This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: International Economic Policy Coordination Volume Author/Editor: Buiter, Willem H. and Richard C. Marston, eds. Volume Publisher: Cambridge University Press Volume ISBN: 0-521-33780-1 Volume URL: http://www.nber.org/books/buit85-1 Publication Date: 1985 Chapter Title: Front matter to "International Economic Policy Coordination"

Chapter Author: Willem H. Buiter, Richard C. Marston

Chapter URL: http://www.nber.org/chapters/c4129

Chapter pages in book: (p. -15 - 0)

2057915

International economic policy coordination

-

2

1 d P GPUAPEN ç .

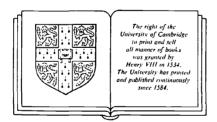
International economic policy coordination

Edited by

WILLEM H. BUITER

and

RICHARD C. MARSTON



· CAMBRIDGE UNIVERSITY PRESS

Cambridge London New York New Rochelle Melbourne Sydney Published by the Press Syndicate of the University of Cambridge The Pitt Building, Trumpington Street, Cambridge CB2 1RP 32 East 57th Street, New York, NY 10022, USA 10 Stamford Road, Oakleigh, Melbourne 3166, Australia

© Cambridge University Press 1985

First published 1985

Printed in Great Britain by the University Press, Cambridge

Library of Congress catalogue card number: 84-29246

British Library cataloguing in publication data

International economic policy coordination. 1. International economic relations 2. World politics – 1975–1985 I. Buiter, Willem H. II. Marston, Richard C. 337 HF1411

ISBN 0 521 30554 3

Centre for Economic Policy Research

The Centre for Economic Policy Research is a registered educational charity which promotes independent analysis of open economies and the relations between them. The research work which it disseminates may include views on policy, but the Board of Governors of the Centre does not give prior review to such publications, and the Centre itself takes no institutional policy positions. The opinions expressed in this volume are those of the authors and not those of the Centre for Economic Policy Research.

Board of Governors of the Centre for Economic Policy Research

Chairman Mr Jeremy Hardie

GovernorsProfessor Sir James BallDr Christopher BlissAdmiral Sir James EberleProfessor Frank HahnSiProfessor James MeadeMr Michael Posner

Lord Richardson Professor Amartya Sen Professor David Stout Sir Douglas Wass Mr David Watt

Officers of the Centre for Economic Policy Research

Director Professor Richard Portes

1

đ

Administrative Directors Mrs Wendy Thompson Programme and Finance Mr Stephen Yeo Research and Publications

1 October 1984

The National Bureau of Economic Research

Officers

Franklin A. Lindsay, Chairman Richard Rosett, Vice Chairman Martin Feldstein, President Geoffrey Carliner, Corporate Secretary

Directors at Large

Moses Abramovitz Andrew Brimmer George T. Conklin, Jr. Jean A. Crockett Morton Ehrlich Edward L. Ginzton David L. Grove Walter W. Heller Saul B. Klaman Franklin A. Lindsay Roy E. Moor Geoffrey H. Moore Michael H. Moskow James J. O'Leary Peter G. Peterson

Sam Parker, Director of Finance and Administration

Charles A. Walworth, Treasurer

Robert V. Roosa Richard N. Rosett Bert Seidman Eli Shapiro Stephen Stamas Donald S. Wasserman Marina v.N. Whitman

Directors by University Appointment

Marcus Alexis, Northwestern Albert Ando, Pennsylvania Charles H. Berry, Princeton James Duesenberry, Harvard Ann F. Friedlaender, Massachusetts Institute of Technology J. C. LaForce, California, Los Angeles Paul McCracken, Michigan James L. Pierce, California, Berkeley Nathan Rosenberg, Stanford James Simler, Minnesota James Tobin, Yale John Vernon, Duke William S. Vickrey, Columbia Burton A. Weisbrod, Wisconsin Arnold Zellner, Chicago

Directors by Appointment of Other Organizations

Carl F. Christ, American Economic Association Robert S. Hamada, American Finance Association Gilbert Heebner, National Association of Business Economists Robert C. Holland, Committee for Economic Development Douglas Purvis, Canadian Economics Association

Directors Emeriti

Arthur Burns Emilio G. Collado Solomon Fabricant Frank Fetter Thomas D. Flynn Gottfried Haberler George B. Roberts Murray Shields

Douglass C. North, Economic History Association Rudolph A. Oswald, American Federation of Labor and Congress of Industrial Organizations Albert Sommers, The Conference Board Dudley Wallace, American Statistical Association Charles A. Walworth, American Institute of Certified Public Accountants

> Lazare Teper Willard L. Thorp Theodore O. Yntema

Since this volume is a record of conference proceedings, it has been exempted from the rules governing critical review of manuscripts by the Board of Directors of the National Bureau (resolution adopted 8 June 1948, as revised 21 November 1949 and 20 April 1968).

