

- a priori probability 28  
 absolute advantage 83  
 accounting equation 18, 97–8, 99  
 accounting profit 58  
 accounting warning signs 152  
 accounts payable 119, 175  
 accounts receivable 119, 175  
 accruals 98, 108  
 activity ratio 122  
 ADR *see* American Depositary Receipts  
 after-tax cash flow (ATCF) 291  
 aggregate demand and supply 54, 70–1, 72  
 aggregate output  
   sample question/answer 72, 301  
 alternative hypothesis 41  
 alternative investments 287, 289  
   closely held companies 293, 294  
   equity investment 292  
   Exchange Traded Funds 292  
   fees 290  
   fund of funds investment 293  
   hedge funds 292, 293  
   net asset value of fund 290  
   open-end/closed-end fund difference 290  
   overview 288  
   real estate investment 293  
   real estate valuation 291–2  
   sample question/answer 294, 315  
   venture capital investment 292  
 American Depositary Receipts (ADR) 216  
 American options 277, 278–9  
 amortization 135  
 annual interest rate 15–16  
 annual pay bond 254  
 annual report 95  
 annuity 14, 16, 17  
 arbitrage 278–9  
   definition/role 266–7  
   profit 249–50  
 arbitrage-free value 226, 249–50  
 arithmetic mean 22  
 asset-backed security 237–8  
 asset-based valuation models 223  
 asset/s 96, 113  
   allocation 46, 197  
   classes 197  
   current/non-current 114  
   leasing/purchasing 145  
   prices 36  
   tangible/intangible 134, 135–6  
   values 135–6  
 ATCF *see* after-tax cash flow  
 auctions 55  
 audits 95  
 average cost 59  
 average product 59  
 average revenue 59  
 backwardation 295  
 balance of payments (BOP) 85  
 balance sheet 94, 98, 178–9  
   assets 114  
   common-size 112–13  
   elements 113  
   formats 113–14  
   liabilities 114  
   limitations 113  
   liquidity/solvency ratios 113  
   sample question/answer 115, 303  
   shareholder equity 114–15  
 balancing adjustment 98  
 bank discount yield 14, 20  
 banker's acceptances 239  
 barter transactions 108  
 Bayes' formula 27–8  
 Bernoulli random variable 34, 36, 299  
 beta calculation 165, 193  
 bias 39  
 binomial random variable 34  
 binomial trees 34  
 bond equivalent yield 14, 20–1, 175, 254  
 bond sectors and instruments 236–9  
   asset-backed security 237–8  
   corporate debt 239  
   coupon/principal strips 236–7  
   government securities 238  
   mortgage-backed securities 237  
   primary/secondary markets 239  
   sample question/answer 240, 311  
 Bond-Yield plus Risk Premium method 165  
 bonds  
   accrued interest, full price, clean price 229  
   affirmative/negative covenants 229  
   arbitrage-free value 226  
   call options 234  
   callable/prepayable security disadvantages 233  
   coupon rate 227, 231, 232  
   deferred coupon 228  
   duration/dollar duration 234, 258  
   embedded option 226, 228  
   exchange rate risk 235  
   expected cash flow estimation 250  
   indentures 229  
   inflation risk 235  
   institutional investors 229  
   interest rate risk 232–3  
   investment risk 226, 234  
   liquidity risk 234–5  
   margin buying/repurchase agreements 229  
   maturity 250  
   measurement of interest rate risk 257–61  
   non-amortizing 229  
   par value 227  
   price 227  
   price relative to par value 231, 232  
   redemption/retirement 229  
   reinvestment risk 233  
   risks 231–5  
   sample questions/answers 235, 240, 311  
   sovereign/event risk 235  
   spot/forward rates 226  
   step-up notes 228  
   taxable/tax-exempt 242  
   valuation 226, 247–50  
   yield 231, 232  
   yield measures 252–3  
   yield volatility 233  
   yield-curve risk 233  
   zero coupon 228  
 book value of equity 217, 222  
 book value per share 170  
 bootstrapping 254  
 BOP *see* balance of payments  
 borrowed costs 134  
 breakeven point of production 60  
 breakeven price of option 286  
 breakeven quantity of sales 169  
 budget constraint 56, 57  
 business cycles  
   sample question/answer 76, 301  
 business risk 168  
 CAL *see* capital allocation line  
 calculators 17

- callable bonds 233, 258
- capital allocation line (CAL) 184, 189, 190, 192–3
- capital asset pricing model (CAPM) 164, 184, 193–4
- capital budgeting
- calculating 159–60
  - evaluation/selection of projects/methods 161
  - NPV, company value, share price relations 162
  - popularity of methods 162
  - principles 160–1
  - process/categories 160
  - sample question/answer 162, 306
- capital estimation
- sample questions/answers 167, 306–7
- capital gain or loss 256
- capital market line (CML) 192–3
