

Monetary Policy in a Globalized Economy

A PRACTITIONER'S VIEW

Rakesh Mohan

'narrates the art and science of the subject'

—Y. V. Reddy, Former Governor, RBI

Monet January in a Globalized Economy

A PRACTITIONER'S VIEW

Rakesh Mohan



OXFORD

Oxford University Press is a department of the University of Oxford. It furthers the University's objective of excellence in research, scholarship, and education by publishing worldwide. Oxford is a registered trademark of Oxford University Press in the UK and in certain other countries

Published in India by Oxford University Press YMCA Library Building, 1 Jai Singh Road, New Delhi 110 001, India

© Rakesh Mohan 2009

The moral rights of the author have been asserted

First Edition published in 2009 Oxford India Paperbacks 2011

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior permission in writing of Oxford University Press, or as expressly permitted by law, by licence, or under terms agreed with the appropriate reprographics rights organisation. Enquiries concerning reproduction outside the scope of the above should be sent to the Rights Department, Oxford University Press, at the address above

You must not circulate this book in any other form and you must impose this same condition on any acquirer

> ISBN-13: 978-0-19-807493-9 ISBN-10: 0-19-807493-X

Typeset in Bembo by Le Studio Graphique, Gurgaon 122 001 Printed at De Unique, New Delhi 110 018

Monetary Policy in a Globalized Economy

Financial stability had eluded most nations even after a significant opening up of their economies. India has, however, been an exception to this phenomenon. This volume unravels the complexities behind the transformation of monetary policy that has helped sustain India's growth miracle. Providing valuable insights from the perspective of an insider, it analyses a wide range of issues such as the evolution of banking and finance and the role of central banking; the conduct of monetary policy since the 1990s; and the impact of the global financial crisis on the Indian economy.

Especially relevant in today's environment of turmoil in global financial markets, this volume is a must-read for students and researchers of finance, management, and economics as well as policymakers, bankers, and analysts.

RAKESH MOHAN is Professor in the Practice of International Economics and Finance, School of Management and Senior Fellow, Jackson Institute of Global Affairs, Yale University. Prior to this, he was Deputy Governor of the Reserve Bank of India.

'What distinguishes this book is the hands-on experience of its author...as a central banker, his extraordinary academic credentials, wide international experience and excellence as an economist. I strongly recommend this book to all those who are interested in India's potential as an emerging global economic power of the 21st century.'—BIMAL JALAN, Former Governor, Reserve Bank of India

'The volume gives us an insider's account written with the knowledge of a professional and the detachment of a scholar. A must read for anyone interested in the monetary and financial aspects of India's reform.'—MONTEK SINGH AHLUWALIA, Deputy Chairman, Planning Commission

'The essays in this volume handsomely display [the author's] uncanny ability to combine the wisdom of a practitioner with the cutting-edge analysis of an economist. [They] are indispensable for anyone interested in...how the transformation of...monetary policy has helped sustain India's growth miracle...'

—ARVIND PANAGARIYA, Professor of Economics and Jagdish Bhagwati Professor of Indian Political Economy, Columbia University

'[The essays] are unique in their deep analytical content...very thought-provoking and full of policy insights. I highly recommend the volume.'—T.N. Srinivasan, Samuel C. Park Jr. Professor of Economics, Yale University

'Over the last two decades, the Reserve Bank of India has played a key role in propelling the Indian economy onto the world stage. Rakesh Mohan...lucidly and convincingly explains how that was done...and the challenges that remain.'

—Stanley Fischer, Governor, Bank of Israel

'Rakesh Mohan gives us an invaluable guide to a complex subject...relevant not only for policy makers and scholars but also for the private sector. He covers a great deal of technical ground in a rigorous yet understandable manner while addressing complex issues that have been at the core of policy debate in India for over two decades.'—ISHER JUDGE AHLUWALIA, Chairperson, Indian Council for Research on International Economic Relations

'combines a policymaker's know-how with a scholar's precision'—Business Today

'explain[s] with great lucidity the complex issues governing monetary policy and the inter-linkages with the outside world'—Outlook Business

'sets out the essentials of monetary policy making in a highly uncertain world'

