

Financial Decisions in Emerging Markets

Jaime Sabal

New York Oxford
OXFORD UNIVERSITY PRESS
2002

Contents

FOREWORD	–	xi
PREFACE		xiii
ACKNOWLEDGMENTS	-	xv
Chapter 1: Financial Theory in Emerging Markets		1
1.1 Financial Theory: What Does It Offer?		1
1.2 The Limitations of Financial Theory		2
1.3 Emerging Countries		4
1.4 Conclusions		12
Questions and Problems		13
PART I: THE INVESTOR AND THE FIRM		15
Chapter 2: Consumption, Investments, and Value		17
2.1 Consumption and Investment: A Complex Relationship		17
2.2 The Fisher Separation Principle		19
2.3 Consumption and Investment in Practice		21
2.4 Real and Financial Investments	•	22
2.5 Investments in Emerging Markets: Concluding Remarks		29
2.6 Conclusions		30
Questions and Problems		31
Appendix 2A: Net Present Value		32
Chapter 3: The Impact of Risk		36
3.1 Risk and Investment Decisions		36
3.2 The Utility Function		38
3.3 NPV and Returns		42
3.4 Choosing the Best Investment		43
3.5 Limitations of the Normal Distribution		46
3.6 Conclusions		48

Questions and Problems	49
Appendix 3A: Probability, Expected Value, and Standard Deviation	50
Appendix 3B: The Normal Distribution	51
Chapter 4: The Benefits of Diversification	53
4.1 Building Investment Portfolios	53
4.2 Portfolio Risk and Return	55
4.3 Finding the Optimum Portfolio	61
4.4 Conclusions	62
Questions and Problems	63
Appendix 4A: Covariance and Correlation	64
Appendix 4B: The Minimum Variance Frontier with " n " Assets	66
Chapter 5: Personal Investments	68
5.1 The Relationship Between Probability and Return	68
5.2 Probabilities, Returns, and Portfolio Selection	69
5.3 Benefits and Costs of a Controlling Stake	77
5.4 The Evaluation of Real Investments	81
5.5 Conclusions	84
Questions and Problems	84
Appendix 5A: Probabilities on the Normal Distribution	85
Part 1 Summary: The Investor and the Firm	87
PART 2: FIRM AND INVESTMENT	89
Chapter 6: The Classical Model	91
6.1 Real Investments and the Firm	91
6.2 Separation Between Consumption and Investment Under Uncertainty	92
6.3 A New Efficient Frontier: The Capital Market Line	95
6.4 The CAPM	99
6.5 Conclusions	109
Questions and Problems	110
Appendix 6 A: Proof of the CAPM	MI
Chapter 7: A Modified CAPM for Emerging Countries	113
7.1 Applicability of the CAPM	113
7.2 What Country Risk Means	114
7.3 A Modified CAPM	123
7.4 "Conclusions	132
Questions and Problems	133

Chapter 8: Valuation in Emerging Markets	134
8.1 Inflation and Exchange Rates	134
8.2 Subsidies	138
8.3 Capital Rationing	140
8.4 Horizon and Terminal Value	142
8.5 References and Adjustments to Net Present Value	145
8.6 Conclusions	146
Questions and Problems	147
Appendix 8A: Selection of Alternatives Under Capital Rationing	148
Appendix 8B: Perpetuities	151
Chapter 9: The Value of Flexibility	153
9.1 An Introductory Example	154
9.2 What Is an Option?	155
9.3 The Binomial Model	157
9.4 The Black-Scholes Model	161
9.5 What Determines the Value of an Option Before Expiration?	163
9.6 Types of Option	165
9.7 Flexibility in Emerging Markets	165
9.8 An Investment in a Mining Development	166
9.9 Real Options and Strategy	169
9.10 Some Comments on Valuing with Real Options	170
9.11 Conclusions	171
Questions and Problems	172
Appendix 9A: Derivation of the Black-Scholes Equation	174
Part 2 Summary: Firm and Investment	179
PART 3: FINANCING AND INVESTMENT	181
Chapter 10: Financing in Theory	183
10.1 Firm Financing	183
10.2 A Simple Model	184
10.3 What Happens When There Are Taxes?	190
10.4 The Costs of Financial Distress	196
10.5 Conclusions	199
10.6 Questions and Problems	200
Chapter 11: Financing in Practice	201
11.1 The Determinants of Leverage	201
11.2 Leverage in Emerging Markets	208

11.3	A Practical Determination of Leverage in Emerging Markets	213
11.4	Cost of Capital and Discount Rate in Emerging Countries	219
11.5	Conclusions	222
	Questions and Problems	222
Chapter 12: Financing and Value		224
12.1	The Value of Financial Flexibility	224
12.2	Financing Strategy	231
12.3	Conclusions	238
	Questions and Problems	238
	Appendix 12A: The Conditions for Cash Dividend Irrelevance	239
Part 3 Summary: Financing and Investment		241
Chapter 13: Final Remarks		243
13.1	The Value of Investment Opportunities	244
13.2	Country Risk and Cash Flow Estimation	246
13.3	Valuation Methods	248
13.4	Financing Decisions	250
ANSWERS TO END-OF-CHAPTER QUESTIONS AND PROBLEMS		252
REFERENCES		264
INDEX	" "	- 2 6 9