Cambridge University Press 978-1-107-09152-8 - The G20 Development Agenda: An Indian Perspective Edited by Parthasarathi Shome Frontmatter More information

# The G20 Development Agenda

## An Indian Perspective

Edited by Parthasarathi Shome



#### **CAMBRIDGE** UNIVERSITY PRESS

4843/24, 2nd Floor, Ansari Road, Daryaganj, Delhi - 110002, India

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781107091528

© Cambridge University Press 2015

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2015

Printed in India

A catalogue record for this publication is available from the British Library

Library of Congress Cataloging-in-Publication Data

The G20 development agenda : an Indian perspective / edited by Parthasarathi Shome. pages cm Includes bibliographical references and index. Summary: "Analyses the evolution and broadening of the G20's agenda from global financial sector matters to covering a vast development agenda"--Provided by publisher. ISBN 978-1-107-09152-8 (hardback) 1. Economic assistance--India. 2. India--Economic integration. 3. Economic development projects--Management. 4. India--Economic conditions--21st century. 5. Group of Twenty countries--Economic policy. 6. Economic policy--International cooperation. I. Shome, Parthasarathi, 1950- editor. HC435.3.G2 2015 338.91--dc23 2014038364

ISBN 978-1-107-09152-8 Hardback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication, and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

### Contents

Lis	t of Tables and Figures	v
Pre	face	xi
See	ction 1: Introduction	
1.	Group of 20 Parthasarathi Shome and Francis Xavier Rathinam	3
Se	ction 2: The Development Agenda	
2.	Commodity Market Policy for Food Security – The Road Ahead for G20 <i>Rajesh Chakrabarti, Francis Xavier Rathinam and Vijay Kumar Varadi</i>	23
3.	Recycling Global Surpluses for Infrastructure Investment in Emerging Market Economies <i>Renu Kohli</i>	73
4.	G20: Impact of the Crisis with Special Reference to India and International Burden Sharing <i>D. K. Srivastava</i>	86
5.	India's Growth Prospect: Structural Impediments <i>Kirit S. Parikh</i>	127
See	ction 3: Energy Security and Environmental Sustainability	
6.	The Co-benefit Principle and the Durban Platform: Towards an Inclusive Framework for Negotiating Climate Finance <i>A. Damodaran</i>	161

iv	Contents	
7.	Greening the G20 Agenda: A Way Forward Parthasarathi Shome and Amrita Goldar	183
8.	Revisiting Fossil–Fuel Subsidies in the Context of Ongoing G20 Dialogue <i>Meeta Keswani Mehra and Divya Datt</i>	203
9.	Should India Join the International Energy Agency? <i>Prodipto Ghosh</i>	256
Со	ntributors	301
Ind	dex	303

## List of Tables and Figures

List of Tables

Table 2.1: Top 20 agricultural futures and options worldwide rankedby number of contracts traded in 2010	32
Table 2.2: Determinants of real spot index prices	42
Table 2.3: Determinants of real spot prices – refined soy oil	43
Table 2.4: Determinants of real spot prices – mentha oil	43
Table 2.5: Determinants of real spot prices – crude oil	44
Table 2.6: Determinants of real spot prices – natural gas	45
Table 2.7: Augmented Dickey-Fuller (ADF) test for unit root	53
Tables 2.8a and 2.8b: Granger causality – returns and volatility	54
Table 2.8c: Summary of causality results	55
Table 2.9: NCDEX soy bean – specifications of a futures contract	60
Table 2.10: List of exchanges	62
Table 2.11: Recent policy actions in India – foodgrains (cereals, pulses, sugar)	63
Table 4.1: Quarterly growth rates in selected G20 countries suffering recession – from pre- to post-crisis period (per cent)	89
Table 4.2: Quarterly growth rates (year-on-year) for selected G20 countries (per cent)	90
Table 4.3: Quarterly growth rates (year-on-year) of GDP at factor cost and its components (per cent)	101
Table 4.4: Quarterly growth rates (year-on-year) of GDP at factor cost and its components (per cent)	103
Table 4.5: Fiscal and current account deficits in India relative to GDP – recent years (per cent to GDP at market prices)	106

