
Index

A

Absolute risk, 25, 26
Accounting, 169, 175, 176, 245–246
Aggregate exposure, 223–224
Agricultural commodities, 129–132
American-style options, 90, 142–143
Asset approach, 13
Asset-liability management, 50
Automatic exercise, options, 71

B

Back office, 169
Backwardation, 36–38, 134
Balance of payments approach 13
Bank for International Settlements (BIS),
235, 242, 243, 245
Barrier options, 98–100
Basel II, 225, 240–245,
revised framework, 243–245
risk weightings, 245
Basis:
commodity, 134
interest rate, 51
risk, 24, 25, 28–29, 51, 57, 65
swaps, 62
Beijing Commodity Exchange, 133
BIS (Bank for International Settlements),
235, 242, 243, 245
Board of directors, oversight, 161
role, requirements, and challenges,
187–189
Bond futures, 55–57
Buffett, Warren, 197

C

Capital adequacy, 240–245
revised framework, 243–245
risk weightings, 245
Caps and floors, 66–68
Cash forecasts, 160–161, 202
Chicago Board of Trade, 16, 17, 54, 126
Chicago Mercantile Exchange (CME), 54,
55, 131
CHIPS, 241
CLS (Continuous linked settlement),
106–107, 234–237
Collars:
commodity, 146–147
foreign exchange, 97
interest rate, 68–69
zero-cost, 68, 97
Collateral, 110, 112–113, 237–238
Commodities, 129–133
agricultural, 129–132
energy, 128, 132–133
metals, 129
weather, 238–239
Commodity forwards and futures, 133–142
basis, 139
closing out, 140–141
delivery, 136–137
futures, 135–136
margin, 137
mark-to-market, 137
price limits, 138
pricing, 134–135
spreads, 140
swaps, 141

Index

- Commodity Futures Trading
 - Commission, 18, 134
 - Commodity options, 142–148,
 - buying and selling, 145–146
 - closing out, 147–148
 - collar, 146–147
 - futures contracts, 143
 - pricing, 143–145
 - Commodity risk management:
 - exposures, markets, 129–133
 - fixed rate contracts, 127
 - history, 126
 - price factors, 14
 - types of participants, 127–128
 - Commodity risks, 34–39
 - Basis, 38–39
 - contango and backwardation, 36–38
 - price, 35–36
 - quantity, 36
 - Compensation and bonuses, personnel, 157
 - Concentration risk, 41–42, 108–109
 - Conflicts of interest, 158
 - Contango, 36
 - Continuous linked settlement, (CLS),
 - 106–107, 234–237
 - Convexity, 25, 208–209
 - Correlation, 6, 25
 - Counterparty ratings, 221–222, 223
 - Counterparty risk, 105–107, 169, 173
 - Country risk, *see* Sovereign risk
 - Credit derivatives, 118–123, 225
 - advantages, 118–119
 - challenges, 122–123
 - credit default swaps, 119–120
 - credit spread, 120–121
 - credit-linked notes, 122
 - ISDA documentation, 123
 - spreadlocks, 121
 - total return swaps, 121–122
 - Credit enhancement, 117, 174
 - Credit exposure:
 - aggregating, 173
 - collateral, 112–113
 - contingent actions, 116–117
 - diversification, 111
 - function, 110
 - limits, 115–116, 173
 - management, 109–117
 - marking-to-market, 114–115
 - netting agreements, 113–114
 - rationing, 112
 - Credit facilities, 199
 - Credit limits, 115–116, 173
 - Credit risk measurement, 221–225
 - aggregate credit exposure, 223–224
 - notional amounts, 222–223
 - rating agencies, 223
 - replacement cost, 224
 - Credit risk, 23, 39–42, 103–109, 176, 232
 - concentration, 41–42, 108–109
 - pre-settlement, 40–41, 105–107
 - settlement, 41, 106
 - default, 104–105
 - default, 40
 - Herstatt, 106
 - legal, 107
 - legal, 42, 174
 - sources, 103–104
 - sovereign (country), 41, 107–108
 - types, 39–42
 - Crop insurance, 126
 - Currency futures, 87–89
 - closing out, 88–89
 - exchanges, 87
 - margin, 88
 - mark-to-market, 88
 - Currency swaps, 85–86
 - closing out, 86
 - uses, 86
 - Currency, assessing, 182
-
- D**
- Daiwa Bank, 20, 150
 - Daylight limits, 107, 116
 - Debt covenants, 117

