

Index

- A-IRB *see* Advanced Internal Rating-Based approach
- accounting 7, 20–2, 43–4, 48, 52–3, 58, 67–8, 108, 123, 174–5, 194, 207–11, 213–14
- ACSM *see* alternative coupon satisfaction mechanism
- adjustments to own creditworthiness, core Tier 1 capital 48, 52–3, 194–5
- Advanced Internal Rating-Based approach (A-IRB) 81–3
- Advanced Measurement Approach (AMA) 90
- agents, insurance companies 12–14, 24
- ALCO, objectives 35–6, 167–8
- alternative coupon satisfaction mechanism (ACSM) 72–3
- alternative investments, equity risk 217–18
- AMA *see* Advanced Measurement Approach
- amortized costs, accounting classifications 213–14
- ancillary own funds, Solvency II concepts 58–62
- annuities 225–6
- appendices 102, 105, 213–31
- arbitrage opportunities, discounted buybacks 196–7
- asset liability management (ALM), concepts 10, 11, 35–6, 142–3, 167–9, 214
- asset management companies 90–1
- assets
- balance sheet concepts 15–22, 23–4, 39–40, 43–4, 58–66, 76–9, 96–105, 118–19, 126–9, 146–8
 - reserve adequacy tests 123
 - RWAs 48, 55, 75–92, 95–105, 107, 131–3, 183–5
- assets under management (AUM) 90–1
- available capital 45, 47–66, 75–9, 96–105, 107–21, 131–3, 141–2, 152–4, 157–61, 171–5, 183–5
- see also* BIS ratio; capital . . . ; Solvency II; Tier . . .
- banks 47–56, 64–6, 75–9, 107–21, 131–3, 141–2, 152–4, 157–61, 171–5, 183–5
 - insurance companies 47, 56–63, 96–105, 141
 - interests in other financial institutions 64–6, 118
 - limits 48–57, 107–21
- available for sale assets (AFSs), accounting classifications 44, 68, 213–14
- balance sheets
- analysis concepts 45, 135–7
 - banks 7, 15–18, 23–4, 31–42, 76–9, 141–8
 - capital management 17–20, 31–42, 141–8
 - concepts 7, 15–22, 31, 32–6, 126–9, 135–7
 - goodwill 17–18, 20–2, 48, 52–3, 58, 77–9, 136–7, 174–5, 194
 - insurance companies 7, 15, 18–22, 23–4, 31–42, 95–105, 126–9, 141–8
 - investments 17–20, 23–4, 31, 36–7, 141–8
 - management issues 31–42, 141–8
 - P&L links 18, 43–4, 68, 194–5
 - reserve adequacy tests 123
 - segmentation 16–18, 146–8
 - structure 16–20
- bancassurance companies 125, 129
- bank business models, concepts 7, 9–14, 15, 201

- banking books 83, 90–1
see also credit risk
Banking Solutions – Aligning the Banking System with Society (author) 132
 bankruptcies 49–50, 54, 68, 70–1, 115
see also gone concerns
 banks
see also commercial . . . ; investment . . . ; private . . . ; regulatory . . . ; retail . . .
 available capital 47–56, 64–6, 75–9, 107–21, 131–3, 141–2, 152–4, 157–61, 171–5, 183–5
 balance sheets 7, 15–18, 23–4, 31–42, 141–8
 capital definition 45, 47–66, 71–3, 75–9, 96–105, 107–21, 131–3, 141–2, 157–61, 183–5, 209–11
 capital requirements 3, 45, 61–3, 64–6, 75–92, 107, 131–3, 135–7, 143, 183–5, 188–97, 207–11
 concepts 7, 9–14, 15–18, 23–4, 43–4, 45, 47–56, 79–92, 141–8
 credit crisis 43, 45, 47, 66, 72–3, 77–8, 92, 107–21, 149, 151, 157
 customers 15, 23–4
 failed banks 107–8
 insurance company contrasts 14, 18–19, 23–4, 47, 57–8, 61, 143–4
 interests in other financial institutions 64–6, 118
 investment decisions 141–8, 166–9, 209–11
 liquidity management 10–12, 16–18, 23–4, 34, 39, 144
 RAROC calculations 171–5
 segmentation of balance sheets 147–8
 three-pillar approach to capital requirements 79–92, 119
 types 9–12, 23–4
 Basel II framework 79, 90, 107
see also capital requirements; three-pillar approach . . .
 Basic Indicator Approach (BIA), concepts 88–90
 basic own funds, Solvency II concepts 58–62
 Berkshire Hathaway 199
 best estimates of insurance liabilities, concepts 98–100, 123
 BIA *see* Basic Indicator Approach
 BIS ratio
see also available capital; risk-weighted assets
 assets
 concepts 75–9, 107–8, 131–3
 bonds 11–12, 16, 23–4, 41, 72–3, 76–9, 80–3, 111–15, 141–8, 150–2, 158–9, 213–14
 brokers, insurance companies 12–14, 24
 BSCR, concepts 102–5, 230–1
 budgets, risk/capital management 164
 business lines 3, 5, 33, 34–5, 40–2, 89–90, 126–9, 153–4, 162–3, 166–9, 171–5, 177–9, 203–5, 208–11
 corporate line 40–2, 90
 economic profits 3, 5, 40–2, 171–5, 177–9, 203–5, 208–11
 optimal performance responsibilities 3, 5, 136–7, 154–7, 171–5, 208–11
 performance evaluations of business lines 3, 5, 136–7, 139, 171–5, 208–11
 risk management 153–4, 162–3, 166–9
 business models
see also bank . . . ; insurance . . .
