo simulations, 2:198, 199
pre-investing in, 5:248–250
specification criteria for asset allocation, 3:194–195
tax profiles of, 2:251–252
- asset composition, in foreign-currency portfolios, 3:322
- asset covariance matrix, 3:28
- asset integration, 2:165
- asset/liability management (ALM) approach
asset-only approach vs., 3:182–185
for defined-benefit pension plans, 2:457; 3:242–247, 262
and funding ratio efficient frontier, 3:243
for insurance companies, 3:271
for interest rate swaps, 4:121
and Monte Carlo simulation, 3:247–249
optimizing asset allocation with, 3:241–249
and surplus efficient frontier, 3:244–247
- asset/liability risk management committee (ALCO), 2:510–511

- asset location
 - and asset allocation, 2:196
 - and concentrated positions, 2:337
 - defined, 2:188
 - and real estate monetization, 2:367
 - and wealth management, 2:251–254
 - asset location decision, 2:337
 - Asset Manager Code of Professional Conduct (AMC), 1:129, 239–265
 - Code of Ethics and Standards of Professional Conduct vs., 1:10
 - compliance of firms with Standard I(A), 1:27
 - Disclosures (Part F), 1:243–244, 255–258
 - introduction, 1:239–241
 - Investment Processes and Actions (Part B), 1:242, 245–248
 - Loyalty to Clients (Part A), 1:242, 244–245
 - Performance and Valuation (Part E), 1:243, 254–255
 - practice problems, 1:259–263
 - principles of conduct, 1:241
 - recommendations and guidance, 1:244–258
 - Risk Management, Compliance, and Support (Part D), 1:243, 250–254
 - solutions to problems, 1:264–265
 - text of, 1:242–244
 - Trading (Part C), 1:242–243, 248–250
 - asset marketability risk, 2:495–496
 - asset-only (AO) approach to asset allocation, 3:182–185
 - asset-only portfolios, for pension plans, 2:536, 537
 - asset pricing
 - behavioral approach to, 2:38–39, 145
 - in behavioral finance, 2:167
 - CAPM, 2:34, 38
 - risk premiums in, 3:50
 - in traditional finance, 2:166
 - asset protection, trusts for, 2:301
 - asset risk attributes, changes in, 6:79
 - assets
 - business, 2:389
 - convexity of, 4:41–42
 - correlations of (*see* correlations of assets)
 - current, 2:386
 - custody of, 1:74
 - domestic, 3:313
 - on economic balance sheets, 2:396
 - foreign, 3:314–316
 - as inflation hedges, 4:163–164
 - international, 3:197–207
 - conditional return correlations for, 3:203–204
 - costs of, 3:200–201
 - diversification opportunities with, 3:201–203
 - in emerging markets, 3:204–207
 - investor objectives and inclusion of, 3:197–199
 - risks of, 3:199–200
 - investment, 2:388
 - mixed, 2:387
 - non-core, 2:360
 - non-current, 2:386
 - non-marketable, 2:389–390
 - employer pension plans, 2:389–390
 - government pensions, 2:390
 - non-publicly traded marketable, 2:388–389
 - annuities, 2:389
 - business assets, 2:389
 - cash-value life insurance, 2:389
 - collectibles, 2:389
 - real estate, 2:388
 - pension, 2:535, 544–550
 - personal, 2:387
 - portable, 2:454
 - real, 3:59
 - total firm, 6:219–220, 292
 - on traditional balance sheets, 2:395
 - asset segregation, in behavioral finance, 2:166
 - asset sensitivities, 2:545–546
 - asset swaps, 4:84
 - asset under management (AUM) fees, 4:223; 5:60
 - asset weighing, 1:99
 - asset-weighted standard deviation, 6:253–254
 - Association for Investment Management and Research (AIMR), 6:210, 211
 - Association for Investment Management and Research Performance Presentation Standards (AIMR-PPS), 6:210, 211
 - assumptions, of classical single-period immunization theory, 4:37
 - assurity of completion, 6:9
 - assurity of the contract, 6:20
 - asynchronism, 3:17n.8
 - at-the-money (ATM) options, 3:337
 - attitudes toward risk, 2:17–19
 - attribution, performance. *see* performance attribution
 - auction markets, 6:10, 16
 - audits, of accounts, 1:257–258
 - AUM fees. *see* asset under management fees
 - Aussie-dollar market (USD/AUD), 3:308, 360
 - Australia. *see also* MSCI EAFE (Europe, Australasia, and Far East) Index
 - asset allocation in pension plans, 3:263, 264
 - capital gains taxes, 2:236, 240n.5
 - CLI for, 3:81
 - Conference Board index, 3:82
 - corporate estate tax freeze, 2:338
 - deemed disposition regimes, 2:298
 - defined-benefit pension plans, 2:463
 - equity real rates of return, 4:164
 - equity risk premium, 3:39
 - exit taxes, 2:306–307
 - expected returns for equities/bonds, 3:24
 - franking in, 2:228
 - in Hague Conference, 2:304
 - inflation-protected bonds, 3:196
 - market bubbles, 2:142
 - market integration, 3:43
 - pension fund equity allocations, 4:163
 - prudent person concept for pension investing, 3:262
 - real estate market, 5:16, 21, 24
 - real GDP growth rate, 3:32
 - REITs, 5:14
 - tax-advantaged savings accounts, 2:246
 - tax regime, 2:231, 347
 - total returns between government bond indexes, 4:128
 - wealth taxes, 2:238
 - Australian dollar
 - as commodity currency, 3:371
 - currency code, 3:307
 - in currency pairs, 3:308, 360
 - US dollar vs., 4:132–133
 - Austria
 - capital gains tax, 2:228
 - Eurozone membership, 3:9n.
 - and EUSD, 2:311
 - and German exports, 3:81
 - in Hague Conference, 2:304
 - tax regime, 2:231, 347
 - automated auctions, 6:16
 - automated trading, 6:40–47
 - algorithmic trading, 6:40–47
 - classification of algorithmic execution systems, 6:42–45
 - implementation shortfall strategies, 6:43–44
 - opportunistic participation strategies, 6:44–45
 - simple logical participation strategies, 6:43
 - specialized strategies, 6:45
 - defined, 6:40
 - reasoning for logical participation
 - algorithmic strategies, 6:45–47
 - automobile insurance, 2:420
 - autopilot strategies, 2:120
 - autoregressive conditional heteroskedasticity (ARCH) time-series models, 3:27n.25
 - availability bias, 2:67–69, 332
 - of analysts, 2:126, 128
 - consequences of, 2:68
 - detection and methods of overcoming, 2:68–69
 - diagnostic questions, 2:87
 - and forecasting, 2:132
 - and momentum effect, 2:140
 - average effective spread, 6:13
 - AXA Equitable-NY, 2:494, 506
- ## B
- Bachelier, Louis, 2:30
 - back-end loaded tax benefits, 2:246
 - backfill bias, of hedge funds, 5:70–71
 - back office, 5:139
 - backtesting, 5:169
 - backwardation, 5:49, 50
 - Bahamas, 2:276
 - Bahrain, 3:74
 - baht, Thai, 3:370
 - Bailard, Biehl, and Kaiser (BB&K) model
 - of investor behavior, 2:109–110
 - Bailey, Jeffery V., 3:397, 400, 412; 4:16
 - balance of payments, 3:77n.65
 - balance sheet(s)
 - economic (holistic)
 - assets on, 2:382
 - human capital considered on, 2:442

- used in individual risk management, 2:396–397
- individual, 2:394–400
 - changes in net wealth, 2:397–400
 - economic (holistic) balance sheet, 2:396–397
 - traditional balance sheet, 2:395–396
- life, 2:279–280
- traditional, 2:395–397
- bancassurance, 2:509n.29
- Bank Administration Institute (BAI), 6:126, 131, 132, 210
- bankers' acceptances, as interest rate swap benchmarks, 4:120
- Bank for International Settlements (BIS), 5:355n.4
- Bank Herstatt, 5:146
- Bank of Japan, 3:65, 81
- Bank of Thailand, 3:98
- bank reserves, 3:65
- bankruptcy process, 5:102–104
 - absolute priority rule, 5:103
 - Chapter 7 and Chapter 11, 5:104
 - netting in, 5:187–188
 - prepackaged filings, 5:104
 - in United States vs. other countries, 5:102–103
- Bankruptcy Reform Act (1978), 5:102
- banks
 - central, 3:56–57, 63, 88
 - investment policy statements for, 2:514–516
 - liabilities for, 3:185
 - portfolio management for, 2:509–516
 - legal and regulatory factors, 2:513
 - liquidity requirements, 2:513
 - return objectives, 2:513
 - risk objectives, 2:512
 - tax concerns, 2:513
 - time horizon, 2:513
 - unique circumstances, 2:514
 - strategic asset allocation for, 3:273–275
- BA process. *see* behavioral alpha process
- barbell portfolios, 4:43, 84
- barbell strategy, credit, 4:86
- Barclays, 3:403; 4:66n.1
- Barclay's Aggregate index, 3:44
- Barclays Capital Corporate Bond Index, 4:14
- Barclays Capital Corporate High-Yield Bond Index, 4:12, 13
- Barclays Capital Corporate Intermediate Bond Index, 4:12, 13
- Barclays Capital Emerging Markets USD Aggregate Bond Index, 4:16–17
- Barclays Capital Global Aggregate Bond Index, 4:24
- Barclays Capital US Aggregate Bond Index, 4:14; 6:247
- Barclays Capital US Aggregate Index, 4:56
- Barclays Corporate Bond Index, 3:414
- Barclays Global Government Bond Index, 3:414
- Barclays Inflation-Linked Bond Index, 3:414
- Barclays Sterling Aggregate Bond Index, 3:397
- Barclays Sterling Gilts Index, 3:397
- Barker, William A., 3:331n.15
- Barnewall, Marilyn MacGruder, 2:108–109
- Barnewall two-way model of investor behavior, 2:108–109
- base currency, 3:307–309
- Basel Committee on Banking Supervision, 5:181
- Basel I. *see* Capital Accord of 1988
- Basel II. *see* New Basel Capital Accord
- Basel III, 2:513
- base-rate neglect, 2:56–57
- base rates, forecasting and, 2:129–131
- basis
 - cost, 2:235, 237–238, 329
 - defined, 4:118
- basis point value (BPV), 5:220
- basis risk, 4:118
- basket clauses, 3:262
- basket trades, 4:182
- batch auction markets, 6:16
- Bayes' formula, 2:9–11, 129
- BB Holdings, 5:230–231
- BB&K model of investor behavior. *see* Bailard, Biehl, and Kaiser model of investor behavior
- bear spreads, 5:292–295
- Becton Dickinson & Co., 4:188
- behavior
 - individual, 2:7–20; 3:191–193
 - in behavioral finance, 2:14–19
 - BFMA and BFMI, 2:7–8
 - and neuro-economics, 2:19–20
 - in traditional finance, 2:8–14
 - market, 2:28–41
 - behavioral factors in, 2:138–145
 - in behavioral finance, 2:37–38, 41
 - in traditional finance, 2:28–36
- behavioral alpha (BA) process, 2:111–116
 - Active Accumulators, 2:116
 - classifying investors as behavioral investor types, 2:113–116
 - Friendly Followers, 2:115
 - Independent Individualists, 2:115–116
 - Passive Preservers, 2:114–115
 - plotting on risk tolerance and active/passive scale, 2:112
 - testing for behavioral biases, 2:112–113
 - testing for risk tolerance and active/passive traits, 2:111–112
- behavioral biases, 2:49–105
 - of analysts, 2:125–136
 - in conducting research, 2:133–136
 - and management's influence on analysis, 2:131–133
 - overconfidence in forecasting skills, 2:126–131
 - behaviorally-modified asset allocation, 2:81–96
 - about, 2:82–83
 - amount to moderate or adapt, 2:84–86
 - case studies, 2:86–96
 - guidelines, 2:83–84
 - and investment policy development, 2:81–82
 - and BFMI/BFMA, 2:7–8, 49–50
 - categorizations of, 2:50–52
 - cognitive errors, 2:52–69
 - belief perseverance biases, 2:52–62
 - confirmation bias, 2:55–56
 - conservatism bias, 2:52–55
 - emotional biases vs., 2:51–52
 - hindsight bias, 2:61–62
 - illusion of control bias, 2:60–61
 - information-processing biases, 2:62–69
 - representativeness bias, 2:56–60
 - in committee decision making, 2:136–138
 - emotional biases, 2:69–81
 - cognitive errors vs., 2:51–52
 - endowment bias, 2:78–79
 - loss-aversion bias, 2:70–73
 - overconfidence bias, 2:73–76
 - regret-aversion bias, 2:79–80
 - self-control bias, 2:76–77
 - status quo bias, 2:77–78
 - practice problems, 2:99–101
 - solutions to problems, 2:102–105
 - testing for, 2:112–113
- behavioral considerations, of risk management, 5:193
- behavioral factors in investment processes, 2:107–154
 - adviser-client relations, 2:117–120
 - client expectations, 2:118
 - consistency of approach, 2:118
 - financial goals, 2:118
 - limitations of risk tolerance questionnaires, 2:119–120
 - mutual benefits, 2:119
 - analysts' forecasts, 2:125–136
 - biases in conducting research, 2:133–136
 - management's influence on analysis, 2:131–133
 - overconfidence in forecasting skills, 2:126–131
 - committee decision making, 2:136–138
 - investment committee dynamics, 2:137
 - techniques for structuring and operating committees, 2:137–138
- and decision-making process, 2:107–108
- investor types, 2:108–117
 - Barnewall two-way model, 2:108–109
 - BB&K model, 2:109–110
 - limitations of classification, 2:116–117
 - psychographic modeling, 2:110–116
- market behavior, 2:138–145
 - bubbles and crashes, 2:141–144
 - market anomalies, 2:138–139
 - momentum, 2:140–141
 - value and growth stocks, 2:144–145
- portfolio construction, 2:120–125
 - and behavioral portfolio theory, 2:124–125
 - company stock, 2:122–123
 - excessive trading, 2:123–124
 - home bias, 2:124
 - inertia and default options, 2:120–121
 - naïve diversification, 2:122
 - target date funds, 2:121
- practice problems, 2:148–152
- solutions to problems, 2:153–154

- behavioral finance, 2:5–47. *see also*
 behavioral factors in investment processes
 about, 2:5–7
 decision making in, 2:20–28
 bounded rationality, 2:22–24
 decision theory, 2:20–22
 prospect theory, 2:24–28
 individual behavior in, 2:7–20
 attitudes toward risk, 2:17–19
 BFMA and BFMI, 2:7–8
 challenges to rational economic man, 2:15
 and neuro-economics, 2:19–20
 traditional perspectives on, 2:8–14
 utility maximization, 2:15–17
 market behavior in, 2:28–41
 adaptive markets hypothesis, 2:41
 asset pricing, 2:38–39
 and behavioral portfolio theory, 2:39–40
 consumption and savings, 2:37–38
 traditional perspectives on, 2:28–36
 and traditional perspectives on portfolio construction, 2:36
 model uncertainty in, 3:23
 practice problems, 2:45–46
 and psychological profiling of individual investors, 2:166–167
 solutions to problems, 2:47
 traditional vs.
 individual behavior, 2:8–14
 market behavior, 2:28–36
 portfolio construction, 2:36
 behavioral finance macro (BFMA), 2:7–8, 49
 behavioral finance micro (BFMI), 2:7–8, 49
 behavioral investor types (BITs), 2:110.
see also psychographic modeling of investors
 behavioral life-cycle model, 2:37–38
 behaviorally-modified asset allocation, 2:81–96
 about, 2:82–83
 amount to moderate or adapt, 2:84–86
 case studies, 2:86–96
 high wealth level investor with emotional biases, 2:88–92
 low wealth level investor with cognitive errors, 2:92–96
 guidelines, 2:83–84
 and investment policy development, 2:81–82
 behavioral portfolio theory (BPT), 2:39–40
 example, 2:40
 and mental accounting bias, 2:64
 and portfolio construction, 2:124–125
 Belarus, 2:304
 Belgium
 capital gains tax, 2:236
 equity real rates of return, 4:164
 equity risk premium, 3:39
 Eurozone membership, 3:9n.
 and EUSD, 2:311
 expected returns for equities/bonds, 3:24
 in Hague Conference, 2:304
 REITs, 5:14
 tax regime, 2:231, 347
 trade partners, 3:81
 wealth taxes, 2:238
 belief perseverance biases, 2:52–62
 confirmation bias, 2:55–56
 conservatism bias, 2:52–55
 hindsight bias, 2:61–62
 illusion of control bias, 2:60–61
 representativeness bias, 2:56–60
 beliefs
 and conservatism bias, 2:54
 and representativeness bias, 2:58
 benchmark bond indexes, 4:7–29
 active strategies, 4:27–29
 classification of strategies, 4:9–10
 indexing strategies, 4:11–27
 benchmarks for, 4:11–13
 bond index investability, 4:13–18
 enhanced, 4:25–27
 reasons for using, 4:11
 risk exposures with, 4:18–22
 and tracking risk, 4:22–25
 monitoring/adjusting portfolio with, 4:29
 benchmark description, 6:248, 275, 287
 benchmark portfolio returns, 6:149–150
 benchmarks, 6:133–146
 about, 3:395–396
 absolute, 6:136
 for after-tax portfolio returns, 6:281–282
 broad market indexes, 6:136–137
 for commodities, 5:46–47
 custom security-based, 6:139–140
 defined, 3:395; 6:134–135
 for distressed securities, 5:97
 factor-model-based, 6:137–138
 for hedge funds, 5:62–65
 alpha determination and absolute-return investing, 5:64–65
 comparison of manager-based hedge fund indices, 5:63–64
 indexes as benchmarks, 5:71–72
 performance evaluations for portfolios, 6:143–146
 indexes as
 and biases, 5:71–72
 equity index weighting schemes, 3:411; 4:171–174
 market indexes as benchmarks, 3:412
 selecting benchmark bond indexes, 4:11–13
 Industry Classification Benchmark, 4:232
 investor's, 4:219
 for managed futures, 5:87–88
 manager universes, 6:136, 140–141
 market indexes vs., 3:397
 for private equity, 5:36
 for real estate, 5:15–17
 returns-based, 6:138–139
 selection example, 3:413–415
 style indexes, 6:137
 tests of quality, 6:142–143
 types, 3:400–403; 6:136–139
 unconditional, 3:19
 uses of, 3:398–400
 valid
 criteria for, 4:15–16
 impact of, 3:396
 manager universes as, 6:140–141
 properties of, 6:135–136
 requirements of, 3:397
 tests of, 3:412
 Benchmarks strategy, 6:153–154
 beneficial ownership, 1:158
 beneficiaries, of trusts, 2:184–185
 benefit period, of disability income insurance, 2:417–418
 Bernanke, Ben, 2:6
 Bernstein, Peter L., 2:537; 3:10, 402–403
 best efforts order, 6:8
 best execution, 1:76, 78, 250; 6:37, 48
Best Practice Guidelines Governing Analyst/Corporate Issuer Relations (CFA Institute), 1:33; 4:207
 beta
 alpha and beta separation, 4:221
 changing, 5:240–241
 country, 4:131
 defined, 5:152; 6:138
 measuring and managing, 5:228–229
 and systematic bias, 6:142
 yield, 4:120
 beta research, 3:8
 BFMA. *see* behavioral finance macro
 BFMI. *see* behavioral finance micro
 biases. *see also specific types, e.g.:*
 forward rate bias
 of analysts, 2:125–136
 in conducting research, 2:133–136
 conservatism bias, 2:53–54
 in creating capital market expectations, 3:18–19
 and management's influence on analysis, 2:131–133
 overconfidence in forecasting skills, 2:126–131
 for hedge funds, 5:67, 69–71
 in index creation, 5:67, 69
 in market-oriented investment styles, 4:189
 bid-ask spread, 6:10
 and credit risk, 5:144
 effective, 6:12–14
 inside, 6:11
 market, 6:11
 and market quality, 6:19
 and transaction costs, 6:22
 bid price, 3:309; 6:10
 bid size, 6:10
 "big figure," currency quote, 3:308
 Big Four European countries, CLI for, 3:80
 binary options
 credit, 4:123, 126–127
 currency, 3:357
 binomial model, 5:306, 339
 BIS. *see* Bank for International Settlements
 BITs. *see* behavioral investor types
 Black, Fischer, 3:231
 Black-Litterman approach, 3:12, 231–238
 asset allocation example, 3:233–234
 as asset-only approach, 3:183

- and efficient portfolio, 3:236–238
- historical and equilibrium returns vs. returns from, 3:236
- ICAPM vs., 3:40
- steps in, 3:232
- unconstrained model, 3:231
- blackout periods, 1:159; 2:330
- Black–Scholes–Merton pricing option
 - and box spreads, 5:306
 - and delta hedging, 5:331
 - formula for, 5:300
 - and model risk, 5:145
 - prices from, 5:273n.4, 287
 - volatility in, 5:152, 339
- blend investment style, 4:188–189
- blind trusts, 1:200
- block orders, 6:17
- Bloomberg, 3:102, 103
- BLS. *see* Bureau of Labor Statistics
- boards of directors, benchmarks for, 3:399
- BofA Merrill Lynch 1–3 Year Corporate Bond Index, 4:12, 13
- BofA Merrill Lynch Long-Term Corporate Bond Index, 4:12, 13
- Bogle, John, 4:167
- bond duration
 - and bond options, 4:121–122
 - of foreign bonds, 4:131
 - and variance, 4:114
- bond futures, risk of, 5:221–223
- bond options, 4:121–122
- bond portfolio risk, 5:219–227
 - balancing types of risks, 5:221–223
 - of government bond portfolios, 5:223–226
 - risk of bond futures, 5:221–223
 - risk of bond portfolio, 5:219–221
 - variations and problems, 5:226–227
- bond portfolios
 - management of (*see* fixed-income portfolio management)
 - risk of, 5:219–221
- bond price, yield and, 5:219–221
- bonds. *see also* fixed-income investments; international bond investing
 - adjusting allocation between, 5:244–245
 - adjusting allocation between stocks and, 5:241–243, 246–247
 - asset allocation in pension plans with, 3:264
 - Brady, 4:137
 - cheapest to deliver, 5:221
 - corporate, 4:21, 76
 - dual currency, 5:373–376
 - emerging market, 3:90
 - Eurobonds, 4:73, 83
 - expected returns, 3:24–25, 36
 - experience-based allocation with, 3:250
 - foreign, 4:131
 - inflation/deflation effects for, 3:59; 4:164
 - inflation-indexed, 3:90–91
 - inflation-protected, 3:195–197
 - insurance company investment in, 2:505–506; 3:272–273
 - investment-grade credit
 - credit spread, 4:86–87
 - market for, 4:82–83
 - returns, 4:67
 - Sharpe ratio, 4:68
 - junk, 3:273
 - nominal default-free, 3:89–90
 - primary risk factors for, 4:9–10
 - tax-exempt, 3:195
 - Treasury
 - and Fed model, 3:35, 147
 - junk bond yield vs., 3:273
 - T-bill yield vs., 3:55
 - yield to maturity of, 3:35
- bond-yield-plus-risk-premium method, 3:38
- bond yields
 - and annuity pricing, 2:426
 - nominal, 3:75
 - real, 3:89, 91
 - yield to maturity, 3:35
 - yield to worst, 3:35n.38
- bonus compensation, 1:116–117
- Bookstaber, Richard, 2:537
- borrowing
 - calls with, 5:309–314
 - swaptions in anticipation of, 5:386–390
- Bosnia and Herzegovina, 2:304
- bottom up approach to psychographic modeling, 2:110
- bottom-up forecasts, 3:138–144
 - earnings forecast revisions based on, 3:143–144
 - of market earnings per share, 3:142, 144
 - portfolio suitability for, 3:140–141
 - top-down vs., 3:139, 142–143
 - using top-down forecasts with, 3:141–143
- bottom-up research approaches, 4:70, 230, 231
- bounded rationality, 2:15, 20, 22–24
- box spreads, 5:306–308
- BP p.l.c., 6:7–8
- BPT. *see* behavioral portfolio theory
- BPV. *see* basis point value
- Brady bonds, 4:137
- Brady plan, 4:137
- Brazil
 - capital gains tax, 2:228
 - credit analysis, 4:87
 - currency crisis, 3:206
 - gift tax, 2:293
 - in Hague Conference, 2:304
 - inflation-protected bonds, 3:196
 - market integration, 3:43
 - tax rates, 2:179
 - tax regime, 2:231, 347
- Brazilian Institute for Geography and Statistics, 3:82
- Brazilian real, 3:307, 372–373
- Brazil Industrial Production, 3:82
- BRC survey. *see* British Retail Consortium survey
- breakeven point
 - bear spread, 5:294
 - box spread, 5:307
 - bull spread, 5:291
 - butterfly spread, 5:297, 298
 - call options, 5:276, 277, 281
 - collars, 5:301, 302
 - covered calls, 5:283
 - protected puts, 5:287
 - put options, 5:279–281
 - straddles, 5:304–305
- breakeven spread analysis, 4:136–137
- Brightman, Christopher J., 5:10
- Brin, Sergey, 5:32
- British Gas, 4:87
- British pound
 - currency code, 3:307
 - currency conversion in loans, 5:366–369
 - in currency pairs, 3:308
- British Retail Consortium (BRC) survey, 3:61
- broad market indexes, 3:401; 6:136–137
- brokerage, prime, 6:18
- brokerage arrangements, 1:76, 79
- brokered markets, 6:17
- broker recruiting, 1:107
- brokers, 6:8, 18
- bubbles, 2:141–144; 3:31n.31
- budget deficits
 - and fiscal policy, 3:66
 - and government structural policies, 3:71
- budgeting, risk, 5:183–185
- buffering, 4:199
- build-up approach, 3:36–40
- Bulgaria, 2:304
- bullet structures, 4:83–84
 - and corporate bond market, 4:83
 - front-end, 4:84
 - and global bond market, 4:74
 - and immunization, 4:43
 - intermediate credit, 4:84
 - maturity, 4:74
 - structure trades, 4:77
 - in US credit markets, 4:82–83
- bull spreads, 5:289–292
- “bums,” in bond indexes, 4:15
- bundled commissions, 1:257
- bundled fees, 6:232, 268–269, 287
- Bureau of Labor Statistics (BLS), 3:13
- Burgiss, 3:401
- business assets, 2:389
- business-continuity planning, 1:252–253
- business cycle analysis, 3:51–66
 - factors affecting, 3:60–66
 - business investment, 3:61–62
 - consumer spending, 3:61
 - fiscal policy, 3:66
 - monetary policy, 3:62–66
 - inflation and deflation in, 3:55–59
 - inventory cycle, 3:51, 52
 - market expectations in, 3:59–60
 - and P/E ratio, 3:94–95
 - and returns for common shares, 3:92
 - stages of business cycle, 3:53–55
- business cycle risk, 2:324
- business cycles
 - and consumer confidence, 3:53, 54
 - defined, 3:51
 - stages of, 3:53–55
- business equity. *see* private business equity

- businesses, concentrated positions held in, 2:357–358
- business investment, in business cycle analysis, 3:61–62
- business owners with concentrated positions
monetization decision-making process for, 2:336–337, 362–364
personal lines of credit for, 2:360–361
profile of, 2:358
- business relationships
in AMC, 1:245
and conflicts of interest, 1:152, 156
- business risk, 5:141n.5
- butterfly spreads, 5:295–299
- buy-and-hold investors, constraints for, 4:79
- buy-and-hold strategies, 3:398n.5; 6:95–96, 158
- buyers
financial, 2:358–359
in liquid markets, 6:20
strategic, 2:358
- buyout funds, VC funds vs., 5:39
- buy-side clients, 1:31
- buy-side research, 4:231
- buy-side traders, 6:6
- Bylaws and Rules of Procedure for Proceedings Related to Professional Conduct, 1:9
- C**
- CAC 40 (index), 3:403, 406; 4:176, 183
- CAD/USD. *see* Dollar-Canada market
- Calculation Methodology (GIPS Section I.2)
composite return calculation provisions, 6:232–235
excerpt of, 6:216
external cash flows, 6:226–229
inputs, 6:226
solutions, 6:226–229
further calculation provisions, 6:229–232
implementation of, 6:229
time-weighted total return, 6:223–226
- calendar-and-percentage-of-portfolio rebalancing, 6:93
- calendar anomalies, 2:35
- calendar rebalancing, 6:90
- callable debt, removing calls from, 5:394–396
- callable structures, 4:83, 84
structure trades, 4:77
and US corporate bond market, 4:83
in US investment-grade credit markets, 4:83
- call features
adding calls to noncallable debt, 5:396–399
removing calls from callable debt, 5:394–396
- call options (calls)
adding, to noncallable debt, 5:396–399
with borrowing, 5:309–314
covered, 4:122
in equity portfolios
combinations of puts and, 5:300–308
covered, 5:282–286
long/short positions for, 5:275–278
premiums, 5:159
removing, from callable debt, 5:394–396
- call payoffs, 5:308–312
- Calmar ratio, 5:83n.120
- Cambridge Associates, 3:401; 5:36
- Campbell, John Y., 3:322–323, 364
- Canada
asset allocation in pension plans, 3:263, 264
bankruptcy, 5:102
capital gains taxes, 2:228, 240n.5
capital loss limits, 2:255
CLI for, 3:80, 81
corporate estate tax freeze, 2:338
currency hedging, 4:134
deemed disposition regimes, 2:298
defined-benefit pension plans, 2:463
equity indexes, 4:176
equity real rates of return, 4:164
equity risk premium, 3:39
exit taxes, 2:306–307
expected returns for equities/bonds, 3:24
government bond index returns, 4:128
in Hague Conference, 2:304
inflation-protected bonds, 3:196
insurance companies, 2:489, 497
interest income taxation, 2:233
ownership of private business enterprises, 2:322
pension funds, 3:262; 4:163; 5:9
prudent person concept for pension investing, 3:262
public sector pension plans, 5:41
Quebec independence movement, 4:88
real estate benchmarks, 5:16
real GDP growth rate, 3:32
REITs, 5:14, 24
tax-advantaged savings accounts, 2:246
tax rates, 2:179
tax regime, 2:231, 347
trade partners, 3:82
transfer of assets from DB plans, 2:454n.1
universal banking, 2:509
- Canadian dollar
currency code, 3:307
in currency pairs, 3:308, 309n.4
currency swaps with, 5:372–373
- Canadian Endowment for the Fine Arts (CEFA) case study, 3:178–180, 186, 226–229
- cancellation, in prospect theory, 2:25
- candidacy in CFA program, referring to, 1:171–172
- Candidate Pledge, 1:167
- candidates, CFA
knowledge of the law [Standard I(A)], 1:26
responsibilities of (*see* Responsibilities of CFA Members and Candidates [Standard of Professional Conduct VII])
- CAPE. *see* Cyclically Adjusted P/E Ratio
- Capellas, Michael D., 5:100
- capital. *see specific types, e.g.:* financial capital
Capital Accord of 1988 (Basel I), 2:513; 5:181
capital adequacy ratio, 5:181n.49
capital allocation, risk management in, 5:191–193
capital allocation line, 3:220
capital asset pricing model (CAPM), 2:34, 38, 545
and *ex post* SML, 6:169
and market indexes, 3:404, 409
market model vs., 6:137n.11
validity of, 6:171
- capital flows
and currency returns, 3:98
forecasting approach based on, 3:100
and USD/euro exchange rate, 3:101
- capital gains, 2:179
accumulation using long- vs. short-term tax rate on, 2:258–260
and cost basis, 2:237–238
deferred, 2:234–237
and income, 2:181–182
and investment policy statements, 2:179
and sell disciplines, 4:210
tax provisions for, 2:228
in tax regimes, 2:229–231, 347
- capitalization-weighted indexes
advantages and disadvantages of, 3:409–410
as benchmarks, 3:411–412
float-adjusted, 3:411–412
- capitalization weighting, 3:405–406
- capital losses, 2:255–258
- capital market constraints, on concentrated positions, 2:330–331
- capital market expectations (CME), 3:5–122
and ALM approach, 3:244
and asset class returns, 3:95–97
in business cycle analysis, 3:59–60
defined, 3:6
economic analysis of, 3:50–103
business cycle analysis, 3:51–66
and economic forecasting, 3:78–87
exogenous shocks in, 3:72–73
forecasting asset class returns with, 3:87–102
growth trends, 3:66–72
information sources for, 3:102–103
international interactions in, 3:73–78
- forecasting of, 3:13–23
biases of analyst methods, 3:18–19
conditioning information, 3:19–20
correlations in, 3:20–21
data measurement errors and biases, 3:14–16
economic data, 3:13–14
and *ex post* risk, 3:18
and GNP vs. GDP, 3:14
with historical estimates, 3:16–18
and model uncertainty, 3:23
psychological traps with, 3:21–22
- framework, 3:7–13
and expected return estimates, 3:11–12
historical analysis in, 3:10
and inconsistency of correlation estimates, 3:12–13
information requirements, 3:8–10

- modifying, 3:95–97
 - and policy portfolio, 3:180
 - practice problems, 3:106–113
 - setting, 3:23–50
 - with formal tools, 3:23–48
 - and judgment, 3:50
 - with survey and panel methods, 3:48–49
 - solutions to problems, 3:114–122
 - Capital Market Line (CML), *ex post*, 6:170
 - capital markets. *see also* Integrity of Capital Markets [Standard of Professional Conduct II]
 - anomalies in, 3:23
 - and benefit of ethics to society, 1:12
 - business cycle effects on, 3:53, 54
 - forecasts of, 3:43–45
 - sustainability of, 1:12–13
 - capital market theory, 3:220–221
 - capital returns, 6:260, 287
 - caplet payoff, 5:319–321, 326, 327
 - caplets, 5:319, 320
 - CAPM. *see* capital asset pricing model
 - cap rate, 4:122
 - cap risk, 4:42
 - caps
 - fee, 4:223
 - and floating rate, 4:42; 5:319–323
 - hedging with options, 4:122
 - interest rate for, 4:122
 - cap weighting, 3:405–406. *see also* capitalization-weighted indexes
 - care. *see also* Loyalty, Prudence, and Care [Standard III(A)]
 - and independent professional judgment, 1:210
 - and prudent judgment, 1:245–246
 - career development phase (financial stages of life), 2:393
 - carried interest, 5:34; 6:266, 287
 - Carril, Peter J., 4:91
 - carry trade, 3:334–336, 347
 - carve-out segments
 - in composite construction, 6:244–245
 - GIPS definition, 6:287
 - presentation and reporting of, 6:256
 - case studies
 - CEFA, 3:178–180, 186, 226–229
 - Susan Fairfax, 2:188–194
 - high-wealth-level investor with emotional biases, 2:88–92
 - behaviorally-modified portfolio decision, 2:92
 - diagnostic tests, 2:89–91
 - effect of biases, 2:91
 - moderate or adapt recommendation, 2:91–92
 - Inger family, 2:159–162, 164–165, 170–171, 173–175, 177, 178, 184–187, 194–196
 - low-wealth-level investor with cognitive biases, 2:92–96
 - behaviorally-modified portfolio decision, 2:96
 - diagnostic tests, 2:93–94
 - effect of biases, 2:95
 - moderate or adapt recommendation, 2:95
 - Perrier family, 2:433–440
 - Ian Thomas, 3:221–225
 - case studies (violations of ethical standards), 1:197–237
 - consultants, 1:198–202
 - framework for ethical decision-making, 1:197–198
 - Pearl Investment Management, 1:202–213
 - practice problems, 1:214–230
 - solutions to problems, 1:231–237
 - cash
 - in asset allocation, 3:195
 - equitizing, 5:236–237
 - from equity, 5:237–241
 - equity from, 5:232–237
 - forecasts of returns, 3:87–88
 - inflation/deflation effects for, 3:59
 - invested in private equity, 5:43
 - synthetic index funds from, 5:233–236
 - cash balance plans, 2:453, 473
 - cash equivalents
 - in asset allocation, 3:195
 - and efficient portfolio for mean–variance approach, 3:220–221
 - forecasts of returns, 3:87–88
 - cash flow at risk (CFAR), 5:170
 - cash flow matching strategies, 4:48–52
 - applications of, 4:51–52
 - for asset allocation, 3:183
 - cash flow analysis for, 4:50
 - as dedication strategy, 4:30
 - extensions of basic strategy, 4:51
 - multiple liability immunization vs., 4:50
 - symmetric, 4:51
- cash flows
 - analysis of, 4:50
 - external (*see* external cash flows)
 - immunization strategies for general, 4:46–47
 - large, 6:222, 243n.20, 290
 - of non-insurance companies, 2:502
 - present value distribution of, 4:20–21
 - secondary trade and reinvestment of, 4:77–78
 - significant, 6:243n.20
 - from VC and buy-out funds, 5:39
 - volatility of, 2:492
- cashless collars, 2:349–350
- cash management, 2:516–517
- cash market trades, 6:99
- cash receipts, foreign, 5:252, 371–373
- cash-value life insurance, 2:389
- cash values
 - inside buildup of, 2:496
 - and policy reserves, of life insurance, 2:412–413
- casualty insurance companies. *see* non-life insurance companies
- categorization, availability bias and, 2:67
- causality relationships, 3:21
- Cautious investors, 2:169
- Cayman Islands, 2:276
- CBOE. *see* Chicago Board Options Exchange
- CBOT. *see* Chicago Board of Trade
- CCAA. *see* Companies' Creditors Arrangement Act
- CDOs. *see* collateralized debt obligations
- CEFA case study. *see* Canadian Endowment for the Fine Arts case study
- Celebrity (BB&K classification), 2:110
- cell-matching technique, 4:18, 20
- Center for International Securities and Derivatives Markets (CISDM), 5:22, 62, 64, 97
- central banks, monetary policy of, 3:56–57, 63; 6:80
- central bank watching, 3:88
- Central Europe. *see specific countries*
- certainty equivalents, 2:13
- certainty overconfidence, 2:74–75
- Certificate in Investment Performance Measurement (CIPM) program, 1:9; 6:209n.3
- certificates of deposit, 4:120
- CFA Centre for Financial Market Integrity, 4:207
- CFA charterholders, 1:171
- CFA designation, 1:171. *see also* Reference to CFA Institute, Designation and Program [Standard VII(B)]
 - guidance on using, 1:171
 - right to use, 1:175
 - stating facts about, 1:176
- CFA examinations, 1:5
 - bringing written material into exam room, 1:167
 - confidential information in, 1:165–166
 - expressing opinions about, 1:166
 - grading guidelines and results for, 1:169
 - passing, in consecutive years, 1:174–175
 - sharing content of, 1:168–169
 - sharing questions from, 1:167
 - writing after exam period, 1:168
- CFA Institute. *see also specific committees and programs*
 - acknowledgment of AMC compliance by, 1:241
 - and Code of Ethics, 4:207
 - compromising integrity of, 1:169
 - ethical commitment of, 1:14–15
 - formation of, 6:210
 - and GIPS standards, 6:283, 284
 - mission of, 1:7
 - referring to, 1:171 (*see also* Reference to CFA Institute, Designation and Program [Standard VII(B)])
 - values of, 1:15
 - website, 1:15, 129
- CFA logo, 1:172–173, 175–176
- CFA marks, use of, 1:172–174
- CFA members and candidates
 - knowledge of the law [Standard I(A)], 1:26
 - responsibilities of (*see* Responsibilities of CFA Members and Candidates [Standard of Professional Conduct VII])

- CFA Program. *see also* Reference to CFA Institute, Designation and Program [Standard VII(B)]
 conduct restrictions for candidates and members, 1:166
 confidential information about, 1:165–166
 stating facts about, 1:176
 testing policies for, 1:167
 CFAR. *see* cash flow at risk
 CFCs. *see* controlled foreign corporations
 chain-linking process, 6:127–128
 chairs, committee, 2:137
 changes
 fund mandate, 1:142
 to investment process, 1:142–144
 organizational, 1:258
 personnel, 1:258
 Chapter 7 bankruptcy, 5:95, 102–104
 Chapter 11 bankruptcy, 5:95, 102–104
 charitable gratuitous transfers, 2:298–299
 charitable remainder trusts (CRT), 2:287–288
 charitable trusts, 2:368
 Chartered Financial Analyst. *see entries beginning with CFA*
 cheapest-to-deliver (CTD) issue, 4:115; 5:221
 Chebyshev's inequality, 3:189n.17
 checklist approach to economic forecasting, 3:84–86
 CHF/EUR. *see* Euro-Swiss market
 CHF/USD. *see* Dollar-Swiss market
 Chicago Board of Trade (CBOT)
 and changes in forwards/futures markets, 6:10
 municipal bond futures, 5:226n.16
 US Treasury bond futures, 4:115, 116; 5:221
 Chicago Board Options Exchange (CBOE), 3:404
 Chicago Mercantile Exchange (CME), 3:342–343; 4:182; 5:171
 children
 forced heirship rules, 2:274–276
 gifting to, 2:182, 184
 Chile
 degree of specialization, 3:74
 in Hague Conference, 2:304
 inflation-protected bonds, 3:196
 market integration, 3:43
 tax-advantaged savings accounts, 2:246
 tax rates, 2:179
 Chilean peso, 3:370
 China
 Cobb-Douglas model for economic growth in, 3:124, 126–129
 economic experience, 3:126–127
 future economic growth, 3:128–129
 in Hague Conference, 2:304
 historical growth accounting, 3:126
 H-model for estimating P/E, 3:130–137
 home ownership, 2:388
 interest income taxation, 2:233
 investment real estate, 2:324
 macroeconomic linkages, 3:74
 market capitalization, 3:205
 REITs, 5:14
 tax rates, 2:179
 tax regime, 2:231, 347
 TFP growth, 3:69
 trade partners, 3:81, 82
 China Industrial Production index, 3:82
 Chinese yuan, 3:307, 372
 CIPM program. *see* Certificate in Investment Performance
 Measurement program
 CISDM. *see* Center for International Securities and Derivatives Markets
 CISDM CTA trading strategy benchmarks, 5:87–90
 CISDM Currency strategy, 5:89
 CISDM Discretionary strategy, 5:89
 CISDM Diversified strategy, 5:89
 CISDM dollar-weighted CTA index (CTA\$), 5:87–92
 CISDM equal-weighted CTA index (CTAEQ), 5:87–89
 CISDM Equal Weighted Hedge Fund Index, 5:62
 CISDM Financial strategy, 5:89
 CISDM Trend-following strategy, 5:89
 Citibank, 2:510
 Citicorp, 2:510
 Citigroup Broad Investment-Grade (US BIG) Bond Index, 6:136
 Citigroup World Government Bond Index, 4:14
 Citi Non-US World Government Bond Index, 3:44
 civil law systems, 2:274, 300, 302
 classical single-period immunization and active bond management strategies, 4:40–41
 assumptions of, 4:37
 characteristics of, 4:31
 duration and convexity of assets and liabilities, 4:41–42
 extensions of, 4:37–45
 risk minimization for immunized portfolios, 4:42–45
 and risk–return tradeoff, 4:40
 and shifts in interest rates, 4:37–40
 and shifts in time horizon, 4:40
 types of risk, 4:42
 classic relative-value analysis, 4:70–72
 clawback provisions, 2:274–275; 5:34
 client-adviser relations. *see* adviser-client relations
 client commission practices, 1:78–80
 client–plan participants, identifying, 1:78
 clients
 approval from, 1:77
 buy-side, 1:31
 communication with (*see* Communication with Clients and Prospective Clients [Standard V(B)])
 disclosure of conflicts to, 1:150–151
 duties to (*see* Duties to Clients [Standard of Professional Conduct III])
 fair dealing with, 1:90
 gifts and entertainment from, 1:39
 identifying, 1:75, 80–81, 93
 informing, of investment process, 1:138–139
 interests of, 1:78, 244–245; 6:47–49
 loyalty to, 1:81 (*see also* Loyalty to Clients [AMC Part A])
 maintaining lists of, 1:85
 priority of personal trading vs. trading for, 1:157
 risk profile of, 1:91
 select, additional services for, 1:88
 soliciting former, 1:109–114
 status of, 1:102
 client updates, 1:131–132
 closed-book markets, 6:11
 closed-end funds, 5:15; 6:259, 287
 closeout netting, 5:188
 closing out of transactions prior to expiration, 2:342
 CLS. *see* continuously linked settlements
 CME. *see* capital market expectations; Chicago Mercantile Exchange
 CML, *ex post*. *see* Capital Market Line, *ex post*
 CNA Financial Corporation, 2:505, 506
 Cobb-Douglas production function (Cobb-Douglas model), 3:124–128
 for Chinese economic growth, 3:124, 126–129
 and neoclassical approach to growth accounting, 3:124–125
 projections of economic growth from, 3:128–129
 Coca-Cola, 4:186
 Code of Ethics (CFA Institute), 1:5–16; 4:207
 adoption of, 1:10
 and applicable law, 1:22–23
 evolution of, 1:6–7
 and importance of ethics, 1:11–15
 notification of, 1:114
 and Professional Conduct Program, 1:9–10
 soft dollar policies in, 6:29
 and Standards of Practice Council, 1:10–11
 in *Standards of Practice Handbook*, 1:3, 5–7
 text of, 1:15–16
 and values of CFA Institute, 1:15
 codes of ethics (in general)
 adopting, 1:120
 commitment to, 1:14
 developing, 1:26–27, 54
 codification, in prospect theory, 2:25
 cognitive cost, 2:58
 cognitive dissonance, 2:52, 125–126
 cognitive errors, 2:52–69
 of analysts, 2:125
 anchoring and adjustment bias, 2:63
 availability bias, 2:67–69
 in behavioral finance, 2:166
 belief perseverance biases, 2:52–62
 confirmation bias, 2:55–56
 conservatism bias, 2:52–55
 hindsight bias, 2:61–62
 illusion of control bias, 2:60–61
 representativeness bias, 2:56–60
 in BFMI, 2:7–8

