Contents

Foreword ................................................................. xi
Acknowledgments ......................................................... xiii
Introduction ................................................................. xiv

I Determination and Impact of the Real Exchange Rate

1. Commodity Currencies and the Real Exchange Rate
   Paul Cashin, Luis F. Céspedes, and Ratna Sahay ..................... 3
   Theoretical Framework ............................................. 7
   Data ................................................................. 8
   Empirical Analysis of Comovement ................................ 14
   Conclusions ....................................................... 30
   Appendix 1.1 Details of the Theoretical Framework ................. 31
   Appendix 1.2 Description of the Data ................................ 34
   Appendix 1.3 Construction of the Country-Specific Nominal
     Price Indices of Commodity Exports .......................... 34
   Appendix 1.4 Cointegration Tests: Real Exchange Rate and
     Real Commodity Prices, Commodity-Exporting Countries,
     1980–2002 ...................................................... 35
   References ......................................................... 37

2. Exchange Rates and Trade Balance Adjustment in Emerging
   Market Economies
   Atish Ghosh, Alun Thomas, Juan Zalduendo, Luis Catão, Bikas Joshi,
   Uma Ramakrishnan, and Lupin Rahman .......................... 41
   The Analytics of Trade Balance Adjustment ......................... 44
   Country Classification and Estimation Strategy .................... 48
   Empirical Results ................................................ 52
   Conclusions ....................................................... 61
   Appendix 2.1 Overview of the Empirical Literature on
     Trade Volume Price Elasticities and Pricing to Market ........ 64
Concluding Remarks and Implications ................................. 164
Appendix 6.1 Data Sources .................................................. 167
Appendix 6.2 Error Correction Model for Trade Equations and Cointegration Tests .................................................. 169
Appendix 6.3 Principle of Dynamic Contributions ..................... 179
References ........................................................................ 180

7. Maintaining Competitiveness in the Global Economy
Catriona Purfield .................................................................... 182
Export Performance .............................................................. 182
Exchange Rate and Competitiveness ...................................... 188
Developments in the Real Effective Exchange Rate ................. 189
Determinants of the Real Effective Exchange Rate .................. 191
Outlook for India's Export Competitiveness ......................... 196
Conclusions ....................................................................... 197
References ........................................................................ 198

8. Modeling the Real Exchange Rates in WAEMU and CEMAC
Yasser Abdih and Charalambos Tsangarides ............................ 200
Theory and Empirical Formulation ........................................ 202
Empirical Methodology ....................................................... 206
Cointegration Analysis ......................................................... 210
Estimation of Equilibrium .................................................... 217
Concluding Remarks ........................................................... 223
Appendix 8.1 Variable Definitions and Sources ....................... 224
Appendix 8.2 Data, Test Diagnostics, and Results ................... 226
References ........................................................................ 237

III Considerations in Choice of Exchange Rate Regime

9. To Peg or Not to Peg: A Template for Assessing the Nobler
Aasim M. Husain ................................................................. 243
De Facto Regimes in Kazakhstan and Pakistan ...................... 246
Template ........................................................................ 248
Scorecard ...................................................................... 264
Conclusions .................................................................... 267
References ...................................................................... 268
10. Exits from Heavily Managed Exchange Rate Regimes: How Good Has the Going Been?
   Enrica Detragiache, Ashoka Mody, and Eisuke Okada ............ 270

11. Long-Run Determinants of Exchange Rate Regimes: A Simple Sensitivity Analysis
   Grace Juhn and Paolo Mauro ........................................ 293