—The Hindu

Preface

Issues related to the conduct of monetary and financial sector policies remain at the core of central banking and these are of particular interest to emerging and transition economies. These issues have acquired even greater interest since mid-2007 following the turmoil in the global financial markets and collapse of some major financial institutions. In this context, the Indian experience in the transition of its financial sector and conduct of monetary policy from a regime of extreme financial repression to that of an increasingly market-based system stands out in the global economy. The transition, which has been achieved over a relatively short period of less than two decades, has been associated with a distinct lowering of inflation and inflation expectations and acceleration of growth in an environment of macroeconomic and financial stability. The period has also been associated with financial deepening, efficiency and productivity gains in the domestic banking system, and growing depth and width of domestic financial markets.

I came to the Reserve Bank of India (RBI) in September 2002 as Deputy Governor with little background in the arcane world of monetary theory. monetary policy, or in the conduct of monetary policy operations. Unlike many other central banks today, the Reserve Bank is responsible for a number of functions in addition to monetary policy, which many central banks also performed traditionally but which have been hived off from some of them to varying degrees. The RBI is more like a traditional unified central bank and is the regulator and supervisor of the banking industry, of non-banking financial companies (NBFCs), and of primary dealers. It is also the debt manager of the government, guardian of its foreign exchange reserves, issuer of currency, manager of the payments system, and regulator of the foreign exchange market, of the government securities market, and of interest rate and other derivatives. Like other central banks, it has evolved over time and different functions have assumed greater relative importance in different periods. With this vast expanse of its functions, as Deputy Governor one gets a bird's eye view of the whole financial system and its intricate workings. From the monetary policy making point of view this is invaluable since one is able to observe the monetary transmission mechanism working in real time,

along with its shortcomings that are inevitable in a rapidly developing, now middle income, country. The interaction of regulatory policy and practice with the operation of monetary policy has also been very useful to observe, which has also informed the actual practice of monetary policy in India. Thus, I have had the luxury of learning on the job, also perhaps innovating as we have gone along in the past five years, but I hope not at the country's expense!

This book reflects these various features of the Indian financial system, and the conduct and development of monetary policy since the early 1990s. The book represents a collection of my speeches and papers, and reflects my thinking as it has evolved, since 2002. Although this book bears my name as the author, and for which I take full responsibility, it really encompasses the collective work of the highly dedicated Reserve Bank staff.

I was inducted into the art of monetary policy making initially by the then Governor, Dr Bimal Jalan, and then put through my paces by his successor Dr Y. Venugopal Reddy over the last five years. Despite exhibiting vastly contrasting styles, a common penchant for pragmatism in monetary policy making can be described as their hallmark. This was particularly notable during a period in which considerable theoretical and policy making rigidity has crept into monetary policy globally. My own approach therefore reflects this overarching importance being given to the contextual environment that should inform monetary policy making. The underlying objectives of maintaining price stability and economic growth, along with financial stability must dominate, and theory and principles must be used as guidance for achieving these objectives. The adherence to any particular theory should not become an objective in itself.

The implementation of monetary policy is carried out through daily money market operations by all central banks. In our case, such operations also include forex market operations. Liquidity management is therefore rendered more complex with the objective of implementing the monetary policy stance and maintaining overall financial stability. This daily practice is an art in itself, and consistent innovation is the order of the day. I was inducted into this activity very skilfully and patiently by Usha Thorat and later Shyamala Gopinath (who are now my colleague Deputy Governors), as part of the internal Financial Markets Committee (FMC). I owe a deep debt of gratitude to them for keeping me on the straight and narrow, and generously giving me the benefit of their long experience and depth of expertise. The Adviser in charge of the Monetary Policy Department has a crucial role to play in monetary policy making, and also acts as the conscience keeper of the RBI, restraining the worst excesses of pragmatism that Governors and Deputy Governors might be prone to exhibit. D.V.S. Sastry, Deepak Mohanty, K. Kanagasbapathy, and Michael Patra have performed this role over the

past five years and, in the process, have been excellent tutors for me. They have tolerated my ignorance with grace: my heartfelt thanks to them.