- confirmation bias, 2:55–56
 conservatism bias, 2:52–55
 defined, 2:50
 emotional biases vs., 2:51–52
 framing bias, 2:65–67
 hindsight bias, 2:61–62
 illusion of control bias, 2:60–61
 information-processing biases, 2:62–69
 anchoring and adjustment bias, 2:63
 availability bias, 2:67–69
 framing bias, 2:65–67
 mental accounting bias, 2:64–65
 of investors with concentrated positions, 2:332
 investors with emotional biases and, 2:117
 low-wealth-level investor case study, 2:92–96
 behaviorally-modified portfolio decision, 2:96
 diagnostic tests, 2:93–94
 effect of biases, 2:95
 moderate or adapt recommendation, 2:95
 mental accounting bias, 2:64–65
 representativeness bias, 2:56–60
 coinsurance (health insurance), 2:403n.3, 421
 collars, 2:330n.1
 cashless, 2:349–350
 debit, 2:350
 defined, 5:288, 300
 in equity portfolios, 5:300–303
 with floating-rate loans, 5:325–329
 hedging, 4:122
 zero-premium, 6:77
 collateral
 managing credit risk with, 5:187
 for repurchase agreements, 4:109, 110
 collateralized debt obligations (CDOs), 1:114; 4:134n.6
 collateral return, 5:49
 collectibles, 2:389
 collision coverage, for automobile insurance, 2:420
 Colombia
 deemed disposition regimes, 2:298
 gift tax, 2:293
 inflation-protected bonds, 3:196
 interest income taxation, 2:233
 tax regime, 2:231, 347
 wealth taxes, 2:238, 306
 combination, in prospect theory, 2:25
 combination matching, 4:51
 combination strategies, for fixed-income portfolios, 4:106
 combined ratio, 2:504
 commercial paper, 4:120
 commingled real estate funds (CREFs), 5:14, 15
 commissions
 and AMC, 1:249–250
 client, 1:78–80
 disclosure of, 1:257
 and international investments, 3:201
 and transaction costs, 6:28–30
 commitment, for private equity investments, 5:34, 37, 41
 commitment period, 5:41
 committed capital, 6:259, 265, 287
 committee decision making, 2:136–138
 investment committee dynamics, 2:137
 techniques for structuring and operating committees, 2:137–138
 Committee for Performance Presentation Standards (CPPS), 6:210, 283
 Committee of Sponsoring Organizations of the Treadway Commission, 5:139n.3
 commodities, 5:44–57
 benchmarks, 5:46–47
 defined, 5:7, 44
 historical performance, 5:47–50
 commodity index return
 components, 5:49–50
 recent performance, 5:48–49
 interpretation issues, 5:50–51
 investment characteristics, 5:51–54
 commodities as inflation hedges, 5:54
 risk characteristics, 5:51–53
 market for, 5:45–46
 size of market, 5:46
 types of commodity investments, 5:45
 in portfolios, 5:55–57
 types of, 5:45
 commodity currencies, 3:371
 Commodity Futures Trading Commission, 5:226n.16
 commodity index returns, 5:49–50
 commodity market, 5:45–46
 size of, 5:46
 types of commodity investments, 5:45
 commodity pool operators (CPOs), 5:86
 commodity pools, 2:516
 commodity trading advisors (CTAs), 5:44
 and characteristics of managed futures, 5:90–91
 in Chicago Mercantile Exchange, 3:343
 historical performance of, 5:88–89
 performance persistence, 5:93
 registration of, 5:86
 common law systems, 2:274, 300
 Common Progressive Tax Regime, 2:229–231, 347
 common shares, earnings of, 3:91–94
 common stock to surplus ratio, 2:502–503
 communication(s)
 in AMC, 1:255
 in case study, 1:201
 with client, 5:11
 different forms of, 1:139
 to employees of material nonpublic information, 1:63
 of GIPS Advertising Guidelines, 6:273–274
 interdepartmental, 1:61
 Communication with Clients and Prospective Clients [Standard V(B)]
 application of the standard, 1:141–146
 case study, 1:212
 compliance procedures, 1:140–141
 eleventh edition revision, 1:8
 guidance, 1:138–140
 different forms of communication, 1:139
 facts vs. opinions in reports, 1:140
 identifying risks and limitations of analysis, 1:139–140
 informing clients of investment process, 1:138–139
 report presentation, 1:140
 text of, 1:18, 137–138
 community foundations, 2:474–475
 community property regimes, 2:275–276
 companies, as estate planning tools, 2:303
 Companies' Creditors Arrangement Act (CCAA), 5:102
 company promotion, 1:69
 company-specific risk, with concentrated positions, 2:325–326
 company-sponsored foundations, 2:474–475
 company stock, 2:122–123
 and confirmation bias, 2:56
 in defined-contribution pension plans, 2:468
 in 401(k) plans, 2:474n.9
 personal lines of credit secured by, 2:360–361
 comparable data, in forecasting, 2:128–129
 compensation. *see also* Additional Compensation Arrangements [Standard IV(B)]
 bonus, 1:116–117
 and conflict of interest, 1:153–154
 disclosure of, 1:77
 externally compensated assignments, 1:113
 notification of, 1:116–117
 outside, 1:117
 and research independence, 1:40
 competence, 1:54
 competition
 and government structural policies, 3:72
 perfect, 2:12
 in private equity evaluation, 5:42
 competition policies, 1:109, 112
 completeness, market index, 3:407
 Completeness axiom (utility theory), 2:9
 completeness funds, 4:220–221
 completeness portfolios, 2:355
 completion, assurity of, 6:9
 complex models, forecasting with, 2:127
 compliance
 claiming, with AMC, 1:241
 using benchmarks to demonstrate, 3:400
 compliance officers, 1:36, 251
 compliance procedures
 adequate, 1:119–121
 adoption of, 1:120
 for AMC, 1:250–251
 in case studies, 1:202
 inadequate, 1:124
 as responsibility of supervisors, 1:120–121
 component returns, 6:260–261

- composite construction
 misrepresentation of, 1:52
 in verification process, 6:279
 in wrap fee/SMA provisions, 6:269
- Composite Construction (GIPS Section I.3), 6:235–245
 carve-out segments, 6:244–245
 defining investment strategies, 6:238–241
 excerpt of, 6:216
 implementation of, 6:236, 237, 240, 242, 245
 including and excluding portfolios, 6:241–244
 qualifying portfolios, 6:235–238
 composite creation date, 6:247, 288
- composite definition
 GIPS definition, 6:288
 GIPS provisions on, 6:238–241, 247n.23, 269–270
- composite descriptions, 6:247, 288
- composite return calculation provisions, 6:232–235
- composites
 defined, 6:208n.2, 287
 disclosures related to, 6:247–248
 non-fee paying portfolios in, 6:256
- compounded returns, 2:287
- compounding
 and cash flow volatility, 2:492
 and tax deferrals, 2:235
- comprehensive coverage, for automobile insurance, 2:420
- comprehensive major medical insurance, 2:421
- concave strategies, 6:97–98
- concentrated portfolios, diversifying, 5:376–378
- concentrated single-asset positions, 2:321–379
 asset classes involved in, 2:323–324
 defined, 2:323
 global perspective on management, 2:322–323
 investment real estate, 2:366–369
 about, 2:366
 monetization strategies, 2:367–369
 investment risks, 2:324–327
 management principles, 2:327–340
 asset location and wealth transfers, 2:337–340
 capital market constraints, 2:330–331
 decision-making process, 2:332–337, 340, 362–364
 goal-based planning, 2:334–337
 institutional constraints, 2:329–330
 investor constraints, 2:328–329
 objectives, 2:327–328
 psychological considerations, 2:331–334
 monetizing, 2:322
 practice problems, 2:372–375
 private business equity, 2:356–366
 about, 2:356–357
 business owner profile, 2:358
 business profile, 2:357–358
 monetization strategies, 2:358–366
 single-stock positions, 2:340–356
 about, 2:340–341
 management strategies, 2:343–356
 non-tax considerations, 2:342–343
 tax considerations, 2:341–342
 solutions to problems, 2:376–379
- concentrated stock positions,
 monitoring portfolios with, 6:77–79
- concurrent returns, expected value of, 2:198
- conditional 1/n diversification, 2:122
- conditional probability. *see* Bayes' formula
- conditional return correlations for international assets, 3:203–204
- conditioning information, 3:19–20
- Conduct as Participants in CFA Institute Programs [Standard VII(A)], 1:19, 165–169
 application of the standard, 1:167–169
 eleventh edition revision, 1:8
 guidance, 1:165–167
 additional CFA restrictions, 1:166
 confidential program information, 1:165–166
 expressing opinions, 1:166
 text of, 1:19, 165
- Conference Board, 3:80, 82, 83, 102
- confidence band, quality control chart, 6:173–174
- confidence intervals
 for forecasts, 2:126
 and immunization risk, 4:44
 and prediction overconfidence, 2:74
- confidential information
 about firms, 1:115
 in AMC, 1:245
 conveying, 1:205
 disclosing, 1:103–105
 possessing, 1:103
- confidentiality. *see also* Preservation of Confidentiality [Standard III(E)]
 of CFA program information, 1:165–166
 maintaining, 1:78
- confirmation bias, 2:55–56, 332
 of analysts, 2:133
 consequences of, 2:55–56
 detection and methods of overcoming, 2:56
 diagnostic questions, 2:88
 and market bubbles, 2:143
- confirmations of transactions, duplicate, 1:160
- confirming evidence trap, 3:21
- conflicts of interest
 in AMC, 1:255–256
 avoidance of, 1:200
 and business relationships, 1:152, 156
 and business stock ownership, 1:152
 in case studies, 1:199–201
 and compensation arrangement, 1:153–154
 and directorship, 1:154–155
 disclosure of (*see also* Disclosure of Conflicts [Standard VI(A)])
 in AMC, 1:255–256
 firm policies, 1:77
 and personal stock ownership, 1:153
 and personal trading, 1:155
 potential, in ethical decision-making framework, 1:200
 and priority of transactions, 1:157
 and requested favors, 1:155
- Conflicts of Interest [Standard of Professional Conduct VI], 1:149–164
- Disclosure of Conflicts [Standard VI(A)], 1:149–156
 application of the standard, 1:152–156
 compliance procedures, 1:152
 guidance, 1:149–152
 text of, 1:18, 149
- Priority of Transactions [Standard VI(B)], 1:157–162
 application of the standard, 1:160–162
 case study, 1:204
 compliance procedures, 1:158–160
 guidance, 1:157–158
 text of, 1:18, 157
- Referral Fees [Standard VI(C)], 1:162–164
 application of the standard, 1:162–164
 compliance procedures, 1:162
 guidance, 1:162
 text of, 1:18, 162
- Congressional Budget Office, 3:103
- conjunction fallacy, 2:133, 135
- conservatism bias, 2:52–55, 87, 332
- consistency
 of investment approach, 2:118
 of performance evaluations, 5:83–85
- consistent growth investment style, 4:188
- constant growth model. *see* Gordon growth model
- constant-mix strategies, 6:96
- constant-proportion (CPPI) strategies, 6:97
- constant returns to scale, 3:125
- constraints
 of long-only investing, 4:207–208
 on secondary trade, 4:78–79
- constraints of individual investors, 2:176–187
 asset allocation based on, 2:193, 194
 and asset location, 2:253–254
 buy-and-hold investors, 4:79
 case study, 2:186–187
 with concentrated positions, 2:328–329
 in investment policy statements, 1:93
 legal and regulatory environment, 2:182–185
 family foundation, 2:184–185
 jurisdiction, 2:185
 personal trust, 2:183–184
 liquidity, 2:176–178
 in sample IPSs, 2:186–187, 190–191
 taxes, 2:179–182
 early transfers, 2:182
 tax avoidance, 2:181
 tax deferral, 2:181
 tax reduction, 2:181–182
 transfer at death, 2:182
 wealth transfer taxes, 2:182

- time horizon, 2:178
- unique circumstances, 2:185
- consultants
 - benchmarks for, 3:399
 - case study, 1:198–202
 - pension fund, 4:185
- consumer confidence, business cycle and, 3:53, 54
- consumer income growth, in
 - econometric modeling, 3:79
- consumer nondurables, Pure Sector Allocation return for, 6:159
- consumers
 - comparison of life insurance costs for, 2:413–415
 - and economic growth trends and, 3:68
- consumer spending
 - and business cycle, 3:61
 - in business cycle analysis, 3:61
 - in econometric modeling, 3:79
 - in United Kingdom, 3:49
- consumption
 - behavioral approach to, 2:37–38
 - and self-control bias, 2:76–77
 - taxes on, 2:226
- contagion, in emerging markets, 3:371–372
- contango, 5:50
- contingent claims risk, 4:42
- contingent immunization, 4:40–41
- Continuity axiom (utility theory), 2:9
- continuous auction markets, 6:16
- continuously linked settlements (CLS), 5:146
- contract risk, 5:147–148
- contracts. *see also* forward contracts (forwards); futures (futures contracts)
 - assurity of, 6:20
 - employment, 5:43
 - guaranteed investment, 2:494; 3:271n.106; 4:31–33
 - service, 2:422
- contractual restrictions, on concentrated positions, 2:330
- contrarian investment style, 4:187
- control. *see also* illusion of control bias; self-control bias
 - of emotions, 2:51
 - of family limited partnerships, 2:297–298
 - of trusts, 2:300
 - voting, 2:328
- controlled foreign corporations (CFCs), 2:303
- convenience, market liquidity and, 6:20
- convenience yield, commodity, 5:52
- conversion factors, for interest rate futures, 4:115
- convertible arbitrage hedge fund strategies, 5:58–59
- convexity
 - of assets/liabilities, 4:41–42
 - of benchmark bond indexes, 4:21
 - as measure of risk, 5:152
 - portfolio, 3:353
- convexity adjustment, 4:20
- convex strategies, 6:97–98
- copayments (health insurance), 2:403n.3, 421
- copies, maintaining, 1:47
- core capital, 2:278–288
 - defined, 2:279
 - Monte Carlo estimation, 2:285–288
 - mortality table estimation, 2:280–284
- core hedge, 3:366
- core investment style, 4:188–189
- core-plus fixed-income portfolios, 4:137
- core real estate strategies, 6:261
- core-satellite investing, 5:13
- core-satellite portfolios, 4:217–220
- corner portfolios, 3:213–217
- corner portfolio theorem, 3:213
- corporate bonds
 - and sector-rotation trades, 4:76
 - and spread duration, 4:21
- corporate form (private equity funds), 5:34
- corporate governance, 3:206; 5:139; 6:71
- corporate risk management, 2:466–467
- corporate share of income, 2:496
- corporate venturing, 5:31
- correction, of unintentional errors, 1:48
- correlation analysis, personality typing of investors and, 2:170
- correlation of returns, for government bond indexes, 4:128–129
- correlations, as performance appraisal measures, 5:83
- correlations of assets
 - inconsistency of estimates, 3:12–13
 - international, 3:203–204
 - judgment in estimates, 3:50
 - misinterpretations of, 3:20–21
 - nonlinear, 3:20
 - partial, 3:20
- corridors for asset classes, 6:91–93
- cost(s)
 - of capital, 3:207
 - commission, 3:201
 - delay, 6:23, 25
 - explicit, 6:25
 - “gaming” of cost measures, 6:23, 24
 - hedging, 3:352–360
 - example, 3:358–360
 - exotic options, 3:356–357
 - over-/under-hedging with forward contracts, 3:353
 - protective puts with OTM options, 3:353–354
 - put spreads, 3:354–355
 - risk reversal, 3:354
 - seagull spreads, 3:355–356
- of international assets, 3:200–201
- life insurance, 2:413–415
- market impact, 3:200, 201
- missed trade opportunity, 6:23, 25
- nonfinancial, 6:84
- opportunity, 3:324
- of portfolio rebalancing, 6:84, 88–89
- replacement, 2:418–419
- sell disciplines based on, 4:210
- in strategic currency decisions, 3:323–324
- trading, 6:21–32
 - for currency hedging, 3:323–324
- econometric models for costs, 6:30–32
 - with emerging market currencies, 3:370–372
 - for international assets, 3:200, 201
 - transaction cost components, 6:22–30
- in trading focus, 6:38–40
- transaction
 - components of, 6:22–30
 - of dedication strategies, 4:52
 - econometric model for, 6:30–32
 - and immunized portfolios, 4:52
 - and indexed portfolios, 4:25, 178
 - of portfolio rebalancing, 6:88–89
- cost arrangements, restricting, 1:36
- cost basis, 2:235, 237–238, 329
- costless hedge, 3:321n.10
- cost of living rider, for disability income insurance, 2:418
- costs-are-not-important trading focus, 6:38, 40
- countercyclical premiums, 6:81
- counterparty credit risk, 2:342
- country beta, 4:131
- country risk, in emerging markets, 3:76–78
- Country Version of GIPS (CVG), 6:211
- covariance
 - estimating, 3:28, 29
 - and risk of equities, 5:228
- covariance matrix
 - multifactor model for estimating, 3:28–31
 - shrinkage estimator of, 3:25–26
 - target, 3:25–26
- coverage, benchmark, 6:143
- covered calls
 - and bull spreads, 5:290
 - in equity portfolios, 5:282–286
 - for portfolio management, 4:122
- Cowles, Alfred, 2:31–32
- CPI. *see* US Consumer Price Index
- CPI-U. *see* US Consumer Price Index for All Urban Consumers
- CPOs. *see* commodity pool operators
- CPPI strategies. *see* constant-proportion strategies
- CPPS. *see* Committee for Performance Presentation Standards
- Crabbe, Leland, 4:92
- cram down, 5:103
- crashes, market, 2:141–144
- credit analysis, for global portfolio management, 4:87
- credit barbell strategy, 4:86
- credit bond portfolio management. *see* global credit bond portfolio management
- credit curve analysis, for global portfolio management, 4:86–87
- credit-default swaps
 - credit relative-value analysis for, 4:70
 - for fixed-income portfolio management, 4:127–128
 - and spread analysis, 4:80
 - transferring credit risk with, 5:189
- credit-defense trades, 4:76
- credit derivatives, 4:123; 5:142n.7, 189

- credited rates, 2:490
 credit events, 4:127
 credit forwards, spread, 4:124–127
 credit method, 2:307
 credit options, 4:123–124, 126–127
 credit protection sellers, 4:123
 credit rating agency opinions, 1:33–34
 credit risk, 2:507n.28
 benchmark bond index selection, 4:11–12
 counterparty, 2:342
 and fixed-income portfolio management, 4:123–128
 identifying, 5:142–143
 for insurance companies, 2:492
 and investments for banks, 2:512
 managing, 5:186–189
 with collateral, 5:187
 with credit derivatives, 5:189
 by limiting exposure to credit risk, 5:186
 by marking to market, 5:186, 187
 with netting, 5:187–188
 reducing, 5:186–189
 with standards and enhanced derivative product companies, 5:188
 transferring, 5:189
 measuring, 5:173–180
 calculating exposures, 5:178–179
 of forward contracts, 5:176
 option-pricing theory, 5:174–176
 of options, 5:178–180
 of swaps, 5:177
 and spread duration, 4:36
 credit spread forwards, 4:124–126; 5:189
 credit spread options, 4:124, 126–127; 5:189
 credit spread risk, 4:123
 credit spreads, 4:86–87
 credit standards, 5:188
 Credit Suisse First Boston, 5:32
 Credit Suisse/Tremont, 3:401
 Credit Suisse/Tremont Index, 5:62, 64
 Credit Support Annexes (CSAs), 3:342n.23
 credit-upside trades, 4:75–76
 credit VaR, 5:174
 CREFs. *see* commingled real estate funds
 Croatia, 2:304
 cross-border estate planning, 2:303–311
 Hague Conference, 2:304–305
 taxes, 2:305–310
 double taxation, 2:307–310
 exit taxes, 2:306–307
 foreign tax credit provisions, 2:307–308
 income taxes, 2:305–306
 wealth and wealth transfer taxes, 2:306
 transparency and offshore banking, 2:310–311
 cross-default provisions, 5:173–174
 cross-departmental conflicts, 1:151
 cross hedging
 currency, 3:360–362; 4:133
 duration, 4:118–119
 risk management with, 2:355–356
 cross-sectional variation of returns, asset allocation and, 3:181
 crowds, committees vs., 2:137–138
 CRT. *see* charitable remainder trusts
 CSAs. *see* Credit Support Annexes
 CTA\$. *see* CISDM dollar-weighted CTA index
 CTAEQ. *see* CISDM equal-weighted CTA index
 CTA managed accounts. *see* managed futures
 CTAs. *see* commodity trading advisors
 CTD issue. *see* cheapest-to-deliver issue
 cumulative composite returns, calculating, 6:258
 currency(-ies)
 base, 3:307–309
 commodity, 3:371
 in country risk analysis, 3:77
 devaluing, 3:65
 emerging market, 3:370–373
 forecasts of returns, 3:97–98
 foreign, 3:314
 funding, 3:336
 haven, 3:371
 home (domestic), 3:313
 investment, 3:336
 price, 3:307–309
 currency codes, 3:307
 currency conversions
 and exchange rate risk, 5:366–373
 of foreign cash receipts, 5:371–373
 of loans, 5:366–371
 currency exposure
 international, 3:313–316
 and portfolio returns, 3:313–318
 international exposure, 3:313–316
 risk and return, 3:313–318
 volatility of returns, 3:316–317
 strategic decisions about, 3:321–324
 cost considerations, 3:323–324
 diversification considerations, 3:321–323
 currency hedging, 5:358
 costs, 3:324, 352–360
 example, 3:358–360
 exotic options, 3:356–357
 over-/under-hedging with forward contracts, 3:353
 protective puts with OTM options, 3:353–354
 put spreads, 3:354–355
 risk reversals, 3:354
 seagull spreads, 3:355–356
 cross hedges in, 4:133
 discretionary, 3:325
 for fixed-income portfolios, 3:322
 instruments for, 4:132
 and market conditions, 3:322–323
 multiple currencies, 3:360–365
 cross hedges, 3:360–362
 macro hedges, 3:362
 minimum-variance hedge ratio, 3:363–365
 over- and under-, 3:353
 passive, 3:325
 and time horizons, 3:321–322
 currency managed futures, 5:87
 currency management, 3:305–393
 currency risk and portfolio return/risk, 3:313–318
 emerging market currencies, 3:370–373
 non-deliverable forwards, 3:372–373
 trading costs and extreme market events, 3:370–372
 foreign exchange markets, 3:306–313
 currency options markets, 3:313
 forward markets, 3:309–312
 spot markets, 3:307–309
 swap markets, 3:312–313
 formulating programs for, 3:328–330
 globalization and, 3:305–306
 portfolio return, 3:313–318
 and international exposure, 3:313–316
 and risk, 3:313–318
 volatility of, 3:316–317
 practice problems, 3:377–385
 solutions to problems, 3:386–393
 strategic decisions, 3:319–330
 currency exposures, 3:321–324
 currency risk, 3:324–328
 formulating currency management programs, 3:328–330
 in Investment Policy Statements, 3:319–320
 portfolio optimization, 3:320–321
 tactical decisions, 3:331–341
 carry trade in, 3:334–336
 economic fundamentals in, 3:331–332
 example, 3:339–341
 technical analysis in, 3:333–334
 volatility trading in, 3:336–341
 tools, 3:341–370
 “correct” approach, 3:366–370
 currency options, 3:338–339, 349–352
 forward contracts, 3:342–349
 hedging multiple currencies, 3:360–365
 reduction of hedging costs, 3:352–360
 currency options, 3:313, 338–339, 349–353
 currency overlay programs, 3:326–328
 currency risk. *see also* currency management
 asset allocation with, 3:321
 defined, 4:129
 in emerging markets, 3:206
 forward and futures strategies for managing, 5:250–258
 hedging of, 4:132–136
 comparing hedged returns, 4:134
 with forward contracts, 4:135–136
 interest rate parity, 4:132
 and international bond investing, 4:129
 and portfolio return/risk, 3:313–318
 risk of foreign currency payments, 5:252–254
 risk of foreign currency receipts, 5:252
 risk of foreign-market asset portfolio, 5:254–258
 and strategic asset allocation, 3:199, 252
 strategic decisions about, 3:324–328

- active currency management, 3:325–326
 - currency overlay programs, 3:326–328
 - discretionary hedging, 3:325
 - passive hedging, 3:325
 - currency swaps. *see also* interest rate swaps
 - and credit portfolio management, 4:68
 - interest rate vs., 5:370
 - notional principal in, 5:179–180
 - current account deficits, 3:77, 100–101
 - current account receipts, 3:77
 - current assets, 2:386
 - current credit risk, 5:173
 - curve-adjustment trades, 4:77
 - cushion spread, 4:41
 - custodial relationships, 1:32
 - custody, of client assets, 1:74
 - custody fees, 6:232, 288
 - customers, opinions of, 5:43
 - custom security-based benchmarks, 3:402; 6:139–140
 - CVG. *see* Country Version of GIPS
 - Cyclically Adjusted P/E Ratio (CAPE), 3:151–155, 159, 160
 - cyclical stocks, 3:92
 - Cyprus, 2:293, 304; 3:9n.
 - Czech Republic
 - capital gains tax, 2:236
 - gift tax, 2:293
 - in Hague Conference, 2:304
 - interest income taxation, 2:233
 - tax regime, 2:231, 347
- D**
- DALBAR, 2:59, 75
 - Darnell, R. Max, 3:322
 - data, quality of, 6:132–133
 - data measurement, biases and errors in, 3:14–16
 - data-mining biases, 3:18
 - DAX 30
 - capitalization weighting of, 3:406
 - composition and characteristics, 4:176
 - stock index futures, 4:183
 - days in underlying, 5:309
 - day traders, 6:34
 - DB pension plans. *see* defined-benefit pension plans
 - DCF models. *see* discounted cash flow models
 - DC pension plans. *see* defined-contribution pension plans
 - dealer(s)
 - defined, 6:10
 - roles of, 6:18–19
 - as type of trader, 6:34
 - dealer markets, 6:10–15
 - death, transfer of taxes at, 2:182
 - death benefits, of deferred variable annuities, 2:424
 - death tax, 2:182
 - debit collars, 2:350
 - debt
 - callable, 5:394–396
 - collateralized debt obligations, 4:134n.6
 - defaultable, 3:90
 - distressed, 5:99–100 (*see also* distressed securities)
 - emerging market, 3:90
 - analysis of, 4:79–80, 138–139
 - and growth/maturity of market, 4:137–138
 - and international bond investing, 4:137–139
 - risk and return characteristics, 4:138
 - external, 3:77
 - fiscal debt to GDP ratio, 3:76
 - foreign debt to GDP ratio, 3:77
 - noncallable, 5:396–399
 - Treasury, 3:37
 - Debt Management Associates, 5:225–226
 - debtor-in-possession, 5:102
 - debt to current account receipts, 3:77
 - decapitalizations, 2:485
 - deceit, 1:55
 - decimalization, 6:41
 - deci-pips, 3:309n.3
 - decision making
 - about concentrated single-asset positions, 2:332–337, 340, 362–364
 - basis for, 1:246–247
 - behavioral factors in, 2:107–108
 - in behavioral finance, 2:20–28
 - bounded rationality, 2:22–24
 - decision theory, 2:20–22
 - prospect theory, 2:24–28
 - committee, 2:136–138
 - investment committee dynamics, 2:137
 - techniques for structuring and operating committees, 2:137–138
 - ethical framework for, 1:13–14, 197–198
 - group, 1:129
 - in traditional finance, 2:8–11
 - decision-making style questionnaire, 2:168
 - decision price, 6:24
 - decision risk, for alternative investments, 5:11–12
 - decisions, time frame for dissemination and, 1:84–85
 - decision theory, 2:20–22
 - dedication strategies, 4:30–48
 - cash flow matching strategies, 4:48–52
 - applications, 4:51–52
 - cash flow analysis for, 4:50
 - extensions of basic strategy, 4:51
 - multiple liability immunization vs., 4:50
 - and classes of liabilities, 4:30
 - immunization strategies, 4:31–48
 - classical single-period immunization, 4:31–33
 - dollar duration in, 4:34–35
 - duration and convexity of assets/liabilities, 4:41–42
 - example, 4:36–37
 - extensions of classical immunization, 4:37–45
 - for general cash flows, 4:46–47
 - multiple liability immunization, 4:45–46
 - rebalancing immunized portfolios, 4:33
 - return maximization for immunized portfolios, 4:47–48
 - risk in, 4:42–45
 - spread duration in, 4:36
 - target return for, 4:33–34
 - time horizon for, 4:34
 - and total return/accumulated value, 4:31–33
 - total return and yield curve of immunized portfolios, 4:39–40
 - value and interest rate of immunized portfolio, 4:38–39
 - yield curve of immunized portfolios, 4:39
- monitoring of, 4:52
- optimization of, 4:51
- security selection for, 4:51
- transaction costs of, 4:52
- deductible
 - health insurance, 2:403n.3, 421
 - homeowner's insurance, 2:419
- deduction method, 2:308
- deemed dispositions, 2:298, 307
- deemed distributions, 2:303
- defaultable debt, 3:90
- default options, 2:120–121
- default risk
 - in credit curve analysis, 4:86
 - defined, 4:26
 - for emerging market debt, 4:139
 - and indexed portfolio costs, 4:26
 - and repurchase agreements, 4:110–111
- default-risk-free yield curve, 6:81
- default risk premiums, 3:36
- deferred annuities, 2:423–424, 426
- deferred capital gains, 2:234–237
- deficits
 - budget, 3:66, 71
 - current account, 3:77, 100–101
 - twin deficits problem, 3:71
- defined-benefit (DB) pension plans, 5:142
 - ALM approach, 3:242–247
 - asset allocation for, 3:180–181
 - defined, 2:453
 - defined-contribution vs., 2:453–454
 - discounting liabilities for, 2:283
 - liabilities for, 3:184
 - portfolio management for, 2:454–467
 - corporate risk management, 2:466–467
 - legal and regulatory factors, 2:462–463
 - liquidity requirement, 2:460–461
 - return objectives, 2:458–460
 - risk objectives, 2:455–458
 - tax concerns, 2:462
 - time horizon, 2:461–462
 - unique circumstances, 2:463–466
 - strategic asset allocation for, 3:262–267
- defined-contribution (DC) pension plans, 3:184
 - behavioral factors in portfolio construction for, 2:120–125
 - defined, 2:453
 - defined-benefit vs., 2:453–454
 - portfolio management for, 2:467–474
 - middle-aged participant, 2:468
 - objectives and constraints framework, 2:468–469
 - participant in early career, 2:469

- deflation
 - in business cycle analysis, 3:55–59
 - defined, 3:58
 - monetary policy for, 3:65
- delay costs, 6:23, 25
- delivery, repurchase rate and, 4:110
- delivery options, 4:116
- Deloitte Touche Tohmatsu International Business Guides, 2:227
- delta
 - and bond duration, 4:121
 - and currency option quotes, 3:338–339
 - defined, 3:336; 5:152
 - gamma and risk of, 5:338–339
 - and option portfolio risk management, 5:329–331
 - and option price sensitivity, 5:332
 - and time, 5:332–333
 - and volatility trading, 3:337–338
- delta hedge, 3:337; 5:329–339
- delta-normal method, 5:160
- demand
 - business-cycle related, 5:51–52
 - for venture capital, 5:29–30
- demand deposit, 2:510n.30
- demutualization, 2:489
- Denmark
 - capital gains taxes, 2:240n.5
 - CLI for, 3:80
 - equity real rates of return, 4:164
 - equity risk premium, 3:39
 - expected returns for equities/bonds, 3:24
 - in Hague Conference, 2:304
 - pension fund requirements in, 3:262
 - real GDP growth rate, 3:32
 - tax regime, 2:231, 347
- departments, physical separation of, 1:61
- deposits, time and demand, 2:510n.30
- depth, market, 6:19
- derivative contracts, accounting risk with, 5:148–149
- derivative product companies, 5:188
- derivatives. *see also specific types, e.g.:*
 - options
 - credit, 4:123; 5:142n.7, 189
 - foundation investments in, 2:478
 - and global bond market, 4:73
 - indexes as bases for, 3:404
 - OTC, 2:342–343; 5:143, 146–147, 187
 - portfolio rebalancing with, 6:99–100
- derivatives-based semiactive equity investing, 4:211, 213
- derivatives-enabled strategies, 4:111–128
 - and alternative measures of dispersion, 4:113
 - bond variance and duration, 4:114
 - with credit risk instruments, 4:123–128
 - credit forwards, 4:124–127
 - credit options, 4:123–124
 - credit swaps, 4:127–128
 - with interest rate futures, 4:115–120
 - duration hedging, 4:118–120
 - duration management, 4:116–118
 - and interest rate risk, 4:111–112
 - with interest rate swaps, 4:120–121
 - and asset/liability management, 4:121
 - dollar duration of, 4:120
 - with options, 4:121–122
 - bond options and duration, 4:121–122
 - portfolio hedging, 4:122
- Derivatives Policy Group, 5:171
- descriptions of securities, 1:141–142
- descriptive statistics, 3:23
- detection of dominance, in prospect theory, 2:25
- deteriorating fundamentals sell discipline, 4:210
- deterministic retirement analysis, 2:197
- Deutsche Bank, 5:9
- Deutsche Börse, 3:417
- developed economies
 - analysis of emerging vs., 3:75–76
 - justified P/E estimates for, 3:137–138
- Dialynas, Chris, 4:92
- Dietz, Peter, 6:131, 210, 283
- differential returns, 6:146
- diffusion index, 3:80
- digital options, 3:357
- diligence, 1:127
- Diligence and Reasonable Basis [Standard V(A)], 1:126–137
 - application of the standard, 1:130–137
 - case study, 1:210–212
 - compliance procedures, 1:130
 - guidance, 1:126–129
 - diligence and reasonable basis defined, 1:127
 - group research and decision making, 1:129
 - quantitatively oriented research, 1:128
 - quantitatively oriented techniques, 1:129
 - secondary or third-party research, 1:127–128
 - selecting external advisers and subadvisers, 1:129
 - text of, 1:18, 126
 - dilution, of interest, 5:43
 - direct commodity investment, 5:45
 - directed brokerage, 1:76
 - direct loss, of property, 2:402
 - direct market access (DMA), 6:36
 - directors, conflicts of interest for, 1:151–152, 154–155
 - direct quotation, currency, 4:132
 - direct real estate, 2:388
 - direct venture capital investment, 5:33
 - disability income insurance, 2:417–418, 434, 438
 - disciplinary action, disclosure of, 1:256
 - Disciplinary Review Committee (DRC), 1:9
 - disclosure
 - of compensation, 1:77
 - of confidential information, 1:103–105
 - conflicts of interest
 - in case studies, 1:200–201
 - firm policies on, 1:77
 - in GIPS Valuation Principles, 6:271
 - interdepartmental referral arrangements, 1:163
 - investment system, 1:141, 143
 - issuer-paid research, 1:48
 - level of service, 1:86
 - material information, 1:60–61, 64
 - of performance calculation methodology, 1:100–101
 - personal investing policies, 1:160
 - personal trading, 1:161
 - possible illegal activity, 1:104
 - for real estate, 6:261–262
 - referral arrangements, 1:162–164
 - selective, 1:64, 86, 88
 - on social media, 1:89
 - trade allocation procedures, 1:86
 - Trade Management Guidelines on, 6:49
 - for wrap fee/SMAs, 6:270
 - Disclosure (GIPS Section I.4), 6:245–251
 - excerpt of, 6:216
 - implementation of, 6:248–249
 - Disclosure of Conflicts [Standard VI(A)], 1:149–156
 - application of the standard, 1:152–156
 - compliance procedures, 1:152
 - guidance, 1:149–152
 - conflicts as a director, 1:151–152
 - cross-departmental conflicts, 1:151
 - disclosure to clients, 1:150–151
 - disclosure to employers, 1:150
 - stock ownership conflicts, 1:151
 - text of, 1:18, 149
 - Disclosures (AMC Part F), 1:243–244, 255–258
 - discounted cash flow (DCF) models, 3:12, 31–35
 - discounting
 - hyperbolic, 2:76
 - of liabilities for DB pension plans, 2:283
 - of spending needs, 2:282–283
 - discount rate
 - for human capital, 2:383–384
 - in life insurance pricing, 2:411
 - discounts
 - forward, 4:132
 - lack of marketability, 2:339
 - for non-controlling interest, 2:339
 - valuation, 2:297–298
 - discretion
 - of brokers, 6:18
 - GIPS definition, 6:237
 - for real estate investments, 6:261
 - in verification process, 6:278–279
 - discretionary hedging, 3:325
 - discretionary trading strategies, 5:87
 - discretionary trusts, 2:300, 301
 - discretionary wealth, 2:279n.11, 335n.4
 - discretion strategies, 6:45
 - disequilibrium behavior, temporary, 2:139
 - disinflation, 3:55
 - disintermediation, 2:489, 495
 - Disney World, 5:251
 - dispersion, alternative measures of, 4:113
 - disposition effect, 2:70, 71, 141, 143–144
 - dissemination of information
 - pre-dissemination behavior, 1:85
 - simultaneous, 1:85
 - time frame between decision and, 1:84–85
 - trading prior to, 1:161–162

- dissociation, 1:26–28
- distinct business entity, 6:218, 288
- distressed debt arbitrage, 5:99–100
- distressed securities, 5:95–105
- bankruptcy process, 5:102–104
 - absolute priority rule, 5:103
 - Chapter 7 and Chapter 11, 5:104
 - prepackaged filings, 5:104
 - in United States vs. other countries, 5:102–103
 - benchmarks, 5:97
 - defined, 5:8
 - example, 5:104–105
 - historical performance, 5:97–98
 - interpretation issues, 5:98
 - investment characteristics, 5:98–99
 - market for, 5:95–96
 - in portfolios, 5:99–102
 - distressed debt arbitrage, 5:99–100
 - long-only value investing, 5:99
 - private equity, 5:100–102
 - private equity of, 5:100–102
 - types of, 5:96
- distressed securities hedge fund strategies, 5:59
- distressed securities market, 5:95–96
- size of, 5:96
 - types of distressed securities, 5:96
- distribution area laws, 1:26
- distribution phase of life, 2:164
- distributions, 6:265, 288
- diversification
- and asset allocation, 2:193, 194
 - and availability bias, 2:68
 - and bond indexed portfolios, 4:11
 - of concentrated portfolios, 5:376–378
 - and confirmation bias, 2:55–56
 - in defined-contribution pension plans, 2:467–468
 - and DJIA history, 4:175
 - as firm policy, 1:77
 - with hedge funds, 5:73
 - with human capital, 2:473–474
 - and illusion of control bias, 2:60–61
 - indexed portfolios, 4:181
 - international, 5:378–380
 - with international assets, 3:201–203
 - and market integration, 3:207
 - and mental accounting bias, 2:124–125
 - naïve, 2:122
 - need for, 1:92
 - with private equity, 5:41, 42
 - with real estate, 5:21–24
 - and strategic decisions about currency exposures, 3:321–323
 - with swap strategies, 5:376–380
 - in value-weighted/float-weighted indexes, 4:170
- diversification effect, for VaR, 5:162
- diversified managed futures, 5:87
- divestiture, of private business equity, 2:360
- divide-and-conquer procedure, 2:23
- dividend recapitalization, 5:33
- dividends
- accrual taxes on, 2:233–234
 - heavy dividend tax regime, 2:229–231
 - and stock index futures trade, 5:230
 - in synthetic index funds, 5:235–236
- tax provisions for, 2:228
- in tax regimes, 2:229–231, 235, 347
- DJ-AIGCI. *see* Dow Jones–AIG Commodity Index
- DJGI. *see* Dow Jones Global Index
- DJGI Americas TR
- annual return, standard deviation, and correlation of, 3:218–219
 - Black–Litterman view-adjusted returns, 3:237
 - efficient portfolio weights using historical mean returns, 3:238
 - efficient portfolio weights with equilibrium returns, 3:235
 - historical, equilibrium, and Black–Litterman view-adjusted returns, 3:236
 - historical average and market equilibrium returns, 3:234
 - market weights, 3:233
- DJGI Asia Pacific ex-Japan TR
- annual return, standard deviation, and correlation of, 3:218–219
 - Black–Litterman view-adjusted returns, 3:237
 - efficient portfolio weights with equilibrium returns, 3:235
 - using historical mean returns, 3:238
 - historical, equilibrium, and Black–Litterman view-adjusted returns, 3:236
 - historical average and market equilibrium returns, 3:234
 - market weights, 3:233
- DJGI Europe/Africa ex-UK and South Africa TR
- Black–Litterman view-adjusted returns, 3:237
 - efficient portfolio weights with equilibrium returns, 3:235
 - historical, equilibrium, and Black–Litterman view-adjusted returns, 3:236
 - historical average and market equilibrium returns, 3:234
 - market weights, 3:233
- DJGI Europe ex-UK, 3:218
- DJGI Japan TR
- annual return, standard deviation, and correlation of, 3:218–219
 - Black–Litterman view-adjusted returns, 3:237
 - efficient portfolio weights with equilibrium returns, 3:235
 - using historical mean returns, 3:238
 - historical, equilibrium, and Black–Litterman view-adjusted returns, 3:236
 - historical average and market equilibrium returns, 3:234
 - market weights, 3:233
- DJGI UK TR
- annual return, standard deviation, and correlation of, 3:218–219
 - Black–Litterman view-adjusted returns, 3:237
 - efficient portfolio weights with equilibrium returns, 3:235
 - using historical mean returns, 3:238
 - historical, equilibrium, and Black–Litterman view-adjusted returns, 3:236
 - historical average and market equilibrium returns, 3:234
 - market weights, 3:233
- historical, equilibrium, and Black–Litterman view-adjusted returns, 3:236
- historical average and market equilibrium returns, 3:234
- market weights, 3:233
- DJIA. *see* Dow Jones Industrial Average
- DMA. *see* direct market access
- documentation
- portfolio, 6:236
 - research, 2:136
 - of trade allocation procedures, 1:85
 - in verification process, 6:280
- documents, former employers', 1:110
- dollar, Australian
- as commodity currency, 3:371
 - currency code, 3:307
 - in currency pairs, 3:308, 360
 - US dollar vs., 4:132–133
- dollar, Canadian
- currency code, 3:307
 - in currency pairs, 3:308, 309n.4
 - currency swaps with, 5:372–373
- dollar, New Zealand
- as commodity currency, 3:371
 - currency code, 3:307
 - in currency pairs, 3:308, 360
- dollar, US
- Australian dollar vs., 4:132–133
 - benefits of currency exposure for, 3:322–323
 - converting yen into, 5:371–372
 - currency code, 3:307
 - in currency pairs, 3:101, 308, 309, 310n.7, 343, 360
 - dual-currency bonds in, 5:373–376
 - and government bond index returns, 4:129
 - as haven currency, 3:371
- Dollar–Canada market (CAD/USD), 3:308, 309n.4
- dollar duration, 4:112
- calculation of, 4:34
 - in immunization strategies, 4:34–35
 - of interest rate swaps, 4:120
 - rebalancing based on, 4:35–36
- Dollar–Swiss market (CHF/USD), 3:308
- dollar value of a basis point (DV01), 4:34n.26
- Dollar–yen market (JPY/USD), 3:308, 309, 310n.7, 343
- domestic assets, 3:313
- domestic common equity, 3:195
- domestic currency, 3:313
- domestic-currency returns, 3:314–317
- domestic fixed income, 3:195
- donor-advised funds, 2:367–368
- do not initiate orders, 6:8
- dopamine, 2:19–20
- dot-com crash (2000–2001), 3:203
- double inflection utility function, 2:17
- double taxation, 2:307–310
- double taxation treaties (DTT), 2:308–310
- Dow Jones–AIG Commodity Index (DJ-AIGCI), 5:46–49, 51
- Dow Jones & Co.
- categorization by, 4:236
 - hedge fund indices, 5:62, 64
 - and Industry Classification Benchmark, 4:232
 - REIT indices, 5:17

- Dow Jones Corporate Bond Index, 4:14
- Dow Jones Euro STOXX 50, 3:137–138; 5:380
- Dow Jones Global Index (DJGI), 3:233.
see also entries beginning DJGI
- Dow Jones Hedge Fund Strategy benchmarks, 5:63
- Dow Jones Industrial Average (DJIA)
certainty overconfidence in prediction of, 2:74–75
composition and characteristics, 4:175, 176
and historical simulation method, 5:161
historical track record of, 3:410
price weighting, 3:406; 4:170
uses of, 3:403
- Dow Jones Industrial Index, 2:34
- Dow Jones Wilshire indexes, 4:200
- down-from-cost sell discipline, 4:210
- downgrade risk, 4:123
- downside deviation, 5:80–81, 191
- downside risk, 2:145; 3:188
- downside volatility, 5:80–81
- DPI, 6:265, 288
- drawdown, 5:81, 190
- DRC. *see* Disciplinary Review Committee
- DTT. *see* double taxation treaties
- dual currency bonds, 5:373–376
- due diligence
for alternative investments, 5:9–12
for DB plans, 2:463
defined, 5:7
and failed investments, 1:135
in financial research and analysis, 1:33
for hedge funds, 5:77–79
for private equity, 5:42–44
for real estate, 5:26
in submanager selection, 1:132–133
sufficient, 1:130, 133–134
- due diligence questionnaire, for portfolio managers, 4:142–143
- duration
of assets and liabilities, 4:41–42
and benchmark bond index selection, 4:20–21
bond, 4:114, 121–122, 130–131
of bonds, 5:152, 219
dollar, 4:34–35, 112, 120
effective, 4:20, 26
of equities in fixed-income portfolios, 4:109
ex post, 5:224, 225
of fixed-income portfolios, 5:359–362
functional, 4:40
key rate, 4:20, 23
leverage-adjusted duration gap, 2:511
Macaulay, 4:34n.27; 5:220n.7
modified, 5:220, 360–361
portfolio
immunized time horizon, 4:34
international bond investing, 4:130–131
multiple liability immunization, 4:45
and portfolio holdings, 4:111–112
return maximization for immunized portfolios, 4:47
and tracking risk, 4:23
- quality-spread, 4:23–24
rate, 4:20
sector, 4:23
spread, 4:21, 23–24, 36
of swaps, 5:359–362
target dollar, 5:222–223
- duration hedging, 4:118–120
- duration management
and fixed-income portfolio management, 4:116–118
international bond investing, 4:130–131
- Duties to Clients [Standard of Professional Conduct III], 1:73–105; 6:29
- Fair Dealing [Standard III(B)], 1:82–90
application of the standard, 1:86–90
case study, 1:207
compliance procedures, 1:84–86
guidance, 1:82–84
text of, 1:17, 82
- Loyalty, Prudence, and Care [Standard III(A)], 1:73–81
application of the standard, 1:78–81
case study, 1:205, 207
compliance procedures, 1:77–81
guidance, 1:73–77
text of, 1:17, 73
- Performance Presentation [Standard III(D)], 1:97–101
application of the standard, 1:98–101
case study, 1:213
compliance procedures, 1:98
guidance, 1:97–98
text of, 1:17, 97
- Preservation of Confidentiality [Standard III(E)], 1:101–105
application of the standard, 1:103–105
compliance procedures, 1:103
guidance, 1:101–102
text of, 1:17, 101
- Suitability [Standard III(C)], 1:90–97
application of the standard, 1:94–97
compliance procedures, 1:93–94
guidance, 1:90–93
text of, 1:17, 90
- text of, 1:16–17
- Duties to Employers [Standard of Professional Conduct IV], 1:105–126
additional compensation arrangements [Standard IV(B)], 1:116–117
application of the standard, 1:116–117
compliance procedures, 1:116
guidance, 1:116
text of, 1:17, 116
- Loyalty [Standard IV(A)], 1:105–115
application of the standard, 1:109–115
case study, 1:205
compliance procedures, 1:109
guidance, 1:105–109
text of, 1:17, 105
- Responsibilities of Supervisors [Standard IV(C)], 1:118–126
application of the standard, 1:122–126
- case study, 1:204
compliance procedures, 1:120–122
eleventh edition revision, 1:7–8
guidance, 1:118–120
text of, 1:18, 118
- DV01. *see* dollar value of a basis point
- dynamic approach to asset allocation, 3:183–184
- dynamic hedges
over- and under-hedging, 3:353
rebalancing with, 3:344–346
- Dynkin, Lev, 4:91
- E**
- EACM 100 Index, 5:62, 73
- EACM Advisors, 5:62, 64, 97
- early career phase (financial stages of life), 2:392–393
- early retirement phase (financial stages of life), 2:393
- early-stage financing, 5:30–31
- early transfers of taxes, 2:182
- early upswing phase (business cycle), 3:53, 54, 92
- earnings at risk (EAR), 5:170
- earnings-based models for equity market
Cyclically Adjusted P/E Ratio, 3:151–155
Fed model, 3:145–148
with UK data, 3:148
with US data, 3:145–146
Yardeni model, 3:148–151
- earnings momentum investment style, 4:188
- earnings risk, 2:400–401
- earn outs, 2:362
- Eastern Bloc, historical data from, 3:137.
see also specific countries
- Eastern Europe. *see specific countries*
- EBS, 3:343
- EC. *see* GIPS Executive Committee
- ECB. *see* European Central Bank
- ECNs. *see* electronic communication networks
- econometric modeling, 3:78–80, 87; 6:30–32
- econometrics, 3:78
- economic analysis, 3:50–103
business cycle analysis, 3:51–66
factors affecting, 3:60–66
inflation and deflation in, 3:55–59
inventory cycle, 3:51, 52
market expectations in, 3:59–60
stages of business cycle, 3:53–55
and economic forecasting, 3:78–87
checklist approach, 3:84–87
econometric modeling, 3:78–80
economic indicators, 3:80–84
strengths and weaknesses of forecasting, 3:86–87
- exogenous shocks in, 3:72–73
- forecasting asset class returns with, 3:87–102
cash and equivalents, 3:87–88
common shares, 3:91–95
currencies, 3:97–98
defaultable debt, 3:90
emerging market bonds, 3:90