List of Abbreviations ................................................. 327

Contributors ......................................................... 328

Figures
1.1 Real Exchange Rate and Real Commodity Price, Selected Commodity-Exporting Countries, 1980–2002 ............... 14
2.1 Price Deflators, 1980–2005 ..................................... 50
2.2 Profiles for Exports, Imports, and Trade Balances .......... 61
2.3 Effect of a Depreciation on the Trade Balance .............. 62
4.1 Effects of Exchange Rate Shock on Euro Area Prices ........ 103
4.2 Pricing Behavior of Domestic and Foreign Firms ............ 113
4.3 Empirical and Theoretical Impulse Response Paths for the Euro Area .............................................. 118
5.1 Real Effective Exchange Rate, 1970:Q1–2002:Q1 ............. 135
5.2 Determinants of Real Effective Exchange Rate, 1970–2002 .... 136
5.3 Real Effective Exchange Rate .................................... 143
6.1 Export Unit Values .......................................................... 154
6.2 Real Effective Exchange Rates, Productivity, and Wages .... 155
6.3 Growth Rate of World Demand ........................................ 156
6.4 Growth Rate of Domestic Demand ................................. 157
6.5 Accounting for Country Differences in Trade Growth ...... 160
6.6 France: Dynamic Contributions of Various Factors to Exports and Imports, 1999–2004 ........................... 163
6.7 Germany: Dynamic Contributions of Various Factors to Exports and Imports, 1999–2004 ......................... 164
6.8 Italy: Dynamic Contributions of Various Factors to Exports and Imports, 1999–2004 ............................. 165
6.9 Spain: Dynamic Contributions of Various Factors to Exports and Imports, 1999–2004 ............................ 166
7.1 World Market Position of Indian Exports, 1990–2003 ...... 185
7.2 India’s Export Performance Relative to Other Asian Countries 186
7.3 IMD Competitiveness Indicators, 2005 ............................. 187
7.4 CPI-Based Real Effective Exchange Rate and Its Components 192
7.5 RBI Five-Country REER and IMF Revised REER Measure 193
7.6 Specification 1: Actual and Estimated CPI-Based REER .... 195
7.7 Specification 2: Estimates of the Equilibrium REER ......... 196
7.8 Effective Exchange Rate Flexibility ................................. 197
8.1 Actual and Hodrick-Prescott Equilibrium Real Effective Exchange Rates ................................................. 221
8.2 Actual and Gonzalo-Granger Equilibrium Real Effective Exchange Rates .................................................. 222
8.3 Estimated Misalignment Episodes ................................. 223
8.A.1 Cointegration Variables .............................................. 230
8.A.2 Exchange Rates and Relative Prices ......................... 232
8.A.3 Real Effective Exchange Rates of Member Countries .... 233
8.A.4 Model Stability Tests ................................................. 234
8.A.5 Impulse Response Functions ................................. 236
9.1 Degree of Flexibility of Rupee and Tenge ......................... 247
9.2 Trade Orientation ...................................................... 251
9.3 Financial Integration .................................................. 253
9.4 Diversification ............................................................ 256
9.5 Stabilization ............................................................ 259
9.6 Credibility .......................................................... 261
9.7 Fear-of-Floating Effects ............................................. 263
10.1 Exits by Duration ...................................................... 275

