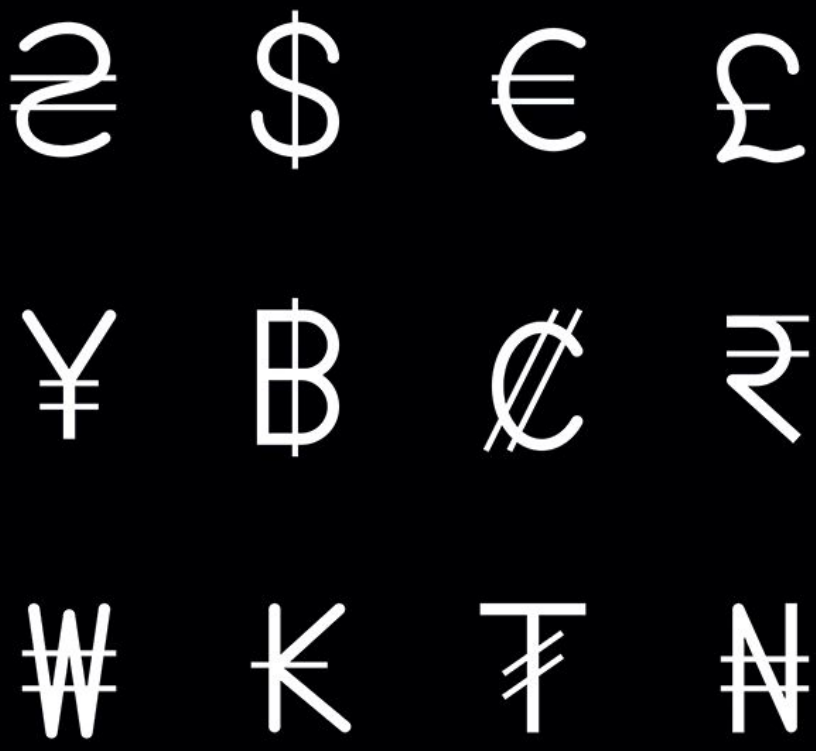
OXFORD



RESETTING THE INTERNATIONAL MONETARY (NON)SYSTEM

JOSÉ ANTONIO OCAMPO

Resetting the International Monetary (Non)System

Endorsements

'José Antonio Ocampo, one of the world class economists, offers us here the elements of a comprehensive yet evolutionary reform of the international monetary system. This book is an urgent read for the G20, and for all those who consider a stable system to be a key international public good.'

Michel Camdessus, former IMF Managing Director

'This book is a must-read for all who want to understand the gaps of the international monetary system, as well as the links between the workings of national economies and of that system. It is remarkable not only in providing a truly global perspective but also a deep analysis of the flaws of the system vis-à-vis emerging and developing countries.'

Kemal Dervis, Vice-President and Director of Global Economy and Development at Brookings Institution, USA

'José Antonio Ocampo is one of the most thoughtful critics of the international monetary system, but more significantly he is a prolific source of ideas for its reform. Implementing such ambitious reforms will not be easy, but a first important step is to be clear on the concepts. There's no one better than Ocampo at conceptualizing the system, its flaws, and its fixes.'

Barry Eichengreen, Professor at the University of California at Berkeley, USA

'José Antonio Ocampo's research is an extraordinary contribution to the effort to design a better international monetