

A Study on Floating Exchange Rate Experience During the 1970s and '80s

**A THESIS SUBMITTED TO THE
UNIVERSITY OF POONA**

**FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
IN ECONOMICS**

**BY
D. SAMBANDHAN**

**GOKHALE INSTITUTE OF POLITICS AND ECONOMICS
PUNE - 411 004 (INDIA)**

JANUARY 1991.

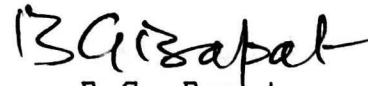
FORM A

Certified that the work incorporated in the thesis,

A Study on Floating Exchange Rate Experience

During the 1970s and 1980s

submitted by D. Sambandhan was carried out by the candidate under my supervision. Such material as has been obtained from other sources has been duly acknowledged in the thesis.



B.G. Bapat

Thesis Supervisor

PREFACE

Prof. A.K.Das Gupta (1986) observes in his "Epochs of Economic Theory" : the fundamental methodological position of economics is that it is essentially "relativist" in contrast to "absolutist" natural sciences. To quote him: "the propositions of economic science do not satisfy what one might call universality criterion. The reality with which physical sciences are concerned is supposed to be given and constant. The assumptions that a scientist makes concerning the occurrence of physical phenomena are thus valid universally not only with respect to space, but also with respect to time. Economists deal with a universe where data are freakish and are not valid universally, and where phenomena emerge which were not only not known before, but had not existed before... In economics old theories do not die. And they do not die, not because one is built on the other, but because one is independent of the other" (p.2).

Although one would not unquestioningly accept Prof.Das Gupta's point of view, it is extremely fascinating and applicable to exchange rate economics. Indeed, one can look upon the evolution of a host of balance of payments theories as a sequence of models on devaluation, each shaped by a set of particular circumstances and the then prevailing analytical tools of economic theory. The evolving new perspectives on exchange rate economics under the impact of recent currency experience can be also treated as a measured

response to specific economic issues and the special circumstances prevailing during the '70s and '80s.

With the emergence of floating rates in the early '70s and the recurring oil crisis through the '70s and the concomitant stagflationary impacts, followed by the U.S. policy engineered monetary shock, the world economy has now become vastly different than what it was during the era of Bretton Woods system. The decade of 1980s has come to a close with the unification of Germany and Saddam's oil shock. With a steep erosion in its economic and political hegemony and unilateral economic excursion in adopting autonomous policies in pursuit of domestic objectives, the U.S. no longer serves as an anchor for the market based current managed float. The great deal of integration among international financial markets and their relative domination over the real sector behaviour of the world economy has intensified the growing macro economic and monetary interdependence generating thereby perennial conflicts between the markets and national governments.

Against this backdrop, the work aims at assessing the exchange rate experience, of the '70s and '80s. While accomplishing this objective Robert.M.Solow's words are kept in mind: "The interests of scientific economics would be better served by a more modest approach. There is enough for us to do without pretending to a degree of completeness and precision which we can not deliver... the true functions of analytical economics are best described informally: to

organize our necessarily incomplete perceptions about the economy to see the connections that the untutored eye would miss to tell plausible -sometimes even convincing causal stories with the help of a few central principles and to make rough quantitative judgements about the consequences of economic policy and other exogenous events. (Robert. M. Solow, American Economic Review (1985). p.329.)

It is explicitly acknowledged that the tremendous insight shown by erudite scholars formed the basis for this interpretative study. In view of the vastness and complexity of the subject it has become difficult to incorporate all aspects in the main text and hence additional interpretations have been included under 'Notes' and "Appendices". They do not hang in isolation but instead carry the flavour of the main text.

The central theme of this work is that the macro economic behaviour of the U.S. under floating regime, especially during the '80s appears to be a great exogenous disturbance to the world economy and a major irritant in the dynamic functioning of floating rates and therefore any attempt towards reform proposals and international policy coordination will be a futile exercise, unless the fundamental financial discipline begins at the U.S. first and percolate down to the rest of the world.

ACKNOWLEDGEMENTS

At the very outset I record my thanks to **Professors V.M. Dandekar, Nilakanta Rath** and the present **Director Prof. V.S. Chitre** for having given me an opportunity to learn at Gokhale Institute of Politics and Economics, Pune under the UGCs' Faculty Improvement Programme.

I express my profound gratitude and regards to my guide **Prof. B.G. Bapat** for his valuable comments and suggestions. Among the faculty members who laid the foundation for this work, special mention must be made to **Prof. S.V. Bokil**, my one time thesis supervisor for his continued intellectual interaction and concern. I am extremely thankful to him. I am also grateful to **Prof. Rath** and **Prof. B.S.R. Rao** for goading me to action. I also record my thanks to **Prof. N. Venkatasubramanian**, the Director, Centre for Post-Graduate Studies, Pondicherry for ensuring an extremely pleasant academic climate and extending the necessary administrative support. I am very much indebted to another young scholar in the South for breathing fresh life into my work.