- and forecasting exchange rates, 3:98–101
- and historical capital market expectations, 3:95–97
- inflation-indexed bonds, 3:90–91
- nominal default-free bonds, 3:89–90
- real estate, 3:95
- growth trends, 3:66–72
 - consumer impact on, 3:68
 - in GDP, 3:68–71
 - and government structural policies, 3:71–72
- information sources for, 3:102–103
- international interactions, 3:73–78
 - in emerging markets, 3:75–78
 - interest rate/exchange rate linkages, 3:74–75
 - macroeconomic linkages, 3:74
- economic (holistic) balance sheet
 - assets on, 2:382
 - human capital considered on, 2:442
 - used in individual risk management, 2:396–397
- economic changes. *see* markets, changes in
- economic data, for CME forecasts, 3:13–14
- economic exposure, 5:251
- economic forecasting, 3:78–87
 - checklist approach, 3:84–87
 - econometric modeling, 3:78–80
 - with economic indicators, 3:80–84
 - for Asia Pacific, 3:81–82
 - for Europe, 3:81
 - for North America, 3:82–84
 - for South America, 3:82
 - worldwide, 3:80–81
 - strengths and weaknesses of forecasting, 3:86–87
- Economic Freedom Index, 3:76–77
- economic fundamentals, 3:331–332
- economic growth
 - checklist for, 3:84–87
 - in country risk analysis, 3:76–77
 - of emerging markets, 4:137–138
 - future growth predicted for China, 3:128–129
 - and market integration, 3:207
 - trends in, 3:51, 66–72
 - consumer impact on, 3:68
 - for GDP, 3:68–71
 - and government structural policies, 3:71–72
- economic indicators
 - advantages and disadvantages of, 3:87
 - for Asia Pacific, 3:81–82
 - economic forecasting with, 3:80–84
 - for Europe, 3:81
 - for North America, 3:82–84
 - for South America, 3:82
 - worldwide, 3:80–81
- economic liability, 2:536n.2
- Economic Optimism Index, 3:49
- economic sectors, 4:87–88
- economic shocks, 3:67, 72–73
- economic state, bias about, 2:63
- economic surplus, 4:41
- Ecuador, 2:304
- EDPCs. *see* enhanced derivative product companies
- education, 1:121, 201
- education phase (financial stages of life), 2:392
- effective duration, 4:20, 26
- effective interest
 - with call, 5:310, 312
 - with cap, 5:320–322
 - with collar, 5:327, 328
 - with floor, 5:324, 325
 - with put, 5:315–317
- effective loan rate
 - with call, 5:310, 312–313
 - with cap, 5:321, 322
 - with put, 5:315, 317
- effectiveness, of risk governance, 5:138
- effective spread, 6:12–14
- efficiency
 - of risk governance, 5:138
 - tax, 6:70
- efficient frontiers
 - asset-class weights in, 3:216–217
 - with Black–Litterman view-adjusted returns, 3:237–238
 - with equilibrium returns, 3:234–235
 - funding ratio, 3:243
 - of managers, 4:214, 215
 - for mean–variance approach, 3:211–217
 - sign-constrained optimization, 3:213–217
 - unconstrained optimization, 3:212–213
 - resampled, 3:230–231
 - retirement income, 2:430–431
 - surplus, 3:241, 242, 244–247
- efficient market hypothesis (EMH), 2:28–36
 - and AMH, 2:41
 - and calendar anomalies, 2:35
 - and fundamental anomalies, 2:33–34
 - and index funds, 6:22
 - and indexing, 4:184
 - and limited arbitrage, 2:35–36
 - review of, 2:28–30
 - semi-strong-form, 2:29–32
 - studies challenging, 2:32–36
 - studies in support of, 2:30–32
 - and technical anomalies, 2:34
 - weak-form, 2:29–31
- efficient portfolio
 - and Black–Litterman approach, 3:236–238
 - for mean–variance approach, 3:219–229
 - and cash equivalents/capital market theory, 3:220–221
 - CEFA case study, 3:226–229
 - Ian Thomas case study, 3:221–225
 - resampled, 3:230–231
- EFP. *see* Exchange of Futures for Physicals
- Egypt, 2:179, 304
- electronic communication networks (ECNs), 4:74; 6:16
- electronic crossing networks, 6:15–16, 21
- electronic information, confidentiality of, 1:102
- electronic limit-order markets, 6:16
- eligible investments, 2:497
- elimination, asset allocation by, 2:188–196
- elimination period, of disability income insurance, 2:418
- Ellis, Charles D., 4:167
- EMBI. *see* JP Morgan Emerging Markets Bond Index
- EMBI+. *see* Emerging Markets Bond Index Plus
- EMBI Global Core Index, 4:14
- EMBI Global Index (EMBIG), 3:401; 4:14, 15
- emergency reserves, 2:176
- emerging market bonds, 3:90
- emerging market debt (EMD)
 - analysis of, 4:79–80, 138–139
 - defined, 3:90
 - and growth/maturity of market, 4:137–138
 - and international bond investing, 4:137–139
 - risk and return characteristics, 4:138
- emerging markets, 3:370–373
 - common shares in, 3:95
 - country risk analysis, 3:76–78
 - developed vs. emerging economies, 3:75–76
 - in economic analysis, 3:75–78
 - growth/maturity of, 4:137–138
 - in hedge fund strategies, 5:60
 - international assets in, 3:204–207
 - non-deliverable forwards, 3:372–373
 - trading costs and extreme market events, 3:370–372
- Emerging Markets Bond Index Plus (EMBI+), 4:138
- EMH. *see* efficient market hypothesis
- e-mini S&P 500, 4:182–183
- emotional biases, 2:69–81
 - of analysts, 2:125
 - in BFMI, 2:7–8
 - cognitive errors vs., 2:51–52
 - in conducting research, 2:133–136
 - defined, 2:50
 - endowment bias, 2:78–79
 - high-wealth-level investor case study, 2:88–92
 - behaviorally-modified portfolio decision, 2:92
 - diagnostic tests, 2:89–91
 - effect of biases, 2:91
 - moderate or adapt recommendation, 2:91–92
 - investors with cognitive errors and, 2:117
 - of investors with concentrated positions, 2:331–332
- loss-aversion bias, 2:70–73
 - consequences of, 2:72
 - detection and methods of overcoming, 2:73
 - effect of, 2:71–72
 - myopic loss aversion, 2:72–73
- overconfidence bias, 2:73–76
 - consequences of, 2:75

- emotional biases (*continued*)
 detection and methods of
 overcoming, 2:75–76
 prediction and certainty
 overconfidence, 2:74–75
 regret-aversion bias, 2:79–80
 self-control bias, 2:76–77
 status quo bias, 2:77–78
 emotional intelligence, 2:79
 emotions, control of, 2:51
 employee classifications, 1:109
 employee references, checking, 1:54
 Employee Retirement Income Security
 Act (ERISA), 2:458, 462–463,
 467–468
 employees, independent contractors vs.,
 1:108–109
 employee share ownership plans,
 2:473–474
 employee stock ownership plans
 as hybrid pension plans, 2:473–474
 and private business equity, 2:361–362
 employer(s)
 competing with current, 1:112
 disclosure of conflicts to, 1:150, 156
 duties to (*see* Duties to Employers
 [Standard of Professional Conduct
 IV])
 leaving, 1:106–107, 115
 misrepresentation of work for, 1:46
 responsibilities of, 1:106
 employer mandates, 2:330
 employer pension plans (vested),
 2:389–390
 employment, nature of, 1:108–109
 employment contracts, 5:43
 endogenous variables, 3:20
 endowment bias, 2:78–79, 331
 of analysts, 2:134
 consequences of, 2:79
 detection and methods of overcoming,
 2:79
 diagnostic questions, 2:87
 and status quo bias, 2:77
 endowments
 foundations vs., 2:475
 investment policy statements,
 2:486–489
 liabilities for, 3:184
 portfolio management for, 2:479–489
 legal and regulatory factors, 2:485
 liquidity requirements, 2:484
 return objectives, 2:482–484
 risk objectives, 2:481–482
 tax concerns, 2:485
 time horizon, 2:484–485
 unique circumstances, 2:485–486
 strategic asset allocation for, 3:267
 Engle, Robert F., 3:27
 enhanced derivative product companies
 (EDPCs), 5:188
 enhanced indexing, 4:25–27. *see also*
 semiactive equity investing
 as equity investment approach, 4:166
 by matching primary risk factors,
 4:9–10
 semiactive equity investing, 4:211–213
 by small risk factor mismatches, 4:10
 enhanced-index managers, 3:405
 Enron Corporation, 2:122, 325; 3:67;
 4:79
 enterprise risk management (ERM),
 5:138–140, 183
 entertainment
 and gifts from clients, 1:39
 and gifts from related parties, 1:38–39
 equal probability rebalancing, 6:93
 equal-weighted indexes, 3:410; 4:169–
 171, 173–174
 equal-weighted standard deviation,
 6:253
 equal weighting, 3:406
 equilibrium
 of inflation premium and real interest
 rate, 3:37–38
 rational belief, 3:23n.18
 equilibrium models, for capital market
 expectations, 3:40–48
 equilibrium returns, from Black–
 Litterman model, 3:232–236
 equilibrium return vector, 3:234n.78
 equities. *see also specific types*
 adjusting allocation between,
 5:245–246
 allocation of, 4:163, 200–201
 and asset allocation in pension plans,
 3:263
 correlation of alternative investments
 and, 3:208
 domestic vs. non-domestic common,
 3:195
 drivers of returns for, 3:123–124
 duration of, 4:109
 expected returns, 3:24–25
 industry classification of, 4:231–232
 inflation/deflation effects for, 3:59;
 4:163–164
 intrinsic value of, 2:545–546
 large-cap, 4:170
 market integration and prices of, 3:207
 orphan, 5:96, 99
 real rate of returns, 4:164–165
 risk of, 5:228–230
 small-cap, 4:205
 equitization
 defined, 4:211n.58
 of market-neutral long–short
 portfolios, 4:207
 equity
 cash from, 5:237–241
 equitizing cash, 5:236–237
 synthetic index funds, 5:233–236
 Equity Analysts, Inc., 5:232
 equity–bonds covariance matrix,
 3:28–31
 equity forward sale contracts, 2:345
 equity hedge fund strategies, 5:60
 equity-indexed annuities, 3:260
 equity index futures, 4:182–183
 equity investment styles, 4:184–204
 advantages of, 4:190
 based on market capitalization,
 4:189–190
 growth, 4:185–186, 188
 in holdings-based style analysis,
 4:190–191, 196–199
 identifying, 4:190–199
 indexes based on, 4:199–202
 market-oriented, 4:188–189
 in returns-based style analysis,
 4:191–196, 199
 and style boxes, 4:202–203
 and style drift, 4:203–204
 value, 4:185–188
 equity IPOs, 1:158–159
 equity market
 asset-based models, 3:155–159
 constant growth model, 3:31–33
 discounted cash flow models, 3:31–35
 earnings-based models, 3:145–155
 Cyclically Adjusted P/E Ratio,
 3:151–155
 Fed model, 3:145–148
 Yardeni model, 3:148–151
 forecasts of, 3:138–144
 market EPS, 3:142, 144
 portfolio suitability of, 3:140–141
 revising earnings forecasts,
 3:143–144
 types of forecasts, 3:139
 using both forecasting approaches,
 3:141–143
 relative value models, 3:145–160
 equity market-neutral hedge fund
 strategies, 5:58
 equity market risk
 forward and futures strategies for
 managing, 5:227–241
 cash from equity, 5:237–241
 equity from cash, 5:232–237
 risk of equities, 5:228–230
 risk of equity portfolios, 5:230–232
 swap strategies for managing,
 5:376–385
 and allocation of stocks and bonds,
 5:380–383
 diversifying concentrated portfolios,
 5:376–378
 insider exposure, 5:383–385
 international diversification,
 5:378–380
 equity market valuation, 3:123–171
 with dividend discount models,
 3:135–136
 drivers of equity returns, 3:123–124
 of insurance company investments,
 2:497
 justified P/E estimates, 3:124–138
 for China, 3:126–127
 creating valuation from estimates,
 3:129–138
 for developed economies, 3:137–138
 and neoclassical approach to growth
 accounting, 3:124–125, 127–128
 quantifying future economic growth
 from, 3:128–129
 practice problems, 3:163–169
 relative value models, 3:145–160
 asset-based models, 3:155–159
 earnings-based models, 3:145–155,
 158–159
 solutions to problems, 3:170–172
 and top-down/bottom-up forecasts,
 3:138–144
 gaps in, 3:141–143
 of market earnings per share, 3:142,
 144

- portfolio suitability for, 3:140–141
 - revising earnings forecasts, 3:143–144
 - top-down vs. bottom-up forecasting, 3:139, 142–143
- equity monetization, 2:343–347
- equity portfolio management, 4:161–245
 - about, 4:162
 - active equity investing, 4:184–210
 - equity styles, 4:184–204
 - long–short investing, 4:205–210
 - sell disciplines, 4:210
 - socially responsible investing, 4:204–205
 - trading frequency, 4:210
 - equity investment approaches in, 4:165
 - passive equity investing, 4:166–184
 - with indexes, 4:168–177
 - investment vehicles, 4:175, 178–184
 - for portfolios of managers, 4:214–221
 - alpha and beta separation, 4:221
 - completeness funds, 4:220–221
 - core-satellite portfolios, 4:217–220
 - and pension fund's performance objectives, 4:218–219
 - practice problems, 4:235–241
 - research
 - buy- vs. sell-side, 4:231
 - and industry classification, 4:231–232
 - top-down vs. bottom-up approaches, 4:230
 - role of equity portfolios, 4:163–165
 - selecting securities for, 4:230–232
 - semiactive equity investing, 4:211–213
 - derivatives- vs. stock-based, 4:211, 213
 - Fundamental Law of Active Management, 4:212
 - solutions to problems, 4:242–245
- equity portfolio managers
 - fixed-income vs., 4:141
 - selecting, 4:222–230
 - fee proposals, 4:229–230
 - fee structures, 4:223
 - finding suitable candidates, 4:222
 - past performance, 4:222
 - questionnaires for, 4:223–229
- equity portfolios
 - options strategies for managing, 5:273–308
 - combinations of calls and puts, 5:300–308
 - money spreads, 5:289–299
 - standard long and short positions, 5:275–282
 - and the underlying, 5:282–288
 - risk of, 5:230–232
 - role of, 4:163–165
 - equity premium puzzle, 2:72
 - equity *q* ratio
 - and asset-based models, 3:156–158
 - strengths and limitations, 3:159
 - equity REITs, 5:14
 - equity risk, in emerging markets, 3:206
 - equity risk premium
 - for capital market expectations, 3:38–40
 - and Fed model, 3:146
 - Grinold–Kroner model for forecasting, 3:34–35
 - volatility ratio vs., 3:277–278
 - equity swaps, 5:376–385
 - equity total return swaps, 2:344–345; 4:183–184
 - ERISA. *see* Employee Retirement Income Security Act
 - ERM. *see* enterprise risk management
 - errors
 - in accounts, 1:208
 - of commission, 2:79
 - known, 1:48
 - notification of, 1:144
 - of omission, 2:79
 - tracking, 6:139n.12, 142
 - Type I, 6:182–183
 - Type II, 6:182–183
 - unintentional, 1:48
 - ESG risk, 5:150
 - estate planning, 2:271–318
 - core capital, 2:278–288
 - Monte Carlo estimation, 2:285–288
 - mortality table estimation, 2:280–284
 - cross-border, 2:303–311
 - Hague Conference, 2:304–305
 - taxes, 2:305–310
 - transparency and offshore banking, 2:310–311
 - defined, 2:273
 - estates, wills, and probate, 2:273–274
 - and legal systems, 2:274–276
 - practice problems, 2:313–314
 - solutions to problems, 2:315–318
 - taxes, 2:276–278
 - tools for, 2:299–303
 - companies and controlled foreign corporations, 2:303
 - foundations, 2:302
 - life insurance, 2:302–303
 - trusts, 2:299–301
 - transferring excess capital, 2:288–299
 - charitable gratuitous transfers, 2:298–299
 - deemed dispositions, 2:298
 - generation skipping, 2:296
 - gifts and bequests, 2:288–296
 - spousal exemptions, 2:297
 - valuation discounts, 2:297–298
 - and wealth management, 2:272
 - estates, 2:273–274
 - estate tax, 2:182, 277n.8, 288, 338–340
 - estimates
 - biases for, 2:63
 - correlation, 3:12–13
 - covariance, 3:28, 29
 - expected return, 3:11–12
 - historical, 3:16–18
 - of human capital, 2:383–386
 - justified P/E, 3:124–138
 - for China, 3:126–137
 - for developed economies, 3:137–138
 - and neoclassical approach to growth accounting, 3:124–125, 127–128
 - point, 3:24n.19
 - estimators
 - sample, 3:24–25
 - shrinkage, 3:25–26
 - time-series, 3:26–27
 - Estonia, 2:304; 3:9n.
 - ETFs. *see* exchange-traded funds
 - ethical culture, 1:202
 - ethical decision-making framework, 1:13–14, 197–198
 - ethical investment considerations, for DB plans, 2:463
 - ethical principles, applicable, 1:200
 - ethics. *see also* Code of Ethics; Standards of Professional Conduct
 - case studies, 1:197–237
 - consultants, 1:198–202
 - Pearl Investment Management, 1:202–213
 - practice problems, 1:214–230
 - solutions to problems, 1:231–237
 - firms commitment to, 1:14
 - as focus of portfolio decisions, 6:49
 - importance, 1:11–15
 - and investment industry, 1:11–15
 - and regulations, 1:13
 - societal benefit of, 1:12
 - EU. *see* European Union
 - EU-25 region, CLI for, 3:80
 - Euribor. *see* Euro Interbank Offered Rate
 - euro(s), 4:129
 - currency code, 3:307
 - in currency pairs, 3:101, 307, 308
 - exchange rate pegging, 3:74–75
 - Eurobonds, 4:73, 83
 - Eurodollar futures
 - controlling risk with, 5:218–219
 - hedging floating-rate loans with, 5:259
 - Euro-dollar market (USD/EUR), 3:101, 308
 - Eurodollars, 4:115
 - EuroHedge, 5:62
 - Euro Interbank Offered Rate (Euribor), 5:386–388
 - Euronext, 3:403; 6:8–9
 - Europe. *see also* MSCI EAFE (Europe, Australasia, and Far East) Index; *specific countries*
 - asset allocation in pension plans, 3:263
 - China stock market volatility vs., 3:134
 - credit market, 4:80
 - defined-benefit pension plans, 2:454
 - economic indicators, 3:81
 - emerging market debt, 4:137, 139
 - family foundations, 2:184
 - government bond index returns, 4:129
 - indexed portfolio regulation, 4:181
 - insurance companies, 2:489
 - international investment, 3:201
 - and justified P/E estimates, 3:131
 - and neoclassical approach to growth accounting, 3:127
 - ownership of private business enterprises, 2:322
 - private equity activity, 5:35–36
 - real estate allocations in, 5:21
 - real estate returns in, 5:20
 - sector rotation, 4:87, 88
 - TFP growth, 3:70
 - trusts, 2:302
 - European Central Bank (ECB)
 - and bond return correlations, 4:129
 - monetary policy, 3:65–66, 100
 - open market operations by, 3:88

- European Community, 2:304
- European options, 5:178, 272
- European Private Equity, 5:35
- European style swaptions, 5:385
- European Union (EU), 4:181
 - CLI, 3:81
 - corporate form of publicly-traded companies, 5:34
 - economic growth projections, 3:128
 - historical growth accounting, 3:126
 - valuation methods, 2:497
 - wealth taxes, 2:307
- European Union Savings Directive (EUSD), 2:311
- euros
 - converting
 - to British pounds, 5:366–369
 - to Canadian dollars, 5:372–373
 - dual-currency bonds in, 5:373–375
 - forward contracts on, 5:254–255
- Euro-sterling market (GBP/EUR), 3:308
- Euro-Swiss market (CHF/EUR), 3:308
- Euro-yen market (JPY/EUR), 3:308
- Eurozone
 - capital flows forecasting approach, 3:100
 - CLI, 3:80
 - composition of, 3:9n.
 - economy valuation, 3:137–138
 - monetary policy, 3:65–66
 - open market operations, 3:88
- Eurozone Harmonized Index of Consumer Prices (HICP), 3:81
- evaluation phase (prospect theory), 2:26–28
- event driven hedge fund strategies, 5:60
- event risk, 4:22, 87–88; 5:101
- evergreen funds, 6:259, 288
- evidence, 2:135
- ex ante* risk, 3:18, 40
- excess benefit transactions, 2:485
- excess capital, 2:288–299
 - charitable gratuitous transfers, 2:298–299
- deemed dispositions, 2:298
 - defined, 2:279
- generation skipping, 2:296
- gifts and bequests, 2:288–296
 - location of gift tax liability, 2:293–296
 - taxable gifts, 2:291–293
 - tax-free gifts, 2:289–291
- spousal exemptions, 2:297
- valuation discounts, 2:297–298
- excess corporate growth, 3:32
- excessive risk
 - and hindsight bias, 2:61–62
 - and loss-aversion bias, 2:72
 - and mental accounting bias, 2:64
 - and self-control bias, 2:77
- excessive trading, 2:123–124
 - ethics violation examples, 1:80, 89
 - and framing bias, 2:67
 - and illusion of control bias, 2:61
 - and loss-aversion bias, 2:72
 - and market bubbles, 2:143
- excess returns, 3:399; 4:135
- excess return to nondiversifiable risk, 6:168
- exchange funds, 2:356; 6:78–79
- Exchange of Futures for Physicals (EFP), 4:183
- Exchange Rate Mechanism, 3:74, 75
- exchange rate risk
 - and currency conversions, 5:366–373
 - and foreign cash receipts, 5:371–373
 - and loans, 5:366–371
 - risk of dual currency bonds, 5:373–376
 - swap strategies for managing, 5:366–376
- exchange rates
 - defined, 3:307
 - in emerging markets, 3:372
 - forecasts of, 3:98–101
 - capital flows, 3:100
 - government intervention, 3:102
 - purchasing power parity, 3:99
 - relative economic strength, 3:99
 - savings–investment imbalances, 3:100–101
 - USD/euro exchange rate, 3:101
 - and interest rates, 3:74–75, 99
 - real, 3:331–332
- exchanges, 6:8
- exchange-traded funds (ETFs)
 - in indexed portfolios, 4:175, 178–179
 - indexes as bases for, 3:404
 - and market-neutral long–short portfolios, 4:207
 - and uptick rule, 4:183
- exchange-traded futures, in FX market, 3:342–343
- exchange-traded instruments, 2:342–343
- execution, best, 1:76, 78, 250
- execution of portfolio decisions, 6:5–63
 - client's interests, 6:47–49
 - importance of ethical focus, 6:49
 - Trade Management Guidelines, 6:48–49
 - costs of trading, 6:21–32
 - econometric models for costs, 6:30–32
 - transaction cost components, 6:22–30
 - duties of portfolio managers, 6:6
 - market microstructure, 6:7–21
 - evaluating market quality, 6:19–21
 - order types, 6:7–9
 - roles of brokers and dealers, 6:18–19
 - types of markets, 6:9–17
 - practice problems, 6:52–57
 - solutions to problems, 6:58–63
 - trade execution decisions, 6:36–47
 - automated trading, 6:40–47
 - for handling of a trade, 6:36–37
 - objectives in trading, 6:37–40
 - traders, 6:32–36
 - traders' selection of order types, 6:35–36
 - types of traders, 6:33–35
- execution-only responsibilities, 1:81
- execution uncertainty, 6:8
- executive choices, portfolio rebalancing, 6:99–100
- executives, equity swaps involving, 5:385
- exempt investors, 2:254
- exemption method, 2:307–308
- exercise rate, of swaptions, 5:386
- exit strategies
 - for equity investments, 5:30
 - staged, 2:359, 361
- exit taxes, 2:306–307
- exogenous economic shocks, 3:72–73
- exogenous variables, 3:20
- exotic options, 3:353, 356–357
- expansion-stage companies, venture capital for, 5:29
- expectations
 - capital market (*see* capital market expectations)
 - investor
 - and adviser-client relations, 2:118
 - in behavioral finance, 2:166
 - in traditional finance, 2:165
- expected future cash flows, 2:280–284
- expected income return, 3:34
- expected nominal earnings growth return, 3:34
- expected repricing return, 3:34
- expected returns
 - estimates of, 3:11–12
 - Gordon growth model, 3:31–33
 - Grinold–Kroner approach, 3:34–35
 - and market integration, 3:207
 - risk-adjusted, 3:187–188
 - risk premium approach, 3:36
 - unconditional, 3:19–20
- expected risk-adjusted performance, 2:193, 194
- expected value of concurrent returns, 2:198
- expenses, liquidity and, 2:176
- experience-based approaches, for asset allocation, 3:249–251
- expert networks, 1:67
- experts, 1:59–60
- expiration, closing out prior to, 2:342
- explicit costs, 6:25
- ex post* alpha, 6:168–170
- ex post* Capital Market Line, 6:170
- ex post* duration, 5:224, 225
- ex post* performance benchmarks, 3:404
- ex post* risk, 3:18
- ex post* Security Market Line, 6:169–170
- ex post* Sharpe ratio, 6:170
- ex post* standard deviation, 6:251, 255
- exposures. *see* risk exposure(s)
- exposure weighting, 4:118
- extensions of VaR, 5:170–171
- external accounts, in country risk analysis, 3:77
- external advisers, selecting, 1:129
- external cash flows
 - at beginning/end of evaluation period, 6:124–125
 - defined, 6:123
 - GIPS definition, 6:243n.20, 288
 - in GIPS provisions, 6:222, 226–229
 - intraperiod, 6:123–125
 - macro attribution, 6:150
 - and performance evaluations, 6:123–125
 - and rate-of-return calculations, 6:123–125
 - and TWR vs. MWR, 6:129–131
- external debt, in country risk analysis, 3:77

- externalities, 3:71n.64
 externally compensated assignments, 1:113
 external manager, travel expenses from, 1:39–40
 external valuations of real estate, 6:260
Extraordinary Popular Decisions and the Madness of Crowds (Mackay), 2:141
 extreme market events, 3:372
 Exxon, 4:171–174
 Ezra, D. Don, 2:548n.12
- F**
 Fabozzi, Frank J., 5:219n.3
 factor betas, 3:28–29
 factor covariance matrix, 3:28–30
 factor exposures, 4:111, 119
 factor loadings, 3:28–29
 factor-model-based benchmarks, 3:401–402; 6:137–138, 156
 factor push models, 5:172
 factor sensitivities, 3:28–29
 facts
 opinions in reports vs., 1:141, 212
 providing opinions as, 1:141
 factual presentations, misrepresentation and, 1:46–47
 failed investments, due diligence and, 1:135
 fair dealing
 in AMC, 1:246
 with clients, 1:90
 between funds, 1:86–87
 and IPO distribution, 1:87
 and transaction allocation, 1:87–88
 Fair Dealing [Standard III(B)], 1:82–90
 application of the standard, 1:86–90
 case study, 1:207
 compliance procedures, 1:84–86
 developing firm policies, 1:84–86
 disclosure of level of service, 1:86
 disclosure of trade allocation procedures, 1:86
 systematic account reviews, 1:86
 guidance, 1:82–84
 investment action, 1:83–84
 investment recommendations, 1:82–83
 text of, 1:17, 82
 Fairfax, Susan (case study), 2:188–194
 fair value
 GIPS definition, 6:260, 289
 in GIPS provisions, 6:221, 222, 260
 in GIPS Valuation Principles, 6:271
 Fair Value Definition (GIPS Section II.A), 6:271
 fallen angels, 5:98
 Fama and French three-factor asset pricing model, 2:144
 Fama–French multi-risk-factor framework, 2:38
 familiarity effect, 2:123
 family accounts, 1:80, 158, 160–161
 family foundations, 2:184–185, 477
 family limited partnerships (FLPs), 2:297–298, 339
 family members, sale of private business equity to, 2:360
- FAS 115. *see* Financial Accounting Standard 115
 FASB. *see* Financial Accounting Standards Board
 favors, requested, 1:155
 FCMs. *see* futures commission merchants
 FDI. *see* foreign direct investment
 Federal Deposit Insurance Corporation, 2:510
 federal funds rate (fed funds), 3:64, 88; 4:120
 Federal Reserve
 economic data from, 3:102
 fed funds rate, 3:64, 88
 Flow of Funds Accounts of the United States-Z.1, 3:156
 monetary policy, 3:100
 monetary policy in recessions, 3:60
 response to financial crisis, 3:73
 and sector-rotation trades, 4:76
 and systematic risk, 5:229
 Federal Reserve Bank of Philadelphia, 3:48
 fed funds. *see* federal funds rate
 Fed model, 3:145–148
 as DCF model, 3:35
 strengths and limitations, 3:158
 with UK data, 3:148
 with US data, 3:145–146
 Yardeni model vs., 3:159–160
 fee caps, 4:223
 feedback
 and committee decision making, 2:137
 and hindsight bias, 2:128
 and overconfidence bias, 2:128
 and research, 2:135
 fees. *see also* Referral Fees [Standard VI(C)]
 administrative, 6:257–258, 287
 ad valorem fees, 4:223, 229–230
 assets under management, 4:223; 5:60
 associated with annuities, 2:428
 and bond indexed portfolios, 4:11
 bundled, 6:232, 268–269, 287
 and conflicts of interest, 1:151
 custody, 6:232, 288
 with exchange-traded instruments, 2:342
 investment management, 6:223, 257, 289
 management, 1:256; 3:201
 performance-based, 4:223, 229–230; 5:76
 service, 1:40
 fee schedule, 6:250, 289
 Ferket, Peter, 4:91
 fictitious name, 1:173, 174, 176
 fiduciary, 2:463
 files
 current, maintaining, 1:26
 of former employers, 1:110
 final liquidation date, 6:265, 267, 289
 Financial Accounting Standard (FAS) 115, 2:492n.22
 Financial Accounting Standards Board (FASB), 5:148, 149; 6:270
 financial advice
 for Active Accumulators, 2:116
 on asset allocation, 2:84–86
 for Friendly Followers, 2:115
 for Independent Individualists, 2:115–116
 for Passive Preservers, 2:114–115
 Financial Analysts Federation, 6:208, 210, 283
 financial buyers, 2:358–359
 financial capital, 2:386–390
 account types, 2:390
 asset allocation with, 3:254–257
 core (*see* core capital)
 defined, 2:382–383
 excess (*see* excess capital)
 human vs., 2:387
 investment assets, 2:388
 non-marketable assets, 2:389–390
 employer pension plans, 2:389–390
 government pensions, 2:390
 non-publicly traded marketable assets, 2:388–389
 annuities, 2:389
 business assets, 2:389
 cash-value life insurance, 2:389
 collectibles, 2:389
 real estate, 2:388
 personal assets, 2:387
 publicly traded marketable assets, 2:388
 financial crises, as exogenous shocks, 3:73. *see also specific crises*
Financial Instruments: Recognition and Measurement (IAS 39), 5:149
 financial managed futures, 5:87
 financial market equilibrium models, 3:40–48
 financial market participants (FMPs), 2:52
 financial market risk. *see* market risk
 financial modeling, 1:9
 Financial Modernization Act, 2:496–497
 financial ownership, 5:14
 financial review, of private equity, 5:43
 financial risk, 1:208; 5:141
 Financial Services Authority, 2:497
 financial stages of life, 2:392–394
 career development phase, 2:393
 early career phase, 2:392–393
 early retirement phase, 2:393
 education phase, 2:392
 late retirement phase, 2:394
 peak accumulation phase, 2:393
 pre-retirement phase, 2:393
 financial statements, 5:43
 Financial Times Actuaries Share Indexes, 3:405–406
 Financial Times Stock Exchange (FTSE), 3:403, 406; 4:200
 Financial Times Stock Exchange 100 Index. *see* FTSE 100 Index
 financial wealth. *see* wealth
 financing, mortgage, 2:367
 Finland
 equity real rates of return, 4:164
 Eurozone membership, 3:9n.
 in Hague Conference, 2:304
 inflation-linked bonds, 3:195
 interest income taxation, 2:233
 tax regime, 2:231, 347

- firewalls, 1:32, 61
- firm policies
in case studies, 1:204, 205, 208, 210–213
for fair dealing, 1:84–86
on loyalty, prudence, and care, 1:77–78
- firm results, overemphasis of, 1:53
- firms
commitment to ethics by, 1:14
compliance with Code of Standards, 1:10
confidential information about, 1:115
GIPS compliance for, 6:209, 214, 218–220
GIPS definition, 6:289
informing, of referral arrangements, 1:163
knowledge of the law, 1:26–27
records as property of, 1:147
starting new, 1:112
total firm assets, 6:219–220, 292
verification, 6:275–276
- first-stage financing, 5:30–31
- fiscal debt to GDP ratio, 3:76
- fiscal policy
in business cycle analysis, 3:54, 66
in country risk analysis, 3:76
defined, 3:60
and government structural policies, 3:71
and monetary policy, 3:66
- Fitch Ratings, 2:493
- FIX communications technology, 6:41
- fixed annuities
advantages and disadvantages of variable and, 2:426–428
deferred, 2:424
immediate, 2:424–426
longevity risk management with, 3:260
- fixed-income arbitrage hedge fund strategies, 5:59
- fixed-income investments. *see also* bonds
correlations to alternative investments, 3:208
domestic vs. non-domestic, 3:195
insurance company investment in, 3:272–273
performance attribution for, 6:162–167
total return of, 6:165–166
- fixed-income markets, discounted cash flow models in, 3:35
- fixed-income portfolio management, 4:5–63, 105–158. *see also* global credit bond portfolio management
about, 4:6
with benchmark bond indexes, 4:7–29
active strategies, 4:27–29
classification of strategies, 4:9–10
indexing (pure and enhanced), 4:11–27
and monitoring/adjusting portfolio, 4:29
cash flow matching strategies, 4:48–52
combination strategies, 4:106
dedication strategies, 4:30–48
cash flow matching strategies, 4:48–52
and classes of liabilities, 4:30
immunization strategies, 4:31–48
monitoring of, 4:52
optimization of, 4:51
security selection for, 4:51
transaction costs of, 4:52
- derivatives-enabled strategies, 4:111–128
and alternative measures of dispersion, 4:113
bond variance and duration, 4:114
with credit risk instruments, 4:123–128
with interest rate futures, 4:115–120
and interest rate risk, 4:111–112
with interest rate swaps, 4:120–121
with options, 4:121–122
- framework for, 4:7, 8
- international bond investing, 4:128–139
active vs. passive management, 4:129–131
breakeven spread analysis, 4:136–137
currency risk, 4:131–136
emerging market debt, 4:137–139
leverage, 4:107–111
effects of, 4:107–109
and portfolio returns/yields, 4:107–109
and repurchase agreements, 4:109–111
with liabilities, 4:29–52
practice problems, 4:55–60, 146–153
solutions to problems, 4:61–63, 154–158
- fixed-income portfolio managers, 4:140–143
criteria for, 4:140–141
due diligence questionnaire, 4:142–143
historical performance of, 4:140
selection of equity managers vs., 4:141
- fixed-income portfolios
core-plus, 4:137
currency hedging for, 3:322
duration of, 5:359–362
hedging of, 4:122
- fixed-income premiums, for capital market expectations, 3:36–38
- fixed-income swaps, equity vs., 5:380–385
- fixed-rate corporate bonds, 4:76
- fixed-rate loans, converting floating-and, 5:355–359
- fixed-rate payers, 4:120
- fixed trusts, 2:300
- flash reports, 1:85
- Flat and Heavy Tax Regime, 2:230–232, 347
- Flat and Light Tax Regime, 2:230–232, 347
- flat tax structures, 2:227, 230–232
- flexibility
of annuities, 2:427
with exchange-traded instruments, 2:343
labor, 3:256–257
- flexible-premium variable life insurance, 2:490n.20
- float adjustment
for float-weighted index, 4:170
for value-weighted index, 4:170
- floating-rate bonds (floaters)
corporate, 4:76
perpetual, 4:70
- floating-rate loans
with caps, 5:319–323
with collars, 5:325–329
converting fixed- and, 5:355–359
with floors, 5:323–325
with FRAs, 5:218–219
inverse, 5:364–366
leveraged floating-rate notes, 5:362–364
- floating-rate payers, 4:120
- floating supply of shares, issue's, 4:169
- float-weighted indexes, 4:170, 173
- floor brokers, 6:8
- floorlet payoff, 5:323, 324, 326, 327
- floorlets, 5:323
- floors, 4:122; 5:323–325
- Flow of Funds Accounts of the United States-Z.1*, 3:156
- FLPs. *see* family limited partnerships
- FMPs. *see* financial market participants
- FOFs. *see* funds of funds
- forced heirship rules, 2:274–276
- Ford Credit, 5:197–198, 205
- Ford Foundation, 2:480
- Ford Motor Company, 2:137; 4:75; 5:196, 197, 204
- Ford Motor Credit, 4:81
- forecasts, 2:125–136
asset class returns, 3:87–102
cash and equivalents, 3:87–88
common shares, 3:91–95
currencies, 3:97–98
defaultable debt, 3:90
emerging market bonds, 3:90
and forecasting exchange rates, 3:98–101
and historical capital market expectations, 3:95–97
inflation-indexed bonds, 3:90–91
nominal default-free bonds, 3:89–90
real estate, 3:95
- biases in research for, 2:133–136
- capital market expectations, 3:13–23, 43–45
and biases of analyst methods, 3:18–19
conditioning information, 3:19–20
correlations in, 3:20–21
data measurement errors and biases, 3:14–16
economic data, 3:13–14
and *ex post* risk, 3:18
and GNP vs. GDP, 3:14
with historical estimates, 3:16–18
and model uncertainty, 3:23
psychological traps with, 3:21–22
and conservatism bias, 2:54
economic, 3:78–87
checklist approach, 3:84–87
econometric modeling, 3:78–80
economic indicators, 3:80–84
strengths and weaknesses of forecasting, 3:86–87
- equity market, 3:138–144
market EPS, 3:142, 144

- portfolio suitability of, 3:140–141
- types of forecasts, 3:138–139
- using both forecasting approaches, 3:141–143
- equity risk premium, 3:34–35
- evaluating previous, 2:135
- exchange rates, 3:98–101
 - capital flows, 3:100
 - government intervention, 3:102
 - purchasing power parity, 3:99
 - relative economic strength, 3:99
 - savings–investment imbalances, 3:100–101
 - USD/euro exchange rate, 3:101
- management's influence on analysis, 2:131–133
- and overconfidence in forecasting skills, 2:126–131
 - case studies, 2:128, 130–131
 - remedial actions, 2:128–131
- and representativeness bias, 2:58
- returns, 3:34–35
- foreign assets, 3:314–316
- foreign bonds, 4:131. *see also*
 - global credit bond portfolio management; international bond investing
- foreign cash receipts, 5:252, 371–373
- foreign currency, 3:314
- foreign currency payments, 5:252–254
- foreign-currency portfolios, asset composition in, 3:322
- foreign-currency returns, 3:314
- foreign currency risk. *see* currency risk
- foreign debt to GDP ratio, 3:77
- foreign direct investment (FDI), 3:100
- foreign exchange, as asset class, 3:326, 327
- foreign exchange (FX) market
 - exchange-traded futures in, 3:342–343
 - forward, 3:309–312
 - spot, 3:307–309
 - swap, 3:312–313
- foreign exchange risk budgeting, 5:183–184
- foreign-market asset portfolio, risk of, 5:254–258
- foreign tax credit provisions for estate planning, 2:307–308
- foreign trade, business cycle and, 3:61
- formal tools for capital market expectations, 3:23–48
 - discounted cash flow models, 3:31–35
 - financial market equilibrium models, 3:40–48
 - and justification of capital market forecasts, 3:43–45
 - risk premium approach, 3:36–40
 - Singer–Terhaar approach, 3:40–48
 - statistical methods, 3:23–31
- formative-stage companies, venture capital for, 5:29
- former clients, soliciting, 1:109–114
- former employers
 - documents and files of, 1:110
 - in performance presentation, 1:99
- Fortune*, 2:145
- forward contracts (forwards)
 - basis risk with, 3:364n.34
- credit spread, 4:124–127
- currency management with, 3:342–349, 352
 - hedge ratios, 3:343–346
 - roll yield, 3:346–348
- futures vs., 3:342–343; 5:258–260
- hedging currency risk with, 4:135–136
- measuring credit risk of, 5:176
- non-deliverable, 3:372–373
- over-/under-hedging with, 3:353
- repricing, 5:186–187
- risk management applications of (*see* risk management applications of forward and futures strategies) and swaps, 5:354
- forward conversions with options, 2:345
- forward curves, 3:346–347; 6:81n.7
- forward discounts, 4:132
- forward hedging, 4:133–136
- forward justified P/E estimates, 3:131
- forward markets, foreign exchange, 3:309–312
- forward rate agreements (FRAs)
 - hedging with, 5:214–215
 - loans with, 5:215–219
 - floating-rate loans, 5:218–219
 - single-payment loans, 5:215–218
- forward rate bias, 3:335, 347
- forward swaps, swaptions and, 5:400
- foundation phase of life, 2:163
- foundations, 2:184–185, 302
 - addition of asset class by, 3:198–199
 - endowments vs., 2:475
 - investment policy statements for, 2:478–479; 3:268–270
 - liabilities for, 3:184
 - portfolio management for, 2:474–479
 - legal and regulatory factors, 2:478
 - liquidity requirements, 2:476–477
 - return objectives, 2:476
 - risk objectives, 2:476
 - tax concerns, 2:477–478
 - time horizon, 2:477
 - unique circumstances, 2:478
- strategic asset allocation for, 3:267–270
- 401(k) plans, 2:120n.4
 - company stock in, 2:122–123, 474n.9
 - excessive trading in, 2:124
- fourth market, 6:15n.6
- fragmentation, order, 6:42
- framing bias, 2:37–38, 65–67
 - consequences of, 2:66–67
 - detection and methods of overcoming, 2:67
 - diagnostic questions, 2:87
 - effect of, 2:65–66
 - and forecasting, 2:132–133
 - and loss-aversion bias, 2:72
 - and management's influence on forecasts, 2:132–133
 - and overinvestment in company stock, 2:123
- framing stage (prospect theory), 2:24–26
- franc, Swiss
 - benefits of currency exposure for, 3:323n.11
 - currency code, 3:307
 - in currency pairs, 3:308
 - as haven currency, 3:371
- synthetic dual-currency bond in, 5:375–376
- France
 - CLI, 3:80
 - Conference Board index, 3:82
 - corporate form of publicly-traded companies, 5:34
 - defined-benefit pension plan, 2:463
 - domestic tax relief, 2:308
 - equity indexes' composition/ characteristics, 4:176
 - equity real rates of return, 4:164
 - equity risk premium, 3:39
 - estate tax, 2:299
 - Eurozone membership, 3:9n.
 - expected returns for equities/bonds, 3:24
 - gift tax, 2:293, 295–296
 - government bond index returns, 4:128
 - in Hague Conference, 2:304
 - long-term after-tax asset allocation, 2:293
 - market integration, 3:43
 - ownership of private business enterprises, 2:322
 - real estate market, 5:16, 24
 - real GDP growth rate, 3:32
 - recognition of trusts, 2:274
 - REITs in, 5:14
 - tax-free gifts, 2:289
 - tax rates, 2:179
 - tax regime, 2:231, 347
 - trade partners, 3:81
 - wealth taxes, 2:306
- franking, 2:228
- Frank Russell Company, 6:137
- FRAs. *see* forward rate agreements
- fraud, 1:55
- Free Commission (UK), 2:463
- free float
 - with international assets, 3:201
 - of market indexes, 3:406, 408
 - of shares, 4:169
- French Monthly Business Survey, 3:81
- Friendly Followers, 2:115
- front-end bullets, 4:84
- front-loaded strategies, 6:44
- front office, 5:139
- front-run (term), 6:17
- front-running, 1:159
- FTSE. *see* Financial Times Stock Exchange
- FTSE 100 Index, 4:236
 - composition and characteristics, 4:176
 - equitizing cash with, 5:236
 - and Fed model with UK data, 3:148
 - forecasting approaches for, 3:138
 - formulating CMEs from, 3:24
 - long–short investing, 4:208–210
 - as market index, 3:397
 - stock index futures, 4:183
 - synthetic index funds using, 5:233, 235
 - uses of, 3:403
- FTSE EPRA/NAREIT Global Real Estate Index, 5:17
- FTSE Global Government Bond Index, 4:14
- FTSE Industry Classification Benchmark, 5:14