- capital rationing 161
- CAPM *see* capital asset pricing model
- cash dividend 171
- cash flow 14, 17, 18
- effect on options 278–9
  - effects on net daily cash position 176
  - estimation 160–1
  - present-value model 222
- cash flow statements 94, 99
- accounting shenanigans 153
  - CFO, CFI, CFF 116–17
  - common-size 120
  - direct/indirect 117–19
  - firm, equity, performance ratios 119–20
  - non-cash investment/finance activities 120
  - sample questions/answers 120–1, 153, 303–4, 306
- cash settlement 268–9
- CBOs *see* collateralized bond obligations
- CDOs *see* collateralized debt obligations
- central banks 79
- central limit theorem 37–8
- central tendency, measures of 22
- certificate of deposit (CD) 239
- CFA Institute 3
- chart patterns, common 46
- Chebyshev's inequality 23
- clean price 229
- closed-end fund 290
- closely held companies 293, 294
- CML *see* capital market line
- CMO *see* collateralized mortgage obligations
- Code of Ethics 182
- difference with Standards of Professional Conduct 2
  - ethical responsibilities 5
  - fundamental to values of CFA Institute 3
  - key points 2
  - knowledge learning outcome statements 3–5
  - reciting/understanding 1–2
  - sample questions/answers 7, 297
  - six components 3–4
  - violations/sanctions 3
  - see also* ethics; Standards of Professional Conduct
- coefficient of variation 23
- collateralized yield 295
- collateralized bond obligations (CBOs) 239
- collateralized debt obligations (CDOs) 239
- collateralized mortgage obligations (CMO) 237
- combination notation 29
- commercial paper 239
- commodities 208, 288
- index strategy 296
  - investment 295–6
  - return and risk 295
  - sample question/answer 296, 315
  - spot rates/expected future prices 295
- common markets 84
- common stock 215
- common-size balance sheet 112–13
- common-size cash flow statement 120
- common-size income statement 109
- company analysis *see* industry and company analysis
- company comparisons 155–6
- company disclosures 104
- company value 162
- comparable method 294
- comparative advantage 83
- compliance
- benefits 9
  - claiming 8–9
  - composite 9
- compound rate 16
- comprehensive income 111
- concentration measures 66
- conditional/unconditional probability 28
- confidence interval
- estimate 37, 38–9
  - relation with hypothesis test 41
- constant-cost 61
- consumer choice theory 56
- consumer demand
- sample question/answer 30, 57
- consumer surplus 53
- contango 295
- contingent claim, definition 266
- continuous compound rates of return 36
- continuous random variable 35
- continuous uniform distribution 35
- convexity 257–8, 260
- modified/effective 261
- corporate bonds 239
- corporate finance 157
- capital budgeting 159–62
  - cost of capital estimation 163–7
  - dividends/share repurchases 170–2
  - financial statement analysis 178–9
  - governance of listed companies 180–2
  - measures of leverage 168–9
  - overview 158
  - sample questions/answers 162, 167, 169, 172, 177, 179, 182, 306–8
  - working capital management 173–7
- corporate governance of listed companies
- board independence 182
  - code of ethics 182
  - definition 182
  - evaluation of committees 181
  - qualifications of board members 182
  - rules 180–1
  - sample question/answer 182, 308
  - shareowner perspective 182
- correlation 28, 29, 34
- cost method 291, 294
- costs 59–61
- borrowing 134
  - capitalized/expensed difference 133–4
  - inventories 129–30, 132
  - long-lived assets 133–4
- counting problems 29
- sample question/answer 29, 299
- country risk premium 166
- coupon paying 248
- coupon rates 227–8, 231, 232
- coupon strips 236–7
- covariance 28–9, 188
- covenants, affirmative/negative 229
- covered call 285–6
- credit analysis 123–4
- credit ratings 234
- credit risk 234, 272, 273
- credit spread 242
- creditors 145
- cross-price elasticity of demand 53
- cross-rate 87
- cross-sectional data 39
- cumulative relative frequency 24
- currency exchange rates
- sample question/answer 88, 302
- currency forward contract 271
- currency swap 283
- current/non-current assets 114
- customer bargaining power 219
- cycles 46
- data set 24
- data-mining bias 39
- dealer 270
- debt 91
- break-points 167
  - corporations 239
  - covenants 145
  - de-recognition 145
  - financial statement presentation/disclosure 145
  - investment 155
  - obligations 239
- debt securities
- bonds, coupon rate structures, floating-rate 227–8
  - embedded options 228
  - features 227–30
  - sample question/answer 230, 251, 311, 312
  - valuation 247–50
