Contents

	Chapter 1		
	Financial Markets 11		
1.1	Capital market 11		
1.2	Foreign Exchange market 13		
1.3	Money market 14		
1.4	Yield curve 17		
1.5	Credit risk market 18		
1.6	Commodity markets 19		
1.7	Regulated markets and the over-the-counter market 20		
	1.7.1 Regulated markets 20		
	1.7.2 The over-the-counter market 21		
	Chapter 2		
	Cash Instruments 23		
2.1	Shares 23		
2.2	Non-tradable loans 26		
	2.2.1 Bank loans 26		
	2.2.2 Repurchase agreements and securities lending 27		
2.3	Fixed-income securities 29		
	2.3.1 Special types of fixed-income securities 32		
2.4	Mutual Funds, ETFs and index trackers 33		
	Chapter 3		
	FX Derivatives 35		
3.1	Terminology 35		
3.2	FX forwards and FX Futures 37		
	3.2.1 Offsetting FX forward contracts 38		
	3.2.2 The use of FX forwards to hedge the FX risk of investment		
	portfolios 40		
	3.2.3 FX Futures 41		
3.3	Non-deliverable forward 41		
3.4	FX options 43		
	3.4.1 Applications of FX options 44		
3.5	Cylinder Option 46		

3.6	FX swap 47			
	3.6.1 Rolling over FX forward contracts by using FX swaps 49			
	3.6.2 Synthetic short-term euro funding 51			
	3.6.3 o/n swaps and t/n swaps 53			
3.7	Cross currency swap 53			
	3.7.1 Application of a CCS with an initial exchange of principals 53			
	3.7.2 Application of a CCS without an initial exchange of principals 55			
	3.7.3 Cross currency basis swap 58			
	Chapter 4			
	Interest rate derivatives 59			
4.1	Forward rate Agreement 59			
	4.1.1 Implied forward rates – conceptual explanation 61			
	4.1.2 FRA application 62			
	4.1.3 Exact calculation of the FRA settlement amount 63			
4.2	Interest rate swaps 64			
	4.2.1 Product characteristics of interest rate swaps 64			
	4.2.2 Hedging the interest rate risk of a loan with a floating rate 66			
	4.2.3 Asset swap 67			
	4.2.4 Application of interest rate swaps by banks 68			
	4.2.5 Overnight index swap 70			
	4.2.6 Basis swaps 70			
4.3	Interest rate options 71			
	4.3.1 Cap 71			
	4.3.2 Floor 74			
	4.3.3 Collar 74			
	4.3.4 Swaption 75			
4.4	Money market futures 76			
	Chapter 5			
	Commodity derivatives 79			
5.1	Commodity futures and commodity forwards 79			
5.2	Commodity swaps 81			
5.3	Commodity options 82			
	Chapter 6			
	Investment-related derivatives 85			
6.1	Share futures 85			
6.2	Share options 88			
6.3	Index futures and index options 91			
6.4	Bond futures 93			
6.5	Precious metals futures 95			

	Chapter 7						
	Pricing Financial Instruments 97						
7.1	Types of prices 97						
7.2	Pricing on a regulated market 98						
7.3	Pricing on the over-the-counter market 99						
7.4	Pricing	Pricing loans 101					
	7.4.1	Credit spread for expected loss 101					
	7.4.2	Add-on for cost of capital 104					
7.5	Pricing	Pricing credit risk for derivative transactions 106					
	7.5.1	Potential future exposure 107					
	7.5.2	CVA spread 111					
	7.5.3	CVA capital requirement 112					
	7.5.4	Total client spread and transparency 113					
	7.5.5	Margins 114					
	Chapte	Chapter 8					
	Conce	pts in Regard to Valuation 119					
8.1	Interes	t rates and calculation of coupon amounts 119					
8.2	Time v	alue of money 124					
	8.2.1	Future value and present value with single interest 124					
	8.2.2	Future value and present value with compounded interest 125					
8.3		Internal rate of return (IRR) 127					
8.4	Risk-free discount factors 128						
	8.4.1	Discount factors for broken periods, spline interpolation 132					
	8.4.2	Spot discount factors and discount factors for value today 133					
	8.4.3	Funding curve 135					
8.5		iscounting 135					
8.6	Implied forward rates for EURIBOR/LIBOR based contracts 138						
8.7	Adjust	Adjusted FX discount factors 142					
	8.7.1	Adjusted FX discount factors for periods shorter than one					
		year 142					
	8.7.2	Adjusted FX discount factors for periods longer than one year 144					
	8.7.3	FX discount factors for value today 147					
	-	Chapter 9					
		Market value calculations 149					
9.1		ion methods 149					
9.2	Differe	Different types of market value 150					
	9.2.1	Valuation per spot or per value today 151					
	9.2.2	Clean or dirty market value 153					