 concepts 7, 9–14, 201
 business risk, concepts 88–91, 210–11
 business strategies
see also risk management
 concepts 162–3, 164–9, 177–9
 business-disruption/system-failure risks, concepts 88–91
 buybacks, concepts 111, 194–7
 call options 73, 99–100
 cancellations/deferrals, coupons 111
 capabilities, strategic diversification 199–205
 capital
see also available . . . ; cost . . . ; shareholder's equity; Solvency II; subordinated debt
 concepts 1–5, 18, 31–66, 75–105, 107–21, 126–9, 131–3, 135–7, 141–8, 207–11
 capital allocations 3, 4–5, 120–1, 154–7, 164–9, 177–9, 205, 208–11
 optimal allocations 3, 5, 120–1, 154–7, 164–9, 178–9, 208–11
 strategic diversification 205
 strategy translation 3, 4–5, 120–1, 164–9, 177–9, 205, 208–11
 capital book, concepts 141–2, 146–8
 capital charges, standardized approach of Solvency II 102–5, 217–31

- capital definition 45, 47–66, 71–3, 75–9,
96–105, 107–21, 131–3, 141–2, 157–61,
183–5, 195–7, 209–11
see also Solvency . . . ; Tier . . .
dynamic changes 109–10
insurance companies 47, 56–66, 96–105,
107
interests in other financial institutions
64–6, 118
limits 48–57, 107–21
potential changes 45, 107–21, 137
quality tests 47–50, 59–62, 71–3, 77–9,
108–21, 157–61, 195–7
- capital hedging
see also foreign exchange . . .
concepts 36–7, 78–9
- capital instruments
see also convertibles; hybrid . . . ;
preference . . . ; rights . . . ; share . . .
concepts 45, 47–66, 67–73, 102–5, 146–8,
209–11
- capital irrelevance principle, concepts 188–9
- capital management
see also optimal . . .
concepts 1–5, 17–20, 31–42, 75, 131–3,
139–79, 181, 199–205, 207–11
conclusions 207–11
critical success factors 139, 149, 163–2
definition 1–5, 31–2, 34, 75, 139, 149–54,
161–3, 207–8, 209–11
departments 32–6
emerging roles 161–3
liquidity management 39
objectives 1–5, 31–6, 139, 141–8, 149–69,
173–5, 181, 199, 207–11
perspectives 1–5, 207–11
risk management 139, 149–69, 209–10
soft side 3, 4, 61, 96, 139, 157–61,
210–11
strategic decision-making processes 161–3,
199–205, 208–11
strategy, risk, and capital management
cycle 2, 5, 139, 177–9, 203
value creation 1–5, 120–1, 202–5,
207–11
- capital preservation objectives of risk
management 149–69
- capital requirements 3, 36, 45, 47, 58–63,
64–6, 75–105, 107–8, 125–9, 131–3,
135–7, 143, 144–5, 183–5, 188–97,
207–11, 217–31
see also regulatory ratios; Solvency . . .
banks 3, 45, 61–3, 64–6, 75–92, 107,
131–3, 135–7, 143, 183–5, 188–97,
207–11
BIS ratio 75–9, 107–8, 131–3
credit risk 80–3, 91–2
definition 45, 75, 107–8
insurance companies 3, 47, 58–62, 93–105,
125–9, 135–7, 144–5, 217–31
market risk 83–8, 91–2, 99–105
operational risk 88–90, 91–2, 102–5
regulatory ratios 36, 75–9, 107–8, 131–3,
183–5, 191–7
three-pillar approach 79–92, 95–105,
119
- capital structures
see also available . . .
concepts 1–5, 45, 125–9, 139–48,
181–211
cash deductions enterprise value 185–7
cash flows 33–6, 48, 53
catastrophe risk, concepts 100, 103–5, 225–6,
227–8
CEOs, objectives 2, 32–3, 35–6
CFOs
see also capital management
objectives 32–3, 35
claim risk, health risk concepts 103–5,
229–30
clients/products/business-practice risks,
concepts 88–90
commercial banks, concepts 11, 90, 154–7,
204
commercial synergies, strategic
diversification 202–5
commodity price risk, concepts 84–8
common shares
see also share . . .
concepts 43–4, 48–66, 67–8, 71, 73,
112–21, 131–2, 142–8, 191–5
definition 67–8, 71
concentration risk, concepts 103–5, 153–4,
222–3, 224
conclusions 207–11
confidence levels, economic capital 26–9,
91–2, 175
consolidations 64–6, 119–21, 125–9,
199–205
consumer finance banks 10
see also retail . . .
