International Parity Conditions

Theory, Econometric Testing and Empirical Evidence

Imad A. Moosa

Senior Lecturer in Economics La Trobe University Australia

and

Razzaque H. Bhatti

Assistant Professor of Economics University of Azad Jammu and Kashmir Pakistan



List	of Figures	xii	
List	List of Tables		
Prej	face	xv	
1	Introduction	1	
	An Overview	1	
	The Resurgence of Interest in International		
•	Parity Conditions	4	
	A Look at the Figures	5	
	What Follows in this Book	14	
2	The Purchasing Power Parity Hypothesis	25	
	Introduction	25	
	Absolute and Relative PPP	27	
	PPP in the History of Economic Thought	30	
	The Arbitrage, Monetary and Asset Market Views of PPP	32	
	Ex Ante PPP	36	
	The Productivity Bias Hypothesis	38	
	PPP as a Long-Run Equilibrium Condition	39	
	Proportionality, Symmetry and Exclusiveness	42	
	The Effect of Different Weights, Non-Traded		
	Goods and Transportation Costs	44	
	Misinterpretation of Cassel	47	
3	The Covered Interest Parity Hypothesis	53	
	Introduction	53	
	The CIP Hypothesis: A Formal Exposition	55	
	The Role of Transaction Costs	58	
	Less Than Infinite Elasticities	63	
	Capital Market Imperfections	65	
	Political Risk	67	
	Capital Controls	68	
	Data Imperfections	69	
	The Role of Speculation	69	
	The Effect of Taxes	72	
	Default Risk	73	

	Fisherian Expectations	74
	The Role of Uncertainty	75
	The Role of News	76
4	Uncovered Interest Parity and the Efficient Market	
	Hypothesis	77
	Introduction	77
	The UIP Hypothesis	78
	The Simple Efficiency Hypothesis	79
	The General Efficiency Hypothesis	81
	Rationalising the Failure of Unbiased Efficiency	82
	Some Sources of Bias	89
5	Real Interest Parity and the Fisher Hypothesis	94
	Introduction	94
	The RIP Hypothesis	95
	The Stability of the Fisher Closed Condition	97
	Measurement of the Expected Inflation Rate	98
	Allowing for Other Factors	101
	The Choice of Interest Rate	103
	Overlapping vs Non-Overlapping Data	104
	The Choice of the Price Index	105
6	International Parity Conditions in a Cointegration	
	Framework	107
	The Basic Idea	107
	Historical Review and the Building Blocks	113
	Statistical Background	118
	The Random Walk Model	119
	Stationarity	121
	Deterministic and Stochastic Trends	122
	Short-Memory and Long-Memory Series	132
	The Order of Integration	133
	Cointegrated Variables	134
	Implications for Conventional Econometric Techniques	139
	Cointegration Analysis: The Pros and Cons	139
7	Testing for Stationarity and Unit Root	143
	Introduction	143
	The Dickey–Fuller Test	144
	The Phillips-Perron Test	148

-

	The Sims Bayesian Test	151
	The Variance Ratio (VR) Test	152
	Testing for Seasonal Unit Roots	158
	Testing for Unit Root: Further Remarks	165
8	Cointegration: Representation and Testing	167
	More about the Cointegrating Regression	167
	Testing for Cointegration: Residual-Based Tests	170
	The Johansen Multivariate Method	174
	Other Tests for Cointegration	1 79
	Granger's Representation Theorem	181
	Seasonal Cointegration and Error Correction Models	184
	Cointegration in a Time-Varying Parameter Framework	186
	Cointegration and Causality	187
	Cointegration and Exogeneity	189
	Cointegration and Simultaneous Equation Models	190
	Cointegration and Non-Linearities	191
	Cointegration and Dynamic Specification	192
	Model Building with Integrated Variables: Summary	193
9	Purchasing Power Parity: Model Specification	
	and Related Econometric Issues	195
	Static Specifications	195
	Dynamic Specifications	198
	The Direction of Normalisation	202
	Short-Run vs Long-Run Specifications	204
	Structural Changes and Time-Varying Parameters	205
	Allowing for Uncertainty	206
	Testing PPP in Conjunction with UIP	208
	Confusion between Absolute and Relative PPP	208
10	Purchasing Power Parity: The Empirical Evidence	213
	Evidence from the Flexible Exchange Rates of the 1920s	213
	Evidence from the post-Bretton Woods Flexible	
	Exchange Rates	216
	Exchange Rates of the EMS and Other European	
	Countries	226
	Other Exchange Rates	228
	Long-Run Data	230
	Testing the Augmented PPP	234
	Concluding Remarks	236

11	Covered Interest Parity: The Empirical Evidence	239
	The Efficient Market Test	239
	The Conventional Regression Test	239
	Cointegration Analysis	241
	The Dynamic Modelling Approach	242
	National Currency vs Eurocurrency Assets	243
	An Overview of the Empirical Evidence	244
	Concluding Remarks	250
12	Uncovered Interest Parity and the Efficient Market	
	Hypothesis: The Empirical Evidence	252
	Conventional Regression Analysis	252
	Error Orthogonality Tests	253
	Tests Based on Vector Autoregression Analysis	254
	Cointegration Analysis	254
	Empirical Evidence on Nominal Interest Linkages	255
	Empirical Evidence on Unbiased Efficiency:	
	The Flexible Exchange Rates of the 1920s	257
	Empirical Evidence on Unbiased Efficiency:	
	The Testing Techniques	259
	Empirical Evidence on Unbiased Efficiency:	
	Other Aspects	270
	Concluding Remarks	278
13	Real Interest Parity and the Fisher Hypothesis:	
	The Empirical Evidence	280
	Testing the FH: Conventional Regression Analysis	280
	Testing the FH: Time-Varying Parametric Regression	284
	Testing the FH: Serial Correlation and Orthogonality	285
	Testing the FH: Cointegration Analysis	288
	Testing the FH: Allowing for Controls and Taxes on	
	Interest Income	291
	Testing the FH: Allowing for the Phillips and	
	Friedman Effects	293
	Testing the FH: Final Remarks	294
	Testing RIP: Conventional Regression Analysis	295
	Testing RIP: Orthogonality Tests	298
	Testing RIP: Cointegration Analysis	299
	Testing RIP: Vector Autoregression Analysis	300
	Testing RIP: The Kalman Filter Technique	301
	Summary and Concluding Remarks	302

X

1

14	Concluding Remarks	304
	Recapitulation	304
	The Feldstein-Horioka Puzzle	306
	Misconceptions about PPP	307
	Where Do We Go From Here?	308
Notes		309
References		326
Author Index		360
Subject Index		367

xi