Index

- Default risk, 40, 225
- Delta hedging, 91
- Derivatives:
- buying, 169
 - definition, 3–4
 - losses, 20, 166
 - trading, 231–232
- Diversification, 111
- lack of, 108–109
 - risk, 5–6
- Dojima, 15–16, 126
- Duration, 50, 208–209
-
- E**
- Embedded options, 44, 49
- Enterprise-wide risk management, 232–234
- Equity price risk, 43
- Euro currency, 20, 65, 236, 241
- Eurodollar futures, 55
- European-style options, 90, 142–143
- Exchange rate risk:
- commodity-based, 79
 - project bids, 78
 - transferring, 78–80
- Exchange rates, pegged, 98
- Expectations theory, 11
- Exposure:
- at default, 224
 - commodity and currency, 79
 - current and potential, 105
 - measuring, 205–206
 - strategic, 34
 - versus risk, 1–2
-
- F**
- FASB138, 246
- Fat tails, 217
- FedWire, 241
- Financial crises, 108, 212–213
- Financial institutions:
- credit risk, 230–231
 - G-30 recommendations for dealers, 170–177
- Financial risk management:
- process, 5, 6–7
 - sources, 2–3
 - what is, 1
- Fixed rate contracts, 127
- Flexible forward, 82–83
- Forecasts, 74, 160–161, 172
- Foreign currency debt, 76–77
- Foreign exchange options, 89–101
- average rate, 97–98
 - barrier, 98–100
 - buying and selling, 93–97
 - closing out, 101
 - collar, 96–97
 - compound, 100–101
 - delta hedging, 91
 - fundamentals, 90–93
 - intrinsic and time value, 93
 - knock-in, 98–100
 - knock-out, 98–100
 - premiums, 92,
- Foreign exchange rates, 82, 83
- exposure reduction, 74
 - factors that affect, 11–13
 - key drivers, 12–13
 - pegged, 98
 - theories of determination, 13
- Foreign exchange risk:
- principles, G-31, 167–170
 - strategic, 33
 - transaction, 29
 - translation, 30–32
 - types, 29–34
- Foreign exchange swap, 84–85
- closing out, 86
 - currency swap, 85–86
- Foreign exchange:
- exposure, 29–34
 - forwards, 80–84
 - futures, 87–89
 - points, 83

Index

- swaps, 84–86
- Forward contracts:
 - commodity, 133–142
 - foreign exchange, 80–84
 - history, 15
 - interest rate, 50–54
- Forward rate agreements (FRAs), 50–54
 - and Eurodollars, 55
 - closing out, 52–54
 - example, 53
 - settlement amount, 53
 - terminology, 52
- Futures:
 - bond, 55–57
 - commodity, 135–136
 - currency, 87–89
 - hedge ratios, 58–59
 - history, 15–18
 - interest rate, 54–59
 - margin, 88
 - reporting limits, 87
 - strips, 57
- FX forwards, 80–84
 - closing out, 83–84
 - flexible, 82–83
 - non-deliverable, 83
 - points, 83
 - pricing, 82
 - rates, 82

G

- Gap analysis and management, 50, 207–208
- Group of 30, Recommendations, 170–176
- Group of 31, Core Principles, 167–170

H

- Hedging, 198
 - decisions, policy, 193–196
 - strategies, 196–200
- Herstatt, Bankhaus, 106
- Historical simulation, 219–220

- History:
 - Dojima, 15–16,
 - early markets, 15
 - Louvre Accord, 19
 - North American, 16–17
 - October 1987, 18
 - Plaza Accord, 19
 - Winnipeg Commodity Exchange, 17
- Human error and fraud, 42–43

I

- IAS 39, 246
- Inflation derivatives, 238
- Intercompany lending, 48–49
- Interest rate futures, 54–59
 - bond, 55–57
 - closing out, 57–59
 - Eurodollar, 55
 - exchanges, 71
 - hedge ratios, 58–59
 - margin, 56
 - short term, 54
 - strips, 57
- Interest rate options, 64–72
 - caps and floors, 66–68
 - closing out, 70–72
 - collar, 68–69
 - example, 67
 - exchange-traded, 70
 - on futures, 70
 - swaptions, 69–70
- Interest rate risk:
 - absolute, 26
 - basis, 28–29
 - reinvestment or refunding, 28
 - types, 24–29
 - yield curve, 26–28
- Interest rate swaps, 59–64
 - agreements, 61
 - asset swap, 61
 - basis swap, 62
 - blend-and-extend, 64