- debt-rating method 164

- deciles 24
- decision making 57, 84
- decision rule 41
- declaration date 171–2
- decreasing-cost 61
- deferred tax assets/liabilities 140–1
- defined benefit pension plans 146, 147
- defined contribution 146, 147
- deflation 75
- demand and supply
  - aggregation 54, 70–1
  - application of LOS 51–4
  - auctions 55
  - consumer demand 56–7
  - consumer, producer, total surplus 53
  - curves 52, 54, 70–1
  - elasticities 53–4, 63, 66
  - equilibria 54
  - excess 52
  - the firm 58–61
  - government regulation 55
  - imbalance 52
  - inverse 52
  - market interference 52
  - market types 54
  - principles 51
  - sample questions/answers 55, 57, 61, 300–1
- depository receipts 216
- depreciation 110, 118
  - calculation 134–5
- derivatives
  - definitions 265
  - forwards 264, 268–71
  - futures 264, 272–3
  - instruments 265–7
  - options 264, 276–80
  - overview 263–4
  - purposes/criticisms 266
  - risk management of option strategies 285–6
  - sample questions/answers 267, 271, 275, 281, 284, 312–14
  - swaps 264, 282–3
- descriptive statistics 24
- developing market 166
- dilutive/anti-dilutive securities 109
- diminishing marginal returns 59
- direct/indirect foreign exchange 86–7
- dirty price 229
- disclosures 132, 136, 141, 146
- discount rate 17, 249, 250
- discount-basis yield 175
- discounted after-tax cash flow (ATCF)
  - method 291
- discounted cash flow
  - sample question/answer 21, 298
- discounted payback period 160
- discrete compound rates of return 36
- discrete random variable 35
- discrete uniform random variable 34
- disinflation 75
- Dividend Discount Model 165, 222
- dividend growth models 223
- dividends/share repurchases
  - book value per share 170
  - cash dividends equivalence 171
  - comparison of methods 172
  - definitions 171
  - earnings per share 170
  - payment chronology 171–2
  - sample question/answer 172, 307
- dollar duration of a bond 234
- DuPont formula 123
- duration of a bond 234
  - definitions 261
  - effective 261
  - measurement 258–60
- earnings per share (EPS) 108–9, 170
- EBIT (or operating profit) 110
- economic growth 69, 72
- economic indicators 75
- economic profit 58
- economic rent 59
- economic unions 84
- economics
  - aggregate output 69–72
  - business cycles 73–6
  - currency exchange rates 86–8
  - demand and supply 51–61
  - economic growth 69–72
  - firm/market structures 62–6
  - international trade/capital flows 83–5
  - macroeconomics 50
  - microeconomics 50
  - monetary/fiscal policy 77–80
  - overview 50
  - prices 69–72
  - sample questions/answers 55, 57, 61, 66, 72, 76, 80, 85, 88, 300–2
- economy well-being 242
- effective annual yield 20
- efficient frontier 190
- Efficient Market Hypothesis 266–7
  - market pricing anomalies 210
  - market value/intrinsic value difference 210
  - psychological factors 211
  - sample question/answer 211, 309
  - weak, semi-strong, strong 209–10
- elasticities 53–4, 63, 66
- Elliott Wave Theory 46
- embedded options 226, 232, 242
- empirical probability 28
- end user 270
- EPS *see* earnings per share
- equilibrium 54, 57, 63, 66
- equity 96, 99, 199, 213
  - analysis 123–4, 206–11, 213, 215–17
  - balance sheet 113, 114, 115
  - comparisons, calculations, interpretations 202–4
  - financial intermediaries 202
  - forward contract 270
  - functions/characteristics of financial system 201–2
  - indices 208
- industry/company analysis 200, 218–20
- investment 155, 292
- markets 200
- overview 200
- ratio 119
- real estate 293
- sample question/answer 205, 309
- securities 200
- shareholders' 114
- statement of changes in 94
- valuation 200, 221–4
- equity markets and analysis 206
  - index construction/management 206–7
  - market efficiency 209–10
  - psychological factors 211
  - rebalancing/reconstitution of index 207
  - sample questions/answers 208, 211, 309
  - security market index calculation/interpretation 206, 208
  - types of indices 208
- equity securities
  - characteristics/role 215
  - market value/book value difference 216–17
  - non-domestic 216
  - public/private 215–16
  - risk/return characteristics 216
  - sample question/answer 217, 310
- equity swap 283
- equity valuation
  - asset-based valuation models 223
  - cash flow models 222
  - categories 223
  - concepts/basic tools 221–4
  - dividend discount model 220
  - estimations 223
  - multiplier model 222–3
  - non-callable/non-convertible preferred stock 224
  - peer group 220
  - sample question/answer 224, 310–11
- estimation 37–9
- estimator 37
- ETFs *see* Exchange Traded Funds