Tables
1.1 Principal Commodity Exports and Percentage Share of Primary Commodities in Total Exports, 1991–99 .................. 12
1.2 Cointegration and Stability Tests, Real Exchange Rate and Real Commodity Prices, 1980–2002 ......................... 21
1.3 Real Exchange Rate and Real Commodity Prices: Exogeneity and Causality, 1980–2002 .............................. 27
2.1 Export Volumes: Coefficient Estimates and Implied Elasticities ......................................................... 53
2.2 Pricing Equation for Manufacturing Exporters: Coefficient Estimates and Implied Elasticities ......................... 55
2.3 Inflation Rate: Coefficient Estimates and Implied Elasticities ................................................................. 56
2.4 Volume of Imports and Absorption: Coefficient Estimates and Implied Elasticities ........................................ 57
2.5 Effects of Devaluations on Export-Import Values and on the Trade Balance for Different Classes of Exporters ....... 60
2.A.1 Estimates of Price Elasticities in Selected Papers .......... 65
2.A.2 Country Sample .................................................... 71
2.A.3 Export Volumes (Long-Run Elasticities) in Different Samples 72
2.A.4 Inflation Equation: Effect of a Change in Exchange Rates . 73
2.A.5 Impact on the Trade Balance of a 10 Percent Depreciation . 73
2.A.6 Pricing Equation for Manufacturing Exporters for Different Samples ..................................................... 74
2.A.7 Pricing Equation for Imports ..................................... 75
2.A.8 Trade Elasticities and Estimation Methodologies ............... 77
2.A.9 Long-Run Effects of Devaluations on Export-Import Values and on the Trade Balance (in Foreign Currency) for Different Classes of Exporters ........................................ 79
3.1 The Sample ............................................................. 87
3.2 Summary Statistics .................................................... 88
3.3 Bivariate Correlations Among Main Variables ................. 89
3.4 Foreign Aid and Trade Balance Volatility ....................... 90
4.1 Euro Area Pass-Through Elasticities .......................... 104
4.2 Pass-Through Elasticities in Trade Prices:
   International Comparisons .......................... 105
4.3 Implicit Estimates of Local “Distribution” Costs ............ 116
4.4 Summary of Behavioral Parameter Estimates .................. 117
4.A.1 Unit Root and Stationarity Tests .......................... 119
4.A.2 Cointegration Tests ..................................... 120
4.A.3 Bivariate Granger Causality Tests .......................... 120
4.A.4 Block Exogeneity Tests .................................. 121
4.A.5 Euro Area Pass-Through Elasticities Across VAR Reorderings 121
5.1 Selected Results of the VECM Specification .................. 138
5.2 Johansen Test for Stationarity and Exclusion Test ............ 140
5.3 Vector Error Correction Tests ................................ 141
5.A.1 Main Commodities Exported and Relative Weights .......... 147
6.1 Contributions of Net Exports to GDP Growth .................. 153
6.2 Balance on Non-oil Goods and Services ....................... 153
6.3 Geographic Orientation of Exports, 2004 ...................... 156
6.4 Cumulative Growth and Contribution of
   Trade Determinants, 2001–04 ................................ 161
6.A.1 Testing for Cointegration Relationship and Estimation of
   the Long-Term Trade Equations ............................ 172
7.1 Indicators of Export Growth ................................ 183
7.2 Composition of Goods Exports ............................... 184
7.3 Estimates of Deviation from the Equilibrium
   Real Effective Exchange Rate .............................. 190
7.4 Revised RBI and IMF Country Weights in REER Indices .... 191
7.5 Real Effective Exchange Rate Determinants ................... 194
8.1 Results of Cointegration Estimation .......................... 215
8.A.1 Real Effective Exchange Rate and Its Components ........... 226
8.A.2 Unit Root Tests for Variables in Levels and Differences .... 226
8.A.3 Tests for Model Reduction ................................ 227
8.A.4 Diagnostic Tests for the Residuals .......................... 228
8.A.5 Johansen Cointegration Tests ............................... 229
9.1 Countries in Sample .................................... 245
9.2 Scorecard ............................................. 265
10.1 Reinhart-Rogoff Natural Exchange Rate Classification ....... 274
10.2 Exits to More Flexible Exchange Rate Regimes, 1980–2002 . . 276
10.3 Summary Statistics of Explanatory Variables by Type of Observation .................................................. 280
10.4 Multinomial Logit Estimation Results
   (Tranquil as Base Category) ................................. 281
10.5 Multinomial Logit Estimation Results
   (Orderly as Base Category) .............................. 283
10.6 Multinomial Logit Results: Gains and Losses in Reserves . . 285
10.7 Binomial Logit Estimation Results .............................. 286
10.8 Binomial Logit Estimation Results: Robustness .............. 287
10.A.1 Data Description ........................................... 289

11.1 Studies on Determinants of Exchange Rate Regimes
   (Likelihood to Float) ........................................ 300
11.2 Summary Statistics of Explanatory Variables under Different Exchange Rate Regimes .......................... 310
11.3 Potential Determinants of Exchange Rate Regimes:
   Correlation Matrix ........................................... 313
11.4 Probit Regressions ........................................... 314
11.5 Probit Estimates ............................................. 315
11.6 Multinomial Logit Estimates ................................. 318
11.7 Probit with Instrumental Variables: IMF2000 Classification . 321
11.8 Multinomial Logit: IMF Classification, Cross-Section
   of Countries with Same Exchange Rate System
   in 2000, 1990, and 1995 ...................................... 322

The following conventions are used in this publication:
• In tables, a blank cell indicates “not applicable”; n.a. indicates “not available”; and 0 or 0.0 indicates “zero” or “negligible.” Minor discrepancies between sums of constituent figures and totals are due to rounding.
• An en dash (–) between years or months (for example, 2005–06 or January–June) indicates the years or months covered, including the beginning and ending years or months; a slash or virgule (/) between years or months (for example, 2005/06) indicates a fiscal or financial year.

As used in this publication, the term “country” does not in all cases refer to a territorial entity that is a state as understood by international law and practice. As used here, the term also covers some territorial entities that are not states but for which statistical data are maintained on a separate and independent basis.