# DEVELOPING COUNTRIES IN THE WORLD ECONOMY

#### Jaime de Melo



## DEVELOPING COUNTRIES IN THE WORLD ECONOMY

#### Jaime de Melo

FERDI, France & University of Geneva, Switzerland



#### Published by

World Scientific Publishing Co. Pte. Ltd.

5 Toh Tuck Link, Singapore 596224

USA office: 27 Warren Street, Suite 401-402, Hackensack, NJ 07601 UK office: 57 Shelton Street, Covent Garden, London WC2H 9HE

#### Library of Congress Cataloging-in-Publication Data

Developing countries in the world economy / Jaime de Melo.

pages cm. -- (World scientific studies in international economics; 42)

ISBN 978-9814494892 (alk. paper)

- 1. Developing countries--Foreign economic relations. 2. Developing countries--Commerce.
- 3. Developing countries--Economic conditions. 4. Developing countries--Economic policy.
- Economic development--Developing countries. I. De Melo, Jaime HF1413.D286 2015

337.09172'4--dc23

2014040801

#### British Library Cataloguing-in-Publication Data

A catalogue record for this book is available from the British Library.

Copyright © 2015 by World Scientific Publishing Co. Pte. Ltd.

All rights reserved. This book, or parts thereof, may not be reproduced in any form or by any means, electronic or mechanical, including photocopying, recording or any information storage and retrieval system now known or to be invented, without written permission from the publisher.

For photocopying of material in this volume, please pay a copying fee through the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, USA. In this case permission to photocopy is not required from the publisher.

In-house Editor: Qi Xiao

Typeset by Stallion Press

Email: enquiries@stallionpress.com

Printed in Singapore

### DEVELOPING COUNTRIES IN THE WORLD ECONOMY

#### **World Scientific Studies in International Economics**

(ISSN: 1793-3641)

Series Editor

Robert M. Stern, *University of Michigan and University of California-Berkeley, USA* 

Editorial Board

Vinod K. Aggarwal, University of California-Berkeley, USA Alan Deardorff, University of Michigan, USA Paul De Grauwe, London School of Economics, UK Barry Eichengreen, University of California-Berkeley, USA Mitsuhiro Fukao, Keio University, Tokyo, Japan Robert L. Howse, New York University, USA Keith E. Maskus, University of Colorado, USA Arvind Panagariya, Columbia University, USA

- Vol. 34 Applied Trade Policy Modeling in 16 Countries: Insights and Impacts from World Bank CGE Based Projects

  by David G Tarr (Consultant and Former Lead Economist, The World Bank, USA)
- Vol. 35 The Floating World: Issues in International Trade Theory by Wilfred J Ethier (University of Pennsylvania, USA)
- Vol. 36 Trade Policy in Asia: Higher Education and Media Services edited by Christopher Findlay (University of Adelaide, Australia), Hildegunn Kyvik Nordas (Organisation for Economic Co-operation and Development, France) & Gloria Pasadilla (APEC Secretariat, Singapore)
- Vol. 37 The Path of World Trade Law in the 21st Century by Steve Charnovitz (The George Washington University, USA)
- Vol. 38 International Trade, Distribution and Development: Empirical Studies of Trade Policies by Paul Brenton (The World Bank, USA)
- Vol. 39 Evolving Patterns in Global Trade and Finance by Sven W Arndt (Claremont McKenna College, USA)
- Vol. 40 Shadow Banking Within and Across National Borders edited by Stijn Claessens (International Monetary Fund, USA), Douglas Evanoff (Federal Reserve Bank of Chicago, USA), George Kaufman (Loyola University Chicago, USA) & Luc Laeven (International Monetary Fund, USA)
- Vol. 41 Modeling Developing Countries' Policies in General Equilibrium by Jaime de Melo (FERDI, France & University of Geneva, Switzerland)
- Vol. 42 Developing Countries in the World Economy by Jaime de Melo (FERDI, France & University of Geneva, Switzerland)

The complete list of the published volumes in the series can be found at http://www.worldscientific.com/series/wssie

#### Credits

The author would like to thank the following publishers for granting permission to reprint respective chapters.

#### Reprinted with kind permission from University of Chicago Press:

#### Chapter 1

Corbo, Vittorio, Jaime de Melo and James Tybout. 1986. "What Went Wrong with the Recent Reforms in the Southern Cone", *Economic Development and Cultural Change*, 34(3), 607–640.

#### Chapter 2

Melo, Jaime de and James Tybout. 1986. "The Effects of Financial Liberalization on Savings and Investment in Uruguay", *Economic Development and Cultural Change*, 34(3), 561–587.