- ethics, importance of 1
  - see also* Code of Ethics; Standards of Professional Conduct
- Euribor 270
- Eurodollar 270
- European options 277, 278–9
- event risk 235
- events 28
  - exhaustive 28
  - (in)dependent 28
  - joint probability 28
  - mutually exclusive 28
  - probability of for/against 28
- ex-dividend date 171–2
- exchange rate risk 235
- Exchange Traded Funds (ETFs) 292
- exchange-traded derivatives 265
- exchange-traded options 279
- expense recognition 110
- expenses 96, 129

- external credit enhancements 237–8
- external efficiency 202
- factorial notation 29
- factors of production 60
- FASB *see* Financial Accounting Standards Board
- FCFF *see* free cash flow to the firm
- Fibonacci numbers 46
- FIFO (first in, first out) 130, 132
- Financial Accounting Standards Board (FASB) 102
- financial analysis techniques
  - sample question/answer 125, 304
- financial information 103
- financial leverage 169
- financial notes/supplementary information 94
- financial ratios 90, 109
- financial reporting and analysis 89, 94, 107, 149
  - balance sheets 112–15
  - cash flow statements 116–21, 153
  - financial statements 89, 90, 93–5
  - income statements 90, 107–11
  - income taxes 138–41
  - inventories 129–32
  - long-lived assets 133–7
  - mechanics of reporting 96–100
  - non-current (long-term) liabilities 142–7
  - overview 90
  - quality 91, 151–2
  - red flags/accounting warning signs 151–2
  - sample questions/answers 100, 152, 302, 306
  - specific accounting issues 90–1
  - standards 101–4
  - techniques 122–5
- financial reporting standards 101
  - company disclosures 104
  - comparison of concepts 103
  - framework characteristics 103–4
  - global convergence/barriers 102–3
  - importance 102
  - intangible assets 134
  - monitoring developments 104
  - requirements 103
  - roles/attributes 102
  - sample question/answer 104, 303
- financial risk 168
- financial statement analysis
  - accounting equation 97–8
  - accruals/adjustments 98
  - balance sheet statement 178–9
  - cash flows/owners' equity link 99
  - comparisons with another company 155–6
  - credit quality of potential debt investment 155
  - five elements 96–7
  - future net income/cash flow 155
  - income/balance sheet link 99
  - intangible assets 136
  - inventories 132
  - past performance 154
  - pro forma income 178–9
  - sample questions/answers 95, 156, 302, 306
  - screening potential equity investments 155
- financial system 201–2
- The Firm
  - costs 59, 61
  - demand and supply 58–61
  - diminishing marginal returns 59
  - diseconomies of scale 60
  - exit/entry 66
  - labor 59
  - market structures 62–6
  - output 60
  - production 60
  - profit 58, 61
  - resources 60
  - revenue 59
  - sample questions/answers 61, 66, 301
- firm ratio 119
- fiscal balance 69–70
- fiscal policy
  - sample question/answer 80, 301–2
- Fisher effect 78
- fixed income 225, 245
  - bond sectors/instruments 236–9
  - debt securities 237–30
  - forward rates 2: 2–6
  - interest rate risk 257–61
  - overview 226
  - risk associated with bond investment 231–5
  - risks 226
  - sample questions/answers 230, 235, 240, 244, 251, 256, 261, 311–12
  - spot rates 252–6
  - valuation of debt securities 247–51
  - yield measures 252–6
  - yield spreads 241–3
- fixed income indices 208
- fixed rate bonds 252–3
- fixed rate debt capital 164
- float-adjusted market capitalization
  - weighting 207
- floating rate securities (or variable rate securities) 228
- flotation costs 167
- flow-of-funds indicators 45
- forward discount (or premium) rate 87–8
- forward exchange rate 86, 87, 88
- forward rate 226, 255–6
- forward rate agreement (FRA) 268, 269, 279–80
- forwards 264
  - contract 270
  - dealer/end user difference 270
  - default risk 268–9
  - definition 266
  - delivery/settlement 268–9
  - equity forward contract 270
  - sample question/answer 271, 313
- fraud 151–2
- free cash flow to the firm (FCFF) 119–20
- free and clear equity 293
- frequency distribution 24
- frequency polygon 24
- full valuation method 260–1
- fund of funds 293
- future net income 155
- future value (FV) 14, 16
- futures 264
  - characteristics 272
  - definition 266
  - margin 272, 273–4
  - sample question/answer 275, 313
  - termination at or prior to expiration 273–4
- FV *see* future value
- GDP *see* gross domestic product
- geometric mean 20, 22, 23
  - sample question/answer 25, 298
- Giffen goods 57
- GIPS *see* Global Investment Performance Standards
- Global Depository Receipts (GLR) 216
- Global Investment Performance Standards (GIPS)