- FTSE International Ltd, 4:232
- full replication approach
and bond index investability, 4:14
for fixed-income portfolio
management, 4:9
for passive investing, 4:179–180
- fully funded pension plans, 2:455
- functional duration, 4:40. *see also* key
rate duration
- fundamental anomalies, 2:33–34
- fundamental factor model, 6:160–162
- fundamental factors, pension assets/
liabilities and, 2:544–550
- Fundamental Law of Active
Management, 4:212
- Fundamentals of Compliance (GIPS
Section I.0), 6:216–220
excerpt of, 6:216
and GIPS compliance of firms, 6:209
implementation of, 6:219
- fundamental-weighted indexes,
3:410–411
- fundamental weighting, 3:406
- funded status, 2:455; 3:242n.82
- fund effects, hedge fund, 5:75–77
- funding, travel, 1:35
- funding currencies, 3:336
- funding ratio, 3:242, 243
- funding risk, 5:143n.10
- fund management companies, risk
budgeting by, 5:184–185
- fund managers
benchmarks for, 3:398, 399, 404
relationships with, 1:32, 42
- fund mandate, change in, 1:142
- funds, fair dealing between, 1:86–87
- funds functioning as endowments, 2:480
- funds of funds (FOFs)
defined, 5:60; 6:289
fund effects for, 5:75–76
and private equity, 6:259
roles of, 5:73
- fund sponsors, on performance
evaluation, 6:121–122
- future benefits, pension liability for,
2:540–543
- future long term accumulation,
2:242–243
- future market expectations, and
annuities, 2:427
- future pension contributions, 2:459
- future pension participants, exposures
for, 2:543
- futures (futures contracts). *see*
also managed futures; risk
management applications of
forward and futures strategies
- asset allocation with, 5:241–250
adjusting asset allocation, 5:241–248
pre-investing in asset classes,
5:248–250
- basis risk with, 3:364n.34
- bond, 5:221–223
defined, 4:115
equity index, 4:182–183
forwards vs., 3:342–343; 5:258–260
interest rate, 4:115–120
duration hedging, 4:118–120
duration management, 4:116–118
- options on, 4:121
price of, 4:115
risk of, 5:221–223
stock index, 4:182–183; 5:230, 232
- futures commission merchants (FCMs),
1:123
- future service rendered, pension liability
for, 2:542–543
- future value interest factor (FVIF), 2:233
- future wage liability, 2:540–542, 547, 551
- FX market. *see* foreign exchange market
- G**
- G–7, 3:80, 95
- GAAP. *see* US Generally Accepted
Accounting Principles
- gains taxes. *see* capital gains
- gain-to-loss ratio, hedge fund, 5:83
- gamblers' fallacy, 2:133–134, 141
- gaming, of cost measures, 6:23, 24
- gamma
defined, 5:152, 337
and risk of delta, 5:338–339
- GARP. *see* Global Association of Risk
Professionals
- GBP/EUR. *see* Euro-sterling market
- GDP. *see* gross domestic product
- GDP deflator. *see* gross domestic
product deflator
- General Electric (GE), 2:35; 4:175; 6:143
- generalized peso problem, 3:18n.10
- General Motors, 4:75
- general partners, 6:266, 289
- generation skipping, 2:182, 296
- geometrical linking of returns,
6:224–225
- geometric average return, 2:287
- geometric mean return, arithmetic vs.,
3:24
- geometric smoothing rule, 2:481
- Georgia, 2:304
- German IFO Business Survey, 3:81
- German Industrial Production index,
3:81
- Germany
bond yields, 3:75
CLI, 3:80
Conference Board index, 3:82
corporate form of publicly-traded
companies, 5:34
defined-benefit pension plans, 2:456n.3
equity indexes' composition/
characteristics, 4:176
equity real rates of return, 4:164
equity risk premium, 3:39
Eurozone membership, 3:9n.
exit taxes, 2:306–307
expected returns for equities/bonds,
3:25
gift tax, 2:293
government bond index returns, 4:128
in Hague Conference, 2:304
home ownership, 2:388
inflation forecast, 3:57–58
interest income taxation, 2:228, 233
international bond investing, 4:150
long-term after-tax asset allocation,
2:293
market integration, 3:43
- ownership of private business
enterprises, 2:322
- real GDP growth rate, 3:32
- recognition of trusts, 2:274
- reunification, 3:72, 74
- tax-advantaged savings accounts, 2:246
- tax-free gifts, 2:289
- tax rates, 2:179
- tax regime, 2:231, 347
- trade partners, 3:82
- wealth taxes, 2:238
- GIC. *see* guaranteed investment contract
- GICS. *see* Global Industry Classification
Standards
- gifts, 2:288–296
in AMC, 1:245
from clients, 1:39
and forced heirship rules, 2:274–275
legal constraints on, 2:184–185
limiting, 1:36
location of gift tax liability, 2:293–296
from related parties, 1:38–39
taxable gifts, 2:291–293
taxes on, 2:277, 288
tax-free gifts, 2:289–291
and wealth transfer taxes, 2:182
- Gilovich, Thomas, 2:55
- GIM. *see* global investable market
- GIPS. *see* Global Investment
Performance Standards
- GIPS Advertising Guidelines, 6:246n.22,
273–275
- GIPS Council, 6:211, 212
- GIPS Executive Committee (EC),
6:211–214, 280, 283
- GIPS Guidance Statement for Country-
Specific Taxation Issues, 6:280
- GIPS Guidance Statement on Composite
Definition, 6:237, 239, 240,
243–244
- GIPS Guidance Statement on the
Treatment of Carve-Outs,
6:245n.21
- GIPS Guidance Statement on the
Treatment of Significant Cash
Flows, 6:243
- GIPS Guidance Statement on the Use of
Supplemental Information, 6:238,
280
- GIPS Handbook. see* *Global Investment
Performance Standards Handbook*
- GIPS Valuation Principles, 6:270–273
disclosure requirements in, 6:248
fair and market value calculations,
6:221
for private equity investments, 6:267
for real estate investments, 6:260, 262
- glamour stocks, 4:187
- glide path, asset allocation, 2:121
- global asset allocators hedge fund
strategies, 5:60
- Global Association of Risk Professionals
(GARP), 5:182
- global credit bond portfolio
management, 4:65–102
asset allocation and sector rotation,
4:87–88
credit analysis, 4:87
credit curve analysis, 4:86–87

- history of, 4:65–68
- liquidity and trading analysis, 4:74
- practice problems, 4:91–97
- primary market analysis, 4:73–74
 - and market-structure dynamics, 4:73
 - and product structure, 4:74
- relative-value analysis, 4:68–72
 - classic, 4:70–72
 - and definition of relative value, 4:70
 - methodologies, 4:72
- secondary trade rationales, 4:75–79
 - and cash flow reinvestment, 4:77–78
 - for credit-defense trades, 4:76
 - for credit-upside trades, 4:75–76
 - for curve-adjustment trades, 4:77
 - for new issue swaps, 4:76
 - for sector-rotation trades, 4:76
 - for structure trades, 4:77
 - and trading constraints, 4:78–79
 - for yield/spread pickup trades, 4:75
- solutions to problems, 4:98–102
- spread analysis, 4:79–82
 - alternative spread measures, 4:79–80
 - swap spreads, 4:80–81
 - tools, 4:81–82
- structural analysis, 4:82–85
 - bullet structures, 4:83–84
 - callable structures, 4:84
 - putable structures, 4:85
 - sinking fund structures, 4:85
- total return analysis, 4:72
- global custodian, 5:140
- global financial crisis (2007-2009), 3:65–66
- global income tax structures, 2:226–232
 - common elements, 2:227–229
 - dimensions in tax planning, 2:232
 - general regimes, 2:229–232
 - international comparisons of income taxes, 2:227
- Global Industry Classification Standards (GICS), 4:232; 5:14
- global investable market (GIM), 3:40
- Global Investment Performance Standards (GIPS), 1:129; 3:399–400; 6:205–313
 - advertising guidelines, 6:273–275
 - after-tax return calculations, 6:280–283
 - background, 6:207–215
 - development of performance presentation standards, 6:210–211
 - governance of GIPS, 6:212
 - need for standards, 6:207–210
 - overview of standards, 6:212–215
 - defined, 6:206–207
 - glossary of terms, 6:287–293
 - keeping current with, 6:283–284
 - performance presentation with, 1:98
 - performance presentation without, 1:98
 - practice problems, 6:294–304
 - provisions, 6:215–270
 - Calculation Methodology (Section I.2), 6:216, 223–235
 - Composite Construction (Section I.3), 6:216, 235–245
 - Disclosure (Section I.4), 6:216, 245–251
 - Fundamentals of Compliance (Section I.0), 6:209, 216–220
 - Input Data (Section I.1), 6:216, 220–223
 - overview, 6:215–217
 - Presentation and Reporting (Section I.5), 6:216–217, 251–259
 - Private Equity (Section I.7), 6:217, 259, 266–268
 - Real Estate (Section I.6), 6:217, 259–265
 - Wrap Fee/Separately Managed Account Portfolios (Section 1.7), 6:217, 268–270
 - solutions to problems, 6:305–313
 - TWR methodology for, 6:131
 - valuation principles, 6:270–273
 - disclosure requirements in, 6:248
 - fair and market value calculations, 6:221
 - for private equity investments, 6:267
 - for real estate investments, 6:260, 262
 - verification, 6:275–280
- Global Investment Performance Standards (GIPS) Handbook*, 6:211, 214
- globalization, currency management and, 3:305–306
- global macro hedge fund strategies, 5:59, 75
- global minimum-variance (GMV) portfolio, 3:211
- Global Performance Presentation Standards Subcommittee, 6:211
- GNP. *see* gross national product
- goal-based planning, 2:334–337
- goals, financial
 - and ability to take risk, 2:174–175
 - and adviser-client relations, 2:118
- goals-based investing, 2:81–82
- Gold, Jeremy, 2:537
- Goldman Sachs Commodity Index (GSCI), 5:17–18, 46, 114
 - and commodities as inflation hedge, 5:54
 - contracts based on, 5:51
 - historical performance, 5:47–50, 109–110
 - and risk diversification with commodities, 5:55–56
- Goldman Sachs Group, Inc., 3:49; 5:162–166
- gold standard currency system, 3:57
- goodwill, 2:386n.2
- Google, Inc., 4:186; 5:31–32, 38; 6:53
- Gordon (constant) growth model
 - for equity markets, 3:31–33
 - and Fed model, 3:146
 - intrinsic value of equity in, 2:546
- governance
 - corporate, 3:206; 5:139; 6:71
 - of GIPS, 6:212
 - risk, 5:138–140
- governing laws, regulations and, 1:203–204
- government bond futures contracts, 5:226
- government bond indexes, total returns of, 4:128–129
- government bond portfolios, 5:223–226
- government pensions, 2:390
- government policy(-ies) and business cycle, 3:61
 - and exogenous shocks, 3:72–73
 - structural, 3:71–72
- government regulations. *see* regulations
- government retirement benefits, 2:387
- Gramm-Leach-Bliley Act (1999), 2:510
- grandchildren, gifting to, 2:182, 184, 296
- Granger, Clive W. J., 3:27n.25
- Granger causation, 3:20n.17
- grantors, 2:183–184, 299–300
- gratuitous transfers, 2:277
 - charitable, 2:298–299
 - of excess wealth, 2:288
- Great Depression, 3:277
- “Great Spread-Sector Crash,” 4:73, 84
- Greece
 - Eurozone membership, 3:9n.
 - in Hague Conference, 2:304
- interest income taxation, 2:233
- tax regime, 2:231, 347
- Grinold–Kroner model, 3:33–35
- gross domestic product (GDP)
 - in business cycles, 3:51
 - in econometric modeling, 3:79
 - and economic growth trends, 3:68–71
 - fiscal debt to GDP ratio, 3:76
 - foreign debt to GDP ratio, 3:77
 - GNP vs., 3:14
 - growth rate of nominal, 3:32
 - growth rate of real, 3:32–33
 - and real wage growth, 2:541–542
- gross domestic product (GDP) deflator, 2:482–483
- Grossman–Stiglitz paradox, 2:29
- gross national product (GNP), 3:14
- gross-of-fees return
 - GIPS definition, 6:250, 289
 - for real estate, 6:261
- gross premiums, of life insurance, 2:411–412
- group decision making, 1:129
- group research, 1:129, 132
- growth accounting, neoclassical approach, 3:124–125, 127–128
- growth-at-a-reasonable price investment style, 4:189
- growth investment style, 4:185–186, 188
 - consistent, 4:188
 - and fundamental anomalies, 2:33–34
 - indexes with, 4:199–201
 - and Microsoft, 4:186
 - return requirements for, 2:172
 - sell disciplines, 4:210
 - value vs., 3:401n.9; 4:185–186
- growth managers, 3:399
- growth stocks, performance of, 2:144
- GSCI. *see* Goldman Sachs Commodity Index
- GSCI Agricultural subindex, 5:48, 54
- GSCI Energy subindex, 5:48, 50, 54
- GSCI Industrial Metals subindex, 5:48, 50, 54
- GSCI Livestock subindex, 5:48, 54
- GSCI Nonenergy subindex, 5:48, 54
- GSCI Precious Metals subindex, 5:48, 54

- guaranteed investment contract (GIC),
2:494; 3:27In.106; 4:31–33
- guaranteed minimum withdrawal benefit
for life rider, 2:424
- Guardian (BB&K classification), 2:110
- Gulf Cooperation Council, 3:74
- H**
- Hague Conference on Private
International Law, 2:304–305
- Hague Convention of the Law
Applicable to Trusts and Their
Recognition, 2:304–305
- halo effect, 2:144
- “handle,” currency quote, 3:308
- haven currencies, 3:371
- Hayward, Paul, 2:346n.7
- health maintenance organization
(HMO), 2:421
- health/medical insurance, 2:420–421
in case study, 2:434
direct costs of, 2:403n.3
recommendations for, in case study,
2:438
- health risk, 2:403–404
- Heavy Capital Gain Tax Regime,
2:229–231, 347
- Heavy Dividend Tax Regime, 2:229–231,
235, 347
- Heavy Interest Tax Regime, 2:229–231,
347
- hedged equity strategies, 5:59
- hedged returns, 4:134
- Hedge Fund Composite Index (HFCI),
5:21n.31, 22
commodities correlation, 5:54–56
historical performance, 5:65–68, 73–74
historical performance of, 5:111
managed futures correlation, 5:88, 91
- Hedge Fund Intelligence Ltd., 5:62
- hedge fund market, 5:58–61
size of, 5:61
types of hedge fund investments,
5:58–61
- HedgeFund.net, 5:63
- Hedge Fund Research (HFR), 3:401;
5:62–64, 97
- hedge funds, 5:57–85
about, 5:57–58
benchmarks, 5:62–65, 71–72
benchmarks for, 6:143–146
defined, 5:7
due diligence, 5:77–79
fund effects, 5:75–77
historical performance, 5:65–68
and institutional investors, 2:516
interpretation issues, 5:67, 69–71
backfill bias, 5:70–71
biases in index creation, 5:67, 69
relevance of past data on
performance, 5:69–70
stale price bias, 5:70
survivorship bias, 5:70
investment characteristics, 5:72–73
manager universes for, 3:401
mean returns, volatilities, and
correlations, 3:208
performance evaluations, 5:79–85
consistency, 5:83–85
- correlations, 5:83
- performance appraisal measures,
5:81–83
- skewness and kurtosis, 5:83
- volatility and downside volatility,
5:80–81
- in portfolios, 5:73–75
hedge funds as diversifiers, 5:73
historical performance, 5:73–75
skewness and hedge funds, 5:75
types of investments, 5:58–61
- hedge fund structure, distressed
securities with, 5:96
- hedge ratios
defined, 3:313
for duration hedging, 4:118–120
with forward contracts, 3:343–346
- hedges
core, 3:366
delta, 3:337; 5:329–339
dynamic, 3:344–346, 353
inflation, 5:19, 54
macro, 3:362
natural, 3:367
static, 3:344
Texas, 3:364n.34
- hedging. *see also* currency hedging
and concentrated stock positions,
6:77–78
cross, 2:355–356; 3:360–362; 4:118–
119, 133
defined, 5:214
delta hedging over time, 5:331–338
duration, 4:118–120
of fixed-income portfolios, 4:122
forward, 4:133–136
hedged vs. unhedged returns, 4:134
inflation, 4:163–164
over- and under-, 3:353
and pension liabilities, 2:549
proxy, 3:360–362; 4:133
of single-stock positions, 2:341,
348–354
cashless collars, 2:349–350
prepaid variable forwards, 2:350
purchasing of puts, 2:348–349
selecting best strategy, 2:352–354
with swaps, 4:127; 5:358
- Heine, Max L., 5:95
- heirs, forced heirship rules,
2:274–276
- HEPI. *see* Higher Education Price Index
- herding behavior, 2:80, 140
- Herstatt risk, 5:146
- heuristics, 2:22n.13, 23, 67
- HFCI. *see* Hedge Fund Composite Index
- HFR. *see* Hedge Fund Research
- HFR Distressed Securities Index,
5:97–98
- HFR Fixed-Income High-Yield Index,
5:97
- HICP. *see* Eurozone Harmonized Index
of Consumer Prices
- hidden order, 6:8–9
- Higher Education Price Index (HEPI),
2:482–483
- highest-in, first-out (HIFO) tax lot
accounting, 2:258
- highest requirement, following, 1:28
- high-net-worth investors (HNWI),
2:272. *see also* portfolio
management, for individual
investors
- high-water mark (HWM), 4:223;
5:60–61
- high-wealth-level investor with
emotional biases (case study),
2:88–92
behaviorally-modified portfolio
decision, 2:92
diagnostic tests, 2:89–91
effect of biases, 2:91
moderate or adapt recommendation,
2:91–92
- high-yield investment style, 4:187–188;
5:99
- hindsight bias, 2:61–62
of analysts, 2:127
consequences of, 2:62
detection and methods of overcoming,
2:62
diagnostic questions, 2:87
and market bubbles, 2:143
overcoming, 2:128
and regret, 2:141
- historical analysis
of beta relative to the account, 6:142
and capital market expectations, 3:7,
10, 11
of fixed-income portfolio manager
performance, 4:140
Grinold–Kroner model, 3:33–35
- historical data, in Monte Carlo
simulations, 2:199
- historical estimates, capital market
expectations from, 3:16–18
- historical method of calculating VaR,
5:160–166
- historical simulation method, 5:161–162
- historical statistical approach to
formulating CMEs, 3:24–25
- hitting the bid, 3:309
- HMO. *see* health maintenance
organization
- H-model for estimating P/E, 3:130–137
- HNWI. *see* high-net-worth investors
- holding period
and asset location, 2:253
and capital gains tax rate, 2:236
- holding period management, 2:258–260
- holdings-based style analysis, 4:190–191,
196–202
- holistic balance sheet. *see* economic
balance sheet
- home bias (home country bias), 2:124,
144–145; 3:200, 306
- home currency, 3:313
- home equity, 2:177–178
- homeowner’s insurance, 2:418–420
- homestead, 2:177
- Hong Kong
Economic Freedom Index, 3:77
exchange rate pegging, 3:74
offshore banking centers, 2:310–311
REITs, 5:14
RNDs’ assets in, 2:306
and SPDR S&P China ETF, 3:130
tax regime, 2:231, 347

- territorial tax system, 2:305
 - trade partners, 3:82
 - Horan, Stephen M., 2:337n.5
 - horizon matching, 4:51
 - hot issue securities, 1:84
 - Hotspot FX, 6:15, 42
 - household savings rate, 3:61
 - house money effect, 2:72
 - HSBC AsiaHedge, 5:62
 - human capital
 - defined, 2:382
 - diversification of investments in, 2:473–474
 - in economic balance sheets, 2:396–397
 - effect of, on asset allocation policy, 2:440–443
 - financial vs., 2:387
 - and government structural policies, 3:72
 - as implied asset, 2:279
 - in net wealth, 2:399–400
 - in risk management for individual investors, 2:383–386
 - and strategic asset allocation for individual investors, 3:253–258
 - human capital risk, 2:442–443
 - human life value method
 - of calculating life insurance needs, 2:412
 - in case study, 2:435–438
 - human resources, in AMC, 1:252
 - Humphrey-Hawkins report, 3:145
 - Hungary, 2:231, 304, 306, 347
 - hunter strategies, 6:45
 - hurdle rate, 5:34
 - HWM. *see* high-water mark
 - hybrid markets, 6:17
 - hybrid pension plans, 2:453, 473–474
 - Hyman, Jay, 4:91
 - hyperbolic discounting, 2:76
 - hypothetical events, scenario analysis with, 5:172
- I**
- IAS. *see* International Accounting Standards
 - IASB. *see* International Accounting Standards Board
 - IBM, 4:87, 186; 5:161–162
 - ICAPM. *see* international CAPM-based approach
 - iceberg order, 6:8–9
 - Iceland, 2:304; 3:195
 - idiosyncratic risks, 2:443; 5:229n.19
 - IFRS. *see* International Financial Reporting Standards
 - ILGS. *see* Index-Linked Gilts
 - illegal activity, disclosure of, 1:104
 - illiquidity
 - of emerging market currencies, 3:371
 - of family limited partnerships, 2:297–298
 - of holdings by individual investors, 2:177–178
 - of private equity investments, 5:37
 - illiquidity premium, 3:36
 - illusion of control bias, 2:60–61, 332
 - of analysts, 2:127
 - consequences of, 2:61
 - detection and methods of overcoming, 2:61
 - diagnostic questions, 2:88
 - of management, 2:132
 - illusion of knowledge, 2:74, 126, 143, 331
 - IMCA. *see* Investment Management Consultants Association
 - IMF. *see* International Monetary Fund
 - immediate annuities, 2:422–426
 - immunization approach to asset allocation, 3:183
 - immunization strategies, 4:31–48
 - and accumulated value, 4:31–33
 - active/immunization combination, 4:106
 - classical single-period, 4:31–33, 37–45
 - and active bond management strategies, 4:40–41
 - assumptions of, 4:37
 - characteristics of, 4:31
 - duration and convexity of assets and liabilities, 4:41–42
 - extensions of, 4:37–45
 - risk minimization for immunized portfolios, 4:42–45
 - and risk–return tradeoff, 4:40
 - and shifts in interest rates, 4:37–40
 - and shifts in time horizon, 4:40
 - types of risk, 4:42
 - contingent, 4:40–41
 - defined, 4:30
 - dollar duration in, 4:34–35
 - duration and convexity of assets/liabilities in, 4:41–42
 - example, 4:36–37
 - for general cash flows, 4:46–47
 - multiple liability immunization, 4:40, 45–46, 50
 - rebalancing immunized portfolios, 4:33
 - and return maximization, 4:47–48
 - risk in, 4:42–45
 - spread duration in, 4:36
 - target return for, 4:33–34
 - time horizon for, 4:34
 - and total return, 4:31–33, 39–40
 - value and interest rate of immunized portfolio, 4:38–39
 - yield curve of immunized portfolios, 4:39
 - immunized time horizon, 4:34
 - implementation, in strategic asset allocation, 3:251–253
 - implementation shortfall, 6:24–28
 - implementation shortfall strategies, 6:43–44
 - implicit advice, 2:123
 - implied yield, bond, 5:221
 - inactive pension participants
 - market related exposures, 2:538–539
 - non-market related exposures, 2:544
 - inadequate compliance procedures, 1:124
 - inadequate supervision, 1:124–125
 - incentives
 - for analysts, 2:128
 - establishing, 1:122
 - for overinvestment in company stock, 2:123
 - incident-reporting procedures, 1:109
 - inclusion bias, 5:70–71
 - income
 - for banks, 2:512
 - and consumption, 3:68
 - corporate share of, 2:496
 - from dividends, 2:228
 - in econometric modeling, 3:79
 - endowment spending based on, 2:480
 - expected return for, 3:34
 - interest (*see* interest income)
 - labor, 3:256, 258
 - net investment, 2:477–478
 - and objectives for concentrated positions, 2:328
 - pension, 2:459
 - permanent income hypothesis, 3:68
 - policyholder's share of, 2:496
 - unrelated business, 2:477, 485
 - income approach to setting return requirements, 2:172
 - income beneficiaries, of trusts, 2:184–185
 - income returns, 6:260, 289
 - income risk, 4:11
 - income taxes, 2:347
 - and cross-border estate planning, 2:305–306
 - in estate planning, 2:276
 - and gains taxes, 2:181–182
 - global structures, 2:226–232
 - common elements, 2:227–229
 - dimensions in tax planning, 2:232
 - general regimes, 2:229–232
 - international comparisons of income taxes, 2:227
 - and investment policy statements, 2:179
 - income yield, for immediate fixed annuities, 2:424–425
 - incremental VaR, 5:170
 - indemnity plan, as health/medical insurance, 2:421
 - indenture agreement, 5:102
 - independence, in AMC, 1:245
 - Independence and Objectivity [Standard I(B)], 1:30–42
 - application of the standard, 1:36–42
 - compliance procedures, 1:35–36
 - guidance, 1:30–35
 - buy-side clients, 1:31
 - credit rating agency opinions, 1:33–34
 - fund manager and custodial relationships, 1:32
 - influence in manager selection/procurement process, 1:34
 - investment banking relationships, 1:32–33
 - issuer-paid research, 1:34–35
 - performance measurement and attribution, 1:33
 - public companies, 1:33
 - travel funding, 1:35
 - text of, 1:16, 30
 - Independence axiom (utility theory), 2:9
 - independence policies, 1:36
 - independent analysis, 1:69

- independent contractors, employees vs., 1:108–109
- independent events, emotional biases about, 2:133
- independent foundations, 2:474–475
- Independent Individualists, 2:115–116
- independent practice, 1:106
- independent professional judgment, 1:210
- indexed portfolios, 4:175, 178–184
- indexes. *see also specific indexes*
 based on equity style, 4:199–202
 benchmark bond, 4:7–29
 active strategies, 4:27–29
 classification of strategies, 4:9–10
 indexing strategies, 4:11–27
 monitoring/adjusting portfolio with, 4:29
 as benchmarks, 3:411, 412
 capitalization-weighted, 3:409–410
 composition and characteristics of, 4:174–177
 diffusion, 3:80
 equal-weighted, 3:410; 4:169–171, 173–174
 float-weighted, 4:170, 173
 fundamental-weighted, 3:410–411
 international diversification with, 3:203
 investability, 4:13–18
 limitations of data on, 3:13, 14
 managing to, 1:93
 market
 about, 3:396
 as benchmarks, 3:412
 benchmarks vs., 3:397
 construction of, 3:405–409
 index weighting schemes, 3:409–413
 passive equity investing with, 4:168–177
 benchmark index selection, 4:171–174
 composition and characteristics of major indexes, 4:174–177
 index weighting choices, 4:168–174
 price-weighted, 3:410; 4:168–170, 172
 selecting benchmark, 4:11–13, 171–174
 style, 4:185
 types of, 6:136–137
 value-weighted, 4:169, 170, 172–173
- index funds
 and efficient market hypothesis, 6:22
 synthetic, 5:233–236
- indexing
 with benchmark bond indexes, 4:11–27
 enhanced indexing, 4:25–27
 investability of indexes, 4:13–18
 reasons for using, 4:11
 risk exposures with, 4:18–22
 selection of benchmark for, 4:11–13
 and tracking risk, 4:22–25
 defined, 4:165
 enhanced, 4:25–27, 165
 as equity investment approach, 4:165
 by matching primary risk factors, 4:9–10
 semiactive equity investing, 4:211–213
 by small risk factor mismatches, 4:10
 for equity investments, 4:165
 pure bond, 4:9
- Index-Linked Gilts (ILGS), 3:90–91
- Index of Leading Economic Indicators (LEI), 3:82–84
- index-tracking strategies, 2:355
- index weighting, 3:409–413
 and bond index investability, 4:14–15
 capitalization-weighted indexes, 3:409–410
 defining, for index construction, 3:405–406
 equal-weighted indexes, 3:410
 fundamental-weighted indexes, 3:410–411
 with index used as benchmark, 3:411
 and market index as benchmarks, 3:412
 for passive equity investing, 4:168–174
 price-weighted indexes, 3:410
- India
 capital gains tax, 2:228
 in Hague Conference, 2:304
 tax rates, 2:179
 tax regime, 2:231, 347
 wealth taxes, 2:306
- Indian rupee, 3:307, 372
- indifference curve analysis, 2:15–17
- indirect investment
 in commodities, 5:45
 of venture capital, 5:33–34
- indirect loss, of property, 2:402–403
- individual balance sheet, 2:394–400
 changes in net wealth, 2:397–400
 economic (holistic) balance sheet, 2:396–397
 traditional balance sheet, 2:395–396
- individual behavior, 2:7–20
 in behavioral finance, 2:14–19
 attitudes toward risk, 2:17–19
 challenges to rational economic man, 2:15
 utility maximization, 2:15–17
 BFMA and BFMI, 2:7–8
 and neuro-economics, 2:19–20
 in traditional finance, 2:8–14
 perfect rationality, self-interest, and information, 2:12
 rational economic man, 2:11–12
 risk aversion, 2:13–14
 utility theory and Bayes' formula, 2:8–11
- individual investors. *see also* constraints of individual investors; portfolio management, for individual investors; risk management, for individual investors
 characteristics of, 2:162–171
 psychological profiling, 2:165–171
 situational profiling, 2:162–165
 CME research, 3:8
 liabilities for, 3:184
 strategic asset allocation for, 3:253–261
 critique of, 3:260–261
 human capital factors, 3:253–258
 and mortality/longevity risk, 3:259–260
- Individualist (BB&K classification), 2:110
- Individualist investors, 2:169
- individual local market, 3:42
- Individual Retirement Accounts (IRAs), 2:246
- individual risk exposures, 2:400–405
 earnings risk, 2:400–401
 health risk, 2:403–404
 liability risk, 2:403
 longevity risk, 2:402
 premature death risk, 2:401
 property risk, 2:402–403
- Indonesia, 2:231, 347; 3:82
- industry classification, of equities, 4:231–232
- Industry Classification Benchmark, 4:232
- industry experts, 1:59–60
- inertia, 2:77, 120–121
- inferential statistics, 3:23
- inflation
 and annuity income, 2:428
 in business cycle analysis, 3:55–59
 and defined-benefit pension plans, 3:263
 and future wage liability, 2:541, 547
 and nominal default-free bonds, 3:89–90
 and P/E ratios, 3:95
 and portfolio monitoring, 6:81–82
 and returns for endowments, 2:482–484
- inflation hedges
 assets as, 4:163–164
 commodities as, 5:54
 real estate as, 5:19
- inflation-indexed bonds, 3:90–91
- inflation premiums, 3:36–38
- inflation-protected bonds, 3:195–197
- inflation risk, 2:324
- inflection point, inventory cycle, 3:52
- information
 account, 1:77
 on applicable laws, 1:27
 from brokers, 6:18
 for capital market expectations, 3:8–10
 conditioning, 3:19–20
 confidential
 about CFA program, 1:165–166
 about firms, 1:115
 conveying, 1:205
 disclosing, 1:103–105
 possessing, 1:103
 considering, before taking action, 1:77
 dissemination
 simultaneous, 1:85
 time frame between decision and, 1:84–85
 trading prior to, 1:161–162
 for economic analysis, 3:102–103
 efficiency of, 4:166
 insider, 1:210–211
 and market liquidity, 6:20
 material, 1:57
 in AMC, 1:255
 analyst recommendations as, 1:65–66
 selective disclosure of, 1:64
 material nonpublic (*see* material nonpublic information)

- misrepresentation of (*see* misrepresentation)
- nonpublic, 1:58, 63–66, 158
 - acting on, 1:63
 - analyst recommendations as, 1:65–66
 - controlling, 1:64
 - defined, 1:58
 - standards for priority of transactions with, 1:158
- out-of-date, 1:52–53
- perfect, 2:12, 15
- supplemental, 6:238, 292
- third-party confirmation of, 1:251–252
- verification of outside, 1:47
- information-based manipulation, 1:68, 72–73
- information coefficient, 4:212
- information-motivated traders, 6:33–35
- information-processing biases, 2:62–69
 - anchoring and adjustment bias, 2:63
 - availability bias, 2:67–69
 - framing bias, 2:65–67
 - mental accounting bias, 2:64–65
- information ratio (IR), 4:166; 5:184; 6:171
- infrastructure, 3:72, 201
- infrastructure funds, 5:14, 15
- Inger family (case study), 2:159–162, 164–165, 170–171, 173–175, 177, 178, 184–187, 194–196
- inheritance, 2:277
- inheritance tax, 2:277n.8, 288
- inherited securities, endowment bias and, 2:78, 79
- initial public offerings (IPOs)
 - and conflicts of interest, 1:158–159
 - fair dealing in, 1:87
 - Google, Inc., 5:31–32
 - in monetization strategies, 2:361
 - private equity for, 5:29
- initial recovery phase (business cycle), 3:53, 54
- Input Data (GIPS Section I.1), 6:220–223
 - excerpt of, 6:216
 - implementation of, 6:223
- inputs, model, 1:72
- input uncertainty, 3:23
- inside ask, 6:10–11
- inside bid, 6:10
- inside bid–ask spread, 6:11
- inside buildup of cash values, 2:496
- inside quote, 6:11
- insider exposure, 5:383–385
- insider information, 1:210–211
- insider status, 2:190
- inside spread, 6:11
- Institute of Canadian Real Estate Investment Managers (ICREIM)/IPD Canadian Property Index, 5:16
- Institute of Chartered Financial Analysts, 6:210
- Institute of Supply Management (ISM), 3:62, 83, 102
- Institutional Alternative Investment Survey, 5:9–10
- institutional constraints, on
 - concentrated positions, 2:329–330
- institutional investors
 - CME research, 3:8
 - constraints for, 6:71
 - defined, 2:452
 - indexing portfolios of, 4:179
 - portfolio management for, 2:451–534
 - about, 2:452
 - banks, 2:509–516
 - endowments, 2:479–489
 - foundations, 2:474–479
 - insurance industry, 2:489–509
 - investment intermediaries, 2:516–517
 - pension funds, 2:452–474
 - practice problems, 2:520–526
 - solutions to problems, 2:527–534
 - strategic asset allocation for, 3:262–275
 - banks, 3:273–275
 - defined-benefit plans, 3:262–267
 - foundations and endowments, 3:267–270
 - insurance companies, 3:270–275
- insurable interest, for life insurance, 2:408
- insurance(s)
 - disability income insurance, 2:417–418
 - health/medical insurance, 2:420–421
 - liability insurance, 2:421–422
 - life insurance, 2:405–416
 - elements of, 2:407–409
 - pricing of, 2:409–415
 - types of, 2:406–407
 - uses of, 2:406
 - other types of, 2:422
 - property insurance, 2:418–420
 - automobile insurance, 2:420
 - homeowner's insurance, 2:418–420
 - protective puts as, 5:288
- insurance companies, strategic asset allocation for, 3:270–275
- insurance industry
 - life insurance companies, 2:489–501
 - non-life insurance companies, 2:501–509
 - portfolio management for, 2:489–509
- insurance program analysis, 2:433–440
 - current insurance plan in, 2:434
 - program review in, 2:434–438
 - recommendations from, 2:438–440
- integrated markets, 3:42–43
- integrity, 1:55, 169; 6:20
- Integrity of Capital Markets [Standard of Professional Conduct II], 1:56–73
 - eleventh edition revision, 1:7
 - Market Manipulation [Standard II(B)], 1:16, 68–73
 - application of the standard, 1:69–73
 - guidance, 1:68–69
 - text of, 1:16, 68
- Material Nonpublic Information [Standard II(A)], 1:16, 56–67
 - application of the standard, 1:63–67
 - case study, 1:210
 - compliance procedures, 1:60–63
 - guidance, 1:56–60
 - text of, 1:16, 56
 - text of, 1:16
- Intel Corporation, 4:171–174; 5:38
- intellectual property, 5:43
- interdepartmental communications, 1:61
- interdepartmental referral arrangements, disclosure of, 1:163
- interest
 - carried, 6:266, 287
 - effective
 - with calls, 5:310, 312
 - with caps, 5:320–322
 - with collars, 5:327, 328
 - with floors, 5:324, 325
 - with puts, 5:315–317
 - retained, 2:184–185
 - in tax regimes, 2:229–232, 347
- interest income
 - accrual taxes on, 2:233–234
 - and asset location, 2:253
 - heavy interest tax regime, 2:229–231
 - tax provisions for, 2:227–228
- interest rate calls, loans with, 5:311–314
- interest rate futures
 - duration hedging with, 4:118–120
 - in duration management strategies, 4:116–118
 - in fixed-income portfolio management, 4:115–120
- interest rate management effect, 6:165–166
- interest rate options
 - and options on futures, 5:340
 - risk management applications, 5:308–329
 - calls with borrowing, 5:309–314
 - caps with floating-rate loans, 5:319–323
 - collars with floating-rate loan, 5:325–329
 - floor with floating-rate loan, 5:323–325
 - puts with lending, 5:314–319
- interest rate parity (IRP), 4:132
- interest rate risk
 - and banks' market value, 2:511
 - in benchmark bond index selection, 4:18
 - and fixed-income portfolio management, 4:111–112
 - and fixed vs. variable annuities, 2:427
 - forward and futures strategies for managing, 5:215–227
 - and immunization, 4:42
 - and life insurance companies, 2:491–492
 - and putable structures, 4:85
 - swap strategies for managing, 5:355–366
 - converting floating- and fixed-rate loans, 5:355–359
 - duration of fixed-income portfolios, 5:359–362
 - risk of structured notes, 5:362–366
- interest rates
 - in benchmark bond index selection, 4:18
 - cap, 4:122
 - in classical single-period immunization, 4:37–40
 - and exchange rate, 3:74–75, 99
 - and international bond investing, 4:130–131
 - and monetary policy, 3:63, 65
 - neutral level of, 3:63
 - prime rate, 4:120
 - and repurchase agreements, 4:111
 - risk-free, 2:546; 3:36, 37
 - and value of immunized portfolio, 4:38–39

- interest rate swaps, **4:120–121; 5:370**
interest rate swap spreads, **4:80, 81**
interest rate swaptions, **5:386–393**
in anticipation of future borrowing, **5:386–390**
terminating swaps with, **5:390–393**
interests, client, **1:78, 244–245**
interest spread, **2:511**
intergenerational equity, **2:476**
intermediate credit bullets, **4:84**
internal capital requirements, in capital allocation, **5:192**
internal dispersion, **6:250–255, 289**
internal rate of return (IRR), **6:128–131**
linked, **6:131–132**
money-weighted rate of return, **6:128–131**
of private equity, **5:38**
for real estate, **6:262–265**
Internal Revenue Code, **2:478, 485; 4:181**
Internal Revenue Service (IRS), **2:477**
International Accounting Standards (IAS)
derivatives, **5:149**
investments by insurance companies, **2:497**
pension expense, **2:459**
International Accounting Standards Board (IASB), **5:148, 149; 6:270**
international assets, **3:197–207**
conditional return correlations for, **3:203–204**
costs of, **3:200–201**
diversification opportunities with, **3:201–203**
in emerging markets, **3:204–207**
investor objectives and inclusion of, **3:197–199**
risks of, **3:199–200**
international bond investing, **4:128–139**
active vs. passive management, **4:129–131**
breakeven spread analysis, **4:136–137**
currency risk, **4:131–136**
hedging of, **4:132–136**
interest rate parity, **4:132**
emerging market debt, **4:137–139**
analysis of, **4:138–139**
and growth/maturity of market, **4:137–138**
risk and return characteristics, **4:138**
international CAPM-based approach (ICAPM), **3:40–48**
international currency exposure, **3:313–316**
international diversification, **5:378–380**
International Financial Reporting Standards (IFRS), **6:262**
international interactions in economic analysis, **3:73–78**
for emerging markets, **3:75–78**
interest rate/exchange rate linkages, **3:74–75**
macroeconomic linkages, **3:74**
International Monetary Fund (IMF), **3:76, 102; 4:137; 5:149**
International Securities Exchange, **6:15, 42**
Interpretations Subcommittee, **6:212**
interquartile range, **6:254–255**
intestate (term), **2:273**
intrafirm pressure, **1:37, 42**
intraproduct external cash flows, **6:123–125**
intrinsic value
of currency options, **3:350**
of equities, **2:545–546**
inventory cycle, **3:51, 52**
inventory/sales ratio, **3:52**
inverse floaters, **5:364–366**
investability
bond index, **4:13–18**
of manager-based hedge fund indices, **5:64**
market index, **3:407**
investable benchmarks, **6:135, 140**
investment(s)
in econometric modeling, **3:79**
and economic growth, **3:69–70**
failed, **1:135**
restricting, **1:36**
for strategic asset allocation, **3:251–252**
tactical asset allocation for, **3:281–282**
traditional vs. alternative, **5:7–13**
investment accounts, **2:245–250**
after-tax asset allocation, **2:247–248**
selecting, **2:248–250**
tax-deferred accounts, **2:246**
tax-exempt accounts, **2:246–247**
investment actions. *see also* Investment Analysis, Recommendations, and Actions [Standard of Professional Conduct V]
in AMC, **1:242, 245–248**
fair dealing in, **1:83–84**
firm policies on, **1:77**
impact of, **1:12–13**
unethical, **1:29**
investment analysis
due diligence in, **1:33**
independent, **1:69**
risks and limitations of, **1:139–140, 145–146**
Investment Analysis, Recommendations, and Actions [Standard of Professional Conduct V], **1:126–148**
Communication with Clients and Prospective Clients [Standard V(B)]
application of the standard, **1:141–146**
case study, **1:212**
compliance procedures, **1:140–141**
eleventh edition revision, **1:8**
guidance, **1:138–140**
text of, **1:18, 137–138**
Diligence and Reasonable Basis [Standard V(A)], **1:126–137**
application of the standard, **1:130–137**
case study, **1:210–212**
compliance procedures, **1:130**
guidance, **1:126–129**
text of, **1:18, 126**
Record Retention [Standard V(C)], **1:146–148**
application of the standard, **1:148**
compliance procedures, **1:147**
guidance, **1:146–147**
text of, **1:18, 146**
investment assets, **2:388**
investment banking, **1:32–33; 2:509–510**
investment committees, dynamics of, **2:137**
Investment Company Act (1940), **2:486**
investment currencies, **3:336**
investment environment, for capital market expectations, **3:7–8, 11**
investment-grade credit bonds
credit spread, **4:86–87**
market for, **4:82–83**
returns, **4:67**
Sharpe ratio, **4:68**
investment industry, ethics in, **1:11–15**
investment instruments, asset allocation and, **2:196**
investment intermediaries, **2:516–517**
investment management, market indexes and, **3:404**
Investment Management Consultants Association (IMCA), **6:210**
investment management fees, **6:223, 257, 289**
investment managers, on performance evaluation, **6:122**
Investment Managers strategy, **6:154**
Investment Manager Subcommittee, **6:212**
investment multiple, **6:265, 290**
investment objectives, **1:77, 93, 148**
investment opportunity set, availability bias and, **2:68**
Investment Performance Council (IPC), **6:211, 276**
investment personnel. *see* personnel
investment policy
and pension liabilities/assets, **2:549–550**
performance evaluation in, **6:121**
investment policy statements (IPs) and AMC, **1:247–248**
and asset allocation, **2:189–191**
asset class selection based on, **3:193**
behaviorally-modified asset allocation for, **2:81–82**
in compliance procedures, **1:93**
in currency management programs, **3:328–330**
currency management strategies based on, **3:319–320**
developing, **1:91**
for individual investors, **2:171–187**
constraints, **2:176–187**
return objectives, **2:172–174**
risk objectives, **2:174–175**
for institutional investors
banks, **2:514–516**
defined-contribution pension plans, **2:468–472**
endowments, **2:486–489**
foundations, **2:478–479; 3:268–270**
life insurance companies, **2:498–501**

- non-life insurance companies, 2:508–509
- investment restrictions in, 6:236–237
- portfolio return calculation provisions in, 6:229–230
- record retention of objectives/recommendations in, 1:148
- requirements and limitations of, 1:95–96
- reviews of, 1:96
- updating, 1:92, 95
- investment practice, impact of misrepresentation on, 1:44
- investment process
 - behavioral factors in (*see* behavioral factors in investment processes)
 - changes to, 1:142–144
 - disclosure of, 1:256
 - informing clients of, 1:138–139
- Investment Processes and Actions (AMC Part B), 1:242, 245–248
- investment products, applicable laws for, 1:23–25
- Investment Property Databank (IPD), 5:16
- investment real estate
 - about, 2:366
 - client objectives with, 2:328
 - concentrated positions in, 2:324, 366–369
 - monetization strategies, 2:367–369
 - donor-advised funds, 2:367–368
 - mortgage financing, 2:367
 - sale and leaseback, 2:368–369
- investment risk
 - with concentrated single-asset positions, 2:324–327
 - and pension liabilities, 2:537
 - and taxes, 2:250–251
- investment services, of brokers, 6:18
- investment skill, 6:168
- investment strategies
 - in composite construction, 6:238–241
 - managing to, 1:247
- investment style indexes, 6:137
- investment styles, 4:184–204
 - advantages of, 4:190
 - based on market capitalization, 4:189–190
 - blend, 4:188–189
 - consistent growth, 4:188
 - contrarian, 4:187
 - core, 4:188–189
 - earnings momentum, 4:188
 - growth, 4:185–186, 188
 - consistent, 4:188
 - indexes with, 4:199–201
 - and Microsoft, 4:186
 - sell disciplines, 4:210
 - value vs., 4:185–186
 - growth-at-a-reasonable price, 4:189
 - high yield, 4:187–188
 - in holdings-based style analysis, 4:190–191, 196–199
 - identifying, 4:190–199
 - indexes based on, 3:401; 4:199–202
 - low P/E, 4:187
 - managing to, 1:247
 - market-oriented, 4:184, 188–189
 - and portfolio characteristics, 4:197–198
 - in returns-based style analysis, 4:191–196, 199
 - returns due to, 6:134–135
 - and style boxes, 4:202–203
 - and style drift, 4:203–204
 - style rotator, 4:189
 - value, 4:185–188
 - defined, 4:184
 - growth vs., 4:185–186
 - Microsoft and, 4:186
 - sell disciplines, 4:210
- investment system, disclosure of, 1:141, 143
- investment universes, 3:396
- investment vehicles, market indexes as basis for, 3:404–405
- investor constraints. *see* constraints of individual investors
- Investor/Consultant Subcommittee, 6:212
- investors. *see also* institutional investors; portfolio management; individual investors
 - active, 6:83–84
 - behavioral types, 2:108–117
 - Barnewall two-way model, 2:108–109
 - BB&K model, 2:109–110
 - limitations of classification, 2:116–117
 - psychographic modeling, 2:111–116
 - behavior of, 3:191–193
 - benchmark of, 4:219
 - buy-and-hold, 4:79
 - changes in circumstances/constraints of, 6:67–79
 - laws and regulations, 6:70
 - liquidity requirements, 6:68
 - tax circumstances, 6:70
 - time horizons, 6:68–70
 - unique circumstances, 6:70–79
 - wealth, 6:67–68
 - with concentrated stock positions, 6:77–79
 - financial stages of life for, 2:392–394
 - goals of, 5:6
 - identity of, 5:43
 - large-cap equity, 4:189–190
 - liabilities for, 3:184–185
 - liquidity requirements of, 6:68, 72, 75
 - micro-cap equity, 4:189
 - mid-cap equity, 4:189, 190
 - objectives of, 3:182–193
 - and asset-only vs. asset/liability management approaches, 3:182–185
 - and behavior influences on asset allocation, 3:191–193
 - and international assets, 3:197–199
 - return objectives, 3:185–187
 - risk objectives, 3:187–191
 - small-stock, 4:189
- IPC. *see* Investment Performance Council
- IPD. *see* Investment Property Databank
- IPO puzzle, 2:139
- IPOs. *see* initial public offerings
- IPs. *see* investment policy statements
- IR. *see* information ratio
- IRAs. *see* Individual Retirement Accounts
- Ireland
 - equity real rates of return, 4:164
 - equity risk premium, 3:39
 - Eurozone membership, 3:9n.
 - expected returns for equities/bonds, 3:25
 - in Hague Conference, 2:304
 - real estate, 5:19
 - tax regime, 2:231, 347
- IRP. *see* interest rate parity
- IRR. *see* internal rate of return
- irrational behavior, predicting, 2:117
- irrevocable trusts, 2:183–184, 300, 301
- IRS. *see* Internal Revenue Service
- iShares Core S&P 500 ETF, 3:397
- Islamic law, 2:274
- ISM. *see* Institute of Supply Management
- isolation effect, 2:26
- Israel
 - exit taxes, 2:306–307
 - in Hague Conference, 2:304
 - inflation-protected bonds, 3:195
 - tax rates, 2:179
 - tax regime, 2:231, 347
- issuer-paid research, 1:34–35, 48
- issuer relationship pressure, 1:37–38
- Italy
 - CLI, 3:80
 - equity real rates of return, 4:164
 - equity risk premium, 3:39
 - Eurozone membership, 3:9n.
 - expected returns for equities/bonds, 3:25
 - gift tax, 2:293
 - in Hague Conference, 2:304
 - interest income taxation, 2:227
 - real GDP growth rate, 3:32
 - tax-advantaged savings accounts, 2:246
 - tax rates, 2:179
 - tax regime, 2:231, 347
 - trade partners, 3:81
- J
- January effect, 2:35, 139
- Japan
 - asset allocation in pension plans, 3:263, 264
 - asset price bubble of 1980s, 2:142
 - banking, 2:509–510
 - China stock market volatility vs., 3:134
 - CLI, 3:80, 81
 - commodity market, 5:45
 - Conference Board index, 3:82
 - corporate form of publicly-traded companies, 5:34
 - currency hedging, 4:134
 - defined-benefit pension plans, 2:454
 - economic growth, 3:68
 - economic state of, 2:63
 - emerging market debt, 3:90
 - equity indexes' composition/characteristics, 4:176
 - equity real rates of return, 4:165
 - equity risk premium, 3:39