convertibles 16, 41, 72–3, 111–15

238 Index

- core Tier 1 capital 47–8, 50–3, 55–6, 57, 71, 77–9, 107–10, 115–21, 131–3, 183–5, 191–5
see also common . . . ; preference . . . ; retained earnings
deductions 48, 52–3, 108–10, 118
definition 47–8, 50–3, 57, 71, 107–10
potential changes 107–10, 115–21
core Tier 1 capital ratio, concepts 77–9, 107–8, 131–3, 183–5, 191–5
corporate bonds, credit risk 80–3
corporate finance decisions
concepts 3–4, 156–7, 161–3, 181–211
mergers and acquisitions 183–97
corporate line, concepts 40–2, 90, 156–7
corporate risk management, concepts 155–7, 163–9
corporate strategies
see also capital management; risk management
concepts 2, 32–3, 156–7, 162–9, 177–9, 199–205
definition 162–3
correlations, concepts 28–9, 85–9
cost of capital 1–5, 41–2, 101–2, 127–9, 139, 143–8, 157, 173–5, 181, 187–91, 207–11
definition 101, 157, 187–9
WACC 181, 187–91
cost centres, treasury departments 34
cost of equity, concepts 189–93
cost synergies, strategic diversification 202–5
counterparties 103–5, 222–3, 224, 231
counterparty default risk
see also concentration risk
concepts 103–5, 215, 224, 231
coupons 50, 53, 71–3, 111–14, 188–91
credit crisis 43, 45, 47, 66, 72–3, 77–8, 92, 107–21, 149, 151, 157
credit derivatives 220–2
credit losses 48, 55–6
credit ratings 27–9, 76–9, 80–3, 91–2, 131–3, 172–5, 196–7, 215, 220–3
agencies 215
downgrades 131–2
credit risk
concepts 26, 28, 37–8, 79–83, 91–2, 131–3, 141–8
definition 79, 83
credit spreads, concepts 220–2
creditworthiness issues, core Tier 1 capital 48, 52–3, 194–5
critical success factors of risk/capital management 139, 149, 163–9
cumulative/non-cumulative categories, subordinated debt 48, 50, 53–7, 62–3, 70–3, 108–14
currency *see* foreign exchange . . .
customers 15, 23–4, 88–90
- DAC unlocking, concepts 20, 43
DACs *see* deferred acquisition costs
dampener formula, concepts 218–24
dated subordinated debt, capital treatment 48–51, 62–3
de-risk concepts 150, 156, 167–8
debt-financing levels 3–4, 11–12, 41–2, 71–3, 126–9, 135–7, 142–8, 158–9, 181, 183–97, 208–11
enterprise value 185–7
optimal capital structure responsibilities 3–4, 183–97, 208–11
WACC 181, 187–91
debt-overhang issues, conversion mechanisms 112–14
default risk, concepts 26, 28, 37–8, 80–3, 142–3, 215, 224
deferred acquisition costs (DACs), concepts 20, 43
deferred tax assets (DTAs)
concepts 18, 20, 52–3, 108–9, 117, 137, 194
definition 18
potential changes in capital regulations 108–9, 117, 137
departments, organizational structures 31, 32–6
deposits 16–20, 23–4, 35–6, 135–7, 147–8, 158–61, 166–9
derivatives 16–18, 73, 84–8, 99–100, 142–3, 220–2
dilution factors, rights issues 68–70
disability risk, life risk concepts 103–5, 225–6
discounted buybacks, concepts 111, 194–7
discounted earnings valuations, concepts 135–7, 191–4
discretion-over-payouts test of capital quality, concepts 49–50, 59–62
distance-to-default concepts 131–3

- distribution networks, insurance companies 12–14, 24
- diversification issues 28–9, 45, 66, 84–8, 92, 103–5, 120–1, 125–9, 131–3, 160–1, 199–205
- bancassurance companies 125, 129
- benefits 45, 120, 125–9, 199–205
- capital structures 45, 125–9
- cross-holdings benefits 66
- definition 200–1
- financial autonomy proposals for subsidiaries 120–1
- insurance companies 125–9
- parental strategy matrix 200–5
- strategic diversification 199–205
- divested RWAs, concepts 132–3
- dividend costs 41–2, 50, 61, 67–73, 188–94
- see also* equity . . . ; share . . .
- double gearing, concepts 64–6
- downward shocks, concepts 217–26
- DTAs *see* deferred tax assets
- duration concepts 10, 23–4, 142–8, 210, 218–22
- dynamic capital regulation, concepts 109–10
- EaD *see* exposure at default
- earnings 18, 43–4, 48, 51–3, 68, 135–7, 142, 171–5, 186–7, 191–4, 203–5
- see also* retained . . .
- discounted earnings valuations 135–7, 191–4
- EV/EBIAT ratios 187
- strategic diversification 203–5
- volatilities 203–5
- EBIAT 187
- EBIT 187
- ECB 81
- economic capital 7, 25–9, 41–2, 84, 91–2, 108, 146–8, 152–4, 171–5, 203–4
- see also* Value at Risk
- definition 25, 91
- ICAAP calculations 91–2
- non-financial companies 25–6, 135–6
- RAROC 171–5, 178–9
- economic profits
- business lines 3, 5, 40–2, 171–5, 177–9, 203–5, 208–11
- concepts 3, 5, 171–5, 177–9, 203–5, 208–11
- definition 174–5
- optimal performance responsibilities 3, 5, 171–5, 177–9, 203–5, 208–11
- economies of scale 120–1
- EEA countries 217, 221–2
- ELs *see* expected losses
- embedded leverages, concepts 118–19
- emerging markets, equity risk 217–18
- employees, risk-adjusted incentives 166
- endowment policies 99–100
- energy companies 135–6
- enterprise value (EV)
- concepts 137, 183, 185–7, 189
- definition 185–6
- epidemic risk, health risk concept 103–5, 228–30
- equity capital 17–21, 23–4, 41–4, 48–53, 67–73, 75–105, 107–21, 126–9, 131–3, 135–7, 141–8, 157–61, 183–5, 187–97, 217–18
- see also* capital . . . ; retained earnings; revaluation reserves; share . . .