  - basic idea 2
  - beneficiaries 2
  - benefitting from compliance 9
  - characteristics, scope, implementation 11
  - claiming compliance 8–9
  - composites 9
  - key elements 2
  - nine major sections 11
  - reasons for creation 8
  - sample questions/answers 10, 12, 297
  - verification 9
- GLR *see* Global Depository Receipts
- good-till-cancelled (GTC) vs time limited orders 204
- goodwill 134
- Gordon's Growth Model 165, 222
- governance, corporate *see* corporate governance of listed companies
- government regulation/intervention 55
- government securities 238
- gross domestic product (GDP) 50, 71–2
- gross profit 130–1
- gross return 188
- gross vs net reporting 108
- GTC *see* good-till-cancelled
- harmonic mean, median, mode 22, 23
- head and shoulders reversal 46
- Heckscher–Ohlin model 83
- hedge funds 208, 293
- hedonic price estimation 291
- hidden orders 204
- histogram 24
- historical simulation 36
- holder-of-record 171–2

- holding period return 20, 36  
 holding period yield 14, 20  
 hypothesis testing  
   population means 42–3  
   relation with confidence interval 41  
   sample question/answer 44, 300
- IASB *see* International Accounting Standards Board
- IFRS *see* International Financial Reporting Standards
- impairment of assets 135–6  
 income effect 56  
 income elasticity of demand 53  
 income method 291, 294  
 income statements 90, 107  
   sample question/answer 111, 303
- income taxes 90  
 calculation 139  
 deferred items 140  
 deferred liabilities 139  
 disclosures 141  
 key provisions under IFRS/US GAAP 141  
 key terms 140  
 profit/taxable income difference 140  
 sample question/answer 141, 305  
 tax base of assets/liabilities 139  
 tax rate changes 140  
 temporary/permanent pre-tax accounting/taxable income 140  
 valuation allowance 141
- indices 73
- indifference curves 57, 189
- industry and company analysis 218  
 business cycle 219  
 classifications 219, 220  
 elements/characteristics 219  
 external factors 220  
 internal factors 219  
 life cycle phase 219  
 sample question/answer 220, 310  
 uses of/relation to company analysis 219
- inferential statistics 24
- inferior goods 57
- inflation 75  
 calculating 73  
 premium 17  
 risk 235
- initial margin 273–4  
 input level 59
- installment sales 108
- interest rate caps, floors, collars 279–80
- interest rate options 277
- interest rate risk 232–3  
 measurement 257–61
- interest rate swaps 282–3
- intermarket analysis 46
- internal control 95
- internal efficiency 202
- internal rate of return (IRR) 14, 19, 158, 159, 161, 162
- internally developed intangible assets 134
- International Accounting Standards Board (IASB) 102–3
- International Financial Reporting Standards (IFRS) 90, 102, 103, 109, 120, 134, 136, 141
- International Monetary Fund (IMF) 85
- International Organization of Securities Commissions (IOSC) 102
- international trade 83–5  
 sample question/answer 85, 302
- intrinsic value 210, 280
- inventories 90, 119, 175  
 closing (or ending) 130  
 cost formulas 130, 132  
 costs included/costs as expenses 129–30  
 financial statement presentation/disclosure 132  
 impairment 131  
 levels 74  
 measurement 131  
 perpetual/periodic systems 130  
 ratios 131  
 sample question/answer 132, 304  
 valuation methods 130–1
- investment 69–70  
 constraints 197  
 debt 155  
 equity 155  
 portfolio method 185  
 property 136–7  
 short-term policy guidelines 174–5  
 strategies 175
- investment policy statement (IPS) 196, 197
- investments savings (IS) curve 70
- Investor Relations statement 95
- investors 185–6  
 bond market 229  
 major asset classes 190  
 positions in an asset 202  
 psychological behaviour 211  
 risk-averse 188, 193
- IPS *see* investment policy statement
- IRR *see* internal rate of return
- IS curve *see* investments savings (IS) curve
- joint probability function 28
- kurtosis 24, 188
- leases 91  
 advantages 145  
 disclosure 146  
 finance/operating 146
- leverage, measures of *see* measures of leverage
- leveraged equity 293
- leveraged returns 188
- liabilities 96, 98, 113
- LIBOR 243, 269–70
- life cycle models 219
- LIFO (last in, first out) 130, 132
- limit order 204
- liquidity 197, 202, 239  
 measures 173  
 preference theory 243  
 ratio 113, 122  
 risk 234–5  
 sources 176
- liquidity/money supply (LM) curve 70
- listed company governance *see* corporate governance of listed companies
- LM curve *see* liquidity/money supply (LM) curve
- lognormal distribution 36
- long position 202–3, 268–9