#### Reprinted with kind permission from Oxford University Press:

#### Chapter 3

Devarajan, Shantayanan and Jaime de Melo. 1987. "Adjustment with a Fixed Exchange Rate: Cameroon, Côte d'Ivoire and Senegal", *The World Bank Economic Review*, 1(3), 447–487.

#### Chapter 11

Carrère, Céline and Jaime de Melo, "Are Different Rules of Origin Equally Costly? Estimates from NAFTA", in Olivier Cadot, Antoni Estevadeordal, Akiko Suwa-Eisenmann and Thierry Verdier, eds., *The Origin of Goods:* Rules of Origin in Regional Trade Agreements. New York: Oxford University Press, 191–212.

#### Chapter 12

Brun, Jean-François, Céline Carrère, Patrick Guillaumont and Jaime de Melo. 2005. "Has Distance Died? Evidence from a Panel Gravity Model", *The World Bank Economic Review*, 19(1), 99–120.

#### Chapter 15

Cadot, Olivier and Jaime de Melo. 2008. "Why OECD Countries Should Reform Rules of Origin", World Bank Research Observer, 23(1), 77–105.

#### Reprinted with kind permission from John Wiley & Sons:

#### Chapter 5

Riccardo Faini and Jaime de Melo. 1989. "Adjustment, Investment and the Real Exchange Rate in Developing Countries", *Economic Policy*, 5(11), 491–519.

#### Chapter 7

Melo, Jaime de, Marcelo Olarreaga and Wendy Takacs. 2000. "Pricing Policy Under Double Market Power: Madagascar and the International Vanilla Market", *Review of Development Economics*, 4(1), 1–20.

#### Chapter 17

Bilal, Sanoussi, Jean-Marie Grether and Jaime de Melo. 2003. "Attitudes Towards Immigration: A Trade Theoretic Approach", *Review of International Economics*, 11(2), 253–267.

#### Reprinted with kind permission from Elsevier:

#### Chapter 4

Faini, Riccardo, Jaime de Melo, Abdelhak Senhadji and Julie Stanton. 1991. "Growth-Oriented Adjustment Programs: A Statistical Analysis", *World Development*, 19(8), 957–967. Chapter 6

Carrère, Céline and Jaime de Melo. 2012. "Fiscal Spending and Economic Growth: Some Stylized Facts", *World Development*, 40(9), 1750–1761.

Credits

#### Chapter 8

Melo, Jaime de and Shujiro Urata. 1986. "The Influence of Increased Foreign Competition on Industrial Concentration and Profitability", *International Journal of Industrial Organization*, 4(3), 287–304.

#### Chapter 9

Tybout, James, Jaime de Melo and Vittorio Corbo. 1991. "The Effects of Trade Reforms on Scale and Technical Efficiency: New Evidence from Chile", *Journal of International Economics*, 31, 231–250.

#### Chapter 10

Melo, Jaime de and Alan Winters. 1993. "Do Exporters Gain from VERs?", *European Economic Review*, 37, 1331–1349.

#### Chapter 14

Cadot, Olivier, Jaime de Melo and Marcelo Olarreaga. 2003. "The Protectionist Bias of Duty Drawbacks: Evidence from Mercosur", *Journal of International Economics*, 59(1), 162–182.

#### Reprinted with kind permission from Taylor & Francis Group:

#### Chapter 16

Grether, Jean-Marie, Jaime de Melo and Tobias Müller. 2001. "The Political Economy of International Migration in a Ricardo–Viner Model", in Slobodan Djajic, ed., *International Migration: Trends, Policy and Economic Impact.* London: Routledge, 42–68.

#### Chapter 19

Gourdon, Julien, Nicolas Maystre and Jaime de Melo. 2010. "Openness, Inequality and Poverty: Endowments Matter", *Journal of International Trade and Economic Development*, 17(3), 343–378.

#### Chapter 22

Grether, Jean-Marie, Nicole Mathys and Jaime de Melo. 2012. "Unravelling the Worldwide Pollution Haven Effect", *Journal of International Trade and Economic Development*, 21(1), 131–162.

#### Reprinted with kind permission from MIT Press:

#### Chapter 18

Melo, Jaime de, Florence Miguet and Tobias Müller. 2004. "The Political Economy of Migration and EU Enlargement: Lessons from Switzerland", in Helge Berger and Thomas Moutos, eds., *Managing European Enlargement*. Cambridge, MA; London, UK: MIT Press, 129–167.

#### Reprinted with kind permission from INSEE/GENES:

#### Chapter 20

Ivlevs, Artjoms and Jaime de Melo. 2010. "FDI, the Brain Drain and Trade: Channels and Evidence", *Annals of Economics and Statistics*, 97/98, 103–121.