Index

- closing out, 63–64
 - counterparties, 60
 - forward starting, 63
 - payer and receiver, 60
 - sample rates, 62
 - zero coupon swap, 63
- Interest rates:
- factors that affect, 8–9
 - theories of determination, 10–11
 - yield curve, 9–10
- Internal controls, 151, 152, 156
- ISDA (International Swaps and Derivatives Association), 169, 233, 238
-
- K**
- Knock-in/knock-out options, 98–100
- Kobe Raw Silk Exchange, 133
-
- L**
- Legal risk, 42, 107, 122–123, 174
- Leverage, 208
- Libor, 61, 65
- Limits:
- credit, 115–116, 173
 - daylight, 107, 116
 - futures reporting, 87
 - overnight, 116
 - price, 138, 199
 - trading, 116
- Liquidity risk, 44,
- Liquidity theory, 11
- London Metals Exchange, 238
- Loss given default, 225
- Losses, problems resulting in, 149–150
- LVTS, 241
-
- M**
- Management:
- oversight, 157–158
 - role, requirements, challenges, 170–171, 187–189, 218
- Margin, 56, 88, 137, 160
- Market segmentation theory, 11
- Marking-to-market, 88, 114–115, 162–163, 171, 237
- Master agreements, ISDA, 61, 123, 169, 173–174
- Monetary approach, 13
- Monte Carlo simulation, 220–221
-
- N**
- Netting:
- agreements, 110, 113–114
 - currency, 73–74
 - global cash, 47–48
 - right of set off, 175
- New York Board of Trade, 130
- New York Mercantile Exchange (NYMEX), 17–18, 132, 136
- Non-deliverable forward, 83
- Notional exposure, 222–223
- NYMEX (New York Mercantile Exchange), 17–18, 132, 136
-
- O**
- Operational risk, 149–177
- centralization, 167
 - considerations, 155–156
 - controls, 152
 - databases, 226
 - error and fraud, 153
 - measurement, 226
 - merger and acquisitions, 167
 - processes and procedures, 153
 - sources, 150–155
 - technology and systems, 153–154
 - trading and leverage, 166
 - types, 42–43
- Options:
- American-style, 142–143
 - commodity, 142–148
 - embedded, 44, 49
 - European-style, 142–143

Index

exotic, 90, 97–101
foreign exchange, 89–101
interest rate, 64–72
on futures contracts, 143
relationship between strike and market price, 144
Overnight limits, 116
Oversight, 161

P

Parametric simulation, 221
Payer swaption, 69–70
Payment:
 initiatives, 239–240
 schedules, 49–50
 systems, 241
Personnel:
 compensation, 157
 conflicts of interest, 158
 expertise, 174
 policy and, 168
 training and skills, 158–159
Policy, 163
 foreign exchange, 168
 hedging policy, 193–196
 oversight, 192–193
 potential components, 195
 reporting, 201
 risk management, 189–192
 risk measurement, 201
 risk mitigation approaches, 201
 strategy selection, 196–200
 topics for discussion, 202–204
Preferred habitat theory, 11
Price limits, 199
Pricing models, 162, 170, 172
Probability of default, 224
Processes and procedural risk, 43
Projects, foreign exchange, 78
Proxy hedging, 74–75
Purchasing and processing, foreign exchange, 77–78

Purchasing power parity, 13

Q

Quantity risk, 36

R

Ratings, 60, 223
Receiver swaption, 69–70
Recommendations, industry, 167–176
 G-30, 167–170
 G-31, 170–177
Reconciliation, 160–161
Reinvestment (refunding) risk, 28
Relationships, financial institution and vendor, 159
Replacement:
 contract, 40–41
 cost, 224
 risk, 232
Reporting, 160, 172, 176
Risk management:
 acceptable exposure, 185–186
 alternatives, 7
 challenges, 188
 commodity, 125–148
 foreign exchange, 73–102
 global initiatives, 229–248
 interest rate, 47–72
 operational, 149–177
Risk measurement, 171, 205–227
 estimation, 207
 value-at-risk, 213–221
 what is, 206
Risk profile, 180–181
 competitive landscape, 186
 risk tolerance, 183–185
RiskMetrics, 216–217
Risks:
 commodity, 34–39
 credit, 39–42
 embedded options, 44–45

Index

equity price, 43
foreign exchange, 29–34
interest rate, 24–29
liquidity, 44
major, 23–24
operational, 42–43
systemic, 45
Risk tolerance, 157, 183–185

S

Safe-haven currencies, 12
Sarbanes-Oxley, 246–247
Scenario analysis, 209–211
Secured lending, 117
Sensitivity:
 delta, 25, 209
 duration and convexity, 25, 208–209
Settlement risk, 41, 106–107, 232, 234
Short term interest rate futures, 54
Sovereign risk, 41, 107–108
Speculation, 198
Strategic exposure, 33
Stress testing, 171, 172, 211–212
Strike price, relationship to market price,
 144
Swaps:
 commodity, 141
 counterparties, 60
 currency, 85–86
 foreign exchange, 84–85
 interest rate, 59–64
Swaptions, 69–70
Systemic risk, 24, 45, 230, 232
Systems, 43, 153–155, 163–164, 174–175

T

TARGET, 241
Trading:
 compensation, 157
 foreign exchange, 235
 limits, 116
 losses, 20, 150, 166
 unauthorized, 154
Transaction exposure, 29
Translation exposure, 30–32

V

Value at risk, 201, 213–221
 assumptions and limitations, 217–219
 credit, 225
 historical simulation, 219–220
 methods to calculate, 215–217
 Monte Carlo simulation, 220–221
 parametric approach, 221
 RiskMetrics history, 216–217

W

Weather, 131, 238–239
What-if analysis (*see* Scenario analysis)
Winnipeg Commodity Exchange, 17, 138

Y

Yield curve:
 risk, 26–28
 scenarios, 211
 steepening/flattening, 26
 trading, 27
 use in forecasting, 10
 what is, 9–10

<http://www.pbookshop.com>

<http://www.pbookshop.com>

<http://www.pbookshop.com>