- long-lived assets  
 amortization methods 135  
 capitalized/expensed costs difference 133–4  
 de-recognition 136  
 depreciation 134–5  
 financial statement presentation 136  
 impairment 135–6  
 intangible assets 134  
 investment property 136–7  
 revaluation model 135  
 sample question/answer 137, 305
- long-term contracts 108
- look-ahead bias 39
- Macaulay duration 261
- macroeconomics 50
- MAD *see* mean absolute deviation
- maintenance margin 273–4
- major asset classes 190
- Management Discussion and Analysis statement 95
- margin 272  
 buying 229  
 securities market/future market difference 273–4
- marginal cost of capital (MCC) 166, 167
- marginal product 59
- marginal revenue 59
- mark to market accounting 135, 273
- market  
 interference 52  
 model 194  
 order 203  
 regulation 204  
 returns 22–5  
 types 54  
 value 210
- market efficiency *see* Efficient Market Hypothesis
- market pricing anomalies  
 calendar effects 210  
 closed-end investment fund discounts 210  
 momentum and overreaction 210  
 size/value effect 210
- market segmentation theory 243
- market structures 50  
 characteristics 62–3  
 concentration measures 66

- market structures (*continued*)
  - monopolistic competition 64
  - monopoly 65–6
  - oligopoly 64–5
  - perfect competition 63
  - sample question/answer 66, 301
- market value-weighted indices 207
- MCC *see* marginal cost of capital
- mean absolute deviation (MAD) 23
- mean of asset returns 188
- meaningful result 43
- measurement scales 24
- measures of central tendency 22
- measures of leverage
  - calculating/interpreting 169
  - definition/explanation 168
  - effect of financial leverage 168–9
  - sample question/answer 169, 307
- medium term notes (MTN) 239
- microeconomics 50
- minimum-variance portfolio 189
- momentum oscillator indicators 45
  - ROC, RSI, MACD 45
- monetary policy
  - sample question/answer 80, 301–2
- money, time value of *see* time value of money
- money-market yield 14, 20, 175
- money-weighted rate of return (MWRR) 14, 20
- monopolist 66
- monopolistic competition 64
- monopoly 65–6
- Monte Carlo simulation 36
- mortgaged-backed securities 237
- mortgages 293
- MTN *see* medium term notes
- multi-factor models 194
- multiplier model 222–3
- multivariate distribution 34
- mutual funds 186
- mutually exclusive projects 151
- MWRR *see* money-weighted rate of return
  
- national income identity formula 84
- NAV *see* net asset value
- negotiable CDs 239
- net asset value (NAV) 290
- net operating cycle 174
- net operating income (NOI) 291
- net present value (NPV) 14, 19, 158, 159, 161, 162, 292
- net realizable value 131
- net return 188
- new entrants 219
- NOI *see* net operating income
- nominal exchange rate 86
- nominal spread 254
- non-callable/non-convertible preferred stock 164, 224
- non-current (long-term) liabilities 90, 142
  - debt 145
  - defined contribution/benefit pension plans 146–7
  - interest rate of bonds 143–4
  - leasing assets 145–6
  - leverage/coverage ratios 144
  - measurement of bonds 143
  - sample question/answer 147, 305
- non-domestic equity securities 216
- non-equilibrium price 52
- non-recurring items 110
- normal distribution 34
- normal goods 57
- normal profit 58
- NPV *see* net present value
- null hypothesis 41
  
- OAS *see* option-adjusted spread
- oligopoly 64–5
- one-tailed tests of hypothesis 41
- open position 273
- open-end fund 290
- operating leverage 169
- operating profit (or EBIT) 110
- operating risk 168
- operating/non-operating income statement 110
- opportunity cost 17
- opportunity sets 57
- optimal portfolio 190
- option-adjusted spread (OAS), 254–5
- option-free bonds 258
- options 264
  - cost 255
  - definition 265
  - European and American 277, 278–9
  - exchange-traded cf over-the-counter 279
  - interest rate 277
  - incentives 277
  - payoffs 277
  - put–call 276, 277
  - risk management application of strategies 285–6
  - sample questions/answers 281, 314
  - synthetic 278–9
  - value estimates 276
- options, embedded
  - accelerated sinking fund 228
  - call and refunding 228
  - cap on a floater 228
  - conversion 228
  - floor on a floater 228
  - prepayment 228
  - put provision 228
- order, types of 203–4
- outcome 28
- over-the-counter (OTC) derivatives 265
- over-the-counter (OTC) options 279
  
- p-value 43
- parameter 24
- parametric/non-parametric tests 44
- past financial performance 154
- payback period 160
- payment date 171–2
- payoff 269
- peer group 220
  
- pensions 91, 146, 147
- percentiles 24
- perfect competition 63