Speechmaking and communicating is an integral part of central bank functioning. Hence, these essays. It is not possible to produce this volume of writing and speechmaking without a host of ghost writers and advisers. I have had the benefit of constant discussions with my colleagues, spread across the various departments of the Reserve Bank and who have helped extensively in doing all the background work, research, where necessary, and in collating and analysing the vast data that exist in the vaults of the Reserve Bank. Specifically, I would like to express my sincere gratitude to Indranil Bhattacharyya, Abhiman Das, Saibal Ghosh, T. Gopinath, Sanjay Hansda, Meena Hemachandra, Asha P. Kannan, R. Kannan, Arun Vishnu Kumar, Sangeeta Misra, Michael Patra, R.K. Pattnaik, Mridul Saggar, Amitava Sardar, Charan Singh, Chandan Sinha, Indranil Sen Gupta, and Y.S.P. Thorat for their valuable assistance and inputs. Staff members of the Department of Economic Analysis and Policy (DEAP), in particular, are always the front line victims for the speeches of Governors and Deputy Governors. They usually go unheralded. I would like to express my deepest appreciation to all my colleagues in DEAP who are not recorded here.

The brunt of my speechmaking load fell on my Executive Assistants. I was inducted into the Reserve Bank by A. Prasad. He was ably succeeded by Partha Ray, and then by Muneesh Kapur. They have given me their unstinting help through thick and thin, in the day and at night, in India and abroad, in the office and in hotel rooms. Neither the speeches nor this book would have been possible without their help. My heartfelt thanks to each of them, and apologies to their families and friends for keeping them busy at all hours of the day or night over the past five years. A particular word of thanks to Muneesh Kapur for his laborious work in the actual production of this book, both substantive in terms of content, avoidance of repetition, updation of data, and also in proofreading.

My able secretaries Rajalakshmi Balasubramanian and Ashok Bathija have toiled away noiselessly all these years and put up with the innumerable drafts that each speech entailed. My heartfelt thanks for their unstinting, affectionate, and loyal support.

The family always comes at the end of such acknowledgements. My wife, Rasika, has been very happy that all the work entailed in preparing these speeches, and then the compilation of this book, kept me out of her hair in the evenings and on weekends, leaving her free to pursue her own art. My children, Tarini and Rasesh, were largely away at school or college during these years. However, they were always puzzled and curious about what it was that I was doing at my desk all the time.

For their cheerful forbearance and constant support, I dedicate this book to Tarini and Rasesh, especially to keep up the promise I made to them in my last book. However, in recognition of who have really done the work, they have to share this dedication with all the staff of the Reserve Bank.

I would like to express my sincere thanks to the following journals/ organizations for permission to re-print my following speeches in this collection: the Pakistan Institute for Development Economics for 'Reforms, Productivity, and Efficiency in Banking', published in the *Pakistan Development Review*, Volume 44, No. 4, Part 1 (2005); the National Institute of Bank Management for 'Evolution of Central Banking in India', published in *Prajnan*, Volume XXXV, No. 2, July–September 2006; and the *Economic and Political Weekly* for 'Agricultural Credit in India: Status, Issues, and Future Agenda', Volume 41, No. 11, March 2006.

Abbreviations

ACLF Additional Collateralized Lending Facility

AFS Available for Sale

AgRC Agricultural Refinance Corporation
AIDIS All-India Debt and Investment Survey

APMC Agricultural Produce Marketing Committee

ARC Asset Reconstruction Company

ARDC Agricultural Refinance and Development Corporation

ATM Automated Teller Machine

BIS Bank for International Settlements

BoP Balance-of-Payments
CAD Current Account Deficit

CAMEL Capital Adequacy, Asset Quality, Management, Earnings,

and Liquidity

CAMELS Capital Adequacy, Asset Quality, Management, Earnings,

Liquidity, and Systems

CBLO Collateralized Borrowing and Lending Obligations

CCIL Clearing Corporation of India Ltd

CEO Chief Executive Officer
CIB Credit Information Bureau
CLF Collateralized Lending Facility