4 Ociober 1984

1

Contents

	List of tables p	age	х		
	List of figures		xii		
	Preface		xiv		
	List of contributors		xv		
	Introduction		1		
	WILLEM H. BUITER and RICHARD C. MARSTON				
1	On transmission and coordination under flexible exchange	On transmission and coordination under flexible exchange			
	rates		8		
	W. MAX CORDEN				
	I A two-country model of macroeconomic policy				
	interaction		8		
	II Intertemporal effects		15		
	III Beyond the model		20		
	Comment DALE W. HENDERSON		24		
	Comment georges de ménil		32		
2	Fiscal expenditures and international economic				
	interdependence		37		
	JACOB A. FRENKEL and ASSAF RAZIN				
	I Introduction		37		
	II One-commodity world		40		
	III Two-commodity world		51		
	IV Concluding remarks		63		
	Appendix The two-commodity stationary system		66		
	Comment MATTHEW B. CANZONERI		73		
	Comment DAVID VINES		75		

vii

.

viii Contents

3	The effects of American policies – a new classical	
	interpretation	84
	PATRICK MINFORD	
	I Introduction and summary	84
	II The Liverpool international transmission model	86
	III A simplified account of the model	88
	IV The model in the context of previous work	94
	V The full model	100
	VI US policy simulations with the full model <i>Appendix A</i> Listing of the Liverpool multilateral	102
	macroeconomic model pierre-richard agénor	119
	Appendix B The solution and simulation of the model	
	SATWANT MARWAHA	126
	Comment MICHAEL EMERSON	131
	Comment RICHARD C. MARSTON	134
4	International policy coordination in historical perspective: a	
	view from the interwar years	139
	BARRY EICHENGREEN	
	I Leadership and cooperation under a gold standard	140
	regime	142
	II The Genoa conference of 1922 and the role for	1 47
	cooperation	147
	III Leadership and cooperation under the interwar gold	167
	standard	153
	IV The tripartite monetary agreement of 1936 and the	1.00
	role for cooperation V Conclusion	165
		170
	Comment willem H. BUITER	178
	Comment JO ANNA GRAY	181
5	Policy coordination and dynamic games	184
	MARCUS MILLER and MARK SALMON	
	I Time consistent equilibria	185
	II Anti-inflationary monetary policy in a two-country	
	setting	192
	III Conclusion	203
	Annex Deriving time consistent equilibria in symmetric	
	and asymmetric dynamic games	204
	Comment RALPH C. BRYANT	213
	Comment STEPHEN J. TURNOVSKY	220

ţ

1

t

4

4

	Contents	ix
6	Macroeconomic policy design in an interdependent world DAVID CURRIE and PAUL LEVINE	228
	I Introduction	228
	II The solution procedure	231
	III The model	242
	IV The design of rules for monetary and fiscal policy in	
	a small open economy	245
	V The cooperative two country control problem	250
	VI Two-country non-cooperative games	254
	VII Conclusions	258
	Appendix	262
	Comment DAVID K. H. BEGG	268
	Comment KOICHI HAMADA	271
		2/1
7	International policy coordination in dynamic macroeconomic	
	models	274
	GILLES OUDIZ and JEFFREY SACHS	
	I Introduction	274
	II A simple dynamic macroeconomic model	277
	III Policy coordination in the two-country model	297
	Appendix	308
	Comment JORGE BRAGA DE MACEDO	319
	Comment KENNETH ROGOFF	327
8	Policy cooperation and the EMS experience TOMMASO PADOA SCHIOPPA	331
	I Introduction	331
	II Systemic issues	332
	III The EMS: quantitative evidence	337
	IV The system at work	349
	V Conclusions	353
	Comment MICHAEL J. ARTIS	355
	Comment JEFFREY R. SHAFER	359
9	Panel discussion: the prospects for international economic	
-	policy coordination	366
	WILLIAM H. BRANSON Chairman	366
	RICHARD N. COOPER	366
	MICHAEL EMERSON	372
	LOUKA T. KATSELI	376
	STEPHEN MARRIS	379
	Index	385

.