- Japan (*continued*)
 expected returns for equities/bonds, 3:25
 foreign cash receipts, 5:371–372
 foreign currency payments, 5:253
 gift tax, 2:293, 296
 government bond index returns, 4:128
 in Hague Conference, 2:304
 insurance companies, 2:497
 interest income taxation, 2:233
 interest rate swaptions, 5:390–393
 international bond investing, 4:150
 international investment, 3:201
 investment real estate, 2:324
 and justified P/E estimates, 3:131
 life insurance industry, 2:493
 monetary policy, 3:65
 pension fund equity allocations, 4:163
 population growth, 3:129
 real estate allocations in, 5:21
 real GDP growth rate, 3:32
 REITs, 5:14
 risk governance, 5:138
 savings–investment imbalances
 forecasting approach, 3:100
 taxable gifts, 2:292, 294
 tax on stock purchases, 2:323
 tax rates, 2:179
 tax regime, 2:231, 347
 TFP growth, 3:70
 trade partners, 3:81–82
- Japanese yen
 benefits of currency exposure for, 3:323n.11
 currency code, 3:307
 in currency pairs, 3:308, 309, 310n.7, 343
 in currency swaps, 5:371–372
 as haven currency, 3:371
- Jensen's alpha, 6:168
 J factor risk, 5:101
 joint life annuities, 2:423, 428–429
 joint ownership with right to survivorship, 2:273–274
- Jones, Alfred Winslow, 6:144
 Jordan, 2:179, 304
 JP Morgan, 3:27, 401, 403; 4:14, 15
 JPMorgan Chase, 5:153
 JP Morgan Emerging Markets Bond Index (EMBI), 3:401, 403
 JPY/EUR. *see* Euro-yen market
 JPY/GBP. *see* Sterling-yen market
 JPY/USD. *see* Dollar-yen market
- judgment, analyst, 3:50
 junk bonds, 2:64; 3:273
- jurisdiction
 of individual investors, 2:185
 residence, 2:305
 source, 2:305
 tax, 2:305
- justified P/E estimates, 3:124–138
 for China, 3:126–137
 and economic experience, 3:126–127
 and future economic growth, 3:128–129
 H-model for estimating P/E, 3:130–137
 for developed economies, 3:137–138
 and neoclassical approach to growth accounting, 3:124–125, 127–128
- K**
kabushiki kaisha (K.K.), 5:34
 Kahneman, Daniel, 2:70, 166
 Kazakhstan, 2:231, 232n.4, 347
 Kenya, 2:231, 347
 key employees, sale of private business equity to, 2:359–360
 Keynes, John Maynard, 2:80
 key rate duration, 4:20, 23
 Knight, Frank, 2:21
 knock-in options, 3:356–357
 knock-out options, 2:348–349; 3:356–357
 knowingly (term), 1:43
 knowledge of the law, failure to maintain, 1:29
 Knowledge of the Law [Standard I(A)], 1:21–29
 application of the standard, 1:27–29
 case study, 1:203–204
 compliance procedures, 1:26–27
 CFA members and candidates, 1:26
 dissociation, 1:26
 distribution area laws, 1:26
 firms, 1:26–27
 legal counsel, 1:26
 guidance, 1:21–25
 Code/Standards and applicable law, 1:22–23
 investment products and applicable law, 1:23–25
 violations by others, participation or association with, 1:23
 text of, 1:16, 21
 known errors, noncorrection of, 1:48
 Korea, 2:179, 304
 Korean won, 3:307, 372
 krona, Swedish, 3:307
 kurtosis, 5:12n.10, 83
 Kuwait, 3:74
- L**
 labor flexibility, 3:256–257
 labor force, economic growth and, 3:70
 labor income, 3:256, 258
 lack of marketability discount, 2:339
 lagging economic indicators, 3:80
 large-cap equities, 2:144; 4:170
 large-cap equity investors, 4:189–190
 large cash flows, 6:222, 243n.20, 290
 late retirement phase (financial stages of life), 2:394
 later-stage financing, 5:30–31
 late upswing phase (business cycle), 3:53, 54
 Latin America, 2:322; 4:137–139. *see also specific countries*
 Latin American debt crisis, 3:73
 Latvia, 2:231, 304, 347
 law(s). *see also* applicable law
 knowledge of, 1:29 (*see also* Knowledge of the Law [Standard I(A)])
 more strict law, 1:22
 portfolio monitoring and changes in, 6:70
 regulations and governing, 1:203–204
 religious tenets as basis for, 1:28–29
 of small numbers, 2:57
 LawInContext, 2:274
 leadership, 1:202
 leading economic indicator (LEI), 3:80
 leaseback, 2:368–369
 leaving an employer, 1:106–107, 115
 legacy goals, 2:416
 legal constraints of individual investors, 2:182–185
 family foundation, 2:184–185
 jurisdiction for taxation, 2:185
 personal trust, 2:183–184
 in sample IPSs, 2:187
 legal counsel, 1:26
 legal factors for institutional investors
 banks, 2:513
 defined-benefit plans, 2:462–463
 endowments, 2:485
 foundations, 2:478
 life insurance companies, 2:496–498
 non-life insurance companies, 2:507
 legal issues, with estate planning, 2:274–276
 legal review, of private equity, 5:43
 legal risk, 5:147–148
 legs, swap, 3:312
 Lehman AA Industrials Index, 6:164
 Lehman Aggregate Bond Index, 5:17–18, 108, 116; 6:136, 137
 Lehman Brothers, 4:66n.1
 Lehman Brothers Corporate High Yield Bond Index, 5:67
 Lehman Brothers Equal-Weighted Corporate Bond Index, 4:96
 Lehman Brothers Global Bond Index commodities correlations, 5:47–49, 55–56, 109–110
 distressed securities correlations, 5:98
 hedge fund correlations, 5:65–66, 68, 74, 111
 managed futures correlations, 5:88, 91, 92
 Lehman Brothers Global Government Bond Index, 4:96
 Lehman Brothers Government Bond Index (LGB), 5:384
 Lehman Brothers Government/Corporate Bond Index commodities correlations, 5:47–49, 55–56, 109–110
 distressed securities correlations, 5:98
 hedge fund correlations, 5:65–68, 74, 111
 managed futures correlations, 5:88, 89, 91, 92
 Lehman Brothers Government/Credit Bond Index, 6:137, 152
 Lehman Brothers Selected Municipal Bonds Index, 4:96
 Lehman Brothers US Corporate Bond Index, 4:95–96
 Lehman Brothers US Government Index, 6:163, 164
 Lehman Brothers US Investment-Grade Credit Bond Index, 4:83
 Lehman Long Treasury Bond (LLTB) index, 5:381
 Lehman Mortgage Index, 6:137

- LEI. *see* Index of Leading Economic Indicators; leading economic indicator
- Leibowitz, Martin L., 2:543n.8, 544n.9
- Leibowitz-Bova approach, 5:13
- lending, puts with, 5:314–319
- less strict (LS) countries, 1:24–25
- level of service, disclosure of, 1:86
- leverage
- effects of, 4:107–109
 - in fixed-income portfolio management, 4:107–111
 - in long–short investing, 4:206
 - and portfolio returns/yields, 4:107–109
 - and repurchase agreements, 4:109–111
 - VC vs. buy-out fund, 5:39
- leverage-adjusted duration gap, 2:511
- leveraged floating-rate notes (leveraged floaters), 5:362–364
- leveraged recapitalization, 2:359
- leverage limits, fund management company, 5:185
- LGB. *see* Lehman Brothers Government Bond Index
- liabilities. *see also* asset/liability management (ALM) approach; pension liabilities
- classes of, 4:30
 - convexity of, 4:41–42
 - defined, 3:182n.6
 - economic, 2:536n.2
 - on economic balance sheets, 2:396
 - fixed-income portfolio management with (*see* dedication strategies)
 - future wage, 2:540–542, 547, 551
 - for investors, 3:184–185
 - multiple liability immunization, 4:40, 45–46, 50
 - on traditional balance sheets, 2:395
- liability-based benchmarks, 3:402–403
- liability framework risk, 4:12
- liability insurance, 2:421–422
- liability matching, 4:7
- liability noise, 2:543–544, 548
- liability-relative portfolios, 2:536–537, 549–550
- liability risk, 2:403
- liability sensitivities, 2:547–548
- Libor. *see* London Interbank Offered Rate
- life annuities, 2:428; 3:260
- life annuities with refund, 2:428
- life balance sheets, 2:279–280
- life-cycle finance, 2:382
- life-cycle models, traditional vs. behavioral, 2:37–38
- life expectancy, core capital based on, 2:280–281
- life insurance, 2:405–416. *see also specific types, e.g.: whole life insurance*
- in case study, 2:434–438
 - elements of, 2:407–409
 - as estate planning tool, 2:302–303
 - participating vs. non-participating policies, 2:406–407
 - pricing of, 2:409–415
 - appropriateness of, 2:416
 - calculation of net and gross premiums, 2:411–412
 - cash values and policy reserves, 2:412–413
 - consumer comparisons of life insurance costs, 2:413–415
 - mortality expectations, 2:409–410
 - riders on, 2:407
 - types of, 2:406–407
 - uses of, 2:406
- life insurance companies
- guaranteed investment contracts from, 4:31–33
 - investment policy statements for, 2:498–501
 - liabilities for, 3:184
 - portfolio management for, 2:489–501
 - legal and regulatory factors, 2:496–498
 - liquidity requirements, 2:495–496
 - return objectives, 2:493–495
 - risk objectives, 2:491–493
 - tax concerns, 2:496
 - time horizon, 2:496
 - unique circumstances, 2:498
- life insurance underwriting, 2:409
- life-only annuities, 2:425
- lifetime gratuitous transfers, 2:277
- life with period certain annuities, 2:425, 428
- LIFO tax lot accounting. *see* lowest in, first-out tax lot accounting
- Light Capital Gain Tax Regime, 2:229–231, 347
- limited arbitrage, 2:35–36
- limited liability company form (private equity funds), 5:33–34
- limited partners, 6:266, 290
- limited partnerships, 6:266, 290
- limit order book, 6:10, 11
- limit-order markets, electronic, 6:16
- limit orders, 6:7–8
- limits, on private placements, 1:159
- limit setting, 5:193
- Lincoln National Corporation, 2:494, 506
- linear programming, 4:44
- linear strategies, 6:97
- linked internal rate of return, 6:131–132
- linking of returns, geometrical, 6:224–225
- links, GIPS definition of, 6:290
- Lipper, 5:62
- Lipper/TASS, 3:401
- liquidation value, 2:354
- liquidity
- for banks, 2:511
 - and concentrated positions, 2:327, 329, 331
 - in country risk analysis, 3:77–78
 - defined, 6:9
 - of emerging market currencies, 3:371
 - of foreign investments, 3:205
 - and full replication, 4:180
 - and global credit bond portfolio management, 4:74
 - illiquidity premium, 3:36
 - of individual investors, 2:176–178
 - of markets, 6:19–20
 - natural, 6:11–12
 - and pension investing, 3:262
 - of private equity, 5:41
 - in sample IPSs, 2:186–187, 190
 - and tax-sheltered savings accounts, 2:181
 - trade size relative to, 6:30
 - and trading costs, 6:30
 - in trading focus, 6:38–40
- liquidity-at-any-cost trading focus, 6:38, 40
- liquidity constraints of investors
- and asset location, 2:253
 - and gift tax, 2:294
 - and life insurance, 2:303
- liquidity limits, fund management company, 5:185
- liquidity-motivated traders, 6:34–36
- liquidity requirements
- for institutional investors
 - banks, 2:513
 - defined-benefit plans, 2:460–461
 - endowments, 2:484
 - foundations, 2:477
 - life insurance companies, 2:495–496
 - non-life insurance companies, 2:505
 - monitoring changes in, 6:68, 72, 75
- liquidity risk
- identifying, 5:143–144
 - measuring, 5:180
- Lithuania, 2:304
- Litterman, Robert, 3:231
- Livingston, Joseph, 3:48
- Livingston Survey, 3:48
- LLTB index. *see* Lehman Long Treasury Bond index
- loading, in life insurance pricing, 2:411
- loans
- and currency conversions, 5:366–371
 - and exchange rate risk, 5:366–371
 - fixed-rate, 5:355–359
 - floating-rate (*see* floating-rate loans)
 - with FRAs, 5:215–219
 - floating-rate loans, 5:218–219
 - single-payment loans, 5:215–218
 - non-recourse, 2:367
 - protected with interest rate calls, 5:311–314
- local requirements, for record retention, 1:147
- locked up investments, 3:43
- lock-up period, 5:61, 76
- Loews Cineplex Entertainment Corporation, 5:100
- logical participation strategies, 6:42–47
- London, England, 2:310–311
- London Business School, 2:140
- London Interbank Offered Rate (Libor)
- credit risk exposures, 5:179
 - credit risk of swaps, 5:177
 - currency swaps, 5:367n.14
 - equity swaps, 4:183; 5:381
 - interest rate compounding, 5:257
 - interest rate swaps, 4:120; 5:356–357, 360, 362–366
- loan interest rate
- calls, 5:309, 310, 312, 313
 - caps, 5:319–322
 - collars, 5:326–329
 - floors, 5:323–325
 - forward and futures strategies, 5:215–218, 259
 - options, 5:308, 309
 - puts, 5:314–318
 - as underlying rate, 5:259, 308, 309
 - swaptions, 5:386, 389–398

- London Stock Exchange (LSE)
 capitalization weighting of, 3:406
 characteristics of, 4:176
 market orders at, 6:7
 price volatility of, 6:55, 61
 and SEAQ, 6:12
- long data series, capital market
 expectations from, 3:17
- longevity insurance, 2:440
- longevity risk
 defined, 6:76
 and pension liabilities, 2:544
 in risk management, 2:402
 and strategic asset allocation,
 3:259–260
- long-only constraint, 4:207–208
- long-only value investing, 5:99
- long positions
 for call options, 5:275–278
 for put options, 5:278–282
 in risk reversals, 3:354
 in seagull spreads, 3:355
- long–short investing, 4:205–210
 equitizing a market-neutral long–short
 portfolio, 4:207
 long-only constraint, 4:207–208
 and market structure, 4:209–210
 price inefficiency on short side of
 market, 4:206–207
 short extension strategies, 4:208–209
- long–short portfolios, market-neutral,
 4:207
- long tail, of non-life insurance, 2:501
- long-term capital gains tax rate,
 accumulation using, 2:258–260
- Long-Term Capital Management
 (LTCM), 2:41; 3:73; 5:180
- long-term health care, 2:404
- long-term health care insurance, 2:439
- long-term investments, identifying, 2:59
- long-term real risk-free interest rate,
 3:37
- loss(es)
 capital, 2:255–258
 direct vs. indirect, 2:402–403
 gain-to-loss ratio, 5:83
 maximum (*see* maximum loss)
 realized, 6:25
 tax loss harvesting, 6:283
 unrealized, 6:23, 25
- loss aversion
 in behavioral finance, 2:166
 myopic, 2:72–73
 and prospect theory, 2:26
- loss-aversion bias, 2:70–73, 94–95
 consequences of, 2:72
 detection and methods of overcoming,
 2:73
 diagnostic questions, 2:87, 94
 effect of, 2:71–72
 myopic loss aversion, 2:72–73
 and prospect theory, 2:166
- loss control, 2:432
- loss harvesting, 2:181–182
- loss prevention, 2:432
- loss reduction, 2:432
- lot allocations, minimum, 1:88–89
- low-cost-whatever-the-liquidity trading
 focus, 6:39, 40
- lowest in, first-out (LIFO) tax lot
 accounting, 2:258
- low P/E investment style, 4:187
- low-return environments, 5:9
- low-wealth-level investor with cognitive
 biases (case study), 2:92–96
 behaviorally-modified portfolio
 decision, 2:96
 diagnostic tests, 2:93–94
 effect of biases, 2:95
 moderate or adapt recommendation,
 2:95
- Loyalty, Prudence, and Care [Standard
 III(A)], 1:73–81; 6:29
 application of the standard, 1:78–81
 case study, 1:205, 207
 compliance procedures, 1:77–81
 client approval, 1:77
 firm policies, 1:77–78
 regular account information, 1:77
 guidance, 1:73–77
 client's portfolio, developing, 1:75–76
 identifying the client, 1:75
 proxy voting policies, 1:76–77
 soft commission policies, 1:76
 understanding application of
 standard, 1:74–75
 text of, 1:17, 73
 understanding application of standard,
 1:74–75
- loyalty effects, overinvestment in
 company stock and, 2:123
- Loyalty [Standard IV(A)], 1:105–115
 application of the standard, 1:109–115
 case study, 1:205
 compliance procedures, 1:109
 competition policy, 1:109
 employee classification, 1:109
 incident-reporting procedures, 1:109
 termination policy, 1:109
 guidance, 1:105–109
 employer responsibilities, 1:106
 independent practice, 1:106
 leaving employers, 1:106–107
 nature of employment, 1:108–109
 social media, 1:108
 whistleblowing, 1:108
 text of, 1:17, 105
- loyalty to clients, 1:81
- Loyalty to Clients (AMC Part A), 1:242,
 244–245
- LS countries. *see* less strict countries
- LSE. *see* London Stock Exchange
- LTCM. *see* Long-Term Capital
 Management
- Luxembourg
 in Eurozone, 3:9n.
 and EUSD, 2:311
 in Hague Conference, 2:304
 offshore banking centers, 2:310–311
 tax regime, 2:231, 347
- M**
- M^2 measure, 6:168, 170–171
- Macauley duration, 4:34n.27; 5:220n.7
- McDonald's, 4:171–174
- Macedonia, former Yugoslav Republic
 of, 2:304
- Mackay, Charles, 2:141
- macro attribution
 conducting, 6:150–155
 Allocation Effects strategy, 6:154–155
 Asset Category strategy, 6:152–153
 Benchmarks strategy, 6:153–154
 Investment Managers strategy, 6:154
 Net Contributions strategy,
 6:151–152
 Risk-Free Asset strategy, 6:152
 defined, 6:146
 inputs, 6:148–150
 overview, 6:148
- macro-consistency, 3:409
- macroeconomics, 3:74, 138
- macro expectations, 3:6
- macro hedges, 3:362
- macro securities, 2:178
- maintenance phase of life, 2:164
- maintenance rules, market index, 3:407
- making the market, 6:12
- Malaysia, 2:231, 304, 347
- Malkiel, Burton, 4:167
- Malta, 2:304; 3:9n.
- managed care facilities, 2:177
- managed futures, 5:86–95
 benchmarks, 5:87–88
 defined, 5:7, 86
 historical performance, 5:88–90
 interpretation issues, 5:89–90
 investment characteristics, 5:90–91
 market for, 5:86–87
 performance persistence, 5:93
 in portfolios, 5:91–93
 and skewness of hedge funds, 5:75
 strategic asset allocation, 5:93–95
 types of investments, 5:86–87
- managed futures funds, 3:343
- managed futures market, 5:86–87
- management
 commitment of, 5:42–43
 commitment to GIPS by, 6:215
 experience of, 5:42
 influence on analysts' forecasts of,
 2:131–133
 sale of private business to, 2:359–360
- management effect, 6:165–166
- management fees, 1:256; 3:201
- manager-based hedge fund indices,
 5:63–64
- manager continuation policies (MCP),
 6:179–183
 as filter, 6:181–183
 phases, 6:179–181
 purposes of, 6:179
- manager monitoring, 6:179–181
- manager peer groups, 3:400–401
- manager review, 6:179, 181
- managers. *see also* portfolio managers
 efficient frontiers of, 4:214, 215
 enhanced-index, 3:405
 fund, 3:398, 399, 404
 growth, 3:399
 value, 3:399
- manager selection process
 diligence in, 1:136
 influencing, 1:34, 41–42
 selection criteria, 6:176–177
- manager universes, 3:400–401; 6:136,
 140–141

- mandates
 - following, 1:95
 - managing to, 1:93, 247
 - notification of change in, 1:142
- MAR. *see* minimum acceptable return
- margin, net interest, 2:511
- marginal tax rate, 2:227
- margin-lending rule, 2:330
- margin requirements, for futures, 3:342
- market-adjusted implementation
 - shortfall, 6:25–26
- market anomalies
 - behavioral factors in, 2:138–139
 - calendar anomalies, 2:35
 - defined, 2:138–139
 - and EMH, 2:32–36
 - fundamental anomalies, 2:33–34
 - technical anomalies, 2:34
- market ask, 6:10–11
- market behavior, 2:28–41
 - behavioral factors in, 2:138–145
 - bubbles and crashes, 2:141–144
 - market anomalies, 2:138–139
 - momentum, 2:140–141
 - value and growth stocks, 2:144–145
 - in behavioral finance, 2:37–38, 41
 - adaptive markets hypothesis, 2:41
 - behavioral approach to asset pricing, 2:38–39
 - behavioral approach to consumption and savings, 2:37–38
 - and behavioral portfolio theory, 2:39–40
 - in traditional finance, 2:28–36
- market bid, 6:8, 10
- market bid–ask spread, 6:11
- market bubbles, 2:141–144
- market capitalization, 3:205; 4:189–190
- market cap weighting, 3:405–406. *see also* capitalization-weighted indexes
- market conditions, currency hedging and, 3:322–323
- market crashes, 2:141–144
- market cycles, portfolio monitoring and, 6:79–80
- market efficiency, 3:207
- market EPS, forecasts of, 3:142, 144
- market fragmentation, 6:9
- market growth, 2:144
- market impact, 3:200, 201; 6:12, 22–23
- market indexes
 - about, 3:396
 - as benchmarks, 3:412
 - benchmarks vs., 3:397
 - construction of, 3:405–409
 - approach, 3:405–407
 - tradeoffs in, 3:407–409
 - index weighting schemes, 3:409–413
 - capitalization-weighted indexes, 3:409–410
 - equal-weighted indexes, 3:410
 - fundamental-weighted indexes, 3:410–411
 - with index used as benchmark, 3:411
 - and market index as benchmarks, 3:412
 - price-weighted indexes, 3:410
 - Nikkei 225 as, 3:412–413
 - uses of, 3:403–405
- market liquidity risk, distressed securities', 5:101
- market making, 1:63
- Market Manipulation [Standard II(B)], 1:16, 68–73
 - application of the standard, 1:69–73
 - guidance, 1:68–69
 - information-based manipulation, 1:68
 - transaction-based manipulation, 1:69
 - text of, 1:16, 68
- market mechanism, 6:18
- market microstructure, 6:7–21
 - evaluating market quality, 6:19–21
 - and integration, 3:207
 - order types, 6:7–9
 - roles of brokers and dealers, 6:18–19
 - types of markets, 6:9–17
 - brokered markets, 6:17
 - hybrid markets, 6:17
 - order-driven markets, 6:15–16
 - quote-driven (dealer) markets, 6:10–15
- market model, 6:137–138
- market momentum, 2:140–141
- market-neutral long–short portfolios, 4:207
- market-not-held order, 6:8
- market-on-close algorithms, 6:45
- market on close order, 6:9
- market on open order, 6:9
- market orders, 6:7
- market-oriented investment styles, 4:184, 188–189
- market-oriented with growth bias (investment style), 4:189
- market-oriented with value bias (investment style), 4:189
- market prices, returns and, 3:276
- market quote, 6:11
- market related exposures, for pension liabilities, 2:538–543
- market risk. *see also* equity market risk
 - of distressed securities, 5:101
 - diversifying, 2:334–335
 - identifying, 5:142
 - managing, 5:182–185
 - measuring, 5:151–152
- market risk bucket, 2:334, 335
- markets. *see also* emerging markets
 - capital
 - anomalies in, 3:23
 - business cycle effects on, 3:53, 54
 - forecasts of, 3:43–45
 - changes in, 6:79–82
 - central bank policy, 6:80
 - changes in asset risk attributes, 6:79
 - market cycles, 6:79–80
 - yield curve and inflation, 6:81–82
 - commodity, 5:45–46
 - credit, 4:80–81
 - distressed securities, 5:95–96
 - equity
 - asset-based models, 3:155–159
 - constant growth model, 3:31–33
 - discounted cash flow models, 3:31–35
 - earnings-based models, 3:145–155
 - forecasts of, 3:138–144
 - relative value models, 3:145–160
 - in evaluation of private equity investments, 5:42
 - fixed-income, 3:35
 - foreign exchange
 - exchange-traded futures in, 3:342–343
 - forward, 3:309–312
 - spot, 3:307–309
 - swap, 3:312–313
 - global investable, 3:40
 - hedge fund, 5:58–61
 - information from brokers about, 6:18
 - integrated, 3:42–43
 - managed futures, 5:86–87
 - perfect, 3:41
 - private equity, 5:29–36
 - demand for venture capital, 5:29–30
 - exit from investment, 5:30
 - size of market, 5:35–36
 - supply of venture capital, 5:31–33
 - types of private equity investments, 5:33–35
 - quality of, 6:19–21
 - segmented, 3:42–43
 - structure of, 4:73, 209–210
 - types of, 6:9–17
 - brokered markets, 6:17
 - hybrid markets, 6:17
 - order-driven markets, 6:15–16
 - quote-driven markets, 6:10–15
- market sentiment, 3:404
- market spread, 6:11
- market value, 6:221, 290
- market value risk, 4:11
- market value weighting, 3:405–406. *see also* capitalization-weighted indexes
- Market Volatility Index (MVI), 3:404
- marking to market, 3:310; 5:186, 187
- Markit, 3:403
- Markit iBoxx USD Liquid Investment Grade Index, 3:403
- Markowitz, Harry, 2:39, 122; 3:192n.20
- Markowitz framework, 2:334; 4:128
- Martini, Giulio, 3:322
- Massachusetts, Commonwealth of, 3:195
- mass affluent, 5:9n.3
- matched swaps, 3:312–313, 344
- matching contributions, in company stock, 2:123
- material information
 - in AMC, 1:248–249, 255
 - defined, 1:57
 - selective disclosure of, 1:64
- materiality, determining, 1:64, 67
- material nonpublic information
 - adopting compliance procedures for, 1:60
 - in AMC, 1:248–249
 - analyst recommendations as, 1:65–66
- Material Nonpublic Information [Standard II(A)]
 - application of the standard, 1:63–67
 - case study, 1:210
 - compliance procedures
 - achieving public dissemination, 1:60
 - adopting, 1:60
 - adopting disclosure procedures, 1:60–61

- Material Nonpublic Information
(*continued*)
- appropriate interdepartmental communications, 1:61
 - communication to employees, 1:63
 - firewall elements, 1:61
 - issuing press releases, 1:61
 - personal trading limitations, 1:62
 - physical separation of departments, 1:61
 - preventing personnel overlap, 1:62
 - proprietary trading procedures, 1:63
 - record maintenance, 1:62
 - reporting systems, 1:62
 - guidance, 1:56–60
 - industry experts, 1:59–60
 - investment research reports, 1:60
 - material information defined, 1:57
 - mosaic theory, 1:58–59
 - nonpublic information defined, 1:58
 - social media, 1:59
 - text of, 1:16, 56
- matrix prices, 4:14; 6:89n.11, 133
- maturity
- of bullet portfolios, 4:74
 - of emerging markets, 4:137–138
 - term to, 4:110
 - ultra-long, 4:84
 - and yield curve, 3:55
- maturity premiums, 3:37
- maturity variance, 4:44
- maximum drawdown, 5:81, 190
- maximum loss
- bear spread, 5:293, 294
 - box spread, 5:307
 - bull spread, 5:291
 - butterfly spread, 5:298
 - call options, 5:276, 277
 - collars, 5:301, 302
 - covered calls, 5:283
 - protective puts, 5:287
 - put options, 5:279, 280
 - straddles, 5:304, 305
- maximum loss limits, in capital allocation, 5:192
- maximum loss optimization, 5:172
- maximum out-of-pocket expenses, for health insurance, 2:421
- maximum profit
- bear spread, 5:293, 294
 - box spread, 5:307
 - bull spread, 5:291
 - butterfly spread, 5:297, 298
 - call options, 5:276, 277
 - collars, 5:301, 302
 - covered calls, 5:283
 - protective puts, 5:287
 - put options, 5:279, 280
 - straddles, 5:304, 305
- maximum yearly benefits, for health insurance, 2:421
- MCI, 5:100, 101
- MCP. *see* manager continuation policies
- mean returns
- arithmetic vs. geometric, 3:24
 - shrinkage estimator of, 3:26
- mean reversion, by markets, 3:278
- mean-reversion analysis, of spreads, 4:81–82
- means-end analysis, 2:23
- mean–variance approach, 3:211–230
- behavioral models vs., 2:125
 - efficient frontier, 3:211–217
 - sign-constrained optimization, 3:213–217
 - unconstrained optimization, 3:212–213
- efficient portfolio selection, 3:219–229
- cash equivalents and capital market theory, 3:220–221
 - CEFA case study, 3:226–229
 - Ian Thomas case study, 3:221–225
 - extensions of, 3:229–230
 - formulating CMEs with, 3:24
 - inputs for, 3:217–219
 - justifying inclusion of international assets with, 3:197–199
 - for portfolio construction, 2:36
- mean–variance optimization (MVO)
- after-tax, 2:260
 - ALM, 3:247–249
 - efficient frontier, 3:212–217
 - hedge funds in, 5:73
 - Monte Carlo simulation vs., 3:239
- measurable benchmarks, 3:397n.4; 4:16n.12; 6:135
- measurement errors, for returns of VC, 5:39
- measure of wealth classifications, 2:163
- medical insurance. *see* health/medical insurance
- medium-term notes (MTN), 4:73
- mega-cap buy-out funds, 5:32
- members, CFA. *see* Responsibilities of CFA Members and Candidates [Standard of Professional Conduct VII]
- membership status, CFA Institute, 1:171, 175
- memory, hindsight bias and, 2:61–62
- mental accounting bias, 2:37–38, 64–65, 94–95
- consequences, 2:64
 - detection and methods of overcoming, 2:64–65
 - diagnostic questions, 2:87, 93–94
 - and diversification, 2:124–125
- Merck, 4:171–174
- merger arbitrage hedge fund strategies, 5:59
- Merrill Lynch Corporate Bond (MLCB) index, 5:381
- Methodical investors, 2:169
- Mexican peso, 3:18n.10, 307
- Mexico
- CLI, 3:81
 - Conference Board index, 3:82
 - currency crisis, 3:73, 206
 - debt, 4:138
 - financial crisis, 4:137
 - in Hague Conference, 2:304
 - inflation-protected bonds, 3:196
 - tax rates, 2:180
 - tax regime, 2:231, 347
 - trade partners, 3:82
 - wealth taxes, 2:306
- mezzanine financing, 5:30–31
- Michelin, 4:232
- micro attribution
- defined, 6:146
 - fundamental factor model, 6:160–162
 - overview, 6:155–157
 - sector weighting/stock selection, 6:157–160
- micro-cap equity investors, 4:189
- microeconomics, 3:139
- micro expectations, 3:6
- Microsoft
- and efficient markets, 2:35
 - equity market data, 4:171–174
 - free-float adjustments, 4:169n.10
 - growth vs. value stock, 4:186
 - and venture capital, 5:38
- Microsoft Excel, mean-variance optimization with, 3:212n.61
- mid-cap equity investors, 4:189, 190
- Middle East, 3:73; 4:137, 139. *see also specific countries*
- middle-market businesses, 2:357
- middle-market buy-out funds, 5:32
- midquote (term), 6:11, 16
- minimum acceptable return (MAR), 5:191
- minimum credit standards, 5:188
- minimum lot allocations, 1:88–89
- minimum size constraints, 2:343
- minimum surplus variance (MSV) portfolio, 3:241–242
- minimum-variance frontier (MVF), 3:211
- minimum-variance hedge ratio, 3:363–365
- Ministry of Finance, 2:497
- minority interests
- nonmarketable, 5:38–39
 - valuation discounts for, 2:297
- Misconduct [Standard I(D)], 1:53–56
- application of the standard, 1:54–56
 - compliance procedures, 1:54
 - guidance, 1:53–54
 - text of, 1:16, 53
- misfit return, 6:149n.19, 153–154
- misfit risk, 4:219–220
- mismatched swaps, 3:312, 313
- mismatch in character, 2:352–354
- misrepresentation
- in AMC, 1:254
 - avoiding, 1:52
 - potential, 1:49
- Misrepresentation [Standard I(C)], 1:43–53
- application of the standard, 1:48–53
 - case study, 1:211–213
 - compliance procedures, 1:46–47
 - factual presentations, 1:46–47
 - maintaining webpages, 1:47
 - plagiarism policy, 1:47
 - qualification summary, 1:47
 - verifying outside information, 1:47
 - guidance, 1:43–46
 - impact on investment practice, 1:44
 - omissions, 1:45
 - performance reporting, 1:44–45
 - plagiarism, 1:45–46
 - social media, 1:45
 - work completed for employer, 1:46
 - text of, 1:16, 43

- missed trade opportunity costs, **6:23, 25**
 mixed assets, **2:387**
 MLCB index. *see* Merrill Lynch Corporate Bond index
 Model Request for Proposal, **1:129**
 model risk, **5:145**
 models
 manipulating inputs for, **1:72**
 in quantitatively oriented research, **1:128**
 model uncertainty, **2:543; 3:23**
 moderate or adapt recommendations
 in behaviorally-modified asset allocation, **2:84–86**
 for high-wealth-level investors, **2:91–92**
 for low-wealth-level investors, **2:95**
 moderating, of cognitive biases, **2:51–52**
 Modified Dietz method, **6:225–228**
 modified duration, **5:220, 360–361**
 Modified Internal Rate of Return (Modified IRR), **6:225–227**
 momentum, **2:140–141; 6:30**
 Monaco, **2:304**
 monetary policy
 in business cycle analysis, **3:54, 62–66**
 with interest rates at zero, **3:65**
 money supply trends, **3:64–65**
 and Taylor rule, **3:63–64**
 in United States vs. Eurozone, **3:65–66**
 in country risk analysis, **3:76**
 defined, **3:60**
 and fiscal policy, **3:66**
 monitoring, **6:80**
 in recessions, **3:60**
 monetary position limits, **5:191–192**
 monetization, **2:322, 369; 5:394n.33**
 monetization strategies, **6:77–78**
 for business equity, **2:358–366**
 evaluating, **2:362–366**
 types of, **2:358–362**
 for investment real estate, **2:367–369**
 donor-advised funds, **2:367–368**
 mortgage financing, **2:367**
 for single-stock position, **2:341**
 money managers, forecasting by, **3:87–88**
 money markets, **2:516–517**
 money spreads
 bear spreads, **5:292–295**
 bull spreads, **5:289–292**
 butterfly spreads, **5:295–299**
 in equity portfolios, **5:289–299**
 money supply, trends in, **3:64–65**
 money-weighted rate of return (MWR), **6:128–131**
 monitoring
 and capital market expectations, **3:8**
 of dedication strategies, **4:52**
 of managers, **6:179–181**
 of portfolios (*see* portfolio monitoring)
 of risk exposures, **2:392**
 Monte Carlo simulation
 and ALM approach, **3:247–249**
 for asset allocation, **2:196–199**
 estimating core capital with, **2:285–288**
 for estimating VaR, **5:167–168**
 for optimization of asset allocation, **3:239–241**
 of returns for endowments, **2:483–484**
 Montenegro, **2:304**
 Montier, James, **2:53–54**
 Moody's Investors Service, **2:493; 4:139; 5:188**
 more strict (MS) countries, **1:24–25**
 more strict law, **1:22**
 Morgan Stanley, **5:32, 62**
 Morgan Stanley Capital International (MSCI)
 broad-market index by, **3:403; 6:137**
 capitalization weighting of indexes by, **3:405**
 equity styles, **4:200**
 float-adjusted indexes by, **3:406**
 Global Industry Classification Standard, **4:232**
 gross and net total return indexes by, **3:417, 418**
 growth/allocation criteria and rebalancing rules for indexes, **4:200**
 and hedge fund benchmarks, **5:63, 64**
 index composition and characteristics, **4:177**
 stock categorization by, **4:236**
 Morgan Stanley REITs Index, **5:16, 17**
 Morningstar, **2:58**
 active-manager benchmarks, **5:62**
 equity styles, **4:200**
 growth/allocation criteria and rebalancing rules for indexes, **4:200**
 style box, **4:202**
 Morocco, **2:304**
 mortality credits, **2:427, 429–430**
 mortality expectations, **2:409–410**
 mortality risk, **2:401, 544; 3:259**
 mortality tables, estimating core capital with, **2:280–284**
 mortgage financing, **2:367**
 mortgage loans, **2:178, 388**
 mortgage REITs, **5:14**
 mosaic theory
 and AMC, **1:249**
 applying, **1:65, 66**
 in case studies, **1:210**
 and material nonpublic information, **1:58–59**
 Mount Lucas Management Index, **5:87**
 moving averages, **3:334**
 moving averages, technical anomalies in, **2:34**
 MPSR. *see* multiperiod Sharpe ratio
 MSCI. *see* Morgan Stanley Capital International
 MSCI China Index, **3:132n.14, 133, 134**
 MSCI EAFE (Europe, Australasia, and Far East) Index, **3:203–204**
 as benchmark, **6:136**
 capital market expectations, **3:244**
 in capital market forecasts, **3:44**
 equity swap, **5:404**
 international diversification with, **5:379**
 in surplus efficient frontier, **3:245, 246**
 MSCI Emerging Markets Index, **3:203–204**
 MSCI Hedge Invest Index, **5:63, 64**
 MSCI International All Country World Index (MSCI ACWI), **4:163, 177, 238–239**
 MSCI US equity index, **3:203–204**
 MSCI World ex-Australia Index, **4:218–220**
 MSCI World Growth Index, **4:235**
 MSCI World Index
 as broad-market index, **3:401**
 characteristics of, **4:177**
 commodities correlations, **5:47–49, 55–56, 109–110**
 constructing benchmarks based on, **3:414**
 distressed securities correlations, **5:98**
 as equity universe, **3:415**
 hedge fund correlations, **5:65–66, 68, 74, 111**
 managed futures correlations, **5:88, 91, 92**
 MSCI World Value Index, **4:235**
 MS countries. *see* more strict countries
 MSV. *see* minimum surplus variance
 MTN. *see* medium-term notes
 multifactor models, **3:27–31; 4:20, 181**
 multifunctional duration, **4:40. see also** key rate duration
 multiperiod Sharpe ratio (MPSR), **3:45**
 multiple liability immunization
 about, **4:45–46**
 cash flow matching strategies vs., **4:50**
 defined, **4:40**
 multiplicative formulation of return
 objective, **3:186**
 multistage time horizons, **2:178**
 multistrategy asset allocation procedure, **3:191–192**
 municipal bond futures contracts, **5:226**
 municipal bonds, taxation of interest on, **2:253**
 must (term), **6:214, 290**
 mutual benefit, adviser-client relations and, **2:119**
 mutual correlation, for pension liabilities and assets, **2:548–549**
 mutual funds, **2:516**
 alphas of, **2:32**
 manager universes for, **3:401**
 skilled and unskilled, **2:58–59**
 zero-alpha, **2:58–59**
 mutual life insurance companies, **2:411**
 mutuals, **2:489**
 MVE. *see* minimum-variance frontier
 MVI. *see* Market Volatility Index
 MVO. *see* mean-variance optimization
 MWR. *see* money-weighted rate of return
 Myner Commission (UK), **2:463**
 N
 NAFTA. *see* North American Free Trade Agreement
 NAICS. *see* North American Industry Classification System
 naïve diversification, **2:122**
 named-risks homeowner's insurance policy, **2:418**
 names, fictitious, **1:173, 174, 176**

- NAREIT. *see* National Association of Real Estate Investment Trusts
- NAREIT Index, 5:16–18, 22, 23
- NASDAQ
- market quality of, 6:20–21
 - options strategies involving, 5:273
 - quote-driven market, 6:11
 - trade size on, 6:41
 - and venture capital returns, 5:37
- NASDAQ 100 Trust Shares, 5:273n.3
- NASDAQ Composite Index, 5:156, 160, 161n.39, 167–168
- National Association of College and University Business Officers, 3:267
- National Association of Insurance Commissioners (NAIC), 2:491, 496–497
- National Association of Real Estate Investment Trusts (NAREIT), 5:15, 108, 114, 116
- National Bureau of Statistics (NBS), 3:82
- National Council of Real Estate Investment Fiduciaries (NCREIF), 3:44
- National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index, 5:16–18, 22–24, 108, 114, 116
- National Futures Association, 3:343; 5:86
- National Investor Relations Institute, 4:207
- National Venture Capital Association (NVCA), 5:35
- National Westminster Bank, 5:196
- natural hedge, 3:367
- natural liquidity, 6:11–12
- natural resources, 3:208
- nature of employment, 1:108–109
- NatWest Markets, 5:196–197
- NBS. *see* National Bureau of Statistics
- NCREIF. *see* National Council of Real Estate Investment Fiduciaries
- NCREIF Property Index. *see* National Council of Real Estate Investment Fiduciaries Property Index
- needs, financial
- and ability to take risk, 2:174–175
 - estimating, 2:280–284
- needs analysis method, 2:412
- need-trustworthy-agent trading focus, 6:38–40
- negative liquidity events, 2:176
- negative skewness, 3:205; 4:138
- neoclassical approach to growth
- accounting, 3:124–125, 127–128
- net asset value (NAV), high-water mark and, 5:60–61
- Net Contributions strategy, 6:151–152
- net employment capital, 2:279
- Netherlands
- equity real rates of return, 4:165
 - equity risk premium, 3:39
 - Eurozone membership, 3:9n.
 - exit taxes, 2:306–307
 - expected returns for equities/bonds, 3:25
 - gift tax, 2:293
 - government bond index returns, 4:128
 - in Hague Conference, 2:304
 - market integration, 3:43
 - pension fund equity allocations, 4:163
 - pension plans, 3:263, 264
 - prudent person concept, 3:262
 - real GDP growth rate, 3:32
 - REITs, 5:14, 24
 - taxable gifts, 2:291
 - tax-advantaged savings accounts, 2:246
 - tax regime, 2:231, 347
 - trade partners, 3:81, 82
 - wealth taxes, 2:306
- net interest margin, 2:511
- net interest spread, 2:493
- net investment income, 2:477–478
- net-of-fees return
- GIPS definition, 6:250
 - for real estate, 6:261
- net-of-tax principal, 2:257–258
- net payment cost index, for life insurance, 2:414–415
- net premiums, of life insurance, 2:411–412
- netting, 5:187–188
- netting risk (settlement netting risk), 5:151
- net wealth, 2:390, 397–400
- net wealth tax, 2:276
- networks, expert, 1:67
- net worth, 2:390; 3:241; 6:68
- net worth tax, 2:276
- neuro-economics, 2:19–20
- neutral level of interest rates, 3:63
- New Basel Capital Accord (Basel II), 2:513; 5:181
- new firms, starting, 1:112
- new issue swaps, 4:76
- new media, information retention on, 1:147
- new value exception, 5:103
- New York, New York, 2:310–311
- New York Federal Reserve, 5:180
- New York State, 2:497, 507
- New York Stock Exchange (NYSE)
- Archipelago Exchange merger, 6:42
 - cross-listing of stock with TSE, 6:31–32
 - as hybrid market, 6:17
 - market quality of, 6:20–21
 - and NAREIT Index, 5:17
 - operational risk management by, 5:145
 - and price volatility of LSE, 6:55, 61
 - Trade and Quote database, 6:52
 - trade size on, 6:41
- New York Times*, 5:32
- New Zealand
- equity real rates of return, 4:165
 - in Hague Conference, 2:304
 - inflation-protected bonds, 3:196
 - marginal tax rates, 2:180
 - tax regime, 2:231, 347
- New Zealand dollar
- as commodity currency, 3:371
 - currency code, 3:307
 - in currency pairs, 3:308, 360
- Nigeria, 2:231, 347
- Nikkei 225 Index, 3:138
- as benchmark, 3:412–413
 - composition/characteristics, 4:176
 - price-weighting of, 3:410n.16; 4:170
 - stock index futures on, 4:183
- Nikkei Stock Average, 3:406; 4:176
- no free lunch (assumption), 2:29
- noise, in performance evaluations, 6:177–179
- nominal bond yields, 3:75
- nominal default-free bonds, 3:89–90
- nominal gross domestic product growth rate of, 3:32
- and money supply, 3:64–65
- nominal position limits, 5:191–192
- nominal risk-free interest rate, 3:36
- nominal spread, 4:36, 79
- Nominations Committee, 6:212
- noncallable debt, adding calls to, 5:396–399
- non-cancelable and guaranteed renewable policy, for disability income insurance, 2:418
- non-cancelable policy, for disability income insurance, 2:418
- noncompete agreements, 1:107
- non-controlling interest, discount for, 2:339
- non-core assets, 2:360
- noncorrection of known errors, 1:48
- non-current assets, 2:386
- non-deliverable forwards, 3:372–373
- nondiversifiable risk, excess return to, 6:168
- non-domestic common equity, 3:195
- non-domestic fixed income, 3:195
- Nonfarm Nonfinancial Corporate Business, 3:156–157
- non-fee paying portfolios, in composites, 6:256
- nonfinancial costs, of portfolio rebalancing, 6:84
- nonfinancial risks
- Basel II requirements, 5:181
 - defined, 5:141
 - measuring, 5:180–181
 - operational risk, 5:180–181
- non-insurance risk transfers, 2:432
- non-life insurance companies, 2:501–509
- legal and regulatory factors, 2:507
 - liabilities for, 3:185
 - liquidity requirements, 2:505
 - portfolio policy determination, 2:507
 - return objectives, 2:503–505
 - risk objectives, 2:502–503
 - tax concerns, 2:506–507
 - time horizon, 2:505–506
- nonlinear correlations of assets, 3:20
- non-marketable assets, 2:389–390
- employer pension plans, 2:389–390
 - government pensions, 2:390
- nonparametric (term), 5:161
- non-participating life insurance policy, 2:407
- nonpublic information
- acting on, 1:63, 66
 - analyst recommendations as, 1:65–66
 - controlling, 1:64
 - defined, 1:58
 - material (*see* Material Nonpublic Information [Standard II(A)])

