

---

# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Relevance of the Topic	3
1.1.1	Relevance for Global Investment	3
1.1.2	Relevance for Emerging Countries	5
1.1.3	Relevance in Academic Research	8
1.2	Research Subject and Methodology	9
1.2.1	Subject	9
1.2.2	Methodology	12
1.2.3	Structure	13
<b>2</b>	<b>Sovereign Lending and Default</b>	<b>15</b>
2.1	The pre-1990 Episode of Sovereign Lending	17
2.1.1	Infancy and the “Golden Age”	17
2.1.2	Bank Loans and Restructuring	19
2.1.3	The Brady Plan	21
2.2	The post-1990 Episode of Sovereign Lending	22
2.2.1	Mexico 1994–1995	28
2.2.2	The Asian Crisis 1996–1997	29
2.2.3	Russia 1997–1998	30
2.2.4	Brazil 1998–1999, 2002–2003	31
2.2.5	Pakistan 1998–1999	32
2.2.6	Ecuador 1998–1999	33
2.2.7	Ukraine 1998–2000	34
2.2.8	Turkey 2000–2001	35
2.2.9	Argentina 2000–2005	36
2.2.10	Uruguay 2001–2003	38
2.2.11	Moldova 2002	39
2.2.12	The Caribbean Restructurings 2005–2006	40

2.2.13	Outlook . . . . .	41
2.3	The Theory of Sovereign Lending and Default . . . . .	42
2.3.1	The Theory of Lending . . . . .	43
2.3.2	Crisis Literature . . . . .	45
2.3.3	The Literature on the IMF's Role . . . . .	47
2.4	Empirical Evidence . . . . .	49
2.4.1	Determinants of Crises . . . . .	50
2.4.2	The Effect of IMF Involvement . . . . .	52
2.4.3	Determinants of Ratings . . . . .	54
2.4.4	Determinants of Spreads . . . . .	55
2.5	Concluding Remarks . . . . .	58
<b>3</b>	<b>Sovereign Restructuring . . . . .</b>	<b>61</b>
3.1	Literature Review . . . . .	62
3.1.1	Sovereign Bankruptcy Procedures . . . . .	62
3.1.2	Analyzing Past Workouts . . . . .	68
3.2	Crisis Resolution in a Nutshell . . . . .	69
3.2.1	Liquidity and Solvency Crises . . . . .	69
3.2.2	Debt Swap, Soft and Hard Restructurings . . . . .	71
3.3	Evidence From Recent Restructurings . . . . .	78
3.3.1	Features of Recent Restructurings . . . . .	80
3.3.2	Resulting Present Value . . . . .	88
3.4	Lessons for Investors . . . . .	96
3.4.1	Investor Returns . . . . .	96
3.4.2	Modeling the Recovery Value . . . . .	101
3.5	Concluding Remarks . . . . .	105
<b>4</b>	<b>Modeling Sovereign Default Risk . . . . .</b>	<b>109</b>
4.1	Literature Review . . . . .	110
4.1.1	Structural Models . . . . .	111
4.1.2	Reduced Form Models . . . . .	112
4.1.3	Recovery Schemes . . . . .	116
4.1.4	Outlook . . . . .	118
4.2	An Overture to Bond Analysis . . . . .	119
4.2.1	The Money Market Account and the Discount Factor . . . . .	119
4.2.2	The Price of a Risky Zero Bond . . . . .	121
4.2.3	The Price of a Risky Coupon Bond . . . . .	122
4.2.4	Yields, Spot and Forward Rates . . . . .	124
4.2.5	Default Probability Functions . . . . .	126
4.2.6	Bootstrap Analysis . . . . .	127
4.2.7	Bond Duration and Average Life . . . . .	129

4.3	Functional Forms of the Term Structure	131
4.3.1	Affine Models	132
4.3.2	Parsimonious Models	133
4.3.3	Discussion	141
4.4	Modeling Recovery	143
4.4.1	Recovery of Market Value	144
4.4.2	Mixed Recovery	145
4.4.3	Discussion	146
4.5	Empirical Implementation	147
4.6	Concluding Remarks	150
<b>5</b>	<b>Empirical Estimations</b>	<b>153</b>
5.1	Empirical Model Comparison	154
5.1.1	The Nelson-Siegel Model	154
5.1.2	Two-factor Nelson-Siegel With RFV	159
5.1.3	The Weibull Model With RFV	163
5.1.4	The Gumbel Model With RFV	168
5.1.5	The Lognormal Model With RFV	171
5.1.6	Discussion	176
5.2	Results From Other Countries	177
5.2.1	Argentina	178
5.2.2	Colombia	183
5.2.3	Mexico	186
5.2.4	Turkey	191
5.2.5	Venezuela	194
5.3	Concluding Remarks	197
<b>6</b>	<b>Credit Default Swaps</b>	<b>199</b>
6.1	An Introduction to CDS	199
6.1.1	CDS Valuation	202
6.1.2	The CDS Basis	204
6.1.3	The Role of Recovery	206
6.2	Empirical Evidence From Brazil 2002–2003	211
6.2.1	Preliminary Data Analysis	211
6.2.2	No Arbitrage With Two Instruments	214
6.2.3	No Arbitrage With Three Instruments	217
6.3	Concluding Remarks	220
<b>7</b>	<b>Conclusion</b>	<b>223</b>
	<b>References</b>	<b>229</b>