

Contents

Preface	xvii
About the Author	xix
1 Main Strategic Equity Derivative Instruments	1
1.1 Equity Forwards	1
1.1.1 Equity Forwards	1
1.1.2 Example of a Cash-settled Equity Forward on a Stock	2
1.1.3 Example of a Physically Settled Equity Forward on a Stock	3
1.1.4 Calculating the Forward Price of a Stock	4
1.2 Equity Swaps	6
1.2.1 Total Return Equity Swaps	6
1.2.2 Price Return Equity Swaps	7
1.2.3 Case Study: Physically Settled Total Return Equity Swap on Deutsche Telekom	7
1.2.4 Case Study: Cash-settled Total Return Equity Swap on Deutsche Telekom	12
1.2.5 Determination of the Initial Price	15
1.2.6 Determination of the Settlement Price	16
1.2.7 Equity Notional Resets	17
1.2.8 Case Study: Total Return Equity Swap on EuroStoxx 50	17
1.2.9 Compo Equity Swaps	21
1.2.10 Quanto Equity Swaps	23
1.2.11 Uses of Equity Swaps	25
1.3 Stock Lending and Borrowing	26
1.3.1 Stock Lending and Borrowing	26
1.3.2 Stock Lending/Borrowing Transaction Flows	27
1.3.3 Counterparty Credit Risk	28
1.3.4 Advantages of Stock Lending and Borrowing	29
1.3.5 Drawbacks of Stock Lending and Borrowing	29
1.4 Call and Put Options	30
1.4.1 Call Options	30
1.4.2 Put Options	33

1.4.3	European vs. American Style	36
1.4.4	Time Value vs. Intrinsic Value	36
1.4.5	In, At or Out-of-the-money	37
1.4.6	Variables that Influence an Option Price	38
1.4.7	Historical Volatility vs. Implied Volatility	40
1.4.8	Put–Call Parity	41
1.4.9	Options’ Sensitivities, the “Greeks”	42
1.4.10	Delta Hedging	44
1.4.11	Offsetting Dividend Risk	45
1.4.12	Adjustments to Option Terms Due to Other Corporate Actions	46
1.4.13	Volatility Smile	47
1.4.14	Implied Volatility Term Structure	48
1.4.15	Composite and Quanto Options	49
1.5	Dividend Swaps	50
1.5.1	Dividend Swaps	50
1.5.2	Applications of Dividend Swaps	50
1.5.3	Risks	52
1.5.4	Main Dates in a Dividend Distribution	52
1.5.5	Case Study: Single-stock Dividend Swap	52
1.5.6	Case Study: Index Dividend Swap	56
1.5.7	Pricing Implied Dividends	58
1.6	Variance Swaps and Volatility Swaps	58
1.6.1	Variance Swaps Product Description	59
1.6.2	Calculation of the Realized Volatility and the Realized Variance	61
1.6.3	Volatility Swaps Product Description	62
1.6.4	Volatility Swaps vs. Variance Swaps	63
1.6.5	Applications of Variance and Volatility Swaps	63
2	Equity Capital Markets Products	65
2.1	Main Equity Capital Markets Products	65
2.1.1	Capital Increase Products	65
2.1.2	Secondary Placement Products	66
2.1.3	Equity-linked Products	66
2.2	Initial Public Offerings	66
2.2.1	Product Description	66
2.2.2	Benefits of Going Public	67
2.2.3	Drawbacks of Going Public	67
2.2.4	The IPO Process	68
2.2.5	Phase 1: Preparation of the Company	68
2.2.6	Phase 2: Preparation of the Offering	69
2.2.7	Phase 3: Marketing of the Offering	75
2.2.8	Phase 4: Placement of the Offering	77
2.2.9	Key Success Factors Affecting an IPO	80
2.2.10	Key Risk Factors Affecting an IPO	81
2.2.11	Case Study: Visa’s IPO	82
2.3	Case Study: Google’s Dutch Auction IPO	85