9.3	Valuation of loans 155			
5.5	9.3.1 Valuation of loans with a floating rate 156			
	9.3.2 Clean and dirty market value of a loan 158			
9.4	Valuation of FX instruments 158			
3.4	9.4.1 Valuation of an FX Forward contract 158			
	9.4.2 Valuation of an FX swap 161			
	9.4.3 Valuation of NDFs 162			
	9.4.4 Valuation of cross currency swaps 163			
9.5	Valuation of FRAs 164			
9.6	Valuation of interest rate swaps 165			
3.0	9.6.1 Clean and dirty price of an interest rate swap 167			
	9.6.2 Valuation of an OIS swap 167			
9.7	Valuation of an oil swap 169			
9.8	Valuation of futures and exchange options 172			
9.9	The market value of an option 174			
9.10	Valuation adjustments 175			
9.11	Prudent valuation according to IFRS and the EBA 177			
9.12	How to interpret market values? 179			
	·			
	Chapter 10			
	Treatment of cash instruments under IFRS 181			
10.1	Initial recognition and measurement 181			
10.2	Subsequent measurement of financial assets 182			
10.3	Subsequent measurement of financial liabilities 184			
10.4	Amortised Cost 185			
	10.4.1 Amortised cost in case of a fixed rate 185			
	10.4.2 Amortised cost in case of a floating rate 187			
10.5	Fair value 187			
	10.5.1 Fair value hierarchy 188			
	10.5.2 FVTPL and FVOCI 189			
10.6	Treatment of expected credit losses 197			
	Chapter 11			
	Treatment of derivatives under IFRS 201			
11.1	Underlying values, initial investments and future settlements 202			
11.2	Reporting of the market value on the start date and during the term 203			
11.3	Treatment of accrued interest 205			
11.4	De-recognition 206			
	11.4.1 De-recognition of physically settled contracts 207			
	11.4.2 De-recognition of cash settled contracts 208			
11.5	Exercise of options 210			
	11.5.1 Exercise of physically settled options 210			
	11.5.2 Exercise of cash settled options 212			

11.6	Keporti	Reporting margin calls 212				
11.7	Treatment of embedded derivatives 214					
	11.7.1	Embedded derivatives with interest as underlying value 215				
	11.7.2	Embedded derivatives with other underlying values 218				
	Chapte	er 12				
	Hedge	accounting under IFRS 9 219				
12.1	Different types of hedge accounting models 219					
	12.1.1	Cash flow hedge 220				
	12.1.2	Fair value hedge 221				
	12.1.3	Hedge of net investment in a foreign operation 222				
12.2	Eligible	hedging instruments and hedged items 223				
	12.2.1	Eligible hedging instruments 224				
	12.2.2	Eligible hedged items 225				
12.3	Different types of exposures 226					
	12.3.1	Net positions 226				
	12.3.2	Partial hedges 227				
	12.3.3	Hedge of risk components 229				
	12.3.4	Aggregate exposures 229				
12.4	Hedge effectiveness 231					
	12.4.1	Economic relationship 231				
	12.4.2	Credit Risk 231				
	12.4.3	Hedge ratio 232				
	12.4.4	Hedge effectiveness test and rebalancing 233				
12.5						
12.6	Hedge documentation 238					

Index 241