- components 43–4, 48–53, 67–73
- equity price risk, concepts 84–8, 185–7, 191–4
- equity risk, concepts 84–8, 103–5, 185–7, 191–4, 217–19, 224
- equity valuations, concepts 191–4
- European Commission 102, 217–30
- European Union, Directives 58–61
- EV *see* enterprise value
- EV/EBIAT ratios, concepts 187
- excess cash, definition 185–6
- execution/delivery/process-management risks, concepts 88–90
- expected losses (ELs), concepts 37–8, 81–3, 171–5
- expected net earnings
- economic profit 174–5
- RAROC 171–5
- expense risk
- health risk concepts 103–5, 229–30
- life risk concepts 103–5, 225–6
- exposure at default (EaD), concepts 81–3
- extraordinary items 174–5, 194
- extreme events, concepts 26–9, 38, 91–2, 112–14, 225–6, 227–8
- F-IRB *see* Foundation Internal Rating-Based approach
- fair value assets (FV), accounting classifications 44, 213–14

- financial assets, accounting classifications 67–8, 123, 213–14
- financial autonomy proposals for subsidiaries 119–21
- financial institutions 1–5, 45, 135–7, 139–48, 177–9, 181–211
see also banks; insurance companies
 financial autonomy proposals for subsidiaries 119–21
 risk/capital management emerging roles 161–3
 strategy, risk, and capital management cycle 2, 5, 139, 177–9, 203
 valuations 45, 135–7, 183, 185–7, 189, 191–4
- financial intermediation, definition 9
- financing of business operations
see also debt . . . ; equity . . . ; optimal capital structure
 concepts 1–3, 11–12, 35–6, 41–2, 67–73, 126–9, 135–7, 183–97, 208–11
- Fitch 215
- foreign exchange risk (FX)
 concepts 36–7, 78–9, 84, 103–5, 222, 224
 definition 84, 103–4, 222
- forward starting options 100
- Foundation Internal Rating-Based approach (F-IRB) 81–3
- fraud risk, concepts 88–90
- FTP *see* funds transfer price
- fully paid share capital, definition 51, 67–8
- funds transfer price (FTP), concepts 39–40
- going concerns 54, 72–3, 108–21, 190–1
- gone concerns 49–50, 54, 108–21
see also bankruptcies
- goodwill, concepts 17–18, 20–2, 48, 52–3, 58, 77–9, 136–7, 174–5, 194
- government bonds, concepts 80–3, 141–8, 150–2
- health risk
see also claim . . . ; epidemic . . . ; expense . . .
 concepts 103–5, 228–31
- heat maps, stakeholder expectations 158–61
- hedging 11–12, 36–7, 146–8, 217–18
- held to maturity assets (HTMs), accounting classifications 44, 123, 213–14
- historical VaR model (HVaR), concepts 86–7, 88, 89
- holding companies, diversification benefits 126–9
- HVaR *see* historical VaR model
- hybrid capital 41–2, 51–6, 57, 61–3, 70–3, 77–9, 111–14, 116, 157–61, 174–5, 191–7
see also preference shares; subordinated debt
 definition 71–2, 111
 discounted buybacks 111, 194–7
 potential changes in capital regulations 111–14
- ICAAP *see* Internal Capital Adequacy Assessment Process
- IFRS *see* International Financial Reporting Standards
- IMF 31
- impairment of assets, concepts 21, 48, 54, 213–14
- income 18, 38, 41–2, 43–4, 48, 51–3, 68, 135–7, 142, 171–5, 186–7, 191–4, 203–5
- inflation 145–6
- innovative hybrid Tier 1 capital, concepts 47–8, 54–6, 71–3, 77–9, 111–14
- insurance business models, concepts 7, 9, 12–14, 15
- insurance companies 3, 7, 9, 12–14, 15, 18–22, 23–4, 43–4, 45, 47, 56–66, 93–105, 107, 125–9, 141–8, 166–9, 202–3, 217–31
see also life . . . ; non-life . . . ; Solvency . . .