- standards for priority of transactions with, 1:158
 - non-publicly traded marketable assets, 2:388–389
 - annuities, 2:389
 - business assets, 2:389
 - cash-value life insurance, 2:389
 - collectibles, 2:389
 - real estate, 2:388
 - non-recourse loans, 2:367
 - non-recourse mortgages, 2:388
 - nonstationarity, 3:17
 - nonsystematic risk, 5:229
 - non-taxable accounts, 2:390
 - normal beta, 6:138
 - normal portfolio, 4:191; 6:138
 - North America, 3:82–84; 5:20, 21. *see also specific countries*
 - North American Free Trade Agreement (NAFTA), 3:81
 - North American Industry Classification System (NAICS), 4:232
 - Norway
 - CLI, 3:80
 - equity real rates of return, 4:165
 - equity risk premium, 3:39
 - expected returns for equities/bonds, 3:25
 - in Hague Conference, 2:304
 - tax regime, 2:231, 347
 - no securities laws (NS) countries, 1:24–25
 - notification
 - changes to investment process, 1:142–144
 - client bonus compensation, 1:116–117
 - Code and Standards, 1:114
 - fund mandate change, 1:142
 - known violations, 1:27
 - outside compensation, 1:117
 - notional position limits, 5:191–192
 - notional principal, 5:179, 360–361, 370–371
 - notional principal amount, 4:120
 - Novatel Wireless, Inc., 5:27–28
 - NS countries. *see* no securities laws countries
 - NVCA. *see* National Venture Capital Association
 - NYSE. *see* New York Stock Exchange
 - NYSE Arca Exchange, 6:16
 - NYSE Fact Book*, 6:41n.27
- O**
- OAS. *see* option-adjusted spread
 - objective function, 6:45–46
 - objectives
 - investment objectives
 - establishing, 1:77
 - in IPSs, 1:93, 148
 - investors' objectives, 3:182–193
 - and asset-only vs. asset/liability management approaches, 3:182–185
 - and behavior influences on asset allocation, 3:191–193
 - and international assets, 3:197–199
 - return objectives, 3:185–187
 - risk objectives, 3:187–191
 - management of concentrated single-asset positions, 2:327–328
 - pension fund objectives, 4:218–219
 - return objectives
 - asset allocation based on, 2:192–195
 - for banks, 2:513
 - for defined-benefit plans, 2:458–460
 - for endowments, 2:482–484
 - for foundations, 2:476
 - for individual investors, 2:172–174
 - for life insurance companies, 2:493–495
 - for non-life insurance companies, 2:503–505
 - in sample IPSs, 2:186, 189
 - of risk management strategies, 2:391
 - risk objectives
 - asset allocation based on, 2:193–195
 - for banks, 2:512
 - for defined-benefit plans, 2:455–458
 - for endowments, 2:481–482
 - for foundations, 2:476
 - for individual investors, 2:174–175
 - for life insurance companies, 2:491–493
 - for non-life insurance companies, 2:502–503
 - trading objectives, 6:37–40
 - objectives and constraints framework, 2:468–469
 - objectivity, 1:245; 3:408. *see also* Independence and Objectivity [Standard I(B)]
 - OECD. *see* Organisation for Economic Co-operation and Development
 - OECD Commentary, 2:309
 - off-balance-sheet debt, 2:330
 - offer price, spot currency, 3:309
 - off-market swaps, 5:354n.1
 - offshore banking, 2:310–311
 - offshore investments, 2:185
 - oil shocks, 2:142; 3:73
 - Oman, 3:74
 - omissions, 1:45
 - OMS. *see* order management system
 - 1/n naïve diversification, 2:122
 - one-factor models, active returns relative to, 6:156–157
 - 130/30 short extension strategies, 4:208–209
 - ongoing expenses, liquidity and, 2:176
 - Ontario Pension Commission, 2:463
 - OPEC. *see* Organization of the Petroleum Exporting Countries
 - open-end funds, 6:259, 290
 - open market operations, 3:87–88
 - open outcry auction markets, 6:10
 - operating foundations, 2:474–475
 - operating investments, 2:466–467
 - operational review, private equity, 5:43
 - operational risk
 - identifying, 5:144–145
 - measuring, 5:180–181
 - opinions
 - about CFA Program or Institute, 1:166
 - of credit rating agency, 1:33–34
 - customer, 5:43
 - facts in reports vs., 1:141, 212
 - group research, 1:132
 - integrity of, 1:35
 - providing, as facts, 1:141
 - reasonable basis for, 1:211–212
 - opportunistic participation strategies, 6:44–45
 - opportunistic real estate strategies, 6:261
 - opportunity costs
 - with currency hedging, 3:324
 - missed trade, 6:23, 25
 - sell disciplines based on, 4:210
 - optimism, 2:132
 - optimization
 - of asset allocation, 3:211–251
 - ALM approach, 3:241–249
 - Black–Litterman approach, 3:231–238
 - experience-based approaches, 3:249–251
 - mean–variance approach, 3:211–230
 - Monte Carlo simulation, 3:239–241
 - with resampled efficient frontier, 3:230–231
 - sign-constrained, 3:213–217
 - unconstrained, 3:212–213
 - of dedication strategies, 4:51
 - of indexed portfolios, 4:180–182
 - of portfolios with currencies, 3:320–321
 - optimizers, 3:210
 - option-adjusted spread (OAS)
 - and spread analysis, 4:79–80
 - and spread duration, 4:36
 - option portfolio risk management strategies, 5:329–339
 - delta hedging over time, 5:331–338
 - gamma and risk of delta, 5:338–339
 - interest rate options and options on futures, 5:340
 - vega and volatility risk, 5:339
 - option-pricing theory, 5:174–176
 - options, 1:154. *see also specific types, e.g.:* call options (calls)
 - fixed-income portfolio management with, 4:121–122
 - forward conversions with, 2:345
 - on futures, 4:121; 5:340
 - measuring credit risk of, 5:178–180
 - on physicals, 4:121
 - risk management with (*see* risk management applications of option strategies)
 - option to purchase additional insurance rider, 2:418
 - Oracle Corporation, 6:42
 - order-driven markets, 6:15–16
 - order fragmentation, 6:42
 - order management system (OMS), 6:46
 - orders
 - representing, 6:18
 - types of, 2:349n.8; 6:7–9
 - ordinary life insurance, 2:489n.19
 - Organisation for Economic Co-operation and Development (OECD)
 - CLI, 3:80–81
 - economic data from, 3:102
 - Model Treaty, 2:308–309
 - organizational changes, disclosure of, 1:258

- Organization of the Petroleum Exporting Countries (OPEC), 3:72
- Original Dietz method, 6:225–227
- orphan equities, 5:96, 99
- OTC derivatives. *see* over-the-counter derivatives
- others to whom duty is owed (ethical decision-making framework), 1:200
- Other Than Temporary Impairment (OTTI), 2:492n.22
- outcome monitoring, for capital market expectations, 3:8
- out-of-date information, 1:52–53
- out-of-the-money (OTM) options
- protective puts with, 3:353–354
 - put spreads with, 3:354–355
 - risk reversal with, 3:354
 - seagull spreads with, 3:355–356
 - strangles with, 3:337
- output gap, business cycle, 3:51
- outright sale
- of concentrated position, 2:328–329
 - of single-stock position, 2:341
- outside compensation
- notification of, 1:117
 - prior approval for, 1:117
- outside information, verifying, 1:47
- outside parties, referral arrangements and, 1:162–164
- overall trade balance, 3:77n.65
- overbought (term), 3:333
- overconfidence
- certainty, 2:74–75
 - and halo effect, 2:144
 - and market bubbles, 2:143
 - prediction, 2:74–75
- overconfidence bias, 2:73–76, 91
- of analysts, 2:126–131
 - case studies, 2:128, 130–131
 - remedial actions for, 2:128–131
 - and committee decision making, 2:137
 - consequences of, 2:75
 - detection and methods of overcoming, 2:75–76
 - diagnostic questions, 2:88–90
 - of management, 2:132
 - and overinvestment in company stock, 2:123
 - prediction and certainty
 - overconfidence, 2:74–75
- overconfidence trap, 3:21
- overfunded pension plans, 2:456
- over-hedging, 3:353
- overnight Fed funds rate, 5:222n.9
- oversold (term), 3:333
- over-the-counter (OTC) derivatives, 2:342–343
- collateral in, 5:187
 - credit risk with, 5:143
 - marking to market in, 5:186–187
 - regulatory risk, 5:146–147
 - settlement risk, 5:146
- owned benchmarks, 3:397n.4; 4:16n.12; 6:135
- ownership, 5:12
- beneficial, 1:158
 - in civil law, 2:274
 - of completed prior work, 1:111
 - of firm's records, 1:147, 148
 - joint ownership with right to survivorship, 2:273–274
 - sole, 2:273
- P**
- Pacific Rim, 2:322. *see also specific countries*
- Page, Larry, 5:32
- paid-in capital, 6:265, 290
- pairs trading, 4:206; 6:42–43
- Pakistan, 2:180, 231, 347
- Panama, 2:304
- panel methods, 3:48–49
- Paraguay, 2:304
- Paris, France, 2:310–311
- Paris Bourse, 6:16
- partial correlation of assets, 3:20
- partial disability benefit, 2:417
- partial fills, 1:85; 6:16
- participant-directed DC pension plans, 2:454
- participate (do not initiate) orders, 6:8
- participating life insurance policy, 2:406–407
- parties
- to annuities, 2:423
 - outside, 1:162–164
 - related, 1:38–39
- partners
- general, 6:266, 289
 - limited, 6:266, 290
 - strategic, 5:31
 - turnaround, 5:100
- partnerships
- FLPs, 2:297–298
 - limited, 6:266, 290
 - tax avoidance with, 2:181
- part-time status, 1:116
- Pascal, Blaise, 2:20–21
- passing exams in consecutive years, 1:174–175
- passive equity investing, 4:166–184
- equity index futures, 4:182–183
 - equity total return swaps, 4:183–184
 - indexed portfolios, 4:175, 178–184
 - with indexes, 4:168–177
 - benchmark index selection, 4:171–174
 - composition and characteristics of major indexes, 4:174–177
 - index weighting choices, 4:168–174
 - portfolio construction for, 4:182
- passive hedging, 3:325
- passive investors, 2:108–109
- in behavioral alpha process, 2:111–112
 - investment strategies for, 3:398
 - strategic asset allocation for, 3:251
 - trading behavior of, 2:254
- passive management
- benchmarks for, 3:397
 - bond market index as benchmarks for, 4:9
 - of equity investments, 4:165
 - for international bond investing, 4:129
- Passive Preservers, 2:113–115
- passive traders, 6:34, 36
- path dependency, 2:197n.8
- paying the offer, 3:309
- payment netting, 5:187
- payments, foreign currency, 5:252–254
- payoffs, credit spread forward, 4:124–126
- payout methods, of annuities, 2:428–429
- pay-to-play scandals, 1:34
- PBGC. *see* Pension Benefit Guaranty Corporation
- PBO. *see* projected benefit obligation
- PBO pension plan. *see* projected benefit obligation pension plan
- PCA index. *see* Property Council of Australia index
- PCP. *see* Professional Conduct Program
- P/E. *see* price to earnings ratio
- peak accumulation phase (financial stages of life), 2:393
- Pearl Investment Management, 1:202–213
- Code of Ethics and Standards of Professional Conduct violations of new employees, 1:202–205
 - in ordinary business practices, 1:208–213
 - with rush projects, 1:206–208
- peer group comparisons. *see* manager universes
- peer groups, manager, 3:400–401
- pegging strategies, 6:45
- pension assets, 2:544–550
- and investment policy design, 2:549–550
 - purpose, 2:535
 - risk and mutual correlation calculations, 2:548–549
 - setting asset and liability sensitivities, 2:545–548
- Pension Benefit Guaranty Corporation (PBGC), 2:458
- pension fund consultants, 4:185
- pension funds, 2:452–474; 5:9
- adjusting asset allocation of, 5:241–243, 245–246
 - application of VaR to, 5:168
 - arbitrage argument for, 2:251–254
 - asset allocation for, 3:180–181
 - creating synthetic cash for, 5:238–240
 - defined, 2:452
 - equity allocations of, 4:163
 - performance objectives of, 4:218–219
 - portfolio management for, 2:452–474
 - defined-benefit plans, 2:454–467
 - defined-contribution plans, 2:468–473
 - hybrid plans, 2:473–474
 - portfolios of managers for, 4:214–217
- Pension Funds* (Dietz), 6:210
- pension income, 2:459
- pension liabilities, 2:535–558
- about, 2:536–537
 - active-lives portion of, 2:455, 459, 461–462
 - assets and, 2:544–550
 - investment policy design, 2:549–550
 - risk and mutual correlation calculations, 2:548–549
 - setting asset and liability sensitivities, 2:545–548
- defined, 2:453

- future wage liability, 2:551
 and investment risk, 2:537
 managing investments for, 2:459
 market related exposures, 2:538–543
 active participants, 2:539–543
 future participants, 2:543
 inactive participants, 2:538–539
 non-market related exposures,
 2:543–544
 active participants, 2:544
 inactive participants, 2:544
 pension investments and, 2:466–467
 practice problems, 2:552–555
 retired-lives portion of, 2:455, 459, 461
 solutions to problems, 2:556–558
 value of, 2:537–538
- pension participants**
 active, 2:539–544
 future, 2:543
 inactive, 2:538–539, 544
 market related exposures for,
 2:539–543
 objectives and constraints of,
 2:468–469
- pension plans**
 in asset allocation, 2:444–445
 defined-benefit, 2:454–467
 ALM approach, 3:242–247
 asset allocation for, 3:180–181
 corporate risk management with,
 2:466–467
 discounting liabilities for, 2:283
 legal and regulatory factors with,
 2:462–463
 liabilities for, 3:184
 liquidity requirements for, 2:460–461
 market risk with, 5:142
 return objectives for, 2:458–460
 risk objectives for, 2:455–458
 strategic asset allocation for,
 3:262–267
 tax concerns with, 2:462
 time horizon for, 2:461–462
 unique circumstances of, 2:463–466
 defined-contribution, 2:467–474; 3:184
 behavioral factors in portfolio
 construction for, 2:120–125
 middle-aged participant, 2:468
 objectives and constraints
 framework, 2:468–469
 for participants in early career, 2:469
 employer, 2:389–390
 government, 2:390
 in net wealth, 2:399
- Pension Protection Fund (PPF), 2:390**
 pension surplus, 2:455, 457; 3:242
 percentage-of-portfolio rebalancing,
 6:90–93
 percentage-of-volume strategy, 6:43
 percent yield spread analysis, in spread
 analysis, 4:82
 perfect competition, 2:12
 perfect information, 2:12, 15
 perfect markets, 3:41
 perfect rationality, 2:12
 perfect self-interest, 2:12
- performance**
 fund manager, 3:399, 404
 portfolio manager, 4:140
- Performance and Valuation (AMC Part
 E), 1:243, 254–255**
 performance appraisal, 6:168–176
 defined, 6:123
 for hedge funds, 5:81–83
 quality control charts, 6:172–176
 risk-adjusted measures, 6:168–172
 performance assessment
 and hindsight bias, 2:61–62
 with Monte Carlo simulations,
 2:198–199
 performance attribution, 1:33, 100;
 6:146–167
 defined, 6:123
 fixed-income, 6:162–167
 macro attribution, 6:148–155
 managers' impact on, 6:147–148
 micro attribution, 6:155–162
 performance-based fees, 4:223, 229–230;
 5:76
 performance calculations
 and asset weighting, 1:99
 and length of time, 1:98
 methodology for, 1:100–101
 on selected accounts, 1:100
 performance evaluation
 defined, 6:120
 for hedge funds, 5:79–85
 consistency, 5:83–85
 performance appraisal measures,
 5:81–83
 returns, 5:80
 skewness and kurtosis, 5:83
 volatility and downside volatility,
 5:80–81
 and risk management, 5:189–191
 performance measurement(s),
 6:123–133
 annualized return, 6:132
 benchmarks for, 1:93
 data quality issues, 6:132–133
 defined, 6:123
 for hedge funds, 5:81–83
 and independence/objectivity, 1:33
 linked internal rate of return,
 6:131–132
 money-weighted rate of return,
 6:128–131
 time-weighted rate of return,
 6:126–131
 total rate of return, 6:126
 without intraperiod external cash
 flows, 6:123–125
 performance netting risk, 5:150–151
 performance persistence, 5:93
 performance presentation
 development of standards for,
 6:210–211
 and misrepresentation, 1:212–213
 and prior fund/employer, 1:99
 for private equity, 6:268
 for real estate, 6:261–262
 and simulated results, 1:99–100
 for wrap fee/SMA composites, 6:270
- Performance Presentation [Standard
 III(D)], 1:97–101**
 application of the standard, 1:98–101
 case study, 1:213
 compliance procedures, 1:98
- with GIPS standards, 1:98
 without GIPS standards, 1:98
 guidance, 1:97–98
 text of, 1:17, 97
 performance reporting, 1:44–45
 performance stopouts, 5:185
 period-by-period approach, 3:130n.11
 period-certain annuities, 2:425, 428
 periodic auction markets, 6:16
 periodic table of investment returns,
 2:59–60
 permanent income hypothesis, 3:68
 permanent life insurance, 2:406–407
 Perold, Andre, 6:24
 Perold-Sharpe analysis, 6:94–99
 buy-and-hold strategies, 6:95–96
 constant-mix strategies, 6:96
 CPPI strategies, 6:97
 linear, concave, and convex strategies,
 6:97–98
 summary of strategies, 6:98–99
 perpetual floaters, 4:70
 Perrier family (case study), 2:433–440
 personal actions, 1:55
 personal assets, 2:387
 personality types of individual investors,
 2:167–171
 cautious investors, 2:169
 individualist investors, 2:169
 methodical investors, 2:169
 spontaneous investors, 2:169
 personal lines of credit, 2:360–361
 personal risk bucket, 2:334, 335
 personal trading, 1:69–70
 and conflict of interest, 1:155
 disclosure of, 1:161
 disclosure of policies for, 1:160
 limitations on, 1:62
 priority of transactions for, 1:157,
 204–205
 personal trusts, 2:183–184
 personal umbrella liability insurance
 policy, 2:421–422
- personnel**
 changes in, 1:258
 preventing overlap of, 1:62
 privity to recommendation, 1:84
 reporting requirements for,
 1:159–160
- Peru, 2:304**
 peso, Chilean, 3:370
 peso, Mexican, 3:18n.10, 307
 Philippines, 2:180, 231, 347
 physicals, options on, 4:121
 PIC multiple, 6:265, 290
 PIPE. *see* private investment in public
 entity
 pips, 3:308
 plagiarism, 1:49–51
 and misrepresentation, 1:45–46
 policies on, 1:47
 plan sponsors, 2:452; 3:398–399
 PLC. *see* public limited company
 pledging requirement, 2:512
 PMI. *see* purchasing managers index
 Pohang Iron & Steel, 4:87
 point estimates, 3:24n.19
 points, forward exchange rate, 3:309
 Poland, 2:231, 304, 347; 3:74–75

- policy allocations, in macro attribution, 6:149
- policyholder reserves, 2:493n.23
- policyholder's share of income, 2:496
- policy portfolio, 3:177. *see also* strategic asset allocation
- policy pricing, insurance, 2:503
- policy reserves, of life insurance, 2:412–413
- political leadership, 3:78
- political risk
 - and emerging market debt, 4:139
 - with international assets, 3:200
 - risk management for, 5:150
 - and sector rotation, 4:88
- pooled funds, managing, 1:247
- population mean, estimating, 3:17n.7
- portability of past performance, 6:256
- portable alpha, 4:206, 221
- portable assets, 2:454
- portfolio(s)
 - adding, removing, and switching, 6:242
 - bond, 5:219–227
 - commodities' roles in, 5:55–57
 - developing, 1:75–76
 - distressed securities' roles in, 5:99–102
 - distressed debt arbitrage, 5:99–100
 - long-only value investing, 5:99
 - private equity, 5:100–102
 - documentation of, 6:236
 - efficient
 - and Black–Litterman approach, 3:236–238
 - for mean–variance approach, 3:219–229
 - resampled, 3:230–231
 - equity, 5:230–232
 - fixed-income, 3:322; 5:359–362
 - foreign-market asset, 5:254–258
 - GIPS definition, 6:290
 - GIPS standards for, 6:210
 - global minimum-variance, 3:211
 - government bond, 5:223–226
 - hedge funds' roles in, 5:73–75
 - hedge funds as diversifiers, 5:73
 - historical performance, 5:73–75
 - skewness and hedge funds, 5:75
 - including and excluding, in
 - composites, 6:241–244
 - managed futures' roles in, 5:91–93
 - managing to mandates, 1:247
 - market indexes in analysis of, 3:404
 - minimum surplus variance, 3:241–242
 - normal, 6:138
 - optimization of, 3:320–321
 - policy, 3:177
 - private equity's roles in, 5:41–42
 - qualifying, for composites, 6:235–238
 - real estate's roles in, 5:21–26
 - diversification within real estate, 5:23–24
 - real estate as diversifier, 5:21–23
 - worldwide investment in real estate, 5:24
 - segmentation of, 3:271–272
 - suitability of equity market forecasts
 - for, 3:140–141
 - suitability of investment for, 1:94–95
 - tangency, 3:220–221
 - taxes and performance of, 2:180–181
- portfolio construction
 - behavioral factors in, 2:120–125
 - and behavioral portfolio theory, 2:124–125
 - company stock, 2:122–123
 - excessive trading, 2:123–124
 - home bias, 2:124
 - inertia and default options, 2:120–121
 - naïve diversification, 2:122
 - target date funds, 2:121
 - in behavioral finance, 2:167
 - in traditional finance, 2:36, 166
- portfolio decisions, execution of. *see* execution of portfolio decisions
- portfolio duration
 - and holdings, 4:111–112
 - for immunized portfolios, 4:45, 47
 - and immunized time horizon, 4:34
 - and international bond investing, 4:130–131
 - and tracking risk, 4:23
- portfolio flows, 6:279
- portfolio management
 - for individual investors, 2:157–223
 - about, 2:158
 - asset allocation, 2:188–199
 - case study, 2:158–162
 - investment policy statements, 2:171–187
 - investor characteristics, 2:162–171
 - practice problems, 2:202–211
 - solutions to problems, 2:212–223
 - for institutional investors, 2:451–534
 - about, 2:452
 - banks, 2:509–516
 - endowments, 2:479–489
 - foundations, 2:474–479
 - insurance industry, 2:489–509
 - investment intermediaries, 2:516–517
 - pension funds, 2:452–474
 - practice problems, 2:520–526
 - solutions to problems, 2:527–534
- portfolio managers. *see also* manager continuation policies (MCP)
 - allocation of funds to, 5:184
 - duties of, 6:6
 - equity
 - fixed-income vs. equity managers, 4:141
 - portfolios of, 4:214–221
 - questionnaires for, 4:223–229
 - selecting, 4:222–230
 - fixed-income, 4:129–131, 140–143
 - criteria for, 4:140–141
 - due diligence questionnaire, 4:142–143
 - equity vs. fixed-income managers, 4:141
 - historical performance of, 4:140
 - impact of, 6:147–148
 - independence of, 1:32
 - mandates for, 3:404
- portfolio monitoring, 4:29; 6:66–84
 - and investor circumstances/constraints, 6:67–79
 - laws and regulations, 6:70
 - liquidity requirements, 6:68
- tax circumstances, 6:70
- time horizons, 6:68–70
- unique circumstances, 6:70–79
- wealth, 6:67–68
- and market/economic changes, 6:79–82
 - central bank policy, 6:80
 - changes in asset risk attributes, 6:79
 - market cycles, 6:79–80
 - yield curve and inflation, 6:81–82
- process, 6:82–84
 - active managers in, 6:82–84
 - nonfinancial costs of revision, 6:84
- portfolio performance evaluation, 6:119–202
- benchmarks, 6:133–146
 - absolute, 6:136
 - broad market indexes, 6:136–137
 - custom security-based, 6:139–140
 - defined, 6:134–135
 - factor-model-based, 6:137–138
 - for hedge funds, 6:143–146
 - manager universes, 6:136, 140–141
 - returns-based, 6:138–139
 - style indexes, 6:137
 - tests of quality, 6:142–143
 - types, 6:136–139
 - valid, 6:135–136
- components, 6:122–123
- defined, 6:120
- importance, 6:121–122
- manager continuation policies, 6:179–183
- noisiness of data, 6:177–179
- performance appraisal, 6:168–176
 - quality control charts, 6:172–176
 - risk-adjusted measures, 6:168–172
- performance attribution, 6:146–167
 - fixed-income, 6:162–167
 - macro attribution, 6:148–155
 - managers' impact on, 6:147–148
 - micro attribution, 6:155–162
- performance measurement, 6:123–133
 - annualized return, 6:132
 - data quality issues, 6:133
 - linked internal rate of return, 6:131–132
 - money-weighted rate of return, 6:128–131
 - time-weighted rate of return, 6:126–131
 - total rate of return, 6:126
 - without intraperiod external cash flows, 6:123–125
- practice, 6:176–183
- practice problems, 6:187–193
- solutions to problems, 6:194–202
- portfolio policy, non-life insurance company, 2:507
- portfolio rebalancing, 6:84–100
 - benefits and costs of rebalancing, 6:85–89
 - benefits of, 6:85–88
 - costs of, 6:88–89
 - executive choices, 6:99–100
 - nonfinancial costs of, 6:84
- Perold–Sharpe analysis, 6:94–99
 - buy-and-hold strategies, 6:95–96
 - constant-mix strategies, 6:96

- CPPI strategies, **6:97**
 linear, concave, and convex strategies, **6:97–98**
 summary of strategies, **6:98–99**
 rebalancing disciplines, **6:90–94**
 calendar rebalancing, **6:90**
 other strategies, **6:93**
 percentage-of-portfolio rebalancing, **6:90–93**
 setting optimal thresholds, **6:94**
 target weights vs. allowed range, **6:93–94**
- portfolio returns, **3:313–318**
 currency risk and return, **3:313–318**
 international currency exposure, **3:313–316**
 volatility of returns, **3:316–317**
 portfolio risk, **3:202; 6:85**
 portfolio theory, **2:226. see also**
 behavioral portfolio theory (BPT)
- portfolio tilts, **2:181**
 portfolio trades, **4:182; 6:9**
 portfolio turnover, **2:116**
 portfolio volatility, taxes and, **2:251**
 portfolio weights, **3:317, 320**
 portfolio yields, **2:493, 505**
 Portugal, **2:231, 304, 347; 3:9n.**
 position a trade (term), **6:17**
 position concentration limits, **5:185**
 positive active positions, benchmark, **6:143**
 positive skewness, **3:205**
 POSIT trading system, **6:15, 52, 58**
 post-trade transparency, **6:20**
 potential output, **3:51**
 pound, British
 currency code, **3:307**
 currency conversion in loans, **5:366–369**
 in currency pairs, **3:308**
 PPF. *see* Pension Protection Fund
 PPO. *see* preferred provider organization
 PPP. *see* Purchasing Power Parity
 practice, defined, **1:106**
 preadmission certification, **2:421**
 preclearance procedures, **1:160**
 prediction overconfidence, **2:74–75**
 pre-dissemination behavior, guidelines for, **1:85**
 preexisting conditions, **2:421**
 preferred provider organization (PPO), **2:421**
 preferred return, **5:34**
 pre-investing in asset classes, **5:248–250**
 premature death risk, **2:401**
 premiums
 bond-yield-plus-risk-premium method, **3:38**
 on calls, **5:159**
 for caps vs. floors, **5:323n.24**
 countercyclical, **6:81**
 currency option, **3:350**
 default risk, **3:36**
 equity risk, **3:34–35, 38–40, 146, 277–278**
 fixed-income, **3:36–38**
 illiquidity, **3:36**
 inflation, **3:36–38**
 life insurance, **2:302**
 maturity, **3:37**
 net and gross, **2:411–412**
 on puts, **2:348; 5:159**
 risk, **3:11, 36–40, 50**
 tax, **3:37**
 prepackaged bankruptcy, **5:100, 104**
 prepaid variable forwards, **2:330, 350**
 Prequin, **3:401**
 pre-retirement phase (financial stages of life), **2:393**
 Presentation and Reporting (GIPS Section I.5)
 excerpt of, **6:216–217**
 recommendations, **6:257–259**
 requirements, **6:251–259**
 present value
 of a basis point, **5:220**
 of cash flows, **4:20–21**
 of human capital, **2:385–386**
 Preservation of Confidentiality [Standard III(E)], **1:17, 101–105**
 application of the standard, **1:103–105**
 compliance procedures, **1:103**
 communicating with clients, **1:103**
 guidance, **1:101–102**
 compliance with laws, **1:102**
 electronic information and security, **1:102**
 professional conduct investigations by CFA Institute, **1:102**
 status of client, **1:102**
 text of, **1:17, 101**
 press releases, issuing, **1:61**
 pretrade transparency, **6:20**
 pre-verification procedures, **6:278**
 price(s)
 artificial price volatility, **1:70–72**
 ask, **6:10**
 bid, **3:309; 6:10**
 decision, **6:24**
 distortion of, **1:246**
 futures, **4:115**
 growth-at-a-reasonable price investment style, **4:189**
 market, **3:276**
 and market integration, **3:207**
 matrix, **4:14; 6:89n.11, 133**
 offer, **3:309**
 and personal trading practices, **1:69–70**
 stale, **4:14; 6:27, 39**
 volume-weighted average, **6:23–24, 27–28**
 price currency, **3:307–309**
 price discovery, **2:342; 6:16**
 priced risk, **3:36**
 price improvement, **6:12**
 price inefficiency, **4:206–207**
 price is right (assumption), **2:28–29**
 price return, **5:49**
 price risk, **4:118**
 price to earnings ratio (P/E)
 of common shares, **3:94–95**
 H-model for estimating, **3:130–137**
 justified estimates, **3:124–138**
 for China, **3:126–137**
 for developed economies, **3:137–138**
 and neoclassical approach to growth accounting, **3:124–125, 127–128**
 price uncertainty, **6:7**
 price value of a basis point (PVBP), **4:34n.26; 5:220**
 price volatility, liquidity and, **2:176**
 PricewaterhouseCoopers, **5:35**
 price-weighted indexes, **3:410; 4:168–170, 172**
 price weighting, **3:406**
 pricing, asset. *see* asset pricing
 PRIMA. *see* Professional Risk Managers' International Association
 primary capital, **2:335**
 primary fund vehicles, **6:259, 291**
 primary market analysis, **4:73–74**
 primary residence, as illiquid holding, **2:177–178**
 primary risk factors, for bonds, **4:9–10**
 prime brokerage, **5:57; 6:18**
 prime rate, **4:120**
 principal trades, **6:9**
 prior coverage, **1:38**
 prior employer
 documents and files of, **1:110**
 in performance presentation, **1:99**
 prior fund, in performance presentation, **1:99**
 priority of transactions (AMC), **1:249**
 Priority of Transactions [Standard VI(B)], **1:157–162**
 application of the standard, **1:160–162**
 case study, **1:204**
 compliance procedures, **1:158–160**
 guidance
 accounts with beneficial ownership, **1:158**
 avoiding potential conflicts, **1:157**
 nonpublic information standards, **1:158**
 personal trading secondary to trading for clients, **1:157**
 text of, **1:18, 157**
 prior work, ownership of, **1:111**
 private business equity, **2:324, 356–366**
 about, **2:356–357**
 business owner profile, **2:358**
 business profile, **2:357–358**
 client objectives with, **2:328**
 monetization strategies, **2:358–366**
 evaluating, **2:362–366**
 types of, **2:358–362**
 private clients, portfolio management for. *see* portfolio management, for individual investors
 private equity, **5:27–44**
 about, **5:27–28**
 benchmarks, **3:401; 5:36**
 defined, **5:7**
 of distressed securities, **5:100–102**
 due diligence, **5:42–44**
 GIPS definition, **6:259, 291**
 GIPS Valuation Principles for, **6:272–273**
 historical performance, **5:36–37**
 interpretation issues, **5:37**
 investment characteristics, **5:37–41**
 investment in publicly-traded equity vs., **5:28**
 market for, **5:29–36**
 demand for venture capital, **5:29–30**

- private equity (*continued*)
 exit from investment, 5:30
 size of market, 5:35–36
 supply of venture capital, 5:31–33
 types of private equity investments, 5:33–35
 mean return, volatility, and correlations, 3:208
 in portfolios, 5:41–42
 types of investments, 5:33–35
 Private Equity (GIPS Section I.7), 6:266–268
 excerpt of, 6:217
 and GIPS definition of private equity, 6:259
 private equity funds, 5:27
 private equity fund structure, distressed securities with, 5:96
 private equity market, 5:29–36
 demand for venture capital, 5:29–30
 exit from investment, 5:30
 size of, 5:35–36
 supply of venture capital, 5:31–33
 types of private equity investments, 5:33–35
 private exchange, 6:78, 79
 Private Financing Initiative (United Kingdom), 5:15
 private foundations, 2:302, 476–478
 private investment in public entity (PIPE), 5:27–28
 private placements, 1:159; 5:29
 private sector, government structural policies in, 3:72
 private wealth management, 2:251–260.
see also portfolio management, for individual investors
 after-tax mean–variance optimization, 2:260
 and after-tax wealth, 2:225–226
 asset location, 2:251–254
 and estate planning, 2:272
 holding period management, 2:258–260
 tax loss harvesting, 2:255–258
 adding net-of-tax principal, 2:257–258
 current tax savings, 2:255–256
 tax deferral, 2:256–257
 trading behavior, 2:254–255
 probabilistic retirement analysis, 2:196–199
 probabilities
 assigning, in research, 2:135
 conditional (*see* Bayes' formula)
 from Monte Carlo simulations, 2:196–199
 VaR probability levels, 5:158–159
 probate, 2:273, 302
 processes, Trade Management Guidelines on, 6:49
 processing errors, 2:52
 procurement process, 1:34
 productivity, total factor growth in, 3:69–71
 and neoclassical approach to growth accounting, 3:125
 professional conduct. *see also* Standards of Professional Conduct
 Asset Manager Code of Professional Conduct, 1:239–265
 introduction, 1:239–241
 practice problems, 1:259–263
 principles of conduct, 1:241
 recommendations and guidance, 1:244–258
 solutions to problems, 1:264–265
 text of, 1:242–244
 CFA Professional Conduct Program, 1:9–10
 professional conduct investigations, 1:102
 Professional Conduct Program (PCP), 1:9–10, 23
 confidentiality of investigations, 1:102
 misuse of, 1:54
 professional designations, 1:176
 professionalism, 1:54
 Professionalism [Standard of Professional Conduct I], 1:21–56
 Independence and Objectivity [Standard I(B)], 1:30–42
 application of the standard, 1:36–42
 compliance procedures, 1:35–36
 guidance, 1:30–35
 text of, 1:16, 30
 Knowledge of the Law [Standard I(A)], 1:21–29
 application of the standard, 1:27–29
 case study, 1:203–204
 compliance procedures, 1:26–27
 guidance, 1:21–25
 text of, 1:16, 21
 Misconduct [Standard I(D)], 1:16, 53–56
 application of the standard, 1:54–56
 compliance procedures, 1:54
 guidance, 1:53–54
 text of, 1:16, 53
 Misrepresentation [Standard I(C)], 1:16, 43–53
 application of the standard, 1:48–53
 case study, 1:211–213
 compliance procedures, 1:46–47
 guidance, 1:43–46
 text of, 1:16, 43
 text of, 1:16
 professionally designated, certified, or licensed commercial property valuer/appraiser, 6:260, 291
 Professional Risk Managers' International Association (PRIMA), 5:182
 profiling of individual investors. *see* psychological profiling; situational profiling
 profit. *see also* maximum profit
 bear spread, 5:292–294
 box spread, 5:307
 bull spread, 5:289–291
 butterfly spread, 5:296–298
 call options, 5:275–276
 collars, 5:301, 302
 covered calls, 5:282–284
 protective puts, 5:286, 287
 put options, 5:278–280
 realized, 6:25
 straddles, 5:304, 305
 unrealized, 6:23, 25
 profitability, of non-insurance companies, 2:503–504
 profit-sharing plans, 2:453
 program trades, 4:182
 progressive tax rate structures, 2:227, 229–231
 estate tax in, 2:278
 and tax reduction with trusts, 2:301
 projected benefit obligation (PBO) pension plan, 2:455
 promotion, company, 1:69
 Property Council of Australia (PCA) index, 5:16
 property insurance, 2:418–420
 automobile insurance, 2:420
 in case study, 2:434
 homeowner's insurance, 2:418–420
 recommendations for, in case study, 2:439–440
 property risk, 2:402–403
 property-specific risk, 2:327
 property taxes, 2:179
 proprietary trading procedures, 1:63
 prospective clients. *see also* Communication with Clients and Prospective Clients [Standard V(B)]
 GIPS definition, 6:291
 GIPS provisions for, 6:213
 prospect theory, 2:24–28; 3:191n.18
 defined, 2:18
 and loss-aversion bias, 2:70, 166–167
 and utility theory, 2:20, 22
 protective puts
 defined, 3:350
 hedging with, 4:122
 with OTM options, 3:353–354
 in risk management strategies, 5:286–288
 "Protocol for Broker Recruiting," 1:107
 proxy hedging, 3:360–362; 4:133
 proxy voting policies, 1:76–78
 prudence, 6:48. *see also* Loyalty, Prudence, and Care [Standard III(A)]
 prudence trap, 3:21–22
 Prudential, 2:494, 506
 prudent investor rule, 2:497
 prudent judgment, 1:245–246
 prudent person concept, 3:262
 Prudent Person Rule, 2:190
 psychographic modeling of investors, 2:111–116
 behavioral alpha process, 2:111–116
 Active Accumulators, 2:116
 classifying as behavioral investor type, 2:113–116
 Friendly Followers, 2:115
 Independent Individualists, 2:115–116
 Passive Preservers, 2:114–115
 plotting on risk tolerance and active/passive scale, 2:112
 testing for behavioral biases, 2:112–113
 testing for risk tolerance and active/passive traits, 2:111–112
 bottom up approach, 2:110
 psychological considerations

- with concentrated positions, 2:331–334
 - of risk management, 5:193
 - psychological profiling of individual investors, 2:165–171
 - behavioral finance, 2:166–167
 - personality typing, 2:167–171
 - traditional finance, 2:165–166
 - psychological traps, in capital market expectations, 3:21–22
 - public companies, independence and objectivity of, 1:33
 - public dissemination, achieving, 1:60
 - public good, 3:71n.64
 - public limited company (PLC), 5:34
 - publicly traded equity, investment in private equity vs., 5:28
 - public market equivalents, 6:267, 291
 - public sector, government structural policies in, 3:71
 - pump and dump strategy, 1:72
 - pump-priming strategy, 1:71
 - purchasing managers index (PMI), 3:62
 - Purchasing Power Parity (PPP), 3:99
 - pure bond indexing, 4:9
 - Pure Sector Allocation return, 6:159
 - putable structures, 4:85
 - structure trades, 4:77
 - in US investment-grade credit markets, 4:83
 - put–call parity, 5:175–176
 - put options (puts)
 - in equity portfolios
 - combinations of calls and, 5:300–308
 - long/short positions, 5:278–282
 - protective, 5:286–288
 - hedging with, 2:348–349
 - with lending, 5:314–319
 - premiums, 5:159
 - protective, 3:350, 353–354; 4:122; 5:286–288
 - put payoffs, 5:309, 314–317
 - put spreads, 2:348, 350; 3:354–355
 - PVBP. *see* price value of a basis point
- Q**
- Qatar, 3:74
 - qualification summary, 1:47
 - Qualified Intermediaries (QIs), 2:311
 - quality, tests of, 6:142–143
 - quality control charts, 6:172–176
 - assumptions underlying, 6:173
 - confidence bands on, 6:173–174
 - defined, 6:172
 - interpreting, 6:174–176
 - quality effect, 6:166
 - quality options, 4:116
 - quality-spread analysis, 4:82
 - quality-spread duration, 4:23–24
 - QuantEX™, 6:42
 - Quantitative Analysis of Investor Behavior* (DALBAR), 2:59
 - quantitative easing, 3:57, 66
 - quantitatively oriented models, 1:134–135
 - quantitatively oriented research, 1:128
 - quantitatively oriented techniques, 1:129
 - quasi-endowments, 2:480
 - Quebec independence movement, 4:88
 - quotations, attributing, 1:47
 - quoted depth, 6:19
 - quote-driven (dealer) markets, 6:10–15
- R**
- rand, South African, 3:307, 371
 - range forwards. *see* collars
 - range of experience, availability bias and, 2:68
 - RAROC. *see* risk-adjusted return on capital
 - rate duration, 4:20
 - rate-of-return calculations
 - annualized return, 6:132
 - with external cash flows at beginning/end of evaluation period, 6:124–125
 - money-weighted, 6:128–131
 - subperiod, 6:127–128
 - time-weighted (*see* time-weighted rate of return [TWR])
 - total rate of return, 6:126
 - without external cash flows, 6:124
 - rational belief equilibrium, 3:23n.18
 - rational economic man (REM), 2:11–12, 15
 - rationality
 - bounded, 2:15, 20, 22–24
 - perfect, 2:12
 - in utility theory, 2:9
 - rational markets, 3:278
 - rational portfolios, 2:36
 - ratio spreads, delta hedges of, 5:335n.32
 - RBC requirements. *see* risk-based capital requirements
 - real, Brazilian, 3:307, 372–373
 - real assets, inflation/deflation effects for, 3:59
 - real bond yields, 3:89, 91
 - real estate, 5:13–26
 - in asset allocation, 3:195
 - benchmarks, 5:15–17
 - concentrated single-asset positions in, 2:366–369
 - defined, 5:7
 - direct, 2:388
 - direct equity investing in, 5:20–21
 - due diligence, 5:26
 - forecasts of returns, 3:95
 - GIPS Valuation Principles for, 6:272
 - historical performance, 5:17–18
 - inflation/deflation effects for, 3:59
 - interpretation issues, 5:18
 - investment characteristics, 5:19–20
 - market for, 5:13–15
 - mean returns, volatilities, and correlations, 3:207–208
 - as non-publicly traded marketable asset, 2:388
 - in portfolios, 5:21–26
 - diversification within real estate, 5:23–24
 - real estate as diversifier, 5:21–23
 - for strategic asset allocation, 5:25–26
 - worldwide investment in real estate, 5:24
 - types of investments, 5:14–15
 - wealth taxes on, 2:238
 - Real Estate (GIPS Section I.6), 6:217, 259–265
 - real estate investment trusts (REITs), 5:14–15; 6:259
 - real estate market, 5:13–15
 - real estate portfolio returns, 6:261
 - real estate securities, 6:259
 - real exchange rate, 3:331–332
 - real gross domestic product, growth rate of, 3:32–33
 - real interest rate, inflation premium and, 3:37
 - realization multiples, 6:265, 291
 - realized profit/loss, 6:25
 - real options, 5:52
 - real rate of returns, equities, 4:164–165
 - real risk-free interest rate, 3:36, 37
 - real wage growth, 2:541–542, 547
 - real yield, 6:82
 - reasonable basis. *see also* Diligence and Reasonable Basis [Standard V(A)]
 - defined, 1:127
 - developing, 1:131
 - reasonable care, 1:245–246
 - rebalancing
 - of asset allocation, 3:252–253
 - based on dollar duration, 4:35–36
 - based on equity styles, 4:199–201
 - and benchmark bond indexes, 4:25
 - of manager-based hedge fund indices, 5:64
 - of market indexes, 3:408
 - Monte Carlo simulations for, 3:239
 - of portfolios (*see* portfolio rebalancing)
 - rebalancing ratio, 4:35
 - re-basing, of indices, 3:14
 - rebound effect, 4:79
 - recallability trap, 3:22
 - recapitalization, leveraged, 2:359
 - receipts, foreign cash, 5:252, 371–373
 - receiver swaptions, 5:394–399
 - recency effect, 2:140
 - recession phase (business cycle), 3:54
 - defined, 3:51
 - earnings in, 3:92
 - and market expectations, 3:59–60
 - yield curve as predictor of, 3:54
 - recommendation objectivity, 1:40–41
 - recommendations. *see also* Investment Analysis, Recommendations, and Actions [Standard of Professional Conduct V]
 - fair dealing in, 1:82–83
 - GIPS, 6:214, 262, 291
 - in investment policy statements, 1:148
 - as material nonpublic information, 1:65–66
 - number of people privy to, 1:84
 - reasonable basis for, 1:127
 - reconstitution, of market indexes, 3:408
 - record keeping
 - in AMC, 1:252
 - supervision of, 1:123
 - Trade Management Guidelines on, 6:49
 - record retention
 - and IPS objectives and recommendations, 1:148
 - and research process, 1:148

