Edited by

John P. Martin & Alasdair Smith

TRADE & PAYMENTS ADJUSTMENT UNDER FLEXIBLE EXCHANGE RATES

Trade and Payments Adjustment under Flexible Exchange Rates

Papers of the Second Annual Conference of the International Economics Study Group

Edited by
JOHN P. MARTIN AND ALASDAIR SMITH

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International Economics Study Group

The International Economics Study Group (IESG), administered by the Trade Policy Research Centre, London, from 1975 to 1978 is one of several study groups in economics supported in the United Kingdom by grants from the Social Science Research Council. The IESG was founded on the initiative of Max Corden and David Wall in 1972, the founding committee also including John Dunning, Brian Hindley, Tim Josling and the late Harry G. Johnson. Through the programme of eight or nine regular seminars in the academic year, held at the London School of Economics, and an annual conference each September, held at the Isle of Thorns, University of Sussex, the IESG provides a forum in which professional international economists in British universities, polytechnics, government departments and business can meet and discuss research papers presented by members and visiting faculty from abroad. The Committee for 1977–78 included John Black, Chairman; David Wall, Secretary; Brian Hindley, Alasdair Smith and Alec Chrystal.

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List of Abbreviations

BTN	Brussels Tariff Nomenclature
CES	constant elasticity of substitution
c.i.f.	prices including cost, insurance and freight
EREO	exchange-rate elasticities of output
FE	foreign exchange
f.o.b.	free-on-board prices
GATT	General Agreement on Tariffs and Trade
GNP	gross national product
IMF	International Monetary Fund
ISIC	International Standard Industrial Classification
MLR	minimum lending rate
OECD	Organisation for Economic Cooperation and Development
OLS	ordinary least squares
PPP	purchasing power parity
QR	quantitative restrictions
RHS	right-hand side
ROW	rest of the world
SDR	special drawing right
SITC	Standard International Trade Classification

Introduction

The nine papers which make up this book were presented at the second annual conference of the International Economics Study Group at the Isle of Thorns, Sussex, 16–18 September 1977.

In seeking to organise a conference around a specific theme, one immediately has the problem of selecting a coherent and topical theme. In this case we were faced with no such difficulty, given the current interest both of academic economists and policy-makers in the workings of a system of flexible exchange rates. All the papers in this volume are concerned with various aspects of the economics of flexible exchange rates but they address a rich variety of topics under that general subject and choose different methods of approach.

The first two papers concern themselves with purely theoretical issues of exchange-rate management. Buiter's model tackles the question of the optimal exchange-rate policy for a small open economy that is subject to stochastic disturbances arising from both foreign and domestic sources. The analysis suggests that some degree of intervention in foreign exchange markets is superior to no intervention – for example, managed floating is superior to free floating. Hindley's paper addresses itself to the topical problem of real-wage rigidity. He adopts a particular definition of the real wage and considers the implications of the real-wage rigidity hypothesis for macro-policy under the two polar exchange-rate regimes.

The papers by Branson and Halttunen, Knight and Mathieson, and Deardorff *et al.*, although very different from each other in most detailed respects, can all be described as empirical models of the interaction between goods markets and financial markets. Branson and Halttunen build on the so-called 'asset market' approach to derive a simple model for explaining monthly movements in bilateral exchange rates. For such a simple model the preliminary econometric results are not unpromising. They then go on to demonstrate how the results can be blended with simple reaction functions to highlight the policy problems facing the authorities under flexible rates. Knight and Mathieson's aim is more ambitious: to construct and estimate a macro-economic model that (i) takes account of the major elements of international interdependence via commodity and financial markets; and (ii) is sufficiently general that it can be applied to different countries. The exchange rate plays a key role in the model; the exchange-rate determination process reflects the insights of the asset–market approach, although allowance is made for excess demands in commodity markets to have a separate influence. Careful attention is given to modelling the intervention strategies of the central authorities in foreign exchange markets. The approach adopted has the merit of stressing the fact, often overlooked, that the move to greater flexibility of exchange rates since 1972–73 was not a dichotomous jump but a shift along the spectrum of exchange-rate regimes. Deardorff *et al.*, specifically consider the interaction between commodity markets and exchange rates in a general equilibrium model of world output and trade. A unique feature of this model is the combination of a multilateral structure with a high level of industry disaggregation between tradeables and non-tradeables. The model is used to simulate the responsiveness of output and employment across countries to changes in exchange rates.

The next two papers focus on aspects of the pricing policies adopted by traders and firms under flexible rates. Magee is concerned with the operation of the 'law of one price' at a micro-economic level. Using United States–Japanese price data he attempts to test whether international commodity arbitrage is more effective under fixed or flexible exchange rates. Carse and Wood, on the other hand, analyse currency invoicing practices using United Kingdom data. They then consider the implications of their findings for exchange-market stability. Evidence is also provided on the degree to which British firms had recourse to forward markets.

The concluding papers are concerned with institutional arrangements in a world of flexible rates. Chrystal's paper builds on the vehicle currency hypothesis to argue that the world economy needs an international medium of exchange even under floating rates and that natural economic forces would lead to the currency of the dominant economic power (presently the United States dollar) being used for the purpose. He casts a cold eye on the special drawing rights (SDR) and argues that such a centrally-created reserve asset cannot hope to challenge the pre-eminence of the dollar as the international money. Indeed, he goes so far as to suggest that the SDR, as presently constituted, may actually lower world welfare. Blackhurst focuses on the principle of reciprocity, which played a major role in tariff negotiations under the Bretton Woods system. He argues that a policy of reciprocity has significant advantages over unilateral tariff reductions under fixed exchange rates but that these advantages disappear under flexible exchange rates.

In sum, we believe these papers provide an interesting cross-section of current work in international economics, representing the type of work which the International Economics Study Group exists to promote. We make no apology for the fact that a high proportion of the authors come from outside Britain: visitors from abroad have an important role in our programme throughout the year, and the annual conference provides a further welcome opportunity for international cross-fertilisation of ideas.

Nor do we apologise for the fact that several of the papers (Branson and Halttunen, Knight and Mathieson, Deardorff *et al.*, and Carse and Wood are reports of work in progress: again it is one of the important aspects of a conference that this should be so. No one who reads this book will be surprised to learn that several papers provoked sharp discussion from the floor: Chrystal's attack on the SDR was criticised not only by the defenders of the SDR but also by those who felt that there were stronger grounds for attack; Deardorff *et al.*'s unusual blending of theory, empirical estimation and simulation was the subject of some controversy; and so on.

We did not keep, and therefore cannot publish, a formal record of the discussion. Instead, the authors were asked in preparing their papers for publication to take account of points made at the conference. We are grateful to all who participated in the conference, but especially to those who acted as principal discussants of papers: John Black, Tony Bottrill, Koichi Hamada, Jocelyn Horne, Vijay Joshi, Seamus O'Cleireacain, John Spraos, and Alan Winters.

We also wish to express our gratitude to those who made the conference possible from a financial point of view: notably the Shell International Petroleum Company, who provided the funds for inviting one American visitor, and the Social Science Research Council, who finance the regular programme of the Study Group as well as the annual conference.

The Study Group would probably not exist, certainly not in its present healthy form, without the organisational support of the Trade

Policy Research Centre. We are grateful for their efforts at every stage of the long process that began with the initial planning for the conference and ended with the production of this volume.

JOHN P. MARTIN
ALASDAIR SMITH

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