 balance sheets 7, 15, 18–22, 23–4, 31–42, 95–105, 126–9, 141–8
 bank contrasts 7, 14, 18–19, 23–4, 47, 57–8, 61, 143–4
 best estimates of insurance liabilities 98–100, 123
 capital definition 47, 56–66, 96–105, 107
 capital requirements 3, 47, 58–62, 93–105, 125–9, 135–7, 144–5, 217–31
 customers 15, 23–4
 diversification issues 125–9
 interests in other financial institutions 64–6, 118
 investment decisions 141–8, 166–9
 liquidity management 23–4, 34, 39
 RAROC calculations 173–5
 segmentation of balance sheets 146–7

- three-pillar approach to capital requirements 95–105
types 12–14, 23–4, 93–5, 202–3
- insurance risk 26
- intangible assets 17–20, 48, 52–3, 58, 77–8, 136–7, 146–8, 174–5, 194
see also deferred . . . ; goodwill
- interest rate risk, concepts 84–8, 90–1, 103–5, 142–8, 219–22, 224
- interest rates 23–4, 39–40, 48, 50–3, 57, 61, 84–8, 90–1, 103–5, 115–16, 128–9, 142–8, 192–7, 219–22, 224
bank/insurance-company differences 23–4
curves 23–4, 219–20
FTP 39–40
volatilities 23–4, 142–3, 219–20
- interest-bearing securities
see also bonds
concepts 48, 50–3, 57, 61, 115–16, 128–9, 142–8, 194
- interests in other financial institutions, available capital 64–6, 118
- interim losses, core Tier 1 capital 48, 53
- Internal Capital Adequacy Assessment Process (ICAAP), concepts 91–2
- International Financial Reporting Standards (IFRS) 18, 43–4, 50–1, 108, 137, 184, 194, 209, 213–14
accounting classifications 108, 213–14
current review of standards 43
equity capital 43–4, 50–1, 157, 184, 194, 209
- investment banks, concepts 11–12, 16–18, 118–19, 132–3, 154–7, 163
- investment grade credit ratings, concepts 215
- investments 17–20, 23–4, 31, 36–7, 78–9, 102–5, 139, 141–8, 149–69, 209–11, 217–24, 231
capital hedging 36–7, 78–9
capital preservation objectives 149–69
decisions 139, 141–8, 150–4, 166–9, 209–11
duration considerations 142–8, 210
inflation 145–6
'let profits run and cut losses early' principle 154–5
Solvency II 102–5, 217–24, 231
stop-loss levels 150–1
- lapse risk, life risk concepts 103–5, 123, 225–6
- law of decreasing marginal utility, concepts 13–14
- law of large numbers, concepts 87–8
- lending, bank balance sheet concepts 11–12, 16–18, 23–4, 147–8, 167–9
- 'let profits run and cut losses early' principle, investments 154–5
- leverage, concepts 26–9, 77–9, 118–19, 127–9, 132–3, 135–7, 150–1, 189–91
- leverage ratio, concepts 77–8, 118–19
- LGD *see* loss given default
- liabilities, balance sheet concepts 15–22, 23–4, 39–40, 43–4, 58–66, 76–3, 96–105, 126–9, 146–8, 194–7
- life annuities 12
- life insurance companies, concepts 12–14, 23–4, 93–5, 98–105, 126–9, 202–3
- life risk
see also catastrophe . . . ; disability . . . ; expense . . . ; lapse . . . ; longevity . . . ; mortality . . . ; revision . . .
concepts 98–100, 103–5, 123, 224–6, 231
- liquidity management
bank/insurance-company differences 23–4, 39, 144
banks 10–12, 16–18, 23–4, 34, 39, 144
capital management 39
definition 33–4
insurance companies 23–4, 34, 39, 144
- liquidity risk, concepts 26, 39, 91, 144
- loan-loss provisions, concepts 43, 173–4
- loans and receivables assets (L&Rs) 213–14
- long positions, capital hedging 37, 78–9
- longevity risk, life risk concepts 103–5, 224–6
- loss distributions 27–9, 37–8, 85–9, 91–2
- loss given default (LGD), concepts 81–3, 224
- loss-absorption test of capital quality, concepts 49–54, 58–62, 68, 71–3, 77–9, 107–21, 131–3, 141–2
- lottery tickets 14
- lower Tier 2 capital, concepts 47–8, 55–6
- marginal utilities, concepts 13–14
- mark-to-market valuations, concepts 44, 52, 58–62, 95–105, 111–14, 115, 213–14
- market capitalizations
concepts 137, 183–4, 185–7, 189
definition 185

- market risk 11–12, 26, 28, 83–8, 91–2, 99–105, 217–24, 231
see also concentration . . . ; equity . . . ; foreign exchange . . . ; interest rate . . . ; property . . . ; spread . . .
 assessment methods 83–8, 91–2
 definition 83–5
 Solvency II standardized approach 99–105, 217–24, 231
 three-pillar approach to capital requirements 83–8
 types 84–5
- market value margins (MVMs), non-hedgeable risks 100–2
- markets, strategic diversification 199–205
- maturity transformation, concepts 9, 16–18, 90–1, 142–8
- MCR *see* minimum capital requirement
- mergers and acquisitions 11, 18, 20–2, 91, 132–3, 136–8, 177–8, 183–97, 199–205
see also goodwill
 corporate finance decisions 183–97
 RWAs 183–5
- Merton's single asset model 82–3
- minimum capital requirement (MCR) 61–3, 75–95, 117, 131–3, 135–7, 191–7
see also BIS ratio; capital requirements
- minority interest, concepts 48, 51–3, 64–6, 108–9, 116–17
- modified duration 10, 218–22
- Modigliani and Miller's capital irrelevance principle 188–9
- Monte Carlo VaR model, concepts 87–9
- Moody's 215
- mortality risk, life risk concepts 98–9, 103–5, 123, 224–6
- mortgages 9–10, 17, 23–4, 81, 166–7
- MVMs *see* market value margins
- nervousness factors, stakeholder expectations 158–61
- net asset book values, concepts 20–2, 64, 127–9, 183–5
- net earnings
 adjustments 193–4
 RAROC 171–5
- net present values, concepts 20, 98–100, 196–7
- net profits, concepts 38
- Nokia 201–2
- nominal share capital, concepts 43–4, 67–8
- non-cumulative/cumulative categories, subordinated debt 48, 50, 53–7, 61–3, 70–3, 110–14
- non-financial companies 25–6, 135–6, 166–9
- non-hedgeable risks, market value margins 101–2
- non-innovative hybrid Tier 1 capital
see also subordinated debt
 concepts 47–8, 53–4, 55–6, 77–9, 111–14
- non-life insurance companies, concepts 12–14, 93–5, 103–5, 203
- non-life risk
see also catastrophe . . . ; premium . . . ; reserve . . .