In the course of my academic journey over an extended period of time, I derived immense benefit and cooperation from the Library Staff of Gokhale Institute of Politics and Economics, Pune, USIS and IFMR, Madras, Central

University, Hyderabad and Pondicherry University. I owe a great deal to them. Among friends, I must acknowledge my indebtedness to P.R.Srinivasan of Pondicherry K.Vaithilingam of Madras, for their assistance in the academic and financial spheres. My thanks are also due to my senior colleague Prof. N. Santhalingam who has been always a source of intellectual inspiration.

Finally I thank R. Saravanan and S. Sivasoupramane of Pondicherry for the neat computer word process work.

January 21, 1991.

D. Sambandhan

CONTENTS

CHAPTER	1	<u>Page No.</u>
INTRODUCTION AND BACKGROUND		1 - 12
1.1	Context of the Work	
1.2	Meade - Sohmen - Friedman Paradigm	
1.3	Great Expectations of Floating Regime	
1.4	Institutional Changes in the '70s and '80s	
1.5	Nature and Significance of the Study	
1.6	Objectives of the Study	
1.7	Framework and Scope of the Study	
1.8	Chapter Plan of the Study	
 CHAPTER 2		
MONEY, OPEN ECONOMY AND EXCHANGE RATE		13 - 43
2.0	Introduction	
2.1	Towards Monetary Economy	
2.2	Difficulties in Using Gold as Money	
2.3	Implications of the Emergence of Fiat Money	
2.4	The Transition to Monetary Open Economy	
2.5	Nature of Exchange Rate Arrangement	
2.6	Need for Appropriate Equilibrium Exchange Rate	
2.7	A Hypothetical Framework on the Lines of Yeager	
2.8	Transition from the Hypothetical World to Actual Situation	
2.9	Relativity of Equilibrium Exchange Rate	
2.10	Basic Approaches to Exchange Rate Determination: An Overview	
2.10.1	Complex General Equilibrium Process in Short Run Exchange Rate Dynamics	
2.10.2	Pure Barter Theory Framework	
2.10.3	Basic Keynesian View	
2.10.4	Simplified Monetary View	
2.10.5	Analytical Asset Market Approach	
2.10.6	'News' and Rational Expectation	
2.10.7	Speculative Bubbles and Peso Problem	
2.10.8	Interdependence Between Current and Capital Accounts	

- 3.0 Introduction
- 3.1 **The Economics of Fixed Exchange Rates**
 - 3.1.1 Insular Economic Framework Defined
 - 3.1.2 Informational Benefits of Fixed Exchange Rates
 - 3.1.3 Illusion of Monetary Unification in Insular Framework
 - 3.1.4 Political and Economic Hegemony of the Key Currency Country
 - 3.1.5 Short Run Relief from Balance of Payments Constraint
 - 3.1.6 Medium Run Dynamics of Fixed Exchange Rates
 - 3.1.7 The Problem of Inconsistent Trinity
- 3.2 **A Simple Theoretical Framework on the Mechanics of Fixed Exchange Rates**
 - 3.2.1 The Classical Model
 - 3.2.2 David Hume's Gold Standard World
 - 3.2.3 Samuelson's Corrected Version of Hume's Mechanism
 - 3.2.4 A Note of Dissent on Samuelson's Way of Correction
 - 3.2.5 Further Examination of Hume's Mechanism in Fiat Currency Framework
 - 3.2.6 Significance of Keynes' Effect
 - 3.2.7 Truncated Classical Model
 - 3.2.8 Keynesian Model : Rationale for Devaluation
- 3.3 **Insular Framework of Meade-Sohmen-Friedman: Virtues of Flexible Exchange Rates**
 - 3.3.1 Floating Rates - A Market Solution
 - 3.3.2 Rationale for Exchange Rate Flexibility
 - 3.3.3 Macroeconomic and Monetary Independence
 - 3.3.4 Double Relationship Between Floating and Free Trade
 - 3.3.5 Stringent Conditions for Stability of Floating Rates
 - 3.3.6 Equalization Fund, Wider Band
- 3.4 **Basic Theoretical Construct on Exchange Rate Economics**
 - 3.4.1 Neglect of International Economy by Keynes
 - 3.4.2 Elasticity Model - The First Fundamental of Microeconomics of Devaluation

- 3.4.3 Alexander's Absorption Model - Realistic Treatment of the Macroeconomics of Devaluation
- 3.4.4 Correspondence Between Elasticity and Absorption
- 3.4.5 Meade's Open Economy Macro Model: Correcting the Neglect of Keynes
- 3.4.6 Correcting the Deficiencies of Meade's Model: Innovative Role of Tsiang
- 3.4.7 Mundell - Fleming Model: Extension of IS/LM to Open Economy Setting
- 3.4.8 Monetary Approach and Global Monetarism: Revival of Classical Tradition
- 3.4.9 New Cambridge Macroeconomics: Reversal of Conventional Wisdom

- 3.5 Evolving New Perspectives on Exchange Rate Economics**
 - 3.5.1 Integrated Approach of Allen and Kenen: Looking Beyond the Worlds of Meade and Mundell
 - 3.5.2 Exchange Rate Dynamics : The Sticky Price , Monetary Model:
 - 3.5.3 Application of the New Science of Chaos in Understanding the Behaviour of Exchange Rate