2.4	Rights Issues (or Rights Offerings)	87
2.4.1	Product Description	87
2.4.2	Main Definitions of a Rights Issue	88
2.4.3	Advantages and Weaknesses of a Rights Issue	89
2.4.4	Rights Offerings Success Factors	90
2.4.5	Calculation of the TERP	90
2.4.6	Case Study: ING's EUR 7.5 billion Rights Issue	91
2.5	Rights Issues of Convertible Bonds	95
2.5.1	Case Study: Banco Popolare Rights Issue of a Convertible Bond	95
2.6	Accelerated Book-Buildings	98
2.6.1	Product Description	98
2.6.2	Advantages and Weaknesses of an ABB	99
2.6.3	Estimating the Discount	99
2.6.4	Case Study: IPIC's Disposal of 11.8% of Barclays	100
2.7	At the Market Offerings	100
2.7.1	Product Description	100
2.7.2	Case Study: US Treasury Placement of Citigroup Shares	101
3	Convertible Bonds and Mandatory Convertible Bonds	103
3.1	Introduction to Convertible Bonds	103
3.1.1	What are Convertible Bonds?	103
3.1.2	Convertible vs. Exchangeable Bonds – Exchange Property	104
3.2	Who Buys Convertible Bonds?	105
3.3	Convertible Bonds: The Issuer Perspective	106
3.4	Case Study: Infineon's Convertible Bond	107
3.4.1	Main Terms of Infineon's Convertible Bond	107
3.4.2	Conversion Price, Ratio, Premium and Lockout Period	108
3.4.3	Hard No Call Period, Hard Call and Soft Call Options	109
3.4.4	Put Rights	110
3.4.5	Additional Clauses: Cash Option, Cash Top-up, Lock-up Period, Tax Call	111
3.4.6	Value of a Convertible Bond at Maturity	112
3.4.7	Value of a Convertible Bond during its Life	112
3.5	Delta Share Repurchase Strategy	114
3.6	Mandatory Convertible Bonds	115
3.7	Rationale for Issuing Mandatory Convertibles	115
3.8	Rationale for Investing in Mandatory Convertibles	116
3.9	Fixed Parity Mandatory Convertibles	116
3.9.1	Case Study: Banco Santander's Fixed Parity Mandatory Convertible	116
3.10	Variable Parity Mandatory Convertibles	118
3.11	Dividend Enhanced Convertible Securities	118
3.11.1	Conversion Mechanics of a DECS	118
3.11.2	Anatomy of a DECS	120
3.11.3	Embedded Derivatives in a DECS	121
3.11.4	Pricing a DECS	122
3.12	Case Study: UBS's DECS	122

3.13	Special Clauses in Convertibles	124
3.13.1	Dividend Protection Clauses	124
3.13.2	Coupon Deferral Clauses	125
3.13.3	Call Option Make-whole Clauses	126
3.13.4	Change-of-control Make-whole Clauses	126
3.13.5	Clean-up Call Clauses	127
3.13.6	Net Share Settlement Clauses	127
3.14	Contingent Convertibles: FRESHES, CASHES and ECNS	127
3.14.1	Case Study: Fortis's FRESH Instrument	128
3.14.2	Case Study: Unicredit's CASHES Instrument	131
3.14.3	Case Study: Lloyds ECN	136
3.14.4	Case Study: Rabobank's SCN	139
4	Strategic Equity Transactions around Convertible/Exchangeable Bonds	141
4.1	Issuing an Exchangeable with a Third-party Guarantee	141
4.1.1	Case Study: Controlinveste's Exchangeable Bonds on Portugal Telecom	141
4.1.2	Transaction Overview	142
4.1.3	Dividend Swap and Transaction Flows during the First Four Years	143
4.1.4	Transaction Flows in Case of Exchanges or at Maturity	145
4.1.5	Exchange Property Pledge and other Security Mechanisms	146
4.1.6	Attractiveness of the Transaction to the Issuer and to BCP	147
4.2	Issuing a Convertible Through a Third Party	147
4.2.1	Case Study: Novartis LEPOs and Put Options with Deutsche Bank	147
4.2.2	Transaction Overview	147
4.2.3	Deutsche Bank's Exposure to Novartis's Stock Price	149
4.2.4	Effect of Deutsche Bank's Zero-coupon Convertibles on the Exchange Price	151
4.2.5	Attractiveness of Deutsche Bank's Zero-coupon Exchangeables to Investors	152
4.2.6	Advantages to Novartis and Relevance of a Call Right	152
4.3	Crystallizing a Gain in a Convertible Investment Through Warrants	153
4.3.1	Case Study: Richemont Warrants Issue on Back of Convertible Preference Shares	153
4.3.2	Warrants' Terms	154
4.3.3	Analysis of R&R's Position	154
4.3.4	Main Benefits to Richemont of the Warrants Issue	155
4.3.5	Effect on BAT's Stock Price of the Warrants Issue	156
4.4	Monetizing a Stake with an Exchangeable Plus a Put	156
4.4.1	Case Study: Deutsche Bank's Exchangeable into Brisa	156
4.4.2	Transaction Overview	157
4.4.3	Analysis of Deutsche Bank's Overall Position	158
4.5	Increasing Likelihood of Conversion with a Call Spread	161
4.5.1	Case Study: Chartered Semiconductor's Call Spread with Goldman Sachs	161
4.5.2	Goldman Sachs's Overall Position	162
4.5.3	CSM's Overall Position	163