 concepts 103–5, 226–8, 231
- non-listed equities, equity risk 217–18
- non-redeemable preference shares 48, 51–3, 57, 61–3, 70–1
- OECD countries 217, 221–2
- operating costs 38
- operational risk
see also business . . . ; clients . . . ; execution . . . ; fraud . . .
 assessment methods 88–90, 91–2
 concepts 26–7, 88–90, 91–2, 102–5, 230–1
 definition 88–9, 102, 230
 Solvency II standardized approach 102–5, 230–1
 three-pillar approach to capital requirements 88–90
 types 88–9
- optimal capital structure
see also capital . . . ; corporate finance decisions; cost of capital; debt-financing . . . ; regulatory . . . ; stakeholder . . .
 concepts 1–5, 45, 139–48, 157, 181–211
 definition 1–2
- optimal cost of capital, concepts 1–5, 139, 143, 157, 173–5, 187–91, 207–11
- optimal performance
see also capital allocations; economic profits; optimal return on capital; risk . . . ; strategy, risk, and capital . . .
 capital preservation considerations 154–7
 concepts 1–5, 113, 136–7, 139–79, 207–11
 definition 1–2, 4
 overview of roles/responsibilities 155–7
- optimal return on capital
see also optimal performance

- concepts 1–5, 38, 41–2, 139, 146, 152–7, 163–9, 171–5, 177–9, 207–11
 options 73, 84–8, 99–100
 organizational structures 32–6, 125–9
 outsourcing to commercial businesses, return on capital 152–6
 own funds, Solvency II concepts 58–62
 own-issued debt, core Tier 1 capital 48, 52–3, 194–7
- P&L** *see* profit and loss statements
 parents
 see also subsidiaries
 strategic diversification 199–205
 payer swaps 142–3
PD *see* probability of default
 penetration considerations, parental strategy matrix 200–5
 pensions 12
 performance evaluations of business lines, concepts 3, 5, 136–7, 139–79, 208–11
 permanence test of capital quality, concepts 47–50, 59–62, 77–9
 perpetual hybrids, concepts 48, 53–6, 70–3
 perspectives of capital management 1–5, 207–11
 pillars, three-pillar approach to capital requirements 79–92, 95–105, 119
 portfolios, concepts 146–8, 199–205
 preference shares
 concepts 48, 51–6, 57, 61–3, 70–1, 108–10, 186–7, 188
 definition 70–1
 valuations 71, 186–7
 premium risk, non-life risk concepts 103–5, 226–8
 premiums, life insurance companies 12–13, 20, 93–5, 102–5, 167, 226–8
 price/earnings ratios 186–7
 private banks, concepts 10–11
 probabilities 25–9, 81–3, 84–8, 91–2, 175, 203–4, 224, 227–9
 probability of default (PD), concepts 81–3, 224
 products
 clients/products/business-practice risks 88–90
 strategic diversification 199–205
 profit centres, treasury departments 34
 profit and loss statements (P&L) 18, 41–2, 43–4, 68, 87–90, 91–2, 116, 194–5
 see also retained earnings; shareholder's equity
 balance sheets links 18, 43–4, 68, 194–5
 components 43–4, 68
 property risk, concepts 103–5, 219, 224
 prudential filters, concepts 48, 51, 53, 115–16
 put options 99–100
- RAROC** *see* risk-adjusted return on capital
 rationality considerations, stakeholder expectations 158–9
 regulatory capital add-ons, Solvency II 97–105
 regulatory ratios
 see also BIS . . . ; core . . .
 concepts 36, 75–9, 107–8, 131–3, 183–5, 191–7
 mergers and acquisitions 183–5
 regulatory requirements 2–3, 4, 25–6, 31–2, 36, 40–1, 43–4, 45–137, 143, 158–9, 183–5, 191–7, 207–11
 see also capital . . .