CPI Consumer Price Index

CRAR Capital to Risk-Weighted Assets Ratio

CRR Cash Reserve Ratio

DFHI Discount and Finance House of India
DFI Development Finance Institution

DI Deposit Insurance

DICGC Deposit Insurance and Credit Guarantee Corporation

DVP Delivery Versus Payment

EBITD Earnings Before Interest, Taxes, and Depreciation

ECB European Central Bank
EME Emerging Market Economy
EMS European Monetary System

xviii ABBREVIATIONS

EMU European Monetary Union

ESCB European System of Central Banks

EU European Union

FDI Foreign Direct Investment

FERA Foreign Exchange Regulation Act
FHC Financial Holding Company

FII Foreign Institutional Investor FIR Financial Inter-relations Ratio

FR Finance Ratio

FRA Forward Rate Agreement

FRBM Fiscal Responsibility and Budget Management

FSA Financial Services Authority

GATT General Agreement on Tariffs and Trade

GDP Gross Domestic Product GNP Gross National Product

HFT Held for Trading HTM Held to Maturity

IAIS International Association of Insurance Supervisors

IDBI Industrial Development Bank of India

IDFC Infrastructure Development Finance Company

IFCI Industrial Finance Corporation of India

IFS International Financial Statistics
IIBI Industrial Investment Bank of India
IIP Index of Industrial Production

ILAF Interim Liquidity Adjustment Facility

IMD India Millennium Deposit
IMF International Monetary Fund

IMFC International Monetary and Financial Committee IOSCO International Organization of Securities Commission

IR Inter-relations Ratio

IRAC Income Recognition and Asset Classification

IRDA Insurance Regulatory and Development Authority

IRS Interest Rate Swap
IT Information Technology
KCC Kisan Credit Card

LAB Local Area Bank

LAF Liquidity Adjustment Facility
LTCM Long-term Capital Management
MICR Magnetic Ink Character Recognition

MNB Magyar Nemzeti Bank

MoU Memorandum of Understanding
MSS Market Stabilization Scheme

NABARD	National Bank for Agriculture and Rural Development
NBFC	Non-banking Financial Company
NDDB	National Dairy Development Board
NDS	Negotiated Dealing System
NDS-OM	Negotiated Dealing System-Order Matching
NEER	Nominal Effective Exchange Rate
NIM	Net Interest Margin
NIR	New Issue Ratio
NPA	Non-performing Asset
NPL	Non-performing Loan
NRI	Non-resident Indian
NSDP	Net State Domestic Product
OECD	Organisation for Economic Co-operation and
	Development
OeNB	Oesterreichische Nationalbank
OMO	Open Market Operation
OPEC	Organization of the Petroleum Exporting Countries
OTC	Over-the-Counter
PACS	Primary Agricultural Credit Society
PBC	People's Bank of China
PCA	Prompt Corrective Action
PD	Primary Dealer
PDO	Public Debt Office
PLR	Prime Lending Rates
PPI	Producer Price Index
PSB	Public Sector Bank
R&D	Research and Development
RBA	Reserve Bank of Australia
RBI	Reserve Bank of India
RBS	Risk-based Supervision
REER	Real Effective Exchange Rate
RFI	Rural Financial Institution
RIDF	Rural Infrastructure Development Fund
RRB	Regional Rural Bank
RTGS	Real-time Gross Settlement
SARFAESI	Securitization and Reconstruction of Financial Assets and
	Enforcement of Security Interest
SARS	Severe Acute Respiratory Syndrome
SBI	State Bank of India
SCB	Scheduled Commercial Bank
SCRA	Securities Contracts Regulation Act
SEBI	Securities and Exchange Board of India

XX ABBREVIATIONS

SFC State Financial Corporation

SHG Self-help Group

SIDBI Small Industries Development Bank of India

SLAF Second Liquidity Adjustment Facility

SLR Statutory Liquidity Ratio SME Small and Medium Enterprise

SSI Small-scale Industries
TFP Total Factor Productivity

UTI Unit Trust of India

WEO World Economic Outlook
WPI Wholesale Price Index
WTI West Texas Intermediate
WTO World Trade Organization