- Record Retention [Standard V(C)],
1:146–148
 application of the standard, **1:148**
 compliance procedures, **1:147**
 guidance, **1:146–147**
 local requirements, **1:147**
 new media records, **1:147**
 records as property of firm, **1:147**
 text of, **1:18, 146**
- records
 maintenance of, **1:62**
 as property of firm, **1:147, 148**
- recourse mortgages, **2:388**
- recourse with respect to a debt, **2:341n.a**
- reference dependence, **2:27**
- reference entities, **4:127**
- references, employee, **1:54**
- Reference to CFA Institute, Designation and Program [Standard VII(B)],
1:19, 170–176
 application of the standard, **1:174–176**
 compliance procedures, **1:174**
 guidance, **1:170–174**
 CFA designation, **1:171**
 CFA Institute membership, **1:171**
 referring to candidacy in CFA program, **1:171–172**
 use of CFA marks, **1:172–174**
 text of, **1:19**
- referral arrangements
 disclosure of, **1:162–164**
 informing firms of, **1:163**
 interdepartmental, **1:163**
- Referral fees [Standard VI(C)],
1:162–164
 application of the standard, **1:162–164**
 compliance procedures, **1:162**
 guidance, **1:162**
 text of, **1:18, 162**
- refinancing, **2:369**
- reflective of current investment opinions (term), **3:397n.4; 4:16n.12; 6:135**
- regimes, **3:17–18**
- Regional Investment Performance Subcommittees (RIPS), **6:212**
- Registered Retirement Savings Plans (RRSPs), **2:246**
- regression analysis, regime changes and, **3:17–18**
- regret, **2:141; 3:192**
- regret-aversion bias, **2:79–80, 91**
 consequences of, **2:80**
 detection and methods of overcoming, **2:80**
 diagnostic questions, **2:87, 89**
 and status quo bias, **2:77**
- Regulated Investment Company (RIC)
 diversification, **4:181**
- regulations
 benchmarks and compliance with, **3:400**
 changes in, **6:70**
 and concentrated positions, **2:330**
 and ethics, **1:13**
 and governing laws, **1:203–204**
 indexed portfolio, **4:181**
 pension investing, **3:262**
 on pension investing, **3:262**
- regulatory capital requirements,
5:192–193
- regulatory constraints of individual investors, **2:182–185**
 family foundation, **2:184–185**
 jurisdiction for taxation, **2:185**
 personal trust, **2:183–184**
 in sample IPSs, **2:187**
- regulatory factors for institutional investors
 banks, **2:513**
 defined-benefit plans, **2:462–463**
 endowments, **2:485**
 foundations, **2:478**
 life insurance companies, **2:496–498**
 non-life insurance companies, **2:507**
- regulatory risk, **5:146–147**
- rehabilitation clause, of disability income insurance, **2:418**
- reinvestment risk, **2:492; 4:43–44**
- REITs. *see* real estate investment trusts
- related parties, gifts and entertainment from, **1:38–39**
- relationships
 in AMC, **1:245**
 and conflicts of interest, **1:152, 156**
 custodial, **1:32**
 fund manager, **1:32, 42**
 independent contractor, **1:108–109**
 investment banking, **1:32–33**
- relative after-tax value
 of taxable gifts, **2:291, 294**
 of tax-free gift, **2:290–291**
- relative economic strength forecasting approach, **3:99, 101**
- relative strength indicators, **4:188**
- relative value, **4:70**
- relative-value analysis
 classic, **4:70–72**
 and definition of relative value, **4:70**
 in global credit bond portfolio management, **4:68–72**
 methodologies, **4:72**
- relative value hedge fund strategies, **5:60**
- relative value models for equity market,
3:145–160
 asset-based models, **3:155–159**
 earnings-based models, **3:145–155**
 Cyclically Adjusted P/E Ratio, **3:151–155**
 Fed model, **3:145–148**
 Yardeni model, **3:148–151**
- religious tenets, laws and regulations based on, **1:28–29**
- REM. *see* rational economic man
- remaindermen, **2:184–185; 6:69**
- reorganization plans, bankruptcy, **5:102–103**
- replacement costs, in homeowner's insurance, **2:418–419**
- reporting
 of material nonpublic information, **1:62**
 performance, **1:44–45**
 of potential unethical actions, **1:29**
 requirements for investment personnel, **1:159–160**
- reports
 facts vs. opinions in, **1:141**
- material nonpublic information in,
1:60
 presentation of, **1:140**
 representativeness bias, **2:56–60**
 of analysts, **2:126, 128, 134**
 consequences of, **2:58**
 detection and methods of overcoming, **2:58–60**
 diagnostic questions, **2:87**
 and halo effect, **2:144**
 of investment managers, **2:134**
- repurchase agreements, **4:109–111**
- repurchase yield, **3:33**
- requested favors, **1:155**
- request for proposal (RFP), **1:112**
- requirements, GIPS, **6:214, 262, 291**
- resampled efficient frontier, **3:231**
- resampled efficient portfolio, **3:230–231**
- rescaling, of appraisal data, **3:16**
- research
 buy-side, **4:231**
 diligence, **1:129**
 facts vs. opinions in reports, **1:212**
 forecasting, **2:133–136**
 group, **1:129, 132**
 issuer-paid, **1:34–35, 48**
 of others, using, **1:211**
 and plagiarism, **1:45–46**
 quantitatively oriented, **1:128**
 reasonable basis for, **1:131, 211–212**
 and record retention, **1:148**
 secondary, **1:127–128**
 sell-side, **4:206–207, 231**
 supervision of, **1:122–123, 125–126**
 third-party, **1:127–128, 132**
 top-down vs. bottom-up, **4:70, 230, 231**
- research independence, **1:37–38, 40**
- research reports, material nonpublic information in, **1:60**
- reserve order, **6:8–9**
- residence, as illiquid holding, **2:177–178**
- residence jurisdiction, **2:305**
- residence–residence conflicts, **2:307**
- residence–source conflicts, **2:307–310**
 and double taxation treaties, **2:308–310**
 relief from, **2:307–308**
- resident, non-domiciliaries (RNDs), **2:306**
- residential property boom (2005–2007), **2:142**
- residents, taxation of, **2:305–306**
- residual disability benefit, **2:417**
- residuals, **3:69**
- residual value, **6:265, 291**
- residue, **6:69**
- resilience, market, **6:19**
- resistance levels, **3:333**
- resonance, availability bias and, **2:68**
- Responsibilities of CFA Members and Candidates [Standard of Professional Conduct VII]
 case study, **1:206**
 Conduct as Participants in CFA Institute Programs [Standard VII(A)], **1:19, 165–169**
 application of the standard, **1:167–169**

- eleventh edition revision, 1:8
- guidance, 1:165–167
- text of, 1:19, 165
- Reference to CFA Institute, Designation and Program [Standard VII(B)], 1:19, 170–176
- application of the standard, 1:174–176
- compliance procedures, 1:174
- guidance, 1:170–174
- text of, 1:19, 170
- Responsibilities of Supervisors [Standard IV(C)], 1:118–126
- application of the standard, 1:122–126
- case study, 1:204
- compliance procedures, 1:120–122
- adequate, 1:120–121
- code of ethics or compliance procedures, 1:120
- establishing incentive structures, 1:122
- implementation of compliance education and training, 1:121
- eleventh edition revision, 1:7–8
- guidance, 1:118–120
- detection in supervision, 1:119–120
- system for supervision, 1:119
- text of, 1:18, 118
- responsibility(-ies)
- accepting, 1:124
- of employers, 1:106
- responsiveness, bond, 5:221
- restricted lists, creating, 1:36
- restricted periods, 1:159
- results
- overemphasis of, 1:53
- simulated, 1:99–100
- retired CFA Institute membership status, 1:175
- retired-lives portion of pension liability, 2:455, 459, 461
- retirement accounts, tax-deferred, 2:232
- retirement income efficient frontier, 2:430–431
- retirement planning
- longevity risk in, 2:402
- Monte Carlo simulation in, 2:196–199
- primary residence in, 2:178
- Retirement Savings Accounts (RSAs), 2:159, 181
- retrievability, availability bias and, 2:67
- return(s)
- accrual equivalent, 2:243–245
- active, 4:166; 6:156–157, 171
- and active management/investment style, 6:134–135
- after-tax, 2:241; 6:280–283
- Allocation/Selection Interaction, 6:160
- annualized, 6:132
- on borrowed funds, 4:108
- capital, 6:260, 287
- collateral, 5:49
- commodity index, 5:49–50
- of company stock, 2:123
- component, 6:260–261
- conditional return correlations, 3:203–204
- correlation of, 4:128–129
- cross-sectional variation of, 3:181
- in currency hedging, 4:134, 135
- differential, 6:146
- domestic-currency, 3:314–317
- drivers of, 3:123–124
- and emerging market debt, 4:138
- equilibrium, 3:232–236
- excess, 3:399; 4:135
- expected
- estimates of, 3:11–12
- Gordon growth model, 3:31–33
- Grinold–Kroner approach, 3:34–35
- and market integration, 3:207
- risk premium approach, 3:36
- unconditional, 3:19–20
- of fixed-income securities, 6:165–166
- forecasting, 3:87–102
- for cash and equivalents, 3:87–88
- for common shares, 3:91–95
- for currencies, 3:97–98
- for defaultable debt, 3:90
- for emerging market bonds, 3:90
- and exchange rates, 3:98–101
- and historical capital market expectations, 3:95–97
- for inflation-indexed bonds, 3:90–91
- for nominal default-free bonds, 3:89–90
- for real estate, 3:95
- foreign-currency, 3:314
- on funds invested, 4:108
- geometrical linking of, 6:224–225
- gross-of-fees, 6:250, 261, 289
- hedged, 4:134
- of immunized portfolios, 4:31–33, 39–41, 47–48
- income, 6:260, 289
- on international assets, 3:203–204
- and leverage, 4:107–109
- low-return environments, 5:9
- macro attribution, 6:150
- from market models, 6:138
- and market prices, 3:276
- mean, 3:24, 26
- minimum acceptable, 5:191
- misfit, 6:149n.19, 153–154
- and monetary policy, 6:80
- net-of-fees, 6:250, 261
- and performance evaluations of hedge funds, 5:80
- portfolio, 3:313–318
- currency risk and return, 3:313–318
- international currency exposure, 3:313–316
- volatility of returns, 3:316–317
- preferred, 5:34
- price, 5:49
- Pure Sector Allocation, 6:159
- real estate portfolio, 6:261
- real rate of, 4:164–165
- risk-adjusted return on capital, 5:190
- roll, 3:346–348; 5:49–50
- rolling, 5:80
- spot, 5:49
- time-weighted total, 6:223–226
- total
- and accumulated value, 4:31–33
- defined, 4:28
- of government bond indexes, 4:128–129
- of immunized portfolios, 4:31–33, 39–41
- total returns analysis, 4:28, 72
- and yield curve, 4:39–40
- unhedged, 4:134
- variation of, 3:180–182
- volatility of, 3:207
- Within-Sector Selection, 6:159–160
- return objectives
- asset allocation and, 2:192–195; 3:185–187
- for individual investors, 2:172–174
- for institutional investors
- banks, 2:513
- defined-benefit plans, 2:458–460
- endowments, 2:482–484
- foundations, 2:476
- life insurance companies, 2:493–495
- non-life insurance companies, 2:503–505
- in sample IPSs, 2:186, 189
- return over maximum drawdown (RoMAD), 5:190
- return requirements, 2:459; 6:72, 75
- returns-based benchmarks, 3:402; 6:138–139
- returns-based style analysis
- example, 4:201, 202
- holdings-based style analysis vs., 4:199
- identifying investment style with, 4:190–196
- returns-based styles, 2:232–237
- Reuters, 3:103, 343
- Reuters Jefferies/Commodity Research Bureau (RJ/CRB) Index, 5:46, 51
- revenue, impact and, 6:147–148
- reverse mortgages, 2:178
- reverse optimization, 3:231
- reviews. *see also* account reviews
- of compliance procedures, 1:26
- for independence/objectivity, 1:36
- and overconfidence bias, 2:75–76
- revocable trusts, 2:183, 300
- reward-to-variability. *see* Sharpe ratio
- reward-to-volatility, 6:168
- RFP. *see* request for proposal
- RIC diversification. *see* Regulated Investment Company diversification
- Richards, Thomas M., 3:397, 400, 412; 4:16
- rider(s)
- cost of living rider, 2:418
- guaranteed minimum withdrawal benefit for life rider, 2:424
- on insurance policies, 2:407
- option to purchase additional insurance rider, 2:418
- RIPS. *see* Regional Investment Performance Subcommittees
- risk(s). *see also specific types, e.g.:*
- earnings risk
- ability to take risk, 2:174–175
- and ALM approaches to asset allocation, 3:183
- attitudes toward, 2:17–19
- avoiding, 2:80
- and benchmark bond indexes, 4:11, 18–25

- rider(s) (*continued*)
- of bond futures, 5:221–223
 - of bond portfolios, 5:219–227
 - changes in asset risk attributes, 6:79
 - of delta, 5:338–339
 - of dual currency bonds, 5:373–376
 - of emerging market debt, 4:138
 - of equities, 5:228–230
 - of equity, 3:206; 5:230–232
 - evaluating, in risk management, 2:391–392
 - of foreign currency payments, 5:252–254
 - of foreign currency receipts, 5:252
 - of foreign-market asset portfolio, 5:254–258
 - and human capital, 3:258
 - identifying, 2:391; 5:140–151
 - accounting risk, 5:148–149
 - analysis of risk exposures, 5:141–142
 - credit risk, 5:142–143
 - ESG, performance netting, and settlement netting risk, 5:150–151
 - legal/contract risk, 5:147–148
 - liquidity risk, 5:143–144
 - market risk, 5:142
 - model risk, 5:145
 - operational risk, 5:144–145
 - regulatory risk, 5:146–147
 - settlement risk, 5:146
 - sovereign and political risks, 5:149–150
 - tax risk, 5:148
 - of immunized portfolios, 4:42–45
 - with international investment, 3:199–200
 - of investment analysis, 1:139–140, 145–146
 - measuring, 5:151–181
 - credit risk, 5:173–180
 - liquidity risk, 5:180
 - market risk, 5:151–152
 - nonfinancial risks, 5:180–181
 - stress testing, 5:171–172
 - value at risk, 5:153–171
 - for pension liabilities and assets, 2:548–549
 - and portfolio return, 3:313–318
 - primary risk factors for bonds, 4:9–10
 - of private equity investments, 5:38
 - risk characteristics of benchmarks, 6:143
 - of structured notes, 5:362–366
 - inverse floaters, 5:364–366
 - leveraged floating-rate notes, 5:362–364
 - and TAA, 3:277–279
 - and trading costs, 6:30
 - willingness to take risk, 2:175
 - risk-adjusted expected return, 3:187–188
 - risk-adjusted performance measures, 6:168–172
 - criticisms, 6:171–172
 - ex post* alpha, 6:168–169
 - information ratio, 6:171
 - M^2 , 6:168, 170–171
 - Sharpe ratio, 6:170
 - Treynor, 6:169–170
 - risk-adjusted return on capital (RAROC), 5:190
 - risk-arbitrage trading, 1:63
 - risk aversion
 - and asset allocation, 3:250
 - for downside risk, 2:145
 - and source of wealth, 2:162
 - in traditional finance, 2:13–14, 165
 - risk avoidance, 2:391, 432
 - risk-based capital (RBC) requirements, 2:491, 507, 513
 - risk-based margin regimes, 2:330
 - risk budgeting, 5:183–185
 - risk-controlled active investing, 4:211–213. *see also* semiactive equity investing
 - risk exposure(s), 2:400–405
 - analysis of, 5:141–142
 - benchmarks in identification/evaluation of, 3:399
 - credit risk, 5:178–179, 186
 - currency
 - international, 3:313–316
 - and portfolio returns, 3:313–318
 - strategic decisions about, 3:321–324
 - defined, 5:135n.1
 - earnings risk, 2:400–401
 - and fixed-income portfolio management, 4:111–112
 - health risk, 2:403–404
 - insider risk, 5:383–385
 - issuer, 4:22
 - liability risk, 2:403
 - longevity risk, 2:402
 - monitoring, in risk management strategies, 2:392
 - premature death risk, 2:401
 - property risk, 2:402–403
 - weighting of, 4:118
 - risk factor limits, fund management company, 5:185
 - Risk-Free Asset strategy, 6:152
 - risk-free interest rates, 2:546; 3:36, 37
 - risk management, 5:133–209
 - about, 5:134
 - of currency risk (*see* currency management)
 - disclosure of, 1:258
 - establishing processes for, 1:253–254
 - identifying risk, 5:140–151
 - accounting risk, 5:148–149
 - analysis of risk exposures, 5:141–142
 - credit risk, 5:142–143
 - ESG, performance netting, and settlement netting risk, 5:150–151
 - legal/contract risk, 5:147–148
 - liquidity risk, 5:143–144
 - market risk, 5:142
 - model risk, 5:145
 - operational risk, 5:144–145
 - regulatory risk, 5:146–147
 - settlement risk, 5:146
 - sovereign and political risks, 5:149–150
 - tax risk, 5:148
 - for individual investors, 2:381–448
 - annuities, 2:422–431
 - determining optimal strategy, 2:431–433
 - financial capital, 2:386–390
 - framework for, 2:391–405
 - human capital, 2:383–386
 - implementation of, 2:431–446
 - insurances, 2:405–422
 - life-cycle finance, 2:382
 - net wealth, 2:390
 - strategy for, 2:391–392
 - managing risk, 5:182–193
 - in capital allocation, 5:191–193
 - credit risk, 5:186–189
 - market risk, 5:182–185
 - and performance evaluation, 5:189–191
 - psychological and behavioral considerations of, 5:193
 - measuring risk, 5:151–181
 - credit risk, 5:173–180
 - liquidity risk, 5:180
 - market risk, 5:151–152
 - nonfinancial risks, 5:180–181
 - stress testing, 5:171–172
 - value at risk, 5:153–171
 - portfolio management for defined-benefit plans, 2:467
 - practice problems, 5:196–203
 - as process, 5:134–138
 - risk governance, 5:138–140
 - solutions to problems, 5:204–209
 - Risk Management, Compliance, and Support (AMC Part D), 1:243, 250–254
 - risk management applications of forward and futures strategies, 5:213–269
 - about, 5:213–215
 - asset allocation with futures, 5:241–250
 - adjusting asset allocation, 5:241–248
 - pre-investing in asset classes, 5:248–250
 - equity market risk, 5:227–241
 - cash from equity, 5:237–241
 - equity from cash, 5:232–237
 - risk of equities, 5:228–230
 - risk of equity portfolios, 5:230–232
 - foreign currency risk, 5:250–258
 - risk of foreign currency payments, 5:252–254
 - risk of foreign currency receipts, 5:252
 - risk of foreign-market asset portfolio, 5:254–258
 - futures vs. forwards, 5:258–260
 - interest rate risk, 5:215–227
 - risk for bond portfolios, 5:219–227
 - risk for loans, 5:215–219
 - practice problems, 5:264–265
 - solutions to problems, 5:266–269
 - risk management applications of option strategies, 5:271–352
 - about, 5:271–273
 - for equity portfolios, 5:273–308
 - combinations of calls and puts, 5:300–308
 - money spreads, 5:289–299
 - standard long and short positions, 5:275–282
 - and the underlying, 5:282–288

- interest rate option strategies, 5:308–329
 - calls with borrowing, 5:309–314
 - caps with floating-rate loans, 5:319–323
 - collars with floating-rate loan, 5:325–329
 - floor with floating-rate loan, 5:323–325
 - puts with lending, 5:314–319
 - option portfolio risk management strategies, 5:329–339
 - delta hedging over time, 5:331–338
 - gamma and risk of delta, 5:338–339
 - interest rate options and options on futures, 5:340
 - vega and volatility risk, 5:339
 - practice problems, 5:344–347
 - solutions to problems, 5:348–352
 - risk management applications of swap strategies, 5:354–417
 - about, 5:354–355
 - equity market risk, 5:376–385
 - and allocation of stocks and bonds, 5:380–383
 - diversifying concentrated portfolios, 5:376–378
 - insider exposure, 5:383–385
 - international diversification, 5:378–380
 - exchange rate risk, 5:366–376
 - and currency conversions, 5:366–373
 - and foreign cash receipts, 5:371–373
 - and loans, 5:366–371
 - risk of dual currency bonds, 5:373–376
 - interest rate risk, 5:355–366
 - converting floating- and fixed-rate loans, 5:355–359
 - duration of fixed-income portfolios, 5:359–362
 - risk of structured notes, 5:362–366
 - practice problems, 5:403–411
 - solutions to problems, 5:412–417
 - swaptions, 5:385–400
 - and forward swaps, 5:400
 - for future borrowing, 5:386–390
 - interest rate swaptions, 5:386–393
 - synthetically removing/adding call features, 5:394–399
 - terminating swaps with swaptions, 5:390–393
 - RiskMetrics Group, 3:27; 5:153n.27, 182
 - risk neutrality, 2:13
 - risk objectives
 - and asset allocation, 2:193–195; 3:187–191
 - for individual investors, 2:174–175
 - for institutional investors
 - banks, 2:512
 - defined-benefit plans, 2:455–458
 - endowments, 2:481–482
 - foundations, 2:476
 - life insurance companies, 2:491–493
 - non-life insurance companies, 2:502–503
 - risk premium approach to capital market expectations, 3:11, 36–40
 - equity risk premiums, 3:38–40
 - fixed-income premiums, 3:36–38
 - general expression, 3:36
 - risk premiums
 - about, 3:37–38
 - in asset-pricing theory, 3:50
 - default, 3:36
 - equity
 - for capital market expectations, 3:38–40
 - and Fed model, 3:146
 - Grinold–Kroner model for forecasting, 3:34–35
 - volatility ratio vs., 3:277–278
 - financial market equilibrium models for, 3:40–48
 - fixed-income, 3:36–38
 - risk profile
 - investment suitability for, 1:94, 96
 - understanding, 1:91
 - risk reduction
 - and asset allocation, 2:443–446
 - in risk management strategies, 2:391
 - risk retention, 2:392, 432
 - risk reversals, 3:354. *see also* collars
 - risk–reward tradeoff, 6:79
 - risk-seeking, 2:13
 - risk tolerance
 - and asset allocation, 3:187, 209–210
 - of defined-benefit pension plans, 2:456
 - of endowments, 2:481–482
 - in ERM, 5:183
 - and goals-based investing, 2:81–82
 - in investment policy statements, 2:186, 189–190; 6:72, 75
 - misidentification of, 2:66–67
 - plotting, in behavioral alpha process, 2:112
 - and return requirements, 2:172–173
 - testing for, in behavioral alpha process, 2:111–112
 - and willingness to take risk, 2:175
 - risk tolerance questionnaires, 2:119–120, 168
 - risk transfer, 2:391–392, 432
 - RJ/CRB Index. *see* Reuters Jefferies/Commodity Research Bureau Index
 - RNDs. *see* resident, non-domiciliaries
 - Robinson, Thomas R., 2:337n.5
 - rogue traders, 5:145
 - rolling return (RR), 5:80
 - rolling three-year average spending rule, 2:481
 - roll return, 3:346–348; 5:49–50
 - roll yield, 3:346–348
 - RoMAD. *see* return over maximum drawdown
 - Romania, 2:304
 - Roman law, 2:274
 - Rosenberg, Michael R., 3:331n.15
 - Roth IRAs, 2:246
 - Roy's safety-first criterion, 3:188–190
 - RR. *see* rolling return
 - RRSPs. *see* Registered Retirement Savings Plans
 - RSAs. *see* Retirement Savings Accounts
 - ruble, Russian, 3:307, 372
 - ruin probabilities, 2:285, 286
 - rule-based margin regimes, 2:330
 - rules-based trading, 6:42–43
 - Rules of Procedure. *see* Bylaws and Rules of Procedure for Proceedings
 - Related to Professional Conduct
 - rumors, addressing, 1:110–111
 - rupee, Indian, 3:307, 372
 - Russell 1000 Growth Index, 4:192–194
 - Russell 1000 Index, 4:177, 237; 6:188, 196–197
 - Russell 1000 Value Index, 4:192–194
 - Russell 2000 Growth Index, 4:192–194
 - Russell 2000 Index, 6:189
 - composition and characteristics, 4:177
 - indexed portfolios, 4:180
 - and liquidity, 4:175
 - portfolio construction with, 4:182
 - Russell 2000 Value Index, 4:192–194
 - Russell 2500 Index, 3:44
 - Russell 3000 Index, 4:176, 237; 5:379, 404; 6:136, 188–189
 - Russell Investments, 3:403, 405, 406; 4:200
 - Russell Large Value Index, 6:137
 - Russell Midcap Growth Index, 4:195, 196
 - Russell Midcap Value Index, 4:195, 196
 - Russell Top 200 Growth Index, 4:195, 196, 221
 - Russell Top 200 Value Index, 4:195, 196
 - Russia
 - currency crisis, 3:206
 - debt default, 4:138–139; 5:150
 - emerging market debt, 4:137–139
 - financial crisis, 3:73, 203
 - flat tax rate, 2:227
 - gift tax, 2:293
 - in Hague Conference, 2:304
 - political instability, 4:88
 - tax rates, 2:180
 - tax regime, 2:231, 232n.4, 347
 - Russian ruble, 3:307, 372
 - RVPI, 6:265, 291
- S**
- safety-first ratio (SFRatio), 3:188–190
 - safety-first rules, 2:191
 - safety reserve, for core capital, 2:283, 285
 - sale(s)
 - of concentrated position, 2:328–329
 - and inventory, 3:52
 - of private business equity, 2:358–360
 - short sales against the box, 2:344, 365–366
 - of single-stock position, 2:341
 - sale and leaseback transactions, 2:368–369
 - sale price, private business equity, 2:362
 - sales pressure, 1:38
 - sales prospects, in evaluation of private equity investments, 5:42
 - sales taxes, 2:226
 - Salomon Smith Barney, 2:510
 - sample estimators, 3:24–25
 - sample-size neglect, 2:57
 - sampling theory, 3:17n.7
 - Samuelson, Paul, 2:72–73; 4:167
 - sanctions, 1:9–10, 15
 - sandwich spread, 5:298n.14

- satisfice (term), 2:22
- Saudi Arabia
- currency pegging, 3:74
 - as import partner, 3:82
 - tax regime, 2:231, 232n.4, 347
- savings
- behavioral approach to, 2:37–38
 - tax-advantaged, 2:245–246
 - tax-sheltered, 2:181
- savings–investment imbalances
- forecasting approach, 3:100–101
- scenario analysis
- limits of fund management companies, 5:185
 - for stress testing, 5:171–172
 - sufficient, 1:131
 - and total returns analysis, 4:29
- Schroder Salomon Smith Barney, 3:49
- Scope and Purpose of Verification (GIPS Section IV.A), 6:277
- Scotia Capital Universe Bond Index, 4:26–27
- screening criteria, investment, 2:55
- SDAX index, 3:417
- SE. *see* *societas Europaea*
- seagull spreads, 3:355–356
- SEAQ market, 6:12
- search process, for information, 2:135
- seasonality, of secondary trading, 4:79
- SEC. *see* US Securities and Exchange Commission
- secondary fund vehicles, 6:259, 291
- secondary offerings, 4:165
- secondary research, 1:127–128
- secondary trade, 4:75–79
- and cash flow reinvestment, 4:77–78
 - constraints on, 4:78–79
 - for credit-defense trades, 4:76
 - for credit-upside trades, 4:75–76
 - for curve-adjustment trades, 4:77
 - for new issue swaps, 4:76
 - rationales for, 4:75–79
 - for sector-rotation trades, 4:76
 - for structure trades, 4:77
 - and trading constraints, 4:78–79
 - for yield/spread pickup trades, 4:75
- second-stage financing, 5:30–31
- secrecy, broker, 6:18
- sector duration, 4:23
- sector effect, for fixed-income attribution, 6:166
- sector exposures, portfolio monitoring for, 6:82–83
- sector-rotation trades, 4:76
- sectors, economic, 4:87–88
- sector weighting, 6:157–160
- securities
- description of, 1:141–142
 - distressed (*see* distressed securities)
 - eligibility rules of market indexes for, 3:405
 - inherited, 2:78, 79
 - lending of, 4:178
 - macro, 2:178
 - regulations on sale of, 2:330
 - selection of, 4:51, 230–232
 - tax-exempt, 2:181
 - transfer of, 4:110
 - US Treasury, 4:115, 116
- security (of electronic information), 1:102
- security-based benchmarks, 3:402; 6:139–140
- security exposures, portfolio monitoring for, 6:83
- Security Market Line (SML), *ex post*, 6:169–170
- security selection effect, 6:166
- Security Valuation Book* (NAIC), 2:497
- seed money, 5:30–31
- segmentation, of insurance companies, 2:495
- segmented markets, 3:42–43
- segregation, in prospect theory, 2:25
- selective disclosure, 1:64, 86, 88
- self-attribution bias
- of analysts, 2:126, 127
 - of management, 2:132
 - and market bubbles, 2:143
 - and overconfidence bias, 2:73–74
- self-control bias, 2:37, 76–77
- consequences of, 2:77
 - detection and methods of overcoming, 2:77
 - diagnostic questions, 2:88, 90–91
- self-dealing, 1:107
- self-enhancing bias, 2:74
- self-insured, 2:392
- self-interest, perfect, 2:12
- self-made investors, 2:162
- self-protecting bias, 2:74
- sell disciplines, active equity investing, 4:210
- sellers, in liquid markets, 6:20
- sell side, 6:19
- sell-side research, 4:206–207, 231
- semiactive equity investing, 4:165, 211–213
- derivatives- vs. stock-based, 4:211, 213
 - and Fundamental Law of Active Management, 4:212
- semiactive investing, 3:252
- semiactive management, 4:165
- semi-strong-form EMH, 2:29–32
- semivariance, 3:188; 4:113
- senior management. *see* management
- sensitivities
- asset, 2:545–546
 - liability, 2:547–548
- sentimental holdings, 6:237
- separate property regimes, 2:275
- September 11 terrorist attacks, 3:60
- Serbia, 2:304
- Serfaty-de Medeiros, Karine, 3:322–323
- serotonin, 2:19–20
- service(s)
- additional, for select clients, 1:88
 - level of, 1:86
 - misrepresentation of, 1:212–213
- service contracts, as insurance, 2:422
- service fees, 1:40
- service providers, selecting, 1:135–136
- settlement, 3:309
- settlement, trade, 6:9
- settlement date, 4:115
- settlement-date accounting, 6:221, 291
- settlement netting risk, 5:151
- settlement (Herstatt) risk, 5:146
- settlor, 2:299–300
- SEU. *see* subjected expected utility
- SFAS 133. *see* Statement of Financial Accounting Standard 133
- SFRatio. *see* safety-first ratio
- “shadow accounting,” 6:269n.46
- shadow period, 2:307
- shareholder voting policies, 1:257
- share repurchases, Grinold–Kroner model for, 3:33–34
- Shari’a, 2:274
- Sharpe, William F., 4:167, 185, 191
- Sharpe ratio, 6:170
- defined, 6:168
 - ex post*, 6:170
 - of hedge funds, 5:81–82; 6:145–146
 - for international assets, 3:197–198
 - and risk management, 5:190
 - for US credit, 4:68
- Sharpe style analysis, 3:402
- Sharpe style weights, 4:191
- Shiller, Robert, 2:166, 178
- short extension strategies, 4:208–209
- shortfall risk
- asset allocation based on, 3:188, 190–191
 - defined, 2:439; 4:113
 - and story disagreement, 4:78–79
- short positions
- for call options, 5:275–278
 - delta hedges of, 5:334–335
 - in pairs trading, 4:206
 - for put options, 5:278–282
 - in risk reversals, 3:354
 - in seagull spreads, 3:355–356
- short sales against the box, 2:344, 365–366
- short selling hedge fund strategies, 5:60
- short-term borrowing, country risk and, 3:77–78
- short-term capital gains tax rate, accumulation using, 2:258–259
- short-term income distributions, 2:199
- should (term), 6:214, 291
- shrinkage estimation, 3:25–26
- sidecar arrangements, 1:246
- side-letter arrangements, 1:246
- Siegel, L., 3:407, 409; 4:15
- sign-constrained optimization, 3:213–217
- significant cash flows, 6:243n.20
- simple logical participation strategies, 6:43
- simple spending rule, 2:481
- simplification, in prospect theory, 2:25
- simulated efficient portfolios, 3:230
- simulated results, 1:99–100
- simultaneous dissemination, 1:85
- since inception internal rates of return (SI-IRR)
- GIPS definition, 6:292
 - for private equity, 6:267–268
 - for real estate, 6:262–265
- Singapore, 4:150
- and Economic Freedom Index, 3:77
 - investment rate, 3:69
 - offshore banking centers, 2:310–311
 - REITs, 5:14
 - residence–source conflicts, 2:307

- RNDs' assets in, 2:306
 tax regime, 2:231, 347
 territorial tax system, 2:305
 wealth taxes, 2:238
- Singer–Terhaar approach, 3:40–48
- single-asset positions. *see* concentrated single-asset positions
- single-payment loans, 5:215–218
- single-premium immediate annuities (SPIAs), 2:423
- single-stock positions, 2:323, 340–356
 about, 2:340–341
 non-tax considerations, 2:342–343
 risk reduction strategies, 2:343–356
 cross hedging, 2:355–356
 equity monetization, 2:343–347
 exchange funds, 2:356
 hedging, 2:348–354
 tax-optimized equity strategies, 2:354–355
 yield enhancement, 2:354
 tax considerations, 2:341–342
- sinking fund structures, 4:83, 85
- situational profiling of individual investors, 2:162–165
 by measure of wealth, 2:163
 by source of wealth, 2:162
 by stage of life, 2:163–165
- skewed forecasts, 2:127
- skewness
 negative, 3:205; 4:138; 5:12n.9
 and performance evaluations, 5:83
 positive, 3:205; 5:12n.10
 and roles in portfolios, 5:75
- skilled mutual funds, 2:58–59
- skills, overconfidence in, 2:126–131
- slippage (delay costs), 6:23, 25
- Slovakia, 2:304; 3:9n.
- Slovenia, 2:304; 3:9n.
- slowdown phase (business cycle), 3:53–54, 54
- SLR. *see* standard of living risk
- small-cap equities, 2:144; 4:205
- small-cap stock effect, 3:18
- small-issuer bias, 3:410
- small numbers, law of, 2:57
- small-stock investors, 4:189
- smart routing, 6:40, 45
- SML, *ex post*. *see* Security Market Line, *ex post*
- smoothed data, 3:14–16
- smoothing rule, 2:477, 481–482, 484
- socially responsible investing (SRI), 4:204–205; 6:71
- social media, 1:9
 limited disclosures on, 1:89
 and loyalty to employers, 1:108
 material nonpublic information on, 1:59
 misrepresentation on, 1:45
- social proof, 2:137
- sociedad anónima*, 5:34
- societas Europaea* (SE), 5:34
- société anonyme*, 5:34
- society, benefit of ethics to, 1:12
- soft commissions, 1:250
 disclosure of, 1:257
 policies for, 1:76
- soft dollars, 1:76, 250; 6:28–29
- Soft Dollar Standards, 1:250; 6:28
- sole ownership, 2:273
- solicitation, of former clients, 1:109–114
- Solow residual, 3:125
- Sony, 4:186
- Sortino ratio
 for hedge funds, 5:83
 and risk management, 5:191
- source jurisdiction, 2:305
- source of wealth classifications, 2:162
- source–source conflicts, 2:307
- South Africa
 equity real rates of return, 4:165
 equity risk premium, 3:39
 expected returns for equities/bonds, 3:25
 gift tax, 2:293
 in Hague Conference, 2:304
 spousal exemptions for estate tax, 2:297
 tax-free gifts, 2:289
 tax rates, 2:180
 tax regime, 2:231, 347
- South African rand, 3:307, 371
- South America, 2:302; 3:70, 82. *see also specific countries*
- Southeast Asia, 4:138, 139. *see also specific countries*
- South Korea, 3:82; 5:14
- sovereign risk, 5:149–150
- Soviet Union, 3:126, 127
- S&P 500 Index
 appraisal data on, 3:15, 16
 in Assets Category strategy, 6:152
 as benchmark, 3:397; 6:247
 as broad-market index, 6:136, 137
 calendar anomalies in, 2:35
 capitalization weighting of, 3:405
 capital market expectations from, 3:244
 in capital market forecasts, 3:44
 Chinese stock market returns vs., 3:132–134
 commodities correlations, 5:47–49, 55–56, 109–110
 composition and characteristics, 4:177
 concentration in, 3:409
 distressed securities correlations, 5:98
 equity fund investors' performance vs., 2:59
 in equity swaps, 5:377, 378, 381
 and Fed model, 3:145–146, 148
 float weighting, 4:169
 forecasting approaches for, 3:138
 futures on, 4:182–183, 221; 5:230
 Grinold–Kroner analysis, 3:34
 hedge fund correlations, 5:65–68, 74, 75, 111
 indexed portfolios, 4:180
 and justified P/E estimates, 3:132–133
 in LEI, 3:83
 long-only positions in, 6:144
 managed futures correlations, 5:88, 89, 91, 92
 market earnings per share forecasting, 3:142–144
 Monte Carlo simulations of, 2:198, 199
 mutual fund expense ratios, 4:178
 passive equity investing, 4:167
- portfolio trades with, 4:182; 6:9
- private equity correlations, 5:37
- as proxy for true market portfolio, 5:228
- real estate correlations, 5:17–18, 22, 108, 116
 and real wage growth, 2:541–542
 in studies of EMH, 2:32
 in surplus efficient frontier, 3:245, 246
 as surrogate, 6:171
 VaR analysis, 5:156, 160, 161n.39, 167–168
 and Yardeni model, 3:149–150
- Spain
 Conference Board index, 3:82
 corporate form of publicly-traded companies, 5:34
 domestic tax relief, 2:308
 equity real rates of return, 4:165
 equity risk premium, 3:39
 Eurozone membership, 3:9n.
 expected returns for equities/bonds, 3:25
 gift tax, 2:293
 in Hague Conference, 2:304
 tax regime, 2:231, 347
 wealth taxes, 2:306
- SPAN system, 5:171
- S&P China BMI Index
 dividend discount model, 3:135–137
 H-model, 3:130
 and justified P/E estimates, 3:132–133
 US stock market returns vs., 3:132–134
- S&PCI. *see* Standard & Poor's Commodity Index
- S&P/Citigroup, 3:403, 406
- S&P/Citigroup 500 Growth Index, 4:195
- S&P/Citigroup 500 Value Index, 4:195
- S&P Citigroup International Treasury Bond Index Series, 3:403
- S&P/Citigroup World indexes, 4:201
- S&P Corporation. *see* Standard and Poor's Corporation
- S&P Dow Jones Global Index, 3:406
- S&P Dow Jones Indices, 3:403
- SPDR S&P China ETF, 3:130
- specialists, NYSE, 6:17
- special purpose vehicles (SPVs), 5:188
 specified in advance (term), 3:397n.4; 4:16n.12; 6:135
- spending, consumer
 and business cycle, 3:61
 in business cycle analysis, 3:61
 in econometric modeling, 3:79
 in United Kingdom, 3:49
- spending down, 2:477
- spending policies
 endowments, 2:479–481, 483–484
 foundations, 2:475–477
- spending rates, sustainable, 2:285–287
- SPIAs. *see* single-premium immediate annuities
- S&P Large Value Index. *see* Standard & Poor's Large Value Index
- S&P MidCap 400 Index, 4:169
- sponsor-directed DC pension plans, 2:454
- sponsors, plan, 3:398–399
- Spontaneous investors, 2:169

- spot markets, foreign exchange, 3:307–309
- spot price, 5:49
- spot return, 5:49
- spousal exemptions, for excess capital, 2:297
- spouses, inheritance rights of, 2:275
- spread analysis
 alternative spread measures, 4:79–80
 global credit bond portfolio management, 4:79–82
 swap spreads, 4:80–81
 tools, 4:81–82
- spread duration, 4:21
 benchmark bond index selection, 4:21
 in immunized portfolios, 4:36
 and tracking risk, 4:23–24
- spread order, 2:349n.8
- spread risk, 4:18, 21
- spreads, 5:285n.8
 bear, 5:292–295
 bid–ask, 5:144; 6:10
 and credit risk, 5:144
 effective, 6:12–14
 inside, 6:11
 market, 6:11
 and market quality, 6:19
 and transaction costs, 6:22
- box, 5:306–308
- bull, 5:289–292
- butterfly, 5:295–299
- credit, 4:86–87
- cushion, 4:41
- defined, 5:289
- interest, 2:511
- interest rate swap, 4:80
- money, 5:289–299
- net interest, 2:493
- nominal, 4:36, 79
- option-adjusted, 4:36, 79–80
- put, 2:348, 350; 3:354–355
- ratio, 5:335n.32
- sandwich, 5:298n.14
- seagull, 3:355–356
- static, 4:36
- strike, 4:123
- swap, 4:80–81
 for “vol” sectors, 4:79–80
 yield, 4:82, 119–120
 yield/spread pickup trades, 4:75
 zero-volatility, 4:36
- S&P REIT Composite Index, 5:16, 17
- SPSC. *see* Standard & Poor’s Small Cap 600 Index
- S&P SmallCap 600 Index, 4:169, 175
- S&P TSX Composite, 4:176
- SPVs. *see* special purpose vehicles
- SRI. *see* socially responsible investing
- Sri Lanka, 2:304
- staged exit strategies, 2:359, 361
- stage of life classifications, 2:163–165, 178
- stale price bias, of hedge funds, 5:70
- stale prices, 4:14; 6:27, 39
- stand-alone risk, 3:204n.44
- Standard and Poor’s (S&P) Corporation
 emerging market debt, 4:139
 Global Industry Classification Standard, 4:232
- ratings by, 2:493; 5:188
- stock style indexes by, 6:137
- standard deviation
 asset-weighted, 6:253–254
 equal-weighted, 6:253
ex post, 6:251, 255
- standard of living risk (SLR), 2:84
- Standard & Poor’s (S&P) 500 Index. *see* S&P 500 Index
- Standard & Poor’s Commodity Index (S&PCI), 5:46–49
- Standard & Poor’s Hedge Fund Indices, 5:62, 63, 64
- Standard & Poor’s (S&P) Large Value Index, 6:137
- Standard & Poor’s Small Cap 600 Index (SPSC), 5:381
- Standards of Practice Council (SPC), 1:10–11, 15
- Standards of Practice Handbook*, 1:3, 5–9, 11, 14
 eleventh edition, 1:7–9
 revisions to, 1:6–7
- Standards of Professional Conduct, 1:5–19, 21–194; 4:207; 6:29.
see also Asset Manager Code of Professional Conduct (AMC)
- adoption of, 1:10
- and applicable law, 1:22–23
- conflicts of interest [Standard VI], 1:149–164
 disclosure of conflicts [Standard VI(A)], 1:18, 149–156
 priority of transactions [Standard VI(B)], 1:18, 157–162, 204
 referral fees [Standard VI(C)], 1:18, 162–164
 text of, 1:18
- duties to clients [Standard III], 1:73–105
- fair dealing [Standard III(B)], 1:17, 82–90, 207
- loyalty, prudence, and care [Standard III(A)], 1:17, 73–81, 205, 207
- performance presentation [Standard III(D)], 1:17, 97–101, 213
- preservation of confidentiality [Standard III(E)], 1:17, 101–105
- suitability [Standard III(C)], 1:17, 90–97
 text of, 1:16–17
- duties to employers [Standard IV], 1:105–126
 additional compensation arrangements [Standard IV(B)], 1:17, 116–117
 loyalty [Standard IV(A)], 1:17, 105–115, 205
 responsibilities of supervisors [Standard IV(C)], 1:7–8, 18, 118–126, 204
 text of, 1:17–18
- evolution of, 1:6–7
- and importance of ethics, 1:11–15
- integrity of capital markets [Standard II], 1:56–73
 market manipulation [Standard II(B)], 1:16, 68–73
- material nonpublic information [Standard II(A)], 1:16, 56–67, 210
 text of, 1:16
- investment analysis, recommendations, and actions [Standard V], 1:126–148
 communication with clients and prospective clients [Standard V(B)], 1:8, 18, 137–146, 212
 diligence and reasonable basis [Standard V(A)], 1:18, 126–137, 210–212
 record retention [Standard V(C)], 1:18, 146–148
 text of, 1:18
- notification of, 1:114
- practice problems, 1:177–186
 and Professional Conduct Program, 1:9–10
- professionalism [Standard I], 1:21–56
 independence and objectivity [Standard I(B)], 1:16, 30–42
 knowledge of the law [Standard I(A)], 1:16, 21–29, 203–204
 misconduct [Standard I(D)], 1:16, 53–56
 misrepresentation [Standard I(C)], 1:16, 43–53, 211–213
 text of, 1:16
- responsibilities of CFA members and candidates [Standard VII], 1:165–176
 case study, 1:206
 conduct as participants in CFA Institute programs [Standard VII(A)], 1:8, 19, 165–169
 reference to CFA Institute, designation and Program [Standard VII(B)], 1:19, 170–176
 text of, 1:18–19
- solutions to problems, 1:187–194
 and Standards of Practice Council, 1:10–11
 in *Standards of Practice Handbook*, 1:3, 5–9
 text of, 1:16–19
 and values of CFA Institute, 1:15
- start-up financing, 5:30–31
- State Farm, 2:505, 506
- Statement of Financial Accounting Standard 133 (SFAS 133), 5:149
- statements of account information, 1:77
- statements of strategic asset allocation, 2:192–193
- State Street Global Advisors, 3:130
- static approach to asset allocation, 3:183–184
- static hedges, 3:344
- static spreads, 4:36
- stationary time series, 3:24
- statistical methods for setting capital market expectations, 3:23–31
 multifactor models, 3:27–31
 sample estimators, 3:24–25
 shrinkage estimators, 3:25–26
 time-series estimators, 3:26–27
- Statistisches Bundesamt Deutschland, 3:81
- Statman, Meir, 2:5, 8, 64, 166