 accounting concepts 43–4
 banks 3, 45, 61–3, 64–6, 75–92, 107, 131–3, 135–7, 143, 191–7, 207–11
 capital definition 45, 47–66, 75–9, 96–105, 107–21, 183–5
 dynamic capital regulation 109–10
 insurance companies 3, 47, 58–62, 93–105, 135–7, 217–31
 optimal capital structure responsibilities 2–3, 4, 207–11
 overview 45, 209
 potential changes 45, 107–21, 137
 three-pillar approach to capital requirements 79–92, 119
 related diversification, parental strategy matrix 200–5
 related penetration, parental strategy matrix 200–5
 replicating portfolios, segmentation of balance sheets 146–8
 reputational risk, concepts 153–4
 reserve adequacy tests, concepts 123
 reserve risk, non-life risk concepts 103–5, 226–8
 retail banks, concepts 9–10, 11, 16–18, 23–4, 76–9, 90, 154–7, 163, 166–9, 204

- retained earnings
see also profit and loss statements
 concepts 18, 43–4, 48, 51–3, 68, 142, 191–7
- return on capital 1–5, 38, 41–2, 128–9, 131–3, 139, 146, 152–7, 163–9, 171–5, 177–9, 188–91, 199–205, 207–11
 definition 171–2
 RAROC 5, 139, 146, 171–5, 178–9
- returns 1–5, 35–9, 41–2, 128–9, 131–3, 139, 146, 152–7, 163–9, 171–5, 177–9, 188–91, 199–205, 207–11
- revaluation reserves, concepts 44, 48, 50–3, 54–6, 57, 68, 115–16, 214
- reverse convertibles, investment banks 16
- revision risk, life risk concepts 103–5, 225–6
- rights issues, concepts 22, 68–70
- risk 2–5, 9, 11–14, 25–9, 35, 38, 45, 67–73, 75–92, 109, 115, 121, 139–79, 203, 207–11, 217–31
see also credit . . . ; market . . . ; operational . . .
 appetites 9, 13–14, 29, 38, 149–69
 assessments 35, 67–73, 75–92, 141–8, 149–69
 aversion 9, 13–14, 29, 38, 149–69
 capital charges 217–31
 limits 164–9
 optimization concepts 45, 131–3
 pooling concepts 13–14
 seekers 13–14, 29, 38, 149–69
 strategy, risk, and capital management cycle 2, 5, 139, 177–9, 203
 types 26, 79–92, 109, 115, 121, 142–8, 217–31
- risk management 2, 4–5, 11–12, 25–9, 33, 35, 45, 139–79, 207–11
see also optimal performance
 budgets 164
 business lines 153–4, 162–3, 166–9
 capital management 139, 149–69, 209–11
 capital preservation objectives 149–69
 critical success factors 139, 149, 163–9
 de-risk concepts 150, 156, 167–8
 definition 149–54, 161–3, 209–10
 departments 33, 35
 emerging roles 161–3
 levels 155–69
 objectives 139, 141–8, 149–69
 strategic decision-making processes 161–3
- stress tests 26, 165–6
- transfer pricing mechanisms 168–9
- risk weightings, three-pillar approach to
 capital requirements 79–92, 107, 131–3
- risk-adjusted incentives for employees 166
- risk-adjusted return on capital (RAROC)
 concepts 5, 139, 146, 171–5, 177–9, 199–205
 definition 171–5
 uses 172–3, 178–9
- risk-free interest rates 41–2, 75–6, 101–2, 141–2, 172–5, 220–2
- risk-reward optimizations 145–8, 150–69, 173–5
- risk-weighted assets (RWAs)
see also BIS ratio; three-pillar approach . . .
 concepts 48, 55, 75–92, 95–105, 107, 131–3, 183–5
 definition 75–6
 mergers and acquisitions 183–5
 optimization considerations 45, 131–3, 183–5
 securitization market 131–2
 subsidiaries 132–3
- RWAs *see* risk-weighted assets
- savings banks
see also retail . . .
 concepts 9–10
- savings and loans crisis in the US 120
- SCR *see* solvency capital requirement
- securitization market 119, 131–3
- segmentation of balance sheets
 banks 147–8
 concepts 9–14, 16–18, 146–8
 insurance companies 146–7
- share capital
see also convertibles; equity . . . ;
 preference . . . ; rights . . .
 concepts 43–4, 48–66, 67–73
- share issues 11–12, 22, 34, 48, 67–70, 195–7
- share premium accounts, concepts 43–4, 48, 51–3, 67–8
- shareholders, concepts 67–8, 158–9, 204–5
- shareholder's equity 17–21, 43–4, 48, 50–66, 67–73, 75–105, 107–21, 126–9, 131–3, 146–8, 158–9
see also capital . . . ; equity . . .