4.5.4	Attractiveness of the Transaction to CSM	166
4.5.5	Additional Remarks	167
4.6	Decreasing Likelihood of Conversion with a Call Spread	169
4.6.1	Case Study: Microsoft's Convertible Plus Call Spread	169
4.7	Double Issuance of Exchangeable Bonds	169
4.7.1	Case Study: ABC's Double Exchangeable	169
4.8	Buying Back Conversion Rights	172
4.8.1	Case Study: Cap Gemini's Repurchase of Conversion Right from Société Générale	172
4.9	Buying Back Convertible/Exchangeable Bonds	175
4.9.1	Case Study: TUI's Convertible Bond	175
4.10	Pre-IPO Convertible Bonds	178
5	Hedging and Yield Enhancing Strategic Stakes	181
5.1	Hedging a Strategic Stake	181
5.1.1	Hedging with a Put Option	181
5.1.2	Hedging with a Put Spread	184
5.1.3	Hedging with a Collar	186
5.1.4	Hedging with a Put Spread Collar	188
5.1.5	Hedging with a Fly Put Spread	189
5.1.6	Hedging with a Knock-out Put	191
5.1.7	Summary of Main Hedging Strategies	193
5.1.8	Hedging with Ladder Puts	193
5.1.9	Hedging with Variable Premium and Variable Expiry Timer Puts	195
5.1.10	Hedging with Pay-later Puts	197
5.2	Yield Enhancement of a Strategic Stake	199
5.2.1	Lending the Stock	199
5.2.2	Selling Part of the Upside with a Call	200
5.2.3	Monetization of Dividend Optionality	202
5.2.4	Reduction of Dividend Withholding Taxes with a Stock Lending Strategy	204
5.2.5	Reduction of Dividend Withholding Taxes with a Converse Strategy	205
6	Disposal of Strategic Stakes	207
6.1	Most Common Disposal Strategies	207
6.1.1	Case Study Assumptions	207
6.1.2	Market Dribbling Out or Gradual Sale	208
6.2	Deterministic Disposal Strategies	209
6.2.1	ABB – Block Trade	209
6.2.2	Mandatory Exchangeable Bond	211
6.2.3	Indirect Issue of an Exchangeable Bond	211
6.3	Enhanced Disposal Strategies	212
6.3.1	Direct Issue of an Exchangeable Bond	213
6.3.2	Sale of a Call Option	214
6.3.3	One-speed Range Accrual	216