- performance ratio 119
- permutation notation 29
- perpetual/periodic systems 130
- PI *see* profitability index
- plain vanilla interest rate swap 282
- point estimate 37
- polarity, change in 46
- population 23, 24
- population mean 22, 43–4
- population variances 42–3
- portfolio
  - duration 259–60
  - performance 20
  - rates of return 20, 22
  - standard deviation 189
- portfolio management 183
  - investment approach 185
  - investors 185–6
  - mutual funds 186
  - overview 184, 185–6
  - passive 210
  - planning and construction 196–8
  - process 186
  - risk and return 184, 187–95
  - sample question/answer 186, 308
- portfolio planning and construction
  - asset allocation 197
  - investment constraints 197
  - IPS 196
  - principles 197
  - risk/return objectives 197
  - sample question/answer 198, 309
- power of a test 41
- preference stock 215
- prepayable bonds 258
- prepayable security 17
- present value (PV) 14, 16
- price 69–72
  - discrimination 66
  - levels 75
  - return 206, 296
  - target 46
- price earnings model (P/E ratio) 222
- price elasticity of demand 53
- price floor ceiling 52
- price value of a basic point (PVBP) 260
- price-based indicators 45
  - Bollinger Bands 45
  - moving averages 45
- price-weighted indices 207
- primary market 204, 239
- principal strips 236–7
- pro forma income 178–9
- probability concepts
  - sample question/answer 29, 299
- probability distribution
  - sample question/answer 36, 299
- producer surplus 53
- product of labor 59
- product markets 50
- production 60

- profit 58  
profit metrics 110  
profit-maximization  
the Firm 63, 64, 65  
level of output 35  
short-run/long-run 61  
profitability index (PI) 160  
profitability ratio 122  
project sequencing 161  
protective put 285–6  
psychological behaviour 211  
public/private equity 215–16  
purchased intangible assets 134  
pure expectations theory 243  
put–call parity 276, 278–9  
puttable bonds 258  
PVBP *see* price value of a basic point
- quantitative methods 187–8, 189  
application 31, 33–47  
basic concepts 13–29  
discounted cash flow applications  
19–21  
market returns 22–5  
overview 13–14  
probability concepts 6–9  
sample questions/answers 25, 298–9  
statistical concepts 14, 22–5  
technical analysis 14  
time value of money 15–18
- quartiles 24  
quintiles 24
- random variable 28, 34  
rate of return 14, 17  
discrete/continuous compound 36  
rates of exchange *see* currency exchange rates
- ratios  
activity 122, 123  
classify, calculate, interpret 122–4  
equity 119  
financial 90, 109  
firm 119  
gross profit margin 131  
inventory 131  
leverage/coverage 144  
liquidity 122, 123, 173–4  
model/forecast earnings 124–5  
performance 119  
price/earnings (P/E) 222  
profitability 122, 123  
relationship among 123  
Roy's safety-first ratio 35  
Sharpe ratio 23, 189  
solvency 122, 123  
valuation 122, 123
- real estate 208  
investment 293  
valuation 291–2  
yield on investment 292
- real estate investment trusts (REITs) 293  
real estate limited partnerships (RELPs) 293
- real exchange rate 86  
reinvestment risk 233  
REITs *see* real estate investment trusts  
relative frequency 24  
RELPs *see* real estate limited partnerships  
reported cash flow statement 120  
repurchase agreements 229  
resistance lines 46  
resources 60  
return on equity (RoE) 168–9  
return-generating models 194  
revaluation model 135  
revenue 59, 96, 98  
revenue recognition 108  
Ricardian model 83  
risk  
bond investment 226, 231–5  
definitions 168  
mortgage-backed securities 237  
premium 17  
systematic/non-systematic 193  
risk management 264  
option strategies 285–6  
sample question/answer 286, 314  
risk and return  
commodity investment 295–6  
equity securities 216–17  
objectives 197  
overview 184  
sample questions/answers 190–1, 195, 308, 309  
risk-averse 188, 188–9, 193  
risk-free assets 192–3  
risk-free rate 17  
risk-neutral 188  
risk-seeking 188  
rivalry 219  
roll yield 295  
Roy's safety-first ratio 35
- safety-first ratio 35  
sales comparison 291  
sample 23, 24  
mean 22  
selection bias 39  
skewness 24  
statistic 24  
variance 23
- sampling  
distribution 39  
error 39  
question/answer 39, 299–300  
saving 69–70  
scenario analysis method 260–1  
SEC *see* Securities and Exchange Commission  
secondary market 204, 239  
Securities and Exchange Commission (SEC) 102, 103  
security analysis 100, 102  
callable/prepayable security 233  
overvalued, fairly valued, undervalued 223  
reinvestment risk 233
- security market index  