1

ţ

• .

Tables

3.1	Impact effects of home policy shocks	page 92
3.2	Impact effects of US fiscal and monetary shocks	102
3.3	Recent world events	115
3A.la	Structure of the non-US country models	119
3A.1b	Structure of the US model	120
3A.lc	Equations for the rest of the world and the common bloc	121
3A.2a	Country coefficients	122
3A.2b	Coefficients for the rest of the world	124
3A.3	World model definitions	125
5.1	Varieties of non-cooperative behaviour	188
5.2	Non-cooperative time-consistent solutions	191
5.3	Economic model and policy objectives	193
5.4	Coordinated policy	195
5.5	Coordinated policy	196
5.6	Time consistent coordinated policy	197
5.7	Time consistent symmetric (Nash) game	199
5.8	Time consistent non-cooperative solutions	200
6.1	Parameter values	247
6.2	Best policy rules and welfare losses for the single open	
	economy	247
6.3	The consequences of monetary targeting. Policy rules	
	$r = \beta m$, with increasing values of β	249
6.4	The aggregate two country problem: monetary policy	
	alone	251
6.5	The aggregate two country problem: fiscal and monetary	
	policy	252
6.6	The divergence component of the two-country problem	253
6.7	The Cournot adjustment process for policy rule: $r = \beta m$	255
6.8	Welfare loss for Nash equilibrium for policy rule: $r = \beta m$	256

l

1

x

Figures

1.1	The effects on Germany of US expansion	page	9
1.2	German policy choices when US expands		11
1.3	US and German policy reaction curves		12
1.4	A case of negative total transmission		17
1A.1	Noncooperative equilibrium following a world productive	vity	
	disturbance		28
1A.2	Noncooperative equilibrium following a goods demand		
	disturbance		30
2A.1	Consequences of a rise in US government spending		79
3.1	Full macroeconomic equilibrium in the world economy		89
3.2	Temporary fiscal expansion in the home country - stylis	ed	
	model		93
3.3	Temporary money supply growth in the home		
	economy – stylised model		94
3.4	The effects of imperfect capital mobility under fiscal or		
	monetary expansion		99
3.5	US monetary expansion – full model	1	03
3.6	US monetary expansion – world effects – full model]	03
3.7	Rise in US money supply by 2% (once for all from 198	1) 1	04
3.8	US deficit rise – world effects – full model	1	09
3.9	US deficits rise – full model	1	09
3.10	US deficit rise (by 1% of GDP, for 1981 only)	1	10
3.11	Iteration structure for period 1, given expectational		
	variable iterate	J	27
3.12	Iteration structure for expectational variables	J	128
4.1	The home country's objective function]	159
4.2	Home and foreign policy reaction curves	J	160
5.1	Policy coordination and the real exchange rate	2	202
7.1	Open-loop control in the one-country model	2	283
7.2	Shadow price on the exchange rate (μ_{4t}) in open-loop		
	control (one-country model)	2	284

xii

		Tables	xi
	6.9	The Cournot adjustment process for policy rule: $r = \beta(y+p)$	257
ı	6.10	Welfare loss for Nash equilibrium for policy rule: $r = \beta(y+p)$	258
	6.11	The Cournot adjustment process for policy rule: $r = \beta p$	259
	6.12	Welfare loss for Nash equilibrium for policy rule: $r = \beta p$	260
	6.13	The Cournot adjustment process for policy rule: $r = \beta p$	261
	6.14	Welfare loss for Nash equilibrium for policy rule: $r = \beta p$	262
	6A.1	A matrix for the two-country model	264
	7.1	Parameter values	283
I I	7.2	Two-country model	297
	8.1	Nominal exchange rate variability	339
	8.2	Correlation coefficient of D.mark exchange rate changes	341
	8.3	Monetary growth rates in the EMS countries	342
	8.4	Correlation between monetary aggregates in the EMS	
		countries	343
	8.5	Correlation between interest rates in the EMS countries	344
	8.6a	Real exchange rate variability	346
	8.6b	Consumer price changes in the EMS	348
	8.6c	Correlation between inflation rates and between industrial	
		activity in the EMS countries	348

2

ſ

· .