#### vi List of Tables and Figures

Table 4.6: Funding gap estimates	107
Table 4.7: Selected MDG indicators – current status in India	120
Table 5.1: Decadal growth rate of GDP at factor cost (2004–05 prices)	127
Table 5.2: Poverty across NSS rounds – head count percentage	128
Table 5.3: All India electricity shortages	131
Table 5.4: Average electricity shortage 2002–03 to 2009–10	131
Table 5.5: AT&C loss (per cent)	133
Table 5.6: Progress of open access	138
Table 5.7: Status of different phases of NHDP (as on 30 April 2012)	141
Table 5.8: Contracts awarded under build-operate-transfer (BOT) (toll/annuity) during the Eleventh Plan	142
Table 5.9: Port-wise performance indicators of major ports	145
Table 5.10: Dropout rates at primary/elementary and secondary schools in India (1960–61, 1965–66, 1970–71 and 1975–76 to 2006–07)	146
Table 5.11: Macroeconomic aggregates of scenarios of TFPG	148
Table 5.12: Ranges of commercial energy requirement, domestic production and imports for 8 per cent growth for 2031–32	151
Table 5.13: Percentage share of exports measured in ₹ by regions	153
Table 6.1: Relative benefits or costs from adaptation projects for different mitigation scenarios	169
Table 6.2: Resource allocation options between mitigation andadaptation	175
Table 6.3: Possible negotiating positions on resource mobilization options in G20	178
Table 8.1: Taxonomy of Subsidies	207
Table 8.2: Subsidy estimates in select OECD countries, 2012 (provisional)	209

CAMBRIDGE

List of Tables and Figures	vii
Table 8.3: Fossil fuel consumption subsidy indicators for select emerging economies and oil exporting countries, (2013)	210
Table 8.4: Magnitude of fossil fuel consumption subsidies by fuel, 2013 (billion dollars)	211
Table 8.5: Gas prices under the APM regime	225
Table 8.6: Average cost of supply and tariffs for electricity (₹/kWh)	227
Table 8.7: Percentage of households and average monthly per capita expenditure (MPCE) by primary source of energy for cooking – all-India, 2007–08	231
Table 8.8: Percentage of households and average MPCE by primary source of energy for lighting – all India, 2007–08	231
Table 8.9: Distribution of surveyed households across rounds and sector (rural-urban)	236
Table 8.10: Descriptive statistics for the variables	237
Table 8.11: Summary of elasticity estimates	242
Table 8.12: Fuel wood consumption by rural households	247
Table 8.13: LPG consumption by rural households	248
Table 8.14: Fuel wood consumption by urban households	248
Table 8.15: LPG consumption by urban households	249
Table 8.16: Electricity consumption by rural households	249
Table 8.17: Electricity consumption by urban households	249
Table 8.18: Consumption of PDS kerosene by rural households	250
Table 8.19: Consumption of non–PDS kerosene by rural households	250
Table 8.20: Consumption of PDS kerosene by urban households	251
Table 8.21: Consumption of non–PDS kerosene by urban households	251
Table 9.1: Estimated global natural gas resources and technically recoverable shale gas resources	265

viii List of Tables and Figures

Table 9.2: India's commercial energy balance, 2010–11, million tonnes of oil equivalent	278
Table 9.3: Estimated net oil imports	290
Table 9.4: Projected (rounded) voting rights with fixed votes of each member = 3	290
Table 9.5: Projected (rounded) voting rights with fixed votes of each member = 1	291
Table 9.6: Votes of original 16 IEA members based on 1973 oil imports	295
Table 9.7: Voting strengths of 25 current IEA members	296
List of Figures	
Figure 2.1: Price indices – food and agricultural commodities	23
Figure 2.2: Price index volatility – food and agricultural commodities	24
Figure 2.3: Broad policy reactions to food crises	27
Figure 2.4: Rice price behaviour	29
Figure 2.5: Real commodity prices	38
Figure 2.6: Spot prices of soy oil, mentha oil, crude oil and natural gas	39
Figure 2.7: Real economic activity	39
Figure 2.8: Financial factors	40
Figure 2.9: Macroeconomic factors	40
Figure 2.10: International oil prices and exchange rate (US\$ vs ₹)	41
Figure 2.11: Rainfall	41
Figure 2.12: Levels of spot and futures (index, crude oil, natural gas, refined soy oil and mentha oil)	52
Figure 2.13: Relationship between spot and futures	53
Figure 4.1: Current account imbalances – pre- and post-crisis	92