choices/issues in construction/  
management 206–7  
rebalancing/reconstitution 207  
sample question/answer 208, 309  
types 208  
uses 208  
value, price return, total return 206  
weighting methods 207
- security market line (SML) 184, 193–4  
segment analysis 123–4  
semiannual pay bond 254  
sentiment indicators 45  
margin debt 45  
options volatility index (VIX) 45  
put/call ratio 45  
shorting interest 45  
share price 162  
share repurchases *see* dividends/share repurchases
- shareholders' equity 114  
shareholders' wealth 171  
Sharpe ratio 23, 189  
short position 203, 268–9  
short-term funding 176  
shortfall risk 35  
shutdown point of production 60  
significance level 41  
simple random sampling 39  
skewness 24, 188  
sample question/answer 25, 299
- SML *see* security market line  
solvency ratio 113  
sources of return 256  
sovereign risk 235  
special purpose vehicle 237–8  
spot exchange rate 86  
spot rate 226, 243, 255–6  
standard deviation 23  
standard error of the mean 37  
Standards of Professional Conduct  
difference with Code of Ethics 2  
ethical responsibilities 5  
fundamental to values of CFA Institute 3  
key points 2  
reciting/understanding 1–2  
sample questions/answers 5, 297  
seven components 4  
violations/sanctions 3  
*see also* Code of Ethics; ethics
- statistical concepts 14  
sample questions/answers 25, 298–9  
statistical result 43  
stock price 162  
stocks 190, 193  
stop 204  
strategic analysis  
external factors 220  
internal factors 219  
stripped Treasury securities 236–7  
structured notes 239  
Student's t-distribution 38–9  
subjective probability 28  
substitution effect 56, 219

- supplier bargaining power 219  
 support 46  
 surplus 53  
 survivor bias 39  
 swaps 264  
   characteristics 282  
   currency swap 283  
   definition 266  
   equity swap 283  
   interest rate swaps 282–3  
   sample question/answer 284, 314  
   termination 282  
 synthetic options 278–9
- T-accounts 99  
 T-bills 190  
 tangible/intangible assets 134, 135  
 tax/es 91, 197  
   cost of capital 165  
   payable 140  
   real estate 292  
 technical analysis 13, 14  
   cycles 46  
   indicators 45  
   intermarket analysis 46  
   principles 45  
   sample question/answer 47, 300  
 term structure 242–3  
 test statistic 41  
 time deposit market 270  
 time horizon 197  
 time value 280  
 time value of money 14  
   annual rate 15–17  
   frequencies of compounding 16  
   sample questions/answers 18, 298  
   timeline 18  
 time-period bias 39  
 time-series data 39  
 time-weighted rate of return (TWRR)  
   14, 20
- TIPS *see* Treasury inflation protected securities  
 total cost 59  
 total leverage 169  
 total probability rule 28  
 total product 59  
 total return 206  
 total revenue 59  
 total surplus 53  
 trade balance 69–70  
 trading blocs 84  
 transparency 202  
 Treasury bills 238  
 Treasury bonds 238  
 Treasury inflation protected securities (TIPS) 238  
 tree diagram 27  
 trend 46  
 trial balance 99  
 two-tailed tests of hypothesis 41  
 TWRR *see* time-weighted rate of return  
 Type I and Type II errors 41
- uncertainty 13  
 unemployment 75  
 unimodal, nonsymmetrical distribution 24  
 univariate distribution 34  
 unweighted indices 207  
 US Department of the Treasury 238  
 US GAAP (US generally-accepted accounting standards) 90, 100, 102, 109, 120, 131, 134, 135, 137, 141  
 utility 188–9  
   analysis 57  
   theory 56  
 valuation 13  
   allowance 140–1  
   ratio 122  
 variable cost 59  
 variance 23  
   population means 42–3  
   variance of asset returns 188  
   variation margin 273  
 Veblen goods 57  
 venture capital investment 292  
 verification 9  
 voting rights 215
- WACC *see* weighted average cost  
 weighted average cost (WACC) 130, 132, 164, 166  
 weighted average or mean 22, 23  
 working capital management  
   sample question/answer 177, 307–8  
 World Bank 85  
 World Trade Organization (WTO) 85
- yield 14  
   curve 242–3  
   curve risk 233  
   measures 252–3  
 yield spreads 241  
   central bank interest rate policy 242  
   credit spread 242  
   embedded options 242  
   LIBOR 243  
   liquidity/issue size 243  
   measures 241  
   sample question/answer 244, 312  
   spot rate 243  
   taxable/tax-exempt bonds 242  
   yield curve 242–3  
 yield to call (YTC) 253  
 yield volatility 233, 261  
 yield-to-maturity (YTM) 164, 253–4  
 YTC *see* yield to call  
 YTM *see* yield-to-maturity
- zero coupon bond 243, 248  
 zero-volatility spread (z-spread) 254–5