6.3.4	Double-speed Range Accrual	220
6.3.5	Double-speed Range Accrual with Final Call	221
6.3.6	Double-speed Range Accrual with Deduction	222
6.3.7	Double-speed Range Accrual with Knock-out	222
6.4	Derecognition Strategies	224
6.4.1	Sale + Cash-settled Equity Swap	224
6.4.2	Physically Settled Equity Swap + Call Option	227
6.5	Combination of ABB and a Call Option/Exchangeable	229
6.5.1	Case Study: Germany's Disposal of Fraport with JP Morgan's Collaboration	229
7	Strategic Equity Derivatives in Mergers and Acquisitions	235
7.1	Keeping Voting Rights in Proxy Contests	237
7.1.1	Case Study: Montalban Partners' Disposal of Gold International	237
7.2	Submitting Resolutions to an AGM	239
7.2.1	Case Study: Laxey's Stock Lending Transaction	240
7.3	Increasing Likelihood of Success of a Merger Arbitrage Position	242
7.3.1	Case Study: Perry's Equity Swaps with Bear Stearns and Goldman Sachs	242
7.4	Avoiding Mandatory Offer Rules	247
7.4.1	Case Study: Agnelli Family Equity Swap with Merrill Lynch	247
7.5	Increasing Likelihood of Success of a Takeover	251
7.5.1	Case Study: Unipol's Takeover of BNL and Call/Put Combination with Deutsche Bank	251
8	Stock Options Plans Hedging	257
8.1	Main Equity-based Compensation Plans	257
8.1.1	Main Equity-based Compensation Plans	257
8.1.2	Terminology of Stock Option Plans and SARs	258
8.2	IFRS Accounting for Equity-based Compensation Plans	259
8.2.1	Accounting for Stock Options Plans	261
8.2.2	Accounting for Stock Appreciation Rights	263
8.3	Case Study: ABC's ESOP and SAR	265
8.3.1	Main Terms of ABC's ESOP and SAR	265
8.3.2	Accounting for ABC's ESOP	266
8.3.3	Accounting for ABC's SAR	270
8.4	Main ESOP/SAR Hedging Strategies	273
8.4.1	Underlying Risks in ESOPs and SARs	273
8.4.2	Hedging with Treasury Shares	274
8.4.3	Hedging with Equity Swaps	275
8.4.4	Hedging a SAR with an Enhanced Equity Swap	279
8.4.5	Hedging with Standard Call Options	280
8.4.6	Hedging with Auto Call Options	282
8.4.7	Hedging with Timer Call Options	282
8.5	HSBC's Performance Share Plan	283
8.5.1	Terms of HSBC's Performance Share Plan	283

8.5.2	Accounting for the Plan	284
8.5.3	Hedging the Plan	285
9	Equity Financings	287
9.1	Case Study: Equity Collateralized Bond	287
9.1.1	Bond Terms	287
9.1.2	Main Documents of the Financing	288
9.1.3	Parties to an Equity Financing	289
9.1.4	Accounts in an Equity Financing	290
9.1.5	Credit Enhancement Tools	291
9.1.6	Early Termination Events	292
9.1.7	Events of Default	295
9.1.8	Syndicating the Equity Financing with a Credit Default Swap	297
9.1.9	Recourse vs. Non-recourse Equity Financings	299
9.2	Sale + Equity Swap	300
9.2.1	Transaction Description	300
9.2.2	Equity Swap Terms	300
9.2.3	Equity Swap Flows	305
9.2.4	Advantages and Weaknesses	307
9.3	Prepaid Forward + Equity Swap + Pledge	308
9.3.1	Product Description	308
9.3.2	Equity Derivatives Terms	308
9.3.3	Transaction Flows	314
9.3.4	Advantages and Weaknesses	316
9.4	Repo Financing	316
9.4.1	Product Description	316
9.5	Stock Loan Financing	317
9.5.1	Product Description	317
9.6	Put Financing	318
9.6.1	Product Description	318
9.6.2	Advantages and Weaknesses	319
9.7	Collared Financing	320
9.7.1	Product Description	320
9.7.2	Advantages and Weaknesses	321
9.8	Revolving Margin Loan Facilities	322
9.8.1	Case Study: Oil SPE's Revolving Margin Loan Facility	322
10	Share Buybacks and Other Transactions on Treasury Shares	327
10.1	Open Market Repurchase Programs	327
10.2	Accelerated Repurchase Programs	329
10.2.1	Case Study: Hewlett Packard's ASR with Merrill Lynch	329
10.3	VWAP-Linked Repurchase Programs	332
10.3.1	Execution on a Best Effort Basis	332
10.3.2	Execution on a Guaranteed Basis	333
10.3.3	Advantages and Weaknesses of a VWAP-linked Strategy	333