CAMBRIDGE

List of Tables and Figures	ix
Figure 4.2: Time path of current account imbalance of selected countries	93
Figure 4.3: Crude oil and world food price indices – time profile	96
Figure 4.4: Crude oil and world food price index – co-movement in growth rates	97
Figure 4.5: Indian manufacturing sector – quarterly growth rates (year-on-year)	103
Figure 4.6: Indian construction sector – quarterly growth rates (year- on-year)	105
Figure 4.7: Indian electricity, gas, and water supply sector – quarterly growth rates (year-on-year)	105
Figure 4.8: Share of working population to total population in India	117
Figure 4.9: India's recent growth experience: actual and trend	122
Figure 6.1: Efficient carbon price discovery – the rationale of mandatory mitigation	171
Figure 6.2: Benefits of mitigation on risk return patterns from adaptation projects	174
Figure 8.1: Freight transport in India – dominated by roads	233
Figure 9.1: Projections of global oil price till 2035	261
Figure 9.2: Changes in population, per capita GDP, energy intensity, oil intensity, and oil use in different global regions, 2007–35	261
Figure 9.3: Trajectories of oil use by OECD and non-OECD countries, 2007–35	262
Figure 9.4: Changes in conventional oil production till 2035 from different OPEC sources	262
Figure 9.5: Changes in conventional oil production till 2035 from different non-OPEC sources	263
Figure 9.6: Production of unconventional liquid fuels till 2035	263
Figure 9.7: Geology of natural gas and shale gas	265
Figure 9.8: India's fuel mix in 2007	268

x List of Tables and Figures

Figure 9.9: India's oil production and consumption, 1990–2009	269
Figure 9.10: India's crude imports by country in 2009	269
Figure 9.11: India's natural gas production and consumption, 1995–2009	272
Figure 9.12: Electricity generation in India by technology type, 1990–2008	275
Figure 9.13: Nuclear power generation projections upto 2050	277
Figure 9.14: India's primary energy requirements in 2031	280
Figure 9.15: Shares of primary energy sources till 2031	280
Figure 9.16: Change in India's commercial energy intensity, 2001–31	281
Figure 9.17: Oil imports of selected countries, 1995–2008	284
Figure 9.18: Net change in IEA Votes of current members, if based on 2005 oil consumption	287
Figure 9.19: Votes of IEA members upon admission of India and China on the basis of 2009 net oil imports	287
Figure 9.20: Shares of projected oil imports of IEA members, India and China till 2035	291
Figure 9.21: Projected percentages of voting rights with fixed votes of each member = 3, variable votes adjusted in line with projected oil imports	292
Figure 9.22: Projected percentages of voting rights with fixed votes of each member = 1, variable votes adjusted in line with projected oil imports	292

Cambridge University Press 978-1-107-09152-8 - The G20 Development Agenda: An Indian Perspective Edited by Parthasarathi Shome Frontmatter More information

#### Preface

The Group of 20 nations (G20) continues to be the premier forum for global economic governance with its relative success in containing the deleterious aftermath of the global economic crisis of 2008–09. In 2010, there was an upturn experienced at a wider macro level if not at an individual economy level for which a more fundamental restructuring of the global economy would be required than was actually reached. The G20's achievement was, nevertheless, to bring together developed and emerging economies and initiate a series of macro-economic and financial sector reforms as the crisis originated from that sector, and be able to coordinate to an observable extent the policies that the members would take for cross-country stabilization.