#### Reprinted with kind permission from Cambridge University Press:

#### Chapter 13

Melo, Jaime de, Arvind Panagariya and Dani Rodrik. 1993. "The New Regionalism: A Country Perspective", in Jaime de Melo and Arvind Panagariya, eds., *New Dimensions in Regional Integration*. UK: Cambridge University Press, 159–192.

#### Reprinted with kind permission from DE Boeck Université:

#### Chapter 21

Melo, Jaime de. 2013. "Trade in a 'Green Growth' Development Strategy", *Revue d'Economie du Développement*, 2013/4, 25–58.

#### **About the Author**

Jaime de Melo is Directeur Scientifique at the Fondation pour les Etudes et Recherches sur le Développement International (FERDI). He is also Emeritus Professor from the University of Geneva, where he taught from 1992 to 2012, a non-resident fellow at Brookings Institute, a CEPR fellow and a member of EU-GDN. He is an adjunct professor at the Bologna Center of the Johns Hopkins University and, since 2008 he also teaches at the Formation Universitaire à distance, Suisse. He is a founding member of the World Trade Institute. From 1972 to 1976 he worked at USAID and from 1976 to 1980 he taught at Georgetown University. From 1980 to 1993, he held several positions in the research department at the World Bank. He has consulted for the IMF, OECD, SECO, IGC, the EC Commission, and several governments. From 1986 to 1992, he was Professor Associé at Centre d'études et de Recherches sur le Développement International (CERDI) at the Université d'Auvergne. Since 2011, he is affiliated with FERDI. He has held several editorial positions and was Editor-in-Chief of The World Bank Economic Review (2005-2010). He holds degrees in Political Science (B.A. from Syracuse University, 1968), International Relations (M.A. from Johns Hopkins SAIS, 1970), and Economics (PhD from John Hopkins University, 1975). His publications are available at http://ideas.repec.org/e/pde173.html. His research interests focus on developing countries, particularly issues related to trade policy, migration, and the environment.

#### Preface and Acknowledgments

Modeling Developing Countries' Policies in General Equilibrium and Developing Countries in the World Economy are a collection of mostly co-authored work at Universities and at the World Bank.

My years at the Research Department at the World Bank brought me a lot. The research department was instrumental in the development of general equilibrium modeling and the papers in *Modeling Developing Countries' Policies in General Equilibrium* owe a great deal to the atmosphere there. For anyone interested in developing countries, the World Bank was, and still largely remains, a place to be.

For the twenty years at the University of Geneva, I am thankful for the opportunity to enter into new collaborations and to start working on the political economy of trade and migration policies. Several papers in *Developing Countries in the World Economy* are the result of these collaborations.

But my longest and closest affiliation — almost thirty years — has been with CERDI, the premier department in France for studying development, especially problems on Africa, and now with FERDI, its closely affiliated think-Tank that has just celebrated its tenth anniversary. Lectures and seminars at CERDI were the source of collaborations and served as springboard for work in progress. And now, at FERDI we are involved in the debate and design of sustainable development strategies and on how to finance them in an inclusive way. Some of the challenges ahead are raised in the papers in *Developing Countries in the World Economy*.

All of the papers have previously been published in academic journals or in books. I thank the publishers for the permission to reprint them. I thank Bob Stern for inviting (and prodding) me to reflect and put these volumes

together and the staff at World Scientific Publishing for seeing through the production process. I also owe a great debt to my family, Isabelle, Lea, Elissa and Ines for their patience and support.

Looking back, I have had the good fortune of engaging in these collaborations. Reflecting on them, I have mostly been on the receiving side in the exchange of ideas. I owe my co-authors a great debt and feel fortunate that many a collaboration has turned into a lasting friendship. I dedicate these volumes to them.

Geneva, January 2015

#### **Contents**

Credits			V
About the Au	uthor	and the same of th	ix
Preface and	Acknowledgments		xi
Introduction			1
Part I: Ref	forms, Adjustment and Growth	, t	19
Chapter 1	(with Vittorio Corbo and James Tybou What Went Wrong with the Recent Re in the Southern Cone	forms	21
	Introduction The Reforms and Their Intent Stylized Outcomes What Went Wrong Conclusions		
Chapter 2	(with James Tybout) The Effects of Fin Liberalization on Savings and Investma Introduction Financial Reforms, Financial Deepenin Crisis	ent in Uruguay	55
	Stylized Outcomes: Savings, Investme Financial Liberalization, Savings and I Financial Resource Allocation at the M Conclusions	Investment	

