

Multinational Finance

Fifth Edition

ADRIAN BUCKLEY



An imprint of **Pearson Education**

Harlow, England • London • New York • Boston • San Francisco • Toronto • Sydney • Singapore • Hong Kong
Tokyo • Seoul • Taipei • New Delhi • Cape Town • Madrid • Mexico City • Amsterdam • Munich • Paris • Milan

Contents

Preface and acknowledgements	xv
-------------------------------------	----

Part A ESSENTIAL BACKGROUND

1 Introduction	3
1.1 What do bankers sell?	7
1.2 The creation of Eurodollars	8
1.3 Facts about the foreign exchange markets	11
1.4 Summary	13
2 The international monetary system	15
2.1 The gold standard	15
2.2 The Great Depression	18
2.3 Exchange rates: 1914 to 1944	19
2.4 The Bretton Woods system	21
2.5 The role of gold up to 1971	22
2.6 The Second Amendment	24
2.7 International reserves	25
2.8 Exchange rate arrangements	26
2.9 The European Monetary System	29
2.10 The exchange rate mechanism of the EMS	29
2.11 The European single currency – the euro	32
2.12 Summary	33
2.13 End of chapter questions	35
3 Corporate finance around the world	36
3.1 World equity markets	36
3.2 World bond markets	41
3.3 Corporate governance and corporate finance	43
3.4 Corporate reporting around the world	46
3.5 Different corporate tax systems	48
3.6 Summary	50
3.7 End of chapter questions	50

Part B FOREIGN EXCHANGE

4	Exchange rates: the basic equations	53
4.1	Foreign exchange markets	53
4.2	Some basic relationships	54
4.3	Interest rates and exchange rates	56
4.4	Purchasing power parity applied	66
4.5	Big Mac purchasing power parity	72
4.6	Summary	72
4.7	End of chapter questions	75
5	Foreign exchange markets	76
5.1	The players	76
5.2	Methods of quotation	77
5.3	Forward contracts and quotations	79
5.4	Spot settlement	82
5.5	Forward value dates	82
5.6	Main purpose of the forward market	83
5.7	Summary	84
5.8	End of chapter questions	85
6	The balance of payments	86
6.1	The essence of international trade	86
6.2	The balance of payments and foreign exchange rates	87
6.3	Balance of payments accounting	91
6.4	Forecasting exchange rates and the balance of payments	95
6.5	Summary	96
6.6	End of chapter questions	97
7	Theories and empiricism on exchange rate movements	98
7.1	Inflation and interest rate differentials	99
7.2	The balance of payments approach	99
7.3	The monetary approach	102
7.4	Overshooting – the Dornbusch model	104
7.5	The portfolio balance theory	106
7.6	The role of news	108
7.7	Chartism	109
7.8	The efficient markets hypothesis	115
7.9	Empiricism and purchasing power parity	116
7.10	Empiricism and the Fisher effect	122
7.11	Empiricism and the international Fisher effect	122
7.12	Empiricism and interest rate parity	124
7.13	Empiricism and expectations theory	125
7.14	Empiricism and foreign exchange market efficiency	126
7.15	Summary	131
7.16	End of chapter questions	134

8	Definitions of foreign exchange risk	135
8.1	Transaction exposure	136
8.2	Translation exposure	136
8.3	Economic exposure	141
8.4	Summary	143
8.5	End of chapter questions	144
9	Financial accounting and foreign exchange	145
9.1	FASB 8	146
9.2	FAS 52	147
9.3	SSAP 20	152
9.4	Derivatives	155
9.5	FAS 133	155
9.6	FRS 13	157
9.7	IAS 39	158
9.8	Summary	159
9.9	End of chapter questions	160
	TEST BANK 1	161
	Exercises	161
	Multiple choice questions	164

Part C HEDGING

10	Does foreign exchange exposure matter?	169
10.1	Transaction exposure	169
10.2	Economic exposure	171
10.3	Translation exposure	173
10.4	Forecasting exchange rates	177
10.5	Summary	178
10.6	End of chapter questions	179
11	Principles of exposure management	180
11.1	Why hedge anyway?	180
11.2	What does exposure management aim to achieve?	180
11.3	The arguments against corporate hedging	181
11.4	The arguments for corporate hedging	185
11.5	Information for exposure management	190
11.6	What kind of foreign exchange exposure is significant?	191
11.7	The transaction exposure information system	193
11.8	Histogramming	195
11.9	Reinvoicing vehicles	198
11.10	Strategies for exposure management	198
11.11	Economic exposure revisited	201