- status, client, 1:102
- status quo bias, 2:77–78, 120n.5, 331
consequences of, 2:78
detection and methods of overcoming, 2:78
diagnostic questions, 2:87
and overinvestment in company stock, 2:123
- status quo trap, 3:21
- stereotypes, 2:57
- Sterling-dollar market (USD/GBP), 3:308
- Sterling ratio, 5:83n.120
- Sterling-yen market (JPY/GBP), 3:308
- stock(s). *see also* equities
adjusting allocation between bonds and, 5:241–243, 246–247
concentrated stock positions, 6:77–79
cyclical, 3:92
experience-based allocation approaches, 3:250
glamour, 4:187
investments of insurance companies in, 2:506
for micro attribution, 6:157–160
monetary policy and returns for, 6:80
single-stock positions, 2:323, 340–356
about, 2:340–341
non-tax considerations, 2:342–343
risk reduction strategies, 2:343–356
tax considerations, 2:341–342
small-cap stock effect, 3:18
stock-based semiactive equity investing, 4:211, 213
stock companies, 2:489
stock index futures, 4:182–183; 5:230, 232
stock life insurance companies, 2:411, 498n.25
stock markets, integration of, 3:202, 207
stock ownership, 1:151, 152
stock prices, stock splits and, 2:31
stock splits, 2:31
stops, 3:333–334
stories, research conclusions presented as, 2:133
“story” disagreement, 4:78–79
STP. *see* straight-through processing
straddles, 3:337; 5:303–306
Straight Arrow (BB&K classification), 2:110
straight-through processing (STP), 5:140; 6:10
strangles, 3:337; 5:305
straps, 5:305
strategic asset allocation
asset-only vs. ALM approaches, 3:182–185
defined, 3:177
implementing, 3:251–253
currency risk management decisions, 3:252
investment approach and instrument selection, 3:251–252
and rebalancing, 3:252–253
for individual investors, 3:253–261
critique of, 3:260–261
human capital factors, 3:253–258
and mortality/longevity risk, 3:259–260
for institutional investors, 3:262–275
banks, 3:273–275
defined-benefit plans, 3:262–267
foundations and endowments, 3:267–270
insurance companies, 3:270–275
with managed futures, 5:93–95
with real estate, 5:25–26
and return objectives, 3:185–187
and risk objectives, 3:187–191
and systematic risk, 3:178–179
tactical vs., 3:179–180
strategic buyers, 2:358
strategic currency management decisions, 3:319–330
currency exposures, 3:321–324
cost considerations, 3:323–324
diversification considerations, 3:321–323
currency risk, 3:324–328
active currency management, 3:325–326
currency overlay programs, 3:326–328
discretionary hedging, 3:325
passive hedging, 3:325
formulating currency management programs, 3:328–330
Investment Policy Statements, 3:319–320
portfolio optimization, 3:320–321
Strategic Money Management, 5:235
strategic partners, 5:31
strategy benchmarks, 3:402
stratified sampling, 4:18, 20, 180–181
stress testing, 5:171–172
strike spreads, 4:123
strips, 5:305
strong-form EMH, 2:29–30
structural analysis
bullet structures, 4:83–84
callable structures, 4:84
global credit bond portfolio management, 4:82–85
putable structures, 4:85
sinking fund structures, 4:85
structural level of unemployment, 3:71
structural policies, government, 3:71–72
structured notes, 5:355, 362–366
structure trades, 4:77
style analysis, for fixed-income manager selection, 4:140
style bias, 6:149n.19, 153–154
style box, 4:202–203
style classification, manager-based hedge fund index, 5:64
style-defined composites, 6:270
style drift, 4:203–204; 5:76
style exposures, portfolio monitoring for, 6:82–83
style indexes, 4:185; 6:137
style matrix, 6:239
style rotator (investment style), 4:189
style weights, 4:191
stylized scenarios, analysis of, 5:171
subadvisers, selecting, 1:129, 136
subjected expected utility (SEU), 2:21–22
submanagers
and IPS reviews, 1:96
selection of, 1:132–133
subperiod rates of return, 6:127–128
substitution, 4:210
suitability, 1:97
of alternative investments, 5:11
in AMC, 1:248
for entire portfolio, 1:94–95
for investor risk profile, 1:94, 96
Suitability [Standard III(C)], 1:90–97
application of the standard, 1:94–97
compliance procedures, 1:93–94
investment policy statements, 1:93
regular updates, 1:94
suitability test policies, 1:94
guidance, 1:90–93
developing investment policies, 1:91
managing to indexes or mandates, 1:93
need for diversification, 1:92
understanding client’s risk profile, 1:91
unsolicited trading requests, 1:92–93
updating investment policies, 1:92
text of, 1:17, 90
suitability test policies, 1:94
Sumitomo, 4:87
summaries, attributing, 1:47
sunshine trades, 6:38
Super Bowl indicator, 2:139
supervision
detection as part of, 1:119–120
inadequate, 1:124–125
of research activities, 1:122–123, 125–126
system for, 1:119
of trading activities, 1:123
supervisors. *see* Responsibilities of Supervisors [Standard IV(C)]
supplemental information, 6:238, 292
supplements, VaR, 5:170–171
supply
business-cycle related, 5:51–52
and credit spreads, 4:73
of venture capital, 5:31–33
support levels, 3:333
supranationals, 4:73
Suriname, 2:304
surplus
defined, 3:241; 5:168
economic, 4:41
of insurance companies, 2:491n.21, 502–503
of non-insurance companies, 2:504
pension, 2:455, 457; 3:242
surplus at risk, 5:168
surplus capital, 2:335
surplus efficient frontier, 3:241, 242, 244–247
surplus optimization, 3:247–249
surrender cost index, for life insurance, 2:414, 415
survey methods, 3:48–49
survival probability, core capital based on, 2:280–284

- survivor bias (survivorship bias), 3:14;
 5:70; 6:141
 survivorship, joint ownership with right
 to, 2:273–274
 sustainability of capital markets, 1:12–13
 swap markets, foreign exchange,
 3:312–313
 swap rate, 5:143n.8
 swaps. *see also* risk management
 applications of swap strategies
 asset, 4:84
 credit-default, 4:70, 80–81, 127–128
 currency, 4:68
 equity total return, 2:344–345;
 4:183–184
 interest rate, 4:80, 81, 120–121
 matched, 3:312–313, 344
 measuring credit risk of, 5:177
 mismatched, 3:312, 313
 new issue, 4:76
 terminating, 5:390–393
 total return, 2:344–345; 4:183–184
 swap spreads, 4:80–81
 swaptions, 5:385–400
 defined, 5:355
 and forward swaps, 5:400
 for future borrowing, 5:386–390
 interest rate swaptions, 5:386–393
 removing/adding call features with,
 5:394–399
 strategies for managing, 5:385–400
 terminating swaps with, 5:390–393
 Sweden
 CLI for, 3:80
 equity real rates of return, 4:165
 equity risk premium, 3:39
 exit taxation, 2:306–307
 expected returns for equities/bonds,
 3:25
 in Hague Conference, 2:304
 inflation-protected bonds, 3:196
 real estate market, 5:24
 real GDP growth rate, 3:32
 tax regime, 2:231, 347
 Swedish krona, 3:307
 Swiss franc
 benefits of currency exposure for,
 3:323n.11
 currency code, 3:307
 in currency pairs, 3:308
 as haven currency, 3:371
 synthetic dual-currency bond in,
 5:375–376
 Switzerland
 asset allocation in pension plans,
 3:263, 264
 CLI for, 3:80
 equity real rates of return, 4:165
 equity risk premium, 3:39
 expected returns for equities/bonds,
 3:25
 gift tax, 2:293
 government bond index returns, 4:128,
 129
 in Hague Conference, 2:304
 market integration, 3:43
 ownership of private business
 enterprises, 2:322
 pension fund equity allocations, 4:163
 real estate market, 5:24
 real GDP growth rate, 3:33
 tax regime, 2:231, 347
 tax treaty with US, 3:200
 trade partners, 3:81
 wealth taxes, 2:306
 symmetric cash flow matching, 4:51
 synthetic index funds, 5:233–236
 systematic account reviews, 1:86
 systematic approach to research, 2:135
 systematic biases, benchmark, 6:142
 systematic risk, 2:324, 443; 3:178–179;
 5:229; 6:79, 85
 systematic trading strategies, 5:87
T
 T + 1 settlement, 3:309n.4
 T + 2 settlement, 3:309
 tactical asset allocation (TAA),
 3:275–282
 defined, 3:177
 equity swaps in, 4:184
 global adjustments in, 3:279–281
 investment decisions for, 3:281–282
 strategic asset allocation vs., 3:179–180
 tactical currency management decisions,
 3:331–341
 carry trade in, 3:334–336
 economic fundamentals in, 3:331–332
 example, 3:339–341
 technical analysis in, 3:333–334
 volatility trading in, 3:336–341
 tactical rebalancing, 6:93
 Taft-Hartley Labor Act, 2:463
 tag-along arrangements, 1:246
 tail value at risk (TVaR), 5:170
 Taiwan
 tax rates, 2:180
 tax regime, 2:231, 347
 territorial tax system, 2:305
 tangency portfolio, 3:220–221
 Tankan Survey, 3:81–82
 TAQ database. *see* Trade and Quote
 database
 target covariance matrix, 3:25–26
 target date funds, 2:121
 target dollar duration of portfolio,
 5:222–223
 target returns, for immunized portfolios,
 4:33–34
 target semideviation, 5:191n.55
 target semivariance, 3:188
 target value, of guaranteed investment
 contract, 4:31–33
 target weights, rebalancing to, 6:93–94
 taxable accounts, 2:390
 taxable investment accounts, 2:246
 tax-advantaged savings accounts,
 2:245–246
 tax alpha, 2:251
 tax avoidance, 2:181, 310
 tax cost basis, 2:329
 tax deferral
 for capital gains, 2:234–237
 by individual investors, 2:181
 with tax loss harvesting, 2:256–257
 tax-deferred accounts (TDAs), 2:246
 and after-tax asset allocation,
 2:247–248
 asset location for, 2:251–254
 financial capital in, 2:390
 and investment risk, 2:250
 retirement, 2:232
 selecting tax exempt accounts vs.,
 2:248–250
 tax drag, 2:233, 235
 and accrual equivalent tax rate, 2:244
 and trading behavior, 2:254, 258
 tax efficiency, 2:327; 6:70
 taxes, 2:225–269. *see also specific types,*
 e.g.: income taxes
 after-tax accumulations and returns,
 2:232–245
 accrual equivalent returns, 2:243–245
 accrual equivalent tax rates,
 2:244–245
 blended tax environments, 2:239–243
 and GIPS, 6:280–283
 simple tax environments, 2:232–239
 and after-tax wealth, 2:225–226
 and alternative investments, 5:11
 and annuities, 2:429
 and asset allocation, 2:196
 and benchmark bond index selection,
 4:12
 and concentrated positions
 equity monetization strategies,
 2:345–347
 hedging strategies, 2:352–354
 leveraged recapitalization, 2:359
 managing single-stock positions,
 2:341–342
 monetization of private business
 equity, 2:362
 outright sale of positions, 2:328–329
 and cross-border estate planning,
 2:305–310
 double taxation, 2:307–310
 double taxation treaties, 2:308–310
 exit taxes, 2:306–307
 foreign tax credit provisions,
 2:307–308
 income taxes, 2:305–306
 wealth and wealth transfer taxes,
 2:306
 and disability income insurance, 2:438
 for equity total return swaps,
 4:183–184
 and estate planning, 2:276–278
 global income tax structures,
 2:226–232
 common elements, 2:227–229
 dimensions in tax planning, 2:232
 general regimes, 2:229–232
 international comparisons of income
 taxes, 2:227
 and government structural policies,
 3:72
 for individual investors, 2:179–182
 early transfers, 2:182
 jurisdiction for taxation, 2:185
 tax avoidance, 2:181
 tax deferral, 2:181
 tax reduction, 2:181–182
 transfer at death, 2:182
 wealth transfer taxes, 2:182
 for institutional investors
 banks, 2:513

- defined-benefit plans, 2:462
- endowments, 2:485
- foundations, 2:477–478
- life insurance companies, 2:496
- non-life insurance companies, 2:504, 506–507
- and insurance company bond investments, 3:273
- and international investments, 3:200
- and investment account types, 2:245–250
 - after-tax asset allocation, 2:247–248
 - selecting account type, 2:248–250
 - tax-deferred accounts, 2:246
 - tax-exempt accounts, 2:246–247
- and investment risk, 2:250–251
- for irrevocable trusts, 2:183
- and life insurance, 2:302–303
- in Monte Carlo simulations, 2:199
- and portfolio monitoring, 6:70
- practice problems, 2:262–266
- in sample IPSs, 2:187, 190
- and sell disciplines, 4:210
- solutions to problems, 2:267–269
- tax costs of portfolio rebalancing, 6:89
- and trusts, 2:301
- and wealth management, 2:251–260
 - after-tax mean-variance optimization, 2:260
 - asset location, 2:251–254
 - holding period management, 2:258–260
 - tax loss harvesting, 2:255–258
 - trading behavior, 2:254–255
- tax evasion, 2:310
- tax-exempt accounts, 2:246–247
 - and after-tax asset allocation, 2:247–248
 - asset location for, 2:251–254
 - selecting TDAs vs., 2:248–250
- tax-exempt bonds, 3:195; 4:12n.7
- tax-exempt securities, 2:181
- tax loss harvesting, 2:255–258
- adding net-of-tax principal, 2:257–258
- current tax savings, 2:255–256
- and GIPS standards, 6:283
- tax deferral, 2:256–257
- tax-optimized equity strategies, 2:354–355
- tax premiums, 3:37
- tax rates
 - accrual equivalent, 2:244–245
 - in other countries, 2:179–180, 227–229
- Tax Reform Act (1969), 2:476
- tax risk, 5:148
- tax-sheltered savings accounts, 2:181
- Taylor, Christopher, 4:91–92
- Taylor rule, 3:63–64
- TBI for Institutional Commercial Property Performance. *see* Transaction-Based Index for Institutional Commercial Property Performance
- T-bills. *see* US Treasury bills
- T-bonds. *see* US Treasury bonds
- TDAs. *see* tax-deferred accounts
- technical analysis, currency management and, 3:333–334
- technical anomalies, 2:34
- technical model requirements, 1:136–137
- technology, validation of, 5:43
- technology bubble (1990s), 2:69, 142
- technology sector
 - Allocation/Selection Interaction return for, 6:160
 - Within-Sector Allocation return for, 6:159–160
- temporary disequilibrium behavior, 2:139
- temporary life insurance, 2:406
- temporary new accounts, 6:243, 292
- termination policies, 1:109
- term life insurance, 2:406, 489n.19
- term to maturity, repurchase agreements, 4:110
- territorial tax systems, 2:305
- testamentary gratuitous transfers, 2:277
- testator, 2:274
- tests of quality (benchmark), 6:142–143
- Texas hedge, 3:364n.34
- Texas Utilities, 4:87
- TFP. *see* total factor productivity
- Thai baht, 3:370
- Thailand, 2:231, 347; 3:82
- Thaler, Richard, 2:64, 72, 166
- “The Theory of Speculation” (Bachelier), 2:30
- theta, 5:152
- third-party confirmation of information, 1:251–252
- third-party custodians, 1:32
- third-party research, 1:127–128, 132
- third-stage financing, 5:30–31
- Thomas, Ian (case study), 3:221–225
- Thomson Venture Economics, 3:401; 5:35, 36
- thresholds, rebalancing, 6:94
- TIAA-CREF plans, 2:120n.6, 122
- tick (term), 4:183n.28
- Tierney, David E., 3:397, 400, 412; 4:16
- time, delta and, 5:332–333
- time deposit, 2:510n.30
- time frame
 - of decision and dissemination, 1:84–85
 - and performance calculation, 1:98
- time horizon
 - and accumulation for deferred capital gains, 2:236
 - for capital market expectations, 3:7, 10
 - changes in, 6:68–70
 - and currency hedging, 3:321–322
 - and expected value of returns, 2:198, 199
 - for experience-based allocation approaches, 3:250
 - immunized, 4:34
 - for individual investors, 2:178
 - for institutional investors
 - banks, 2:513
 - defined-benefit plans, 2:461–462
 - endowments, 2:484–485
 - foundations, 2:477
 - life insurance companies, 2:496
 - non-life insurance companies, 2:505–506
 - in investment policy statements, 6:72, 75
- and return objectives of investors, 3:186–187
- in sample IPSs, 2:187, 190
- and taxes/capital growth, 2:233–234
- for VaR, 5:158–159
- and wealth tax/investment growth, 2:238–239
- timeline, venture capital, 5:30–31
- time-period biases, 3:18–19
- time-series estimators, 3:26–27
- time to expiration, 5:52
- time value of currency options, 3:350
- time-weighted average price (TWAP) strategy, 6:43
- time-weighted rate of return (TWR), 6:126–131
 - about, 6:126–128
 - GIPS definition, 6:292
 - and linked internal rate of return, 6:131, 132
 - MWR vs., 6:129–131
 - as requirement of GIPS standards, 6:224
- time-weighted total return, 6:223–226
- timing, of taxation, 2:259–260
- timing options, 4:116
- TIPS. *see* US Treasury Inflation-Protected Securities
- title insurance, 2:422
- Tobin’s *q* ratio
 - and asset-based models, 3:155–158
 - strengths and limitations, 3:159
- Tokyo Stock Exchange, 3:406; 4:176; 6:16
- Tokyo Stock Exchange Price Index (TOPIX)
 - alpha and beta separation, 4:221
 - capitalization weighting for, 3:406
 - composition and characteristics, 4:176, 177n.a
 - float weighting for, 4:169
 - as pension fund benchmark, 4:214
 - stratified sampling for, 4:180
- tolerance bands, for asset allocation, 6:92–93
- top down approach to psychographic modeling. *see* behavioral alpha process
- top-down forecasts, 3:138–144
 - bottom-up vs., 3:139, 142–143
 - earnings forecast revisions based on, 3:143–144
 - of market earnings per share, 3:142, 144
 - portfolio suitability for, 3:140–141
 - using bottom-up forecasts with, 3:141–143
- top-down research approaches, 4:70, 224, 230, 231
- TOPIX. *see* Tokyo Stock Exchange Price Index
- Toronto 300 Composite, 5:380
- Toronto Stock Exchange (TSE), 4:176; 6:15, 31–32
- total factor productivity (TFP)
 - growth in, 3:69–71
 - and neoclassical approach to growth accounting, 3:125

- total firm assets, GIPS definition, 6:219–220, 292
- total future liability, pension plan, 2:455
- total rate of return, 6:126
- total return(s)
- and accumulated value, 4:31–33
 - defined, 4:28
 - endowment spending based on, 2:479–481
 - of fixed-income securities, 6:165–166
 - of government bond indexes, 4:128–129
 - for immunized portfolios, 4:31–33, 39–41
 - for insurance companies, 2:494
 - investor requirements based on, 2:172–173
 - for non-life insurance companies, 2:504
 - time-weighted, 6:223–226
 - and yield curve, 4:39–40
- total returns analysis, 4:28, 72
- total return swaps, 2:344–345; 4:183–184; 5:189
- total value, in TVPI, 6:265, 292
- Toyota, 4:180
- tracking error, of benchmarks, 6:139n.12, 142
- tracking risk
- and benchmark bond indexes, 4:22–25
 - defined, 4:166
 - interpreting and reducing, 4:24–25
 - and market risk, 5:152
 - and spread duration, 4:24
- trade
- and business cycle, 3:61
 - and currency returns, 3:98
- trade allocation procedures
- developing and documenting, 1:85
 - disclosure of, 1:86, 257
 - fair and equitable, 1:250
- Trade and Quote (TAQ) database, 6:52
- trade balance, overall, 3:77n.65
- trade blotter, 6:46
- trade date accounting, 6:221, 222, 292
- trade execution decisions, 6:36–47
- automated trading, 6:40–47
 - algorithmic trading, 6:40–47
 - classification of algorithmic execution systems, 6:42–45
 - reasoning for logical participation
 - algorithmic strategies, 6:45–47 - for handling of a trade, 6:36–37
 - and objectives in trading, 6:37–40
- Trade Management Guidelines, 6:48–49
- traders, 6:32–36
- behavior of, 2:254–255
 - preferred order types of, 6:35–36
 - roles of, 6:41
 - types of, 6:6, 33–35
- trades
- basket, 4:182
 - credit-defense, 4:76
 - credit-upside, 4:75–76
 - curve-adjustment, 4:77
 - handling of, 6:36–37
 - opposite sides of, 6:18
 - pairs, 4:206 (*see also* long–short investing)
 - portfolio, 4:182
 - program, 4:182
 - sector-rotation, 4:76
 - structure, 4:77
 - urgency of, 6:33
- trade settlement, 5:140; 6:9
- trade size, relative to available liquidity, 6:30
- trading
- costs of, 6:21–32
 - for currency hedging, 3:323–324
 - econometric models for costs, 6:30–32
 - with emerging market currencies, 3:370–372
 - for international assets, 3:200, 201
 - transaction cost components, 6:22–30
 - decisions related to handling of trades, 6:36–37
 - excessive, 1:80, 89; 2:123–124
 - ethics violation examples, 1:80, 89
 - and framing bias, 2:67
 - and illusion of control bias, 2:61
 - and loss-aversion bias, 2:72
 - and market bubbles, 2:143
 - expenses associated with, 6:231–232, 257, 292
 - for family member accounts, 1:160
 - frequency of, 4:210
 - objectives in, 6:37–40
 - pairs, 4:206; 6:42–43
 - priority of transactions for, 1:157
 - prior to dissemination, 1:161–162
 - proprietary trading procedures, 1:63
 - in secondary market, 4:75–79
 - supervising trading activities, 1:123
 - and wealth management, 2:254–255
- Trading (AMC Part C), 1:242–243, 248–250
- trading activity, in fixed-income attribution, 6:166
- trading analysis, for global credit bond portfolio management, 4:74
- “trading and other” factor, in micro attribution, 6:158
- trading range breaks, technical anomalies in, 2:34
- trading requests, unsolicited, 1:92–93
- trading style, 6:30
- traditional balance sheet, 2:395–397
- traditional finance
- behavioral vs., 2:5–6
 - individual behavior in, 2:8–14
 - perfect rationality, self-interest, and information, 2:12
 - rational economic man, 2:11–12
 - risk aversion, 2:13–14
 - utility theory and Bayes’ formula, 2:8–11
 - market behavior in, 2:28–36
 - portfolio construction in, 2:36
 - and psychological profiling of individual investors, 2:165–166
- training, compliance, 1:121
- transaction allocation, 1:87–88
- Transaction-Based Index (TBI) for Institutional Commercial Property Performance, 5:16
- transaction-based manipulation, 1:69
- transaction costs
- components of, 6:22–30
 - of dedication strategies, 4:52
 - econometric model for, 6:30–32
 - and immunized portfolios, 4:52
 - and indexed portfolios, 4:25, 178
 - and liquidity, 2:176
 - of portfolio rebalancing, 6:88–89
- transaction expenses, 6:260, 266, 292
- transaction exposure, 5:251
- transactions, priority of. *see* priority of transactions
- transcription errors, 3:14
- Transitivity axiom (utility theory), 2:9
- translation exposure, 5:251
- transparency
- in cross-border estate planning, 2:310–311
 - market, 6:9, 20
 - market index, 3:408
- Travelers Group, 2:510
- Travelers Insurance, 2:505, 506, 510
- travel expenses, 1:36–37, 39–40
- travel funding, 1:35
- Treasury bills, 6:95, 230. *see also* US Treasury bills (T-bills)
- trend-chasing effect, 2:141
- trending effects. *see* momentum
- Treynor, Jack, 6:24
- Treynor measure, 6:168–170
- T Rowe Price, 2:121
- true active risk, 4:219–220
- trust companies, 2:183
- trust departments, 2:183
- trustees, 2:158, 183–184, 463
- trusts, 2:183–184, 299–301
- asset protection, 2:301
 - beneficiaries of, 2:184–185
 - charitable, 2:368
 - charitable remainder, 2:287–288
 - in common law, 2:274
 - control, 2:300
 - and Hague Conference, 2:305
 - tax avoidance with, 2:181
 - tax reduction, 2:301
- Trust Universe Comparison Service (TUCS), 6:210
- TSE. *see* Toronto Stock Exchange
- “Tuna” indices, 5:63
- Turkey
- in Hague Conference, 2:304
 - inflation-indexed bonds, 3:196
 - in OECD-Europe, 3:80
 - tax regime, 2:231, 347
- turnaround partners, 5:100
- turnover
- benchmark, 6:143
 - market index, 3:408
- TVaR. *see* tail value at risk
- Tversky, Amos, 2:70, 166
- TVPI, 6:265, 292
- TWAP strategy. *see* time-weighted average price strategy
- twin deficits problem, 3:71
- twist, 5:171n.45
- twist, yield curve, 4:18
- two-layer factor approach for modeling covariance, 3:30

- 2005-2006 Russell Survey on Alternative Investing, 5:21
- TWR. *see* time-weighted rate of return
- Type I error, in MCP analysis, 6:182–183
- Type II error, in MCP analysis, 6:182–183
- U**
- UBL model. *see* unconstrained Black–Litterman model
- UCITS. *see* Undertakings for Collective Investment in Transferable Securities
- Ukraine
- in Hague Conference, 2:304
 - tax regime, 2:231, 232n.4, 347
- ultra-long maturities, 4:84
- UMIFA. *see* Uniform Management of Institutional Funds Act
- unambiguous benchmarks, 3:397n.4; 4:16n.12; 6:135, 140
- uncertainty
- execution, 6:8
 - input, 3:23
 - model, 2:543; 3:23
 - price, 6:7
- unconditional benchmarks, 3:19
- unconditional expected returns, 3:19–20
- unconstrained Black–Litterman (UBL) model, 3:231
- unconstrained optimization, 3:212–213
- uncovered interest rate parity theorem, 3:334
- undeclared funds, 2:310
- underfunded pension plans, 2:455, 456
- under-hedging, 3:353
- underlying
- for covered calls, 5:282–286
 - defined, 4:115
 - for derivatives, 3:336n.21
 - for equity portfolios, 5:282–288
 - for protective puts, 5:286–288
- Undertakings for Collective Investment in Transferable Securities (UCITS), 4:181
- underwriting
- life insurance, 2:409
 - at non-life insurance companies, 2:502, 506
- undisclosed limit order, 6:8–9
- unemployment, structural level of, 3:71
- unethical actions, reporting, 1:29
- unhedged returns, 4:134
- Uniform Management of Institutional Funds Act (UMIFA), 2:478, 480, 485
- unilateral pegging of currency, 3:74
- unintentional errors, correction of, 1:48
- unique circumstances
- for banks, 2:514
 - for defined-benefit plans, 2:463–466
 - for endowments, 2:485–486
 - for foundations, 2:478
 - of individual investors, 2:185, 187
 - for life insurance companies, 2:498
- United Arab Emirates, 2:276; 3:74, 82
- United Energy Services, 5:223–225
- United Kingdom
- asset allocation, 3:181, 262–264
 - BRC survey, 3:61
 - CLI, 3:80
 - Conference Board index, 3:82
 - corporate form of publicly-traded companies, 5:34
 - defined-benefit pension plans, 2:454, 456n.3, 463
 - deflation, 3:56–57
 - denationalization, 3:134
 - economic growth, 3:68
 - equity indexes' composition/ characteristics, 4:176
 - equity in residential property in, 5:19
 - equity real rates of return, 4:165
 - equity risk premium, 3:39
 - expected returns for equities/bonds, 3:25
 - Fed model with UK data, 3:148
 - foreign currency payments, 5:253–254
 - gift tax, 2:294
 - government bond index returns, 4:128, 129
 - in Hague Conference, 2:304
 - house price average multiple of family income, 2:142
 - inflation, 3:55–56
 - inflation hedging by real estate, 5:19
 - inflation-indexed bonds, 3:90–91
 - inflation-protected bonds, 3:196
 - infrastructure funds in, 5:15
 - inheritance tax, 2:277
 - insurance companies, 2:489, 497
 - interest income taxation, 2:233
 - international bond investing, 4:150
 - international investment, 3:201
 - legal system, 2:274
 - market bubbles, 2:142
 - market integration, 3:43
 - momentum effect in, 2:140
 - ownership of private business enterprises, 2:322
 - pensions, 2:390; 4:163
 - private equity in, 5:28, 35–36
 - prudent person concept, 3:262
 - real estate market, 5:16, 24
 - real GDP growth rate, 3:33
 - return on government bonds, 3:89
 - short-term consumer spending, 3:49
 - spousal exemptions for estate tax, 2:297
 - stock purchases, 2:323
 - taxable gifts, 2:291
 - tax-advantaged savings accounts, 2:246
 - taxation of residents, 2:306
 - taxation on pension funds, 2:462
 - tax-free gifts, 2:289
 - tax rates, 2:180
 - tax regime, 2:231, 347
 - TFP growth, 3:70
 - trade partners, 3:81
 - wealth taxes, 2:238
 - weekend effect, 2:139
- United Nations System of National Accounts (UNSNA), 3:14
- United States
- asset allocation, 3:180–181, 263, 264
 - bankruptcy process in other countries vs., 5:102–103
 - banks, 2:509–510, 512
 - bond yields, 3:75
 - capital flows forecasting approach, 3:100
 - China equity market valuation vs., 3:133–135
 - CLI, 3:80, 81
 - commodity market, 5:45
 - corporate estate tax freeze, 2:338
 - corporate form of publicly-traded companies, 5:34
 - credit market, 4:81
 - defined-benefit pension plans, 2:454, 462–463
 - deflation, 3:56–57
 - degree of specialization, 3:73–74
 - disintermediation, 2:489, 495
 - distressed securities in, 5:95, 96
 - domestic tax relief, 2:308
 - donor-advised funds, 2:367–368
 - Economic Freedom Index, 3:77
 - economic growth, 3:126, 128
 - employee stock ownership plans, 2:361
 - endowments, 2:485
 - equity indexes' composition/ characteristics, 4:175–177
 - equity real rates of return, 4:165
 - equity risk premium, 3:34–35, 39
 - exchange rate linkages with, 3:75
 - exit taxes, 2:306–307
 - expected returns for equities/bonds, 3:25
 - Fed model with US data, 3:145–146
 - formative-stage companies, 5:29
 - foundations, 2:474, 476–478
 - GDP growth and business cycles, 3:68–69
 - generation-skipping transfer tax, 2:296
 - government bond index returns, 4:128, 129
 - growth accounting in, 3:126, 127
 - in Hague Conference, 2:304
 - health/medical insurance, 2:421
 - hedge fund market, 5:61
 - indexed portfolio regulation, 4:181
 - inflation, 3:55–56
 - inflation-indexed bonds, 3:90–91
 - inflation-protected bonds, 3:196
 - insurance industry, 2:489
 - interest income taxation, 2:233
 - international investing, 3:201; 4:150
 - inventory/sales ratio, 3:52
 - investment-grade credit bonds, 4:67, 68, 82–83, 86–87
 - investors in private equity funds, 5:33
 - laws on transparency in banking, 2:311
 - legal system and wills in, 2:274
 - life insurance companies, 2:490–491, 493–498
 - long-term government bonds, 3:244–246
 - macroeconomic linkages, 3:74
 - managed care facilities, 2:177
 - managed futures market, 5:87
 - market bubbles, 2:142
 - market integration, 3:43
 - mismatch in character, 2:353–354
 - monetary policy, 3:65–66
 - monetizing tax-free exchanges, 2:369

- United States (*continued*)
 municipal bond futures contracts in, 5:226
 non-life insurance companies, 2:501, 503–505, 507
 normal distribution of common stocks, 2:191–192
 ownership of private business enterprises, 2:322
 pensions and pension funds, 2:390; 4:163; 5:9
 P/E ratios, 3:95
 PMI, 3:62
 prepaid variable forwards, 2:330
 private equity capacity in, 5:28
 private equity returns, 5:36–37
 prudent person concept, 3:262
 real estate investment in, 5:12–19, 23–24
 real GDP growth rate, 3:33
 recessions, 3:60
 registration of CTAs and CPOs, 5:86
 residence–source conflicts, 2:307
 return on government bonds, 3:89–90
 sector rotation, 4:87, 88
 spousal exemptions for estate tax, 2:297
 stock returns and monetary policy in, 6:80
 swap spreads, 4:80–81
 taxable gifts, 2:291
 tax-advantaged savings accounts, 2:246
 taxation of citizens and residents, 2:305
 tax-free gifts, 2:289
 tax on stock purchases, 2:323
 tax rates, 2:180
 tax regime, 2:231, 347
 tax treatment of irrevocable trusts, 2:183
 tax treaty with Switzerland, 3:200
 TFP growth, 3:70
 trade partners, 3:81, 82
 upstairs markets, 6:17n.8
 value stock in, 2:144
 venture capital activity in, 5:35
 wealth taxes, 2:306
 weekend effect, 2:139
 yield curves, 2:505–506; 6:81
- US agency benchmark curve, 4:80
 US Commerce Department, 3:82
 US Commodity Futures Trading Commission, 3:343; 5:86
 US Consumer Price Index (CPI), 2:482–483; 3:151, 152, 196
 US Consumer Price Index for All Urban Consumers (CPI-U), 3:13, 44
 US dollar, 3:101
 Australian dollar vs., 4:132–133
 benefits of currency exposure for, 3:322–323
 converting yen into, 5:371–372
 currency code, 3:307
 in currency pairs, 3:308, 309, 310n.7, 343, 360
 dual-currency bonds in, 5:373–376
 and government bond index returns, 4:129
 as haven currency, 3:371
- US Federal Reserve Bank, policies of, 6:80
 US Generally Accepted Accounting Principles (US GAAP)
 capital gains for non-life insurance companies, 2:504
 and GIPS, 6:262
 insurance companies, 2:491
 pension expense, 2:459
 US Securities and Exchange Commission (SEC)
 benchmarks, 3:400
 financial risk reporting required by, 5:169
 registration of hedge funds with, 5:57n.79
 US Treasury bills (T-bills)
 and capital market expectations, 3:244
 in capital market forecasts, 3:44
 interest rate futures on, 4:115
 as interest rate swap benchmark, 4:120
 nominal risk-free interest rate, 3:36
 in rising vs. declining markets, 6:230
 in semiactive equity investing, 4:211
 Sharpe ratio of, 5:190
 in surplus efficient frontier, 3:245, 246
 yield curve of T-bonds and, 3:55
 US Treasury bond futures, 5:221
 US Treasury bonds (T-bonds)
 credit assets vs., 4:66
 and Fed model, 3:35, 147
 fixed-income portfolio management with, 4:56–57
 interest rate futures on, 4:115
 junk bond yield vs., 3:273
 and macroeconomic influences on credit spreads, 4:72
 and spread duration, 4:21, 36
 yield curve of T-bills and, 3:55
 US Treasury debt, maturity premium for, 3:37
 US Treasury Inflation-Protected Securities (TIPS), 2:390; 3:90–91, 196–197
 US Treasury notes, 3:148; 4:115, 116
 US Treasury securities
 and Fed model, 3:145–147
 interest rate futures on, 4:115, 116
 interest rates and prices, 6:163
 US Treasury spot curve, 4:34, 80
 US Treasury strips, 5:219n.4
 US Treasury yield curve, 4:80, 81
 unit-linked life insurance, 2:490n.20
 universal banking, 2:509–510
 universal life insurance, 2:407, 490n.20
 universes, manager, 3:400–401
 University of Michigan Survey, 3:102
 University of Virginia Investment Management Company (UVIMCO), 5:10–11
 unrealized multiple, 6:265, 292
 unrealized profit/loss, 6:23, 25
 unrelated business income, 2:477, 485
 unskilled mutual funds, 2:58–59
 UNSNA. *see* United Nations System of National Accounts
 unsolicited trading requests, 1:92–93
 unstructured modeling, 3:78n.66
 updates, 1:94, 131–132
- up-from-cost sell discipline, 4:210
 upstairs markets, 6:17n.8
 uptick rules, 4:183
 urgency of the trade, 6:33
 Uruguay, 2:304; 3:43
 US BIG Bond Index. *see* Citigroup Broad Investment-Grade Bond Index
 USD/AUD. *see* Aussie-dollar market
 USD/EUR. *see* Euro-dollar market
 USD/GBP. *see* Sterling-dollar market
 USD/NZD currency pair, 3:360
 utility, 2:8–9, 11–12
 utility function of wealth, 2:13–14
 utility maximization, 2:15–17
 utility theory
 and indifference curve analysis, 2:16–17
 prospect theory vs., 2:27
 risk aversion in, 2:13
 in traditional finance, 2:8–9
 utility function of wealth, 2:13–14
 UVIMCO. *see* University of Virginia Investment Management Company
- V**
 valid benchmarks, 3:396, 397, 412; 4:15–16
 valuation. *see also* equity market valuation
 disclosure of methods, 1:257
 and endowment bias, 2:78–79
 GIPS principles related to, 6:270–273
 of insurance company investments, 2:498
 and interest rate risk, 2:491
 in macro attribution, 6:150
 Performance and Valuation (AMC Part E), 1:243, 254–255
 valuation discounts, 2:297–298
 valuation-level sell discipline, 4:210
 valuation reserve, 2:491n.21
 value. *see also* relative-value analysis
 accumulated, 4:31–33
 dollar value of a basis point, 4:34n.26
 of immunized portfolios, 4:31–33, 38–39
 present value distribution of cash flows, 4:20–21
 price value of a basis point, 4:34n.26
 relative, 4:70
 target, 4:31–33
 value-added real estate strategies, 6:261
 value-added taxes, 2:226
 value at expiration
 bear spread, 5:292–294
 box spread, 5:306, 307
 bull spread, 5:289, 291
 butterfly spread, 5:295–296, 298
 call options, 5:275–277, 281
 collars, 5:302
 covered calls, 5:282, 283
 protective puts, 5:286, 287
 put options, 5:278–281
 straddles, 5:303–305
 value at risk (VaR)
 advantages and limitations, 5:168–170
 credit, 5:174
 elements, 5:154–155

- extensions and supplements, 5:170–171
 - in fixed-income strategies, 4:113
 - measuring, 5:153–171
 - analytical method, 5:155–160
 - historical method, 5:160–166
 - Monte Carlo simulation method, 5:167–168
 - position and aggregate, 2:511
 - probability levels and time horizons, 5:158–159
 - and risk budgeting, 5:183
 - surplus at risk, 5:168
 - value investment style, 3:401n.9; 4:185–188
 - defined, 4:184
 - and fundamental anomalies, 2:33–34
 - growth vs., 4:185–186
 - long-only investing with, 5:99
 - Microsoft and, 4:186
 - sell disciplines, 4:210
 - Value Line Arithmetic Composite Index, 4:176
 - Value Line Composite Average, 3:406
 - value managers, 3:399
 - value-motivated traders, 6:34, 35
 - values, CFA Institute, 1:15
 - value stocks, performance of, 2:144
 - value-weighted indexes, 4:169, 170, 172–173
 - Vanguard Admiral class shares, 4:179
 - Vanguard Group, Inc., 4:167, 179
 - Vanguard Investments Australia, 2:58
 - Vanguard LifeStrategy® funds, 3:250
 - Vanguard Mid-Cap Growth Fund, 4:202–203
 - Vanguard mutual funds, 5:184–185
 - vanilla options, 3:356
 - van Leeuwen, Erik, 4:91
 - VaR. *see* value at risk
 - VaR-based position limits, 5:192
 - variable annuities, 3:260
 - advantages and disadvantages of fixed and, 2:426–428
 - deferred, 2:423–424
 - immediate, 2:424
 - variable life insurance, 2:490n.20
 - variable prepaid forward strategy, 6:77
 - variables, endogenous vs. exogenous, 3:20
 - variable universal life insurance, 2:490n.20
 - variance
 - and bond duration, 4:114
 - of domestic-currency returns, 3:316–317
 - Markowitz mean-variance framework, 4:128
 - maturity, 4:44
 - semi-, 4:113
 - variance-covariance method, 5:155–160
 - variation in returns over time, 3:180–182
 - VC. *see* venture capital
 - VC funds. *see* venture capital funds
 - VCTs. *see* venture capital trusts
 - vega
 - defined, 3:336
 - and market risk, 5:152
 - and volatility risk, 5:339
 - in volatility trading, 3:337
 - Venezuela, 2:231, 304, 347
 - venture capital (VC). *see also* private equity
 - defined, 5:27, 31
 - demand for, 5:29–30
 - for IPOs, 5:29
 - supply of, 5:31–33
 - venture capital firms, 5:29n.41
 - venture capital funds (VC funds), 5:31, 39
 - venture capitalists, 5:31
 - venture capital trusts (VCTs), 5:31
 - VE Post Venture Capital Index, 3:44
 - verification
 - GIPS definition, 6:275n.48, 293
 - GIPS provisions on, 6:275–280
 - implementation of, 6:275–276, 278
 - preparing for, 6:278
 - verification firms, selecting, 6:275–276
 - Verification/Practitioner Subcommittee, 6:212
 - verification report, 6:275–277, 293
 - Vernley, Mark (case study), 1:198–202
 - vested (term), 2:383n.1, 454n.1
 - Viceira, Luis M., 3:322–323
 - Vienna Convention on the Law Treaties, 2:309
 - Vietnam, 2:231, 347
 - vintage effects, hedge fund, 5:77
 - vintage year, 5:37; 6:265, 293
 - violations of ethical standards
 - case studies, 1:197–237
 - consultants, 1:198–202
 - Pearl Investment Management, 1:202–213
 - practice problems, 1:214–230
 - solutions to problems, 1:231–237
 - dissociating from, 1:27–28
 - and legal violations, 1:204
 - lists of, 1:54
 - notification of known, 1:27
 - by others, participation or association with, 1:23
 - sanctions, 1:15
 - supervisor's response to, 1:121
- volatility
 - of annuity benefits, 2:427
 - in binomial model, 5:339
 - in Black–Scholes–Merton pricing option, 5:152, 339
 - cash flow, 2:492
 - downside, 5:80–81
 - of emerging markets, 3:76
 - and expected value of returns, 2:198, 199
 - of hedge funds, 5:80–81
 - and historical analysis, 3:17
 - of human capital, 2:441
 - and market integration, 3:207
 - and market risk, 5:151–152
 - as measure of risk tolerance, 3:188
 - and measure of wealth, 2:163
 - portfolio, 2:251; 3:316–317
 - price, 2:176
 - and sustainability of spending rates, 2:285, 287
 - volatility clustering, 3:27
 - volatility overlay programs, 3:338
 - volatility ratio, 3:277–278
 - volatility risk, 5:339
 - volatility smile, 5:196
 - volatility trading, currency management and, 3:336–341
 - Volcker, Paul, 3:60; 6:80
 - “vol” sectors, spread measures for, 4:79–80
 - volume, trading, 1:70, 246
 - volume-weighted average price (VWAP), 6:23–24, 27–28
 - volume-weighted average price (VWAP) strategy, 6:43
 - volunteers, compromising of CFA Institute integrity, 1:169
 - voting
 - proxy voting policies, 1:76–78
 - shareholder voting policies, 1:257
 - voting control, 2:328
 - culture capital, 5:100
 - culture funds, 5:100
 - culture investors, 5:100
- W**
- waiting period, of disability income insurance, 2:418
 - waiver of premium clause, of disability income insurance, 2:418
 - Wal-Mart Stores, 3:70; 4:169n.10, 171–174
 - weak-form EMH, 2:29–31
 - wealth
 - after-tax, 2:225–226
 - and behaviorally modified asset allocation, 2:84–86
 - changes in, 6:67–68, 71–76
 - measure of wealth classifications, 2:163
 - net, 2:390, 397–400
 - source of wealth classifications, 2:162
 - utility function of, 2:13–14
 - wealth concentration, 2:327
 - wealth effect, permanent income hypothesis and, 3:68
 - wealth management. *see* private wealth management
 - wealth relative, 6:127–128
 - wealth taxes, 2:238–239
 - and cross-border estate planning, 2:306
 - and estate planning, 2:276
 - in global tax structures, 2:226
 - and tax planning, 2:232
 - wealth transfers, managing concentrated positions with, 2:337–340
 - wealth transfer taxes, 2:182
 - and concentrated positions, 2:339–340
 - and cross-border estate planning, 2:306
 - and estate planning, 2:276–277
 - and investment policy statements, 2:179
 - webpages, maintaining, 1:47
 - weekend effect, 2:139
 - weighting scheme, for manager-based hedge fund indices, 5:64
 - Wells Fargo, 4:166–167
 - Wen Jiabao, 3:128

- Western Europe. *see also specific countries*
 managed care facilities, **2:177**
 universal banking, **2:509; 3:129**
 whistleblowing, **1:108, 113**
 whole life insurance, **2:406–407, 489n.19**
 Wilcox, Jarrod, **2:335n.4**
 wild card options, **4:116**
 wills
 defined, **2:273**
 and legal system, **2:274–276**
 and trusts, **2:183**
 Wilshire 5000 Index, **6:188, 196**
 and adjustments to composite-specific minimum asset levels, **6:244**
 as broad-market index, **6:136**
 diversification with, **5:378**
 investability of, **3:407**
 value, growth, and size subsets of, **3:401**
 Wilshire Associates, **3:401; 5:16, 17; 6:210**
 Within-Sector Selection return, **6:159–160**
 won, Korean, **3:307, 372**
 workforce age, **2:461–462**
 working capital allocations, **5:185**
 World Bank, **3:76, 102; 4:73**
 WorldCom, Inc., **2:122; 4:76; 5:100**
 World Trade Center bombing (1993), **5:145**
 worldwide economic indicators, **3:80–81**
 worst-case scenario analysis, **5:172**
 Wrap Fee/Separately Managed Account (SMA) Portfolios (GIPS Section 1.8), **6:217, 268–270**
 Wright, Christopher, **5:9n.2**
 writing, after exam period, **1:168**
 written material, brought into exam room, **1:167**
 Wu, Wei, **4:91**
- Y**
 Yardeni, Edward, **3:145**
 Yardeni model, **3:148–151, 158–160**
 yen, Japanese
 benefits of currency exposure for, **3:323n.11**
 currency code, **3:307**
 in currency pairs, **3:308, 309, 310n.7, 343**
 in currency swaps, **5:371–372**
 as haven currency, **3:371**
 yield
 bond, **5:219–221**
 and annuity pricing, **2:426**
 nominal, **3:75**
 real, **3:89, 91**
 yield to maturity, **3:35**
 yield to worst, **3:35n.38**
 and duration hedging, **4:119–120**
 high yield investment style, **4:187–188**
 income, for immediate fixed annuities, **2:424–425**
 and leverage, **4:107–109**
 portfolio, **2:494, 505**
 repurchase, **3:33**
 roll, **3:346–348**
 yield beta, **4:120; 5:222, 228n.17**
 yield curve(s), **2:505–506**
 in benchmark bond index selection, **4:18**
 for discounting liabilities, **4:34**
 of immunized portfolios, **4:39**
 and indexed portfolio costs, **4:25–26**
 and monetary/fiscal policy, **3:66**
 and portfolio monitoring, **6:81–82**
 as predictor of economic growth, **3:55**
 and total return of immunized portfolios, **4:39–40**
 Treasury, **4:80, 81**
 twists in, **4:18**
 yield curve management, **4:130**
 yield curve risk, **4:18**
 yield enhancement, **2:354**
 yield spread, **4:82, 119–120**
 yield to maturity (YTM), bond, **3:35**
 yield to worst, **3:35n.38**
 yuan, Chinese, **3:307, 372**
- Z**
 zakat, **2:231, 347**
 zero-alpha mutual funds, **2:58–59**
 zero-based budgeting process, **6:181**
 zero-cost collars, **5:300**
 zero-premium collars, **2:349–350; 6:77**
 zero risk investments, **5:190**
 zero-sum derivatives markets, **5:90**
 zero-sum game, trading as, **6:49**
 zero-volatility spread, **4:36**
 Zheng, Hu, and Bigsten (ZHB) projections, **3:128–129**
 Zurich, Switzerland, **2:310–311**
 Zurich Institutional Benchmark Series, **5:63**
 Zweig, Martin, **6:80**