10.3.4	Execution at a Discounted VWAP	334
10.3.5	Execution at a Capped VWAP	337
10.4	Prepaid Collared Repurchase Programs	338
10.4.1	Case Study: Hewlett Packard's PCRPs with BNP Paribas	339
10.5	Deep-in-the-money Call Purchase	340
10.5.1	Case Study: ABC's Acquisition of a Deep-in-the-money Call Option	341
10.6	Asian Call Purchase	343
10.7	Publicly Offered Repurchase Programs	345
10.7.1	Case Study: Corporacion Dermoeestetica's Public Offer to Acquire Own Shares	345
10.8	Public Offer of Put Options	346
10.8.1	Case Study: Swisscom's Public Offer of Put Options	346
10.9	Private Sale of a Put Option	347
10.10	Acquisition of Shares with a Range Accrual	348
10.10.1	One-speed Range Accrual	348
10.10.2	Double-speed Range Accrual	352
10.10.3	Double-speed Range Accrual with Final Put	354
10.11	Other Transactions on Treasury Shares	355
10.11.1	Case Study: ABC's Restructuring of Call on Own Shares	355
10.11.2	Case Study: Gilead's Share Repurchase Program Financed with Convertible Bonds	361
11	Bank Regulatory Capital	365
11.1	An Overview of Basel III	365
11.1.1	Precedent Bank Regulatory Capital Accords	365
11.1.2	The Capital Ratio	366
11.1.3	Bank Regulatory Capital	367
11.1.4	Risk-weighted Assets	367
11.2	Tier 1 Capital	369
11.2.1	Common Equity Tier 1 Capital	369
11.2.2	Additional Tier 1 Capital	373
11.3	Tier 2 Capital	376
11.3.1	Criteria for Inclusion in Tier 2 Capital	376
11.3.2	Trigger Conditions for Hybrid Instruments	379
11.4	Deductions from Common Equity Tier 1 Capital	380
11.4.1	Goodwill and Other Intangible Assets (Except Mortgage Servicing Rights)	380
11.4.2	Deferred Tax Assets	380
11.4.3	Cash Flow Hedge Reserve	382
11.4.4	Shortfall of the Stock of Provisions to Expected Losses	383
11.4.5	Gain-on-sale Related to Securitization Transactions	383
11.4.6	Gains and Losses on Fair Valued Own Liabilities due to Changes in Own Credit Risk	383
11.4.7	Defined Benefit Pension Fund Assets and Liabilities	383
11.4.8	Treasury Stock	385
11.4.9	Reciprocal Stakes in Unconsolidated Financial Companies	385

11.4.10	Less than 10% Stakes in Unconsolidated Financial Companies	385
11.4.11	Significant Stakes in Unconsolidated Financial Companies	387
11.4.12	Combined Deduction of Significant Investments in Unconsolidated Financial Entities, MSRs and DTAs	388
11.4.13	Basel II 50/50 Deductions	389
11.5	Other Capital Buffers	389
11.5.1	Capital Conservation Buffer	389
11.5.2	Countercyclical Buffer	391
11.6	Transitional Arrangements	392
11.6.1	Transitional Period	392
11.6.2	Capital Instruments Failing Criteria for Eligibility in Capital	393
11.7	Leverage Ratio	393
11.8	Liquidity Coverage Ratio	394
11.9	Net Stable Funding Ratio	396
11.10	Case Study: Calculation of Minority Interests	397
11.11	Case Study: Creating Minority Interests	399
11.12	Case Study: Reducing Risk Weighting	401
11.13	Case Study: Releasing Common Equity	401
11.14	Case Study: Reducing an Unconsolidated Financial Stake	403
11.15	Case Study: Commerzbank's Capital Structure Enhancement with Credit Suisse	404
	Bibliography	407
	Index	409

<http://www.pbookshop.com>