Contents

List	of Tables, Figures, and Boxes	V
Preface		xi
List of Abbreviations		XV
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1.	Introduction	
2.	Transforming Indian Banking In Search of a Better Tomorrow	26
3.	Finance for Industrial Growth	40
4.	Agricultural Credit in India Status, Issues, and Future Agenda	68
5.	Ownership and Governance in Private Sector Banks in India	95
6.	Reforms, Productivity, and Efficiency in Banking	103
7.	Financial Sector Reforms and Monetary Policy	133
8.	Challenges to Monetary Policy in a Globalizing World	170
9.	Some Apparent Puzzles for Contemporary Monetary Policy	195
10.	Evolution of Central Banking in India	226
11.	Coping with Liquidity Management in India A Practitioner's View	244

V1	CONTENTS	ŝ

12.	Central Banks and Risk Management	265
	Pursuing Financial Stability	
13.	Monetary and Financial Policy Responses to Global Imbalances	286
Afteri Globi	word al Financial Crisis and Key Risks:	301
Impad	ct on India and Asia	
Index		324

Tables, Figures, and Boxes

TABLES

2.	1 Real Interest Rates	30
2.		
	Real Interest Rates	33
3.	1 Sectoral Growth in the 1980s and 1990s	41
3.		45
3.		46
3.	4 Major Sources of Industrial Finance	48
3.	5 Sectoral Distribution of Non-food Gross Bank Credit	50
3.	6 Banking Sector Performance	52
3.	7 Maturity Profile of Bank Liabilities	56
3.	8 Maturity Profile of Bank Assets	56
3.	9 Capital Market Indicators	57
3.	10 Capitalization of Stock Markets	58
3.	11 Pattern of Sources of Funds for Indian Corporates	60
3.	12 Composition of Financial Savings Portfolio of	
	Indian Households	61
4.	1 Ratio of Direct Agricultural Credit (Disbursements)	
	to Agricultural GDP, Total GDP, and Total Credit	75
4.	2 Relative Share of Borrowing of Cultivator	
	(Households from Different Sources)	76
4.	3 Decadal Average Share of Institutions in	
	Direct Agricultural Credit (Disbursements)	77
4.	4 Gross Value of Outputs, Value of Inputs, and	
	Short-term Credit	79
4.	5 Private Capital Formation and Share of	
	Long-term Credit	79
4.	8	
	Net State Domestic Product (NSDP)	80
4.	8	
	Allied Sector Credit (Short-term and Long-term)	
	Disbursements	80

4.8	Region-wise Trends in Agricultural and	
	Allied Sector Credit Per Capita	81
4.9	Sector-wise Average Non-performing Assets of	
	Banks (2001–3)	82
	Growth of the Indian Economy	83
4.11	Share of Cereals and Non-cereal Items in	
	Total Monthly Per Capita Expenditure on Food:	
	Rural and Urban Areas	84
4.12	Share of Food and Non-Food Items in Total Monthly	
	Per Capita Expenditure: Rural and Urban Areas	85
4.13	India's Position in World Production of	
	Fruits and Vegetables	86
4.14	Yields in Vegetables: India and the World	86
6.1	Share of Real GDP Originating in Banking	
	and Insurance	105
6.2	Flow of Funds-based Indicators of Financial	
	Development	106
6.3	Liquidity- and Credit-based Indicators of	
	Financial Development	106
6.4	Financial System Orientation	108
6.5	Summary Profile of the Banking Industry:	
	1990–1 to 2004–5	109
6.6	Private Shareholding in Public Sector Banks	
	(as on 31 March 2005)	111
6.7	Non-performing Loans of Different Bank Groups:	
	1994–2005	112
6.8	Herfindahl's Index of Concentration on Deposits	
	and Credit of SCBs: 1992-2004	116
6.9	Non-interest Income of SCBs: 1992–2004	117
	Intermediation Cost of SCBs: 1992–2004	118
6.11	Operating Expense and its Components of SCBs:	
	1992–2004	119
	Burden of SCBs: 1992–2004	120
	Cost-Income Ratio of SCBs: 1992-2004	121
	Spread of SCBs: 1992–2004	122
	Select Productivity Indicators of SCBs	124
6.16	Spread (Net Interest Margin) of Banks of	
	Major Asian Countries	125
6.17	Intermediation Cost (Operating Expense) of	
(10	Banks of Major Asian Countries	125
6.18	Non-interest Income of Banks of Major	
	Asian Countries	126