Chapter 3	(with Shantayanan Devarajan) Adjustment with a Fixed Exchange Rate: Cameroon,	
	Côte d'Ivoire, and Senegal	83
	Case Studies of Adjustment: Cameroon, Cote d'Ivoire, and Senegal  A Model of Medium-Term Adjustment  Determinants of the Current Account and Real Exchange Rates  Conclusions  Appendix A: Symbols Used in the Text  Appendix B: Solution of the Model  Appendix C: Parameters for Model Simulation	
	Appendix C. Farameters for Model Simulation	
Chapter 4	(with Riccardo Faini, Abdelhak Senhadji and Julie Stanton) Growth-Oriented Adjustment Programs: A Statistical Analysis	125
	Introduction External Environment and Adjustment Lending A Model to Measure Effectiveness of IMF–WB Programs Statistical Results Sustainability of Adjustment: Output Loss Estimates from Investment Cuts for a Group of Intensive Adjustment Lending Recipients Conclusions	
Chapter 5	(with Riccardo Faini) Adjustment, Investment and the Real Exchange Rate in Developing Countries	137
	Introduction The Controversy External Adjustment and the Real Exchange Rate Investment, the Real Exchange Rate and the Debt Overhang	
27	Looking Ahead Appendix A: Forward-Looking Model of Investment	

Chapter 6	(with Céline Carrère) Fiscal Spending	4.5
	and Economic Growth: Some Stylized Facts	167
	Introduction	
	Defining Events	
	Patterns of Fiscal and Growth Events	
	Understanding Fiscal Events	
	Conclusions	
	Appendix A: Growth Acceleration	
	Appendix B: Fiscal Events	
	Appendix C: Sensitivity Analysis	-
Part II: T	rade Policies, Market Structure and	
	Iarket Access	197
Chapter 7		
	Pricing Policy Under Double Market Power:	
	Madagascar and the International Vanilla Market	199
	Introduction	
	Trends in the Natural Vanilla Market	
	Alternative Pricing Policies in a Price-Leadership Model	
	Estimation of the Price-Leadership Model	
	Evaluating Madagascar's Pricing Strategy	
	Conclusions	
Chapter 8	(with Shujiro Urata) The Influence of Increased	
	Foreign Competition on Industrial	
	Concentration and Profitability	219
	Introduction	5.0
	A Comparison of Concentration and Profitability	
	in 1967 and 1979	
	Industry Structure and Performance: Cross-Section	
	Regression Analysis	
	Conclusion	

Chapter 9	(with Vittorio Corbo and James Tybout) The Effects of Trade Reforms on Scale and Technical Efficiency: New Evidence from Chile	237
	Overview A Glance at the Data Better Measures of Efficiency Changes Concluding Remarks Appendix: Production Technology Estimates	
Chapter 10	(with Alan Winters) Do Exporters Gain from VERs?  Introduction A Simple Model of a Competitive Industry Subject to a VER Estimation Welfare and Distributional Effects of VERs: Some Illustrative Simulations Conclusions Appendix A: Data Sources for Econometric Estimates	257
Chapter 11	(with Céline Carrère) Are Different Rules of Origin Equally Costly? Estimates from NAFTA Introduction  NAFTA RoO Map, and Non-Parametric Cost Estimates A Simple Model  Cost Estimates by Type of RoO and Category of Activities  Evaluating Estevadeordal's Synthetic Index  Value Content Restrictions  Conclusions  Appendix: the Model	277
Chapter 12	(with Jean-François Brun, Céline Carrère and Patrick Guillaumont) Has Distance Died? Evidence from a Panel Gravity Model Is There a Puzzle? Explaining the Puzzle	299

	Robustness	
	Conclusion	
	Appendix A: Data Sources and Data Preparation	
	Appendix B: Estimation Method	
	Appendix C: Evolution of $ \beta $ by Subperiod	
	Appendix D: Additive Transport Cost Function	
Part III: P	Political Economy	32
Chapter 13	(with Arvind Panagariya and Dani Rodrik)	
	The New Regionalism: A Country Perspective	323
	Introduction	
	Welfare Economics of FTAs	
	Institutional Dimensions of RI	
	Growth Effects of RI Schemes	
	Conclusions	
	Conclusions	
Chapter 14	(with Olivier Cadot and Marcelo Olarreaga)	
	The Protectionist Bias of Duty Drawbacks:	
	Evidence from Mercosur	359
	Introduction	
	Tariff Drawbacks and Lobbying	
	Customs Union and Duty Drawbacks	
	Application to Mercosur	
	Concluding remarks	
	Concluding Terriarks	
Chapter 15	(with Olivier Cadot) Why OECD Countries	
	Should Reform Rules of Origin	381
	Rules of Origin: Definition and Measurement	
	Quantifying the Effects of Rules of Origin	
	Direct Evidence	
	An Exception and a Quasi-Natural Experiment	
	Indirect Evidence	
	Implications for Reform	
	*	
	Appendix: Glossary of terms	