As the global economy recovered in 2010, the G20 began expanding its brief to include a development agenda, in particular, achieving food security in an environment of commodity price volatility, recycling global savings to boost infrastructure investment, enhancing international burden sharing, and energy and environmental sustainability. Thus, the G20 embarked on a strategy to broaden its agenda that had included global macroeconomic coordination together with financial sector reforms and regulation and the reform of international financial institutions, to also include a list of development agenda pillars together with energy security and environmental sustainability. During the concerned period, India's position was that of a growing emerging economy of significant size that came off relatively unscathed by the crisis despite extensive opening up of its economy to international trade. It was well placed to influence the G20 in its functioning as a global steering entity.

A recent volume edited by Shome  $(2014)^1$  has examined emerging economy concerns and perspectives on reforms of the financial sector and the international monetary system, with a focus on India, set in the context of G20 reform initiatives and impasses. With this backdrop, this new volume

<sup>&</sup>lt;sup>1</sup> Shome, Parthasarathi (edited). 2014. *The G20 Macroeconomic Agenda: India and the Emerging Economies*, Cambridge University Press, New Delhi.

xii Preface

assesses the progress as well as unresolved concerns of the G20's development agenda, with a focus on India. The volume is a collection of essays covering important aspects of the G20's development agenda, with an introductory chapter that addresses the evolution of the G20 and its subsequent inclusion of a development agenda and brings together selected development concerns, touching upon component aspects.

The G20's concerns are varied and constantly changing, thus providing rich ground to present and analyse them. Section 2 addresses the issue of commodity market policy for food security and explores the role of financialization of commodities, both in the international and Indian context. The section also examines the matter of recycling global surpluses to finance infrastructure investment in emerging economies. Coexistence of a persistent gap in infrastructure investment in some countries *pari passu* with excessive savings elsewhere, represents a serious drawback in converting savings into investment at a global level. However, profitable recycling of global savings is inhibited by considerable maturity mismatch risks and several alternatives to effectively manage the mismatch risk are explored. Given the G20's development initiatives, India's role in international burden sharing is discussed. And the section also addresses the prevailing structural impediments to India's growth prospects.

This is followed by energy security and environmental sustainability that have been added to the G20's emerging agenda. Section 3 discusses global initiatives on climate change and adaptation financing in the context of equity and economic efficiency. It explores the cost and benefit of energy subsidies as the intent and impact vary substantially among G20 members. The OECD countries provide subsidies to ensure regional employment and energy-supply security, while emerging economies aim at managing the price of basic goods and services where energy is a key input, with the objective of reaching out to poor end-users. As India contemplates taking up membership in the International Energy Agency (IEA) for better energy security, this section also weighs the cost of membership and the loss of policy autonomy, against the fact that non-members, including India currently, enjoy the positive externalities of global oil stabilization measures taken by the IEA.

Undoubtedly, the G20 has proved its resilience in bringing to the table emerging issues proving to be of global concern, the most recent just having emerged being base erosion and profit shifting for tax minimization by multinational companies whose global tax contribution has fallen to negligible levels at a time when the need for funds to reduce fiscal deficits or

Preface xiii

fund much needed programmes is at its highest. Despite ever new challenges, the G20, somewhat surprisingly perhaps, appears to remain the most relevant international body to combat the continuing global recessionary environment while pursuing emerging development and structural challenges.

Appreciation for support received in the formulation of this volume authored by a wide array of authors is warranted. First, the Indian Ministry of Finance financed the research as a part of an overarching collaborative project on the G20 with the Indian Council for Research on International Economic Relations (ICRIER) where I was Director and Chief Executive when I headed the project. Francis Rathinam and Pooja Sharma managed the project on a day-to-day basis and Santosh Gupta provided secretarial help. It is hoped that the readership will find this work on the G20's development agenda a useful addition to the earlier work from the project on the G20's macroeconomic agenda, while the future calls for another volume on the G20's emerging concerns over depletion of tax revenues in the multinational context.

New Delhi

Parthasarathi Shome