CHAPTER IV

SOME FUNDAMENTAL TRUTHS ABOUT EXCHANGE RATE EXPERIENCE

112 - 162

- 4 Introduction

- 4.1 An Overview of Bretton Woods System**
 - 4.1.1 Institutional Setting for BWS
 - 4.1.2 Emergence of the U.S. as Reserve Centre
 - 4.1.3 Beneficial Disequilibrium of the U.S. BOP Deficits
 - 4.1.4 Insular Keynesian Environment and the Stable U.S. Monetary Policy
 - 4.1.5 Costs of Growing Economic Interdependence
 - 4.1.6 Inherent Dynamics of Gold Exchange Standard and Interplay Between Inconsistent Trinity
 - 4.1.7 Beyond Smithsonian Agreement

- 4.2 Environment of Floating Exchange Rates**

- 4.3 Linkages Between Exchange Rate and Price**
 - 4.3.1 PPP Monetary Model
 - 4.3.2 Alternative Keynesian Model

- 4.3.3 Irrelevence of PPP in Short Run
Exchange Rate Dynamics
- 4.4 **Link Between Exchange Rate and Interest Rate**
 - 4.4.1 Keynesian View
 - 4.4.2 From Closed Parity to Open Parity
 - 4.4.3 Monetary (Chicago) Theory
- 4.5 **Exchange Rate Developments**
 - 4.5.1 Impact of Inflationary Policies
and Current Account Imbalances
 - 4.5.2 Accelerating Monetary Expansion : Absence of
Stabilizing Speculation
 - 4.5.3 Keynesian Prescription without
Monetary Restraint
 - 4.5.4 Consequence of Sterilized Intervention
 - 4.5.5 Dominant Influence of Insular Models
 - 4.5.6 The New Monetary Experiment During the '80s
 - 4.5.7 Beneficial Fall out of Monetary Targeting
 - 4.5.8 Disruptive Effects of Disinflation Strategy
and Fiscal Irresponsibility of the U.S.
 - 4.5.9 Aftermath of Flexible Monetary Targeting
 - 4.5.10 Proximate and Fundamental Determinants
for the Rise of Dollar
 - 4.5.11 Looking beyond Monetary Explanation :
Role of Diverse Expectations
 - 4.5.12 Supply side Package and International
Portfolio Shifts
 - 4.5.13 Ideal Laboratory Environment For
Experimenting Mundell's Policy-Mix
 - 4.5.14 Speculative Bubbles and Bandwagon Effect
 - 4.5.15 Between Plaza and Louvre Accord
 - 4.5.16 Beneficial Role of Japan and Faltering Yen
 - 4.5.17 Summing up with Solomon Brothers' "Vortex
into the Unknown"
- 4.6 **Exchange Rate Changes and
Current Account Developments**

CHAPTER - V

CERTAIN SPECIFIC ISSUES UNDER FLOATING

163 - 191

- 5.0 Introduction
- 5.1 Inflexibility of Real Exchange Rate
under BWS
- 5.2 Greater Real Exchange Rate Flexibility
Under Managed Float
- 5.3 Excessive Exchange Rate Instability :
The Social Cost Of Resolving Inconsistent
Trinity

5.4	The Question of Inflation Transmission and Insulation
5.5	Residual Role of the U.S. in the Process of International Money Creation
5.6	Severing of Gold : A Qualitative Welcome Change
5.7	Floating Exchange Rates and Domestic Policy Options

CHAPTER VI

NEW REVELATIONS ON EXCHANGE RATE EXPERIENCE 192 - 211

6.0	Introduction
6.1	Paul Krugman's New Analytical Framework : His Innovative Concept and Historical Insight
6.2	Relevance of Old Keynes Meade Model
6.3	Loosening of International Price Linkages
6.4	Implications of Sunk Cost Model and Failure of the international Financial Market
6.5	Increasing Divorce Between Exchange Rate Theory and Practice: Goodhart's Empirical Findings
6.6	The Insurmountable Problem of Inconsistent Trinity
6.7	McKinnon's International Monetary Standard
6.8	Managing the "Managed Float" : Williamson's Target Zone

CHAPTER VII

SUMMARY, CONCLUSION AND POLICY IMPLICATIONS 212 - 245

7.0	Introduction
7.1	Summary
7.2	Major Findings of the Work
7.3	Some Policy Implications

APPENDIX - I	Excerpts from Hume	246 - 260
--------------	--------------------	-----------

APPENDIX - II	Michael's Integrated Approach
---------------	-------------------------------

APPENDIX - III	John F. Kyle's Model
----------------	----------------------

APPENDIX - IV	Marc Miles Framework
---------------	----------------------

APPENDIX - V	Tables and Graphs	261 - 268
--------------	-------------------	-----------

ADDITIONAL NOTES	269 - 288
------------------	-----------

BIBLIOGRAPHY	289 - 299
--------------	-----------