11.12	Macroeconomic exposure	201
11.13	Value at risk	204
11.14	Summary	207
11.15	End of chapter questions	210
12	Internal techniques of exposure management	212
12.1	Netting	212
12.2	Matching	215
12.3	Leading and lagging	216
12.4	Pricing policy	217
12.5	Asset and liability management	221
12.6	Summary	222
12.7	End of chapter questions	223
13	External techniques of exposure management	224
13.1	Forward markets	224
13.2	Trading purpose of the forward market	225
13.3	Short-term borrowing	229
13.4	Discounting foreign-currency-denominated bills receivable	231
13.5	Factoring foreign-currency-denominated receivables	231
13.6	Currency overdrafts	232
13.7	Exchange risk guarantees	233
13.8	Counterparty risk	233
13.9	Summary	234
13.10	End of chapter questions	236
	TEST BANK 2	237
	Exercises	237
	Multiple choice questions	239
 Part D DERIVATIVES		
14	Swaps	245
14.1	Swaps – the basics	245
14.2	Interest rate swaps	247
14.3	Calculation of interest	253
14.4	Currency swaps	259
14.5	Assessing risk in swaps	264
14.6	Summary	267
14.7	End of chapter questions	268
15	Financial futures and foreign exchange	269
15.1	Financial futures in general	269
15.2	Currency contracts	273

15.3	Hedging a borrowing	274
15.4	Basis risk	275
15.5	Use of currency futures market	276
15.6	Summary	276
15.7	End of chapter questions	277
16	Options	278
16.1	Call options	278
16.2	Put options	280
16.3	Writing options	282
16.4	Reading the <i>Financial Times</i>	283
16.5	Combinations of options	283
16.6	Valuing options	286
16.7	An option-pricing formula	290
16.8	An option-pricing table	299
16.9	Summary	301
16.10	End of chapter questions	301
17	Currency options	303
17.1	How currency option markets work	303
17.2	Currency option strategies	307
17.3	Average rate option	309
17.4	Hedging a currency option	312
17.5	Option pricing models	316
17.6	Option pricing models for stocks and currencies: the empirical evidence	320
17.7	Corporate use of currency options	324
17.8	Summary	329
17.9	End of chapter questions	330
18	Interest rate risk	331
18.1	The term structure of interest rates	331
18.2	Interest rate exposure	335
18.3	Forward rate agreements	338
18.4	Interest rate futures	339
18.5	Interest rate swaps	339
18.6	Interest rate options	340
18.7	Summary	341
18.8	End of chapter questions	343
19	Financial engineering	344
19.1	Forward contracts	344
19.2	Option contracts	346
19.3	Some financial instruments	351

19.4	Summary	356
19.5	End of chapter questions	356
TEST BANK 3		357
	Exercises	357
	Multiple choice questions	358

Part E INTERNATIONAL CAPITAL BUDGETING

20	The internationalization process	363
20.1	Foreign direct investment	363
20.2	The sequential process	365
20.3	Market imperfections	368
20.4	Transaction cost theory	374
20.5	Internalization and firm-specific advantages	375
20.6	Location-specific advantages	377
20.7	The product life cycle	378
20.8	The eclectic theory	383
20.9	Globalization	386
20.10	Game theory and international strategy	388
20.11	The new trade theory	390
20.12	Summary	392
20.13	End of chapter questions	393
20.14	Appendix 1: Inward stock of world foreign direct investment	394
20.15	Appendix 2: Outward stock of world foreign direct investment	395
21	Exchange controls and corporate tax in international investment	396
21.1	Exchange controls	396
21.2	Profits repatriation	398
21.3	Circumventing profit repatriation restrictions	399
21.4	Other techniques of unblocking funds	403
21.5	International corporate taxation	403
21.6	Taxation of UK multinationals	407
21.7	Multicurrency management centres	408
21.8	Co-ordination centres	409
21.9	Foreign exchange rate strategy	411
21.10	Summary	412
21.11	End of chapter questions	413
22	The international capital budgeting framework	414
22.1	The international complications	415
22.2	NPV or APV?	420
22.3	Foreign investment and the cost of capital	422

22.4	The basic model	422
22.5	Empirical studies of international investment appraisal	424
22.6	Summary	429
22.7	End of chapter questions	430
23	The international capital budgeting model	432
23.1	International project appraisal	433
23.2	Taxation	434
23.3	Project evaluation with no exchange controls	436
23.4	Growth opportunities – aka real operating options	440
23.5	Valuing real operating options	442
23.6	Project evaluation with exchange controls	446
23.7	Debt–equity swaps	452
23.8	Sensitivity analysis	453
23.9	Summary	453
23.10	End of chapter questions	456
24	International investment: what discount rate?	457
24.1	The original US evidence	458
24.2	The new international evidence	460
24.3	Arithmetic or geometric mean?	461
24.4	The equity premium puzzle	466
24.5	Mean reversion	469
24.6	The equity risk premium	471
24.7	The international risk premium	472
24.8	Gains from international diversification	475
24.9	The international capital asset pricing model	476
24.10	Emerging markets	478
24.11	Summary	482
24.12	End of chapter questions	482
25	Country risk analysis and political risk	484
25.1	Country risk analysis	484
25.2	Sources of country risk	485
25.3	Measuring country risk	486
25.4	Political risk	489
25.5	The measurement of political risk	489
25.6	Managing political risk	493
25.7	Post-expropriation policies	495
25.8	Political risk analysis in international capital budgeting	497
25.9	Summary	501
25.10	End of chapter questions	502
26	International capital budgeting: the practicalities	503
26.1	Net present value and adjusted present value	503
26.2	Overseas project appraisal: Alpha NV	504