• •

Figures

Reoptimization of open-loop control in 1987 (comparison	
with original solution; one-country model)	285
A comparison of open-loop and time-consistent policies	
(one-country model)	291
The cost of reversion to time-consistent control	296
A comparison of non-cooperative and cooperative control	
(simplified two-country model)	301
The gains from cooperation with myopic governments	303
A comparison of non-cooperative control: open-loop	
versus time-consistent solutions (two-country model)	305
A comparison of non-cooperative control: the case of	
time-consistency (two-country model)	307
Consumer price inflation in selected EMS countries	347
Consumer price inflation rates in the EMS countries	347
	with original solution; one-country model) A comparison of open-loop and time-consistent policies (one-country model) The cost of reversion to time-consistent control A comparison of non-cooperative and cooperative control (simplified two-country model) The gains from cooperation with myopic governments A comparison of non-cooperative control: open-loop versus time-consistent solutions (two-country model) A comparison of non-cooperative control: the case of time-consistency (two-country model) Consumer price inflation in selected EMS countries

xiii

è

Preface

In this volume we are publishing the proceedings of the conference 'International Economic Policy Coordination', sponsored by the Centre for Economic Policy Research and the National Bureau of Economic Research, and held in London on June 28th-29th, 1984.

We would like to express our appreciation to the authors and discussants whose contributions are published here for their participation in the conference and readiness to help in the preparation of this volume. In addition to the authors and discussants, all those listed below also participated in the conference. Their great interest in the subject and lively contributions to the discussion added much to its value.

We would like to thank the Ford Foundation for providing financial support for the conference, and Thomas Bayard of the Foundation's staff for expressing interest in the project at an early stage in its planning. We are also grateful for financial support from the United Kingdom clearing banks and the Bank of England. The quality of this manuscript and the speed with which it was published owe much to the efforts of the technical editor, John Black of the University of Exeter. Stephen Yeo, Research and Publications Director of the CEPR, made sure that the authors, discussants and editors lived up to the commitments they had made at the conference. That the conference ran smoothly and efficiently was due in no small part to Monica Allen and Wendy Thompson of the CEPR, and we are most grateful to them. Finally, we would like to thank the Director of the CEPR, Richard Portes, and the Director of the International Studies Program of the NBER, William Branson, for first suggesting that a conference on international coordination should be coordinated internationally by the CEPR and NBER.

> WILLEM H. BUITER RICHARD C. MARSTON

Contributors

Editors

F

Willem H. Buiter London School of Economics Richard C. Marston The Wharton School, University of Pennsylvania

Authors

W. Max Corden Australian National University David Currie Queen Mary College, London Barry Eichengreen Harvard University Jacob A. Frenkel University of Chicago Paul Levine Polytechnic of the South Bank, London Marcus Miller University of Warwick Patrick Minford University of Liverpool Gilles Oudiz Institut National de la Statistique et des Études Économiques Tommaso Padoa Schioppa Banca d'Italia Assaf Razin University of Tel Aviv Jeffrey Sachs Harvard University Mark Salmon University of Warwick

Discussants

Michael J. Artis University of Manchester David K. H. Begg Worcester College, Oxford William H. Branson Princeton University Ralph C. Bryant The Brookings Institution Matthew B. Canzoneri Federal Reserve System, Washington Richard N. Cooper Harvard University Michael Emerson Commission of the European Communities Jo Anna Gray Washington State University

xvi Contributors

Koichi Hamada University of Tokyo
Dale W. Henderson Federal Reserve System, Washington and Georgetown University
Louka T. Katseli Centre of Planning and Economic Research, Athens
Jorge Braga de Macedo Princeton University
Stephen Marris Institute for International Economics, Washington
Georges de Ménil Ecole des Hautes Études en Sciences Sociales, Paris
Kenneth Rogoff Federal Reserve System, Washington
Jeffrey R. Shafer Organisation for Economic Cooperation and Development
Stephen J. Turnovsky University of Illinois
David Vines Department of Applied Economics, University of Cambridge

Other participants

Charles Bean London School of Economics Anthony Bottrill HM Treasury Jeremy Bray House of Commons Sam Brittan The Financial Times Michael Calingaert US Embassy, London Christopher Johnson Lloyds Bank Geoffrey Maynard The Chase Manhattan Bank Grayham Mizon University of Southampton Joan Pearce Royal Institute of International Affairs Richard Portes Centre for Economic Policy Research and Birkbeck College Michael Wickens University of Southampton Jackie Whitley Lloyds Bank Charles Wyplosz Institut Européen d'Administration des Affaires