- Shell 135–6
- shorting, capital hedging 37, 78–9
- silos-thinking 35

- SME/corporate banks *see* commercial banks
- soft side of capital management
see also stakeholder expectations
 concepts 3, 4, 61, 96, 139, 157–61, 210–11
- solo-supervision concepts 125–9
- solvency capital requirement (SCR) 61–3,
 96–105
- Solvency I, concepts 93–5, 144
- Solvency II
 BSCR 102–5, 230
 capital definition 58–62, 96–105
 concepts 47, 58–62, 93, 95–105, 123,
 144–5, 217–31
 counterparty default risk 103–5, 224, 231
 definition 93, 95–6, 102–3
 health risk 103–5, 228–30, 231
 liabilities side of the balance sheet 97–102
 life risk 98–100, 103–5, 224–6, 231
 market risk 99–105, 217–24, 231
 non-life risk 103–5, 226–8, 231
 operational risk 102–5, 230–1
 preference shares 61–2
 quality tests 59–62
 standardized approach 96, 98, 102–5,
 217–31
 technical provisions 95–105, 123, 144–5
 spread risk, concepts 103–5, 220–2, 224
 spreads 10, 11, 220–2, 224
- SREP *see* Supervisory Review and
 Evaluation Process
- stakeholder expectations 2, 3–4, 29, 157–61,
 191–2, 205, 208, 210–11
 heat maps 158–61
 optimal capital structure responsibilities 2,
 3–4, 157–61, 208, 210–11
 rationality considerations 158–9
 types 158–61
- Standard & Poor's (S&P) 99–100, 215
- standard deviations 85–9, 227–30
- standardized approach of Solvency II,
 concepts 58–62, 96, 98, 102–5, 217–31
- stop-loss levels, investments 150–1
- strategic decision-making processes, concepts
 161–3, 199–205, 208–11
- strategic diversification, concepts 199–205
- strategic risk, definition 91
- strategy, risk, and capital management cycle
see also optimal performance
 concepts 2, 5, 139, 177–9, 203
- strategy translation, capital allocations 3, 4–5,
 120–1, 164–9, 177–9, 205, 208–11
- stress tests, concepts 26, 165–6
- structured products, investment banks 16
- subinvestment grade credit ratings, concepts
 215
- subordinated debt 17–21, 41–2, 48, 49–50,
 53–6, 58–62, 70–3, 108–14, 115, 142–8,
 158–61, 185–7, 195–7
see also non-innovative hybrid Tier 1
 capital
- benefits 113
- cumulative/non-cumulative categories 48,
 50, 53–7, 62–3, 70–3, 108–14
- potential changes in capital regulations
 111–15
- priorities 49–50, 53–4
- subordination test of capital quality, concepts
 49–50, 59–62
- subsidiaries 36–7, 40–1, 51–3, 78–9, 108–9,
 116–17, 119–21, 125–9, 132–3, 199–205
- divestment decisions 132–3
- financial autonomy proposals 119–21
- RWAs 132–3
- strategic diversification 199–205
- Supervisory Review and Evaluation Process
 (SREP) 92, 96–105
- surplus capital, Solvency II 97–105
- swaps 142–3
- syndicated lending 11–12
see also investment banks
- synergies 91, 129, 199–205
- systematically relevant banks, subordinated
 debt 109, 115
- systemic risks, concepts 109, 115, 121
- tactical capital management, definition 163,
 208
- tail-VaR RAROC (TVRAROC), concepts
 175, 203
- takeovers *see* mergers and acquisitions
- taxes 18, 20, 52–3, 108–9, 117, 137, 174,
 188–93
- technical provisions 19–22, 57–8, 93–105,
 123, 144–5, 146–8
 capital definition 57–8, 93–5, 96–105, 123,
 144–5
 reserve adequacy tests 123
 Solvency II 95–105, 123, 144–5
- term structure of interest rates 219–20
- theoretical ex-rights price (TERP) 69–70
- three-pillar approach to capital requirements,
 concepts 79–92, 95–105, 119

- Tier 1 capital
see also core . . . ; innovative . . . ;
 non-innovative . . .
 concepts 47–66, 71–3, 75–9, 107–21,
 131–3, 183–5
 deductions 48, 52–3, 54, 55, 64–6, 108–10,
 115–16, 118
 definition 47–8, 59–61, 71–2
 potential changes 107–21
- Tier 1 non-common, potential changes 110
- Tier 2 capital
see also lower . . . ; upper . . .
 concepts 47–66, 75–9, 109–10, 114,
 115–16, 118, 195–7
 deductions 47–8, 55–6, 64–6
 potential changes 110, 114, 115–16, 118
- Tier 3 capital, concepts 47–63, 107
- tolerance levels, heat maps 158–61
- trading books, market risk 83–8
- transfer pricing mechanisms, risk
 management 168–9
- transferability factors, rights issues 68–9
- transparency issues 92, 96, 119, 146–8, 166
- treasury departments 32–6, 39–40, 120–1
- TVRAROC *see* tail-VaR RAROC
- ULs *see* unexpected losses
- underwriting risk, concepts 101–2, 153–4,
 167–8
- unexpected losses (ULs), concepts 37–8,
 81–3, 171–5
- unit-linked policies, 92–3, 102–3
- unrelated diversification, parental strategy
 matrix 200–5
- unrelated penetration, parental strategy
 matrix 200–5
- upper Tier 2 capital, concepts 47–8, 54–6
- upward shocks, concepts 217–26
- valuations 45, 135–7, 183, 185–7, 189, 191–4
 balance sheet analysis 45, 135–7
 discounted earnings valuations 135–7,
 191–4
 enterprise value 137, 183, 185–7, 189
 equity valuations 191–4
- Value at Risk (VaR)
see also economic capital; historical . . . ;
 Monte Carlo . . . ; variance-covariance
 (parametric) . . .
 concepts 25–9, 82–3, 84–9, 175, 203–4,
 227–9
 overview of models 89
- value creation, concepts 1–5, 120–1, 202–5,
 207–11
- value propositions, concepts 9–12
- variance-covariance (parametric) VaR model,
 concepts 85–7, 88, 89
- VaR *see* Value at Risk
- Vasicek's single-factor model 82–3
- volatilities 23–4, 142–3, 203–5, 219–20
- WACC *see* weighted average cost of capital
- warehousing risks, concepts 11–12, 38
- weighted average cost of capital (WACC),
 concepts 181, 187–91
- wholesale banks
see also commercial . . . ; investment . . .
 definition 11
- wholesale markets, concepts 10–12, 17–19,
 146–8
- yield curves 123