26.3	Summary	512
26.4	End of chapter questions	512
TEST BANK 4		513
	Exercises	513
	Multiple choice questions	514

Part F INTERNATIONAL FINANCING

27	International debt instruments	519
27.1	Short-term borrowing	521
27.2	Medium-term borrowing	523
27.3	Euromarkets	524
27.4	Definitions of key Eurocurrency terms	525
27.5	Eurodollar deposits and loans	526
27.6	Historical underpinnings of the Eurocurrency market	528
27.7	The players in the market	529
27.8	Euromarket deposits and borrowings	531
27.9	The Eurocredit market	531
27.10	Loan syndication	531
27.11	Securitization	535
27.12	Eurocurrency interest rates and their linkage with domestic rates	536
27.13	The international bond market	539
27.14	Disintermediation	546
27.15	The advantages of the Eurobond market to borrowers	547
27.16	The advantages of Eurobonds to investors	547
27.17	Summary	548
27.18	End of chapter questions	549
28	Financing the multinational and its overseas subsidiaries	550
28.1	The international financing choice	550
28.2	Minimization of global taxes	551
28.3	Managing risk	552
28.4	Financial market distortions	553
28.5	The multinational's capital structure	554
28.6	Political risk	555
28.7	Exchange control risk	556
28.8	Currency risk	557
28.9	Losses earned by subsidiaries	557
28.10	Inter-company credit	558
28.11	Taxation effects	558
28.12	Dividend policy	559
28.13	Other methods of profit transfer	559

28.14	Parent company guarantees	559
28.15	Partly owned subsidiaries	560
28.16	Euroequity or crosslisting	561
28.17	Some more empirical evidence	564
28.18	Measuring the cost of international borrowing	566
28.19	The advantages of borrowing internationally	567
28.20	The risks of borrowing internationally	568
28.21	Foreign currency financing decisions	570
28.22	Summary	573
28.23	End of chapter questions	574
29	Cash management	575
29.1	Banking relationships	575
29.2	Electronic banking	581
29.3	Cash collection and disbursement	582
29.4	Cash centres	584
29.5	Short-term investments	585
29.6	Summary	586
29.7	End of chapter questions	586
30	Project finance	587
30.1	Limited recourse finance	589
30.2	Ownership structures	590
30.3	Financing structures	591
30.4	Loan structuring	599
30.5	Resource risk	600
30.6	Raw material and supplies risk	601
30.7	Completion risk	601
30.8	Operating risk	603
30.9	Marketing risk	604
30.10	Financial risk	605
30.11	Political and regulatory risk	606
30.12	<i>Force majeure</i> risk	606
30.13	How does project finance create value?	606
30.14	The financial analysis of investments with project financing	608
30.15	Summary	611
30.16	End of chapter questions	611
31	Financing international trade and minimizing credit risk	612
31.1	Cash with order	612
31.2	Open account	614
31.3	Documentation in foreign trade	615
31.4	Bills of exchange	620
31.5	Documentary letters of credit trading	623
31.6	Government assistance schemes	626

31.7	Sources of export finance	628
31.8	Forfaiting	630
31.9	Countertrade	632
31.10	Summary	632
31.11	End of chapter questions	632
31.12	Appendix: Some terms encountered in trade finance	633

Part G Miscellaneous

32	Miscellaneous issues in multinational finance	639
32.1	Overseas subsidiary performance measurement	639
32.2	Problems in overseas performance evaluation	640
32.3	Treasury management performance	644
32.4	Centralization of exposure management	645
32.5	The treasury as a profit centre	647
32.6	Authority and limits	647
32.7	Foreign exchange dealing with banks	649
32.8	Dealing room security	650
32.9	Commercial paper	651
32.10	Credit rating	653
32.11	Transfer pricing	657
32.12	Capital flight	658
32.13	Corporate hedging policies	659
32.14	Summary	671
32.15	End of chapter questions	673
	TEST BANK 5	674
	Exercises	674
	Multiple choice questions	675
	Suggested answers to end of chapter questions	679
	Suggested answers to selected exercises	696
	Solutions to multiple choice questions	708
	Appendix 1 Present value of \$1	711
	Appendix 2 Present value of \$1 received annually for n years	713
	Appendix 3 Table of areas under the normal curve	715
	Appendix 4 Black and Scholes value of call option expressed as a percentage of the share price	716
	Appendix 5 Present value of \$1 with a continuous discount rate, r, for T periods. Values of e^{-rt}	719
	Appendix 6 SWIFT codes	723
	Glossary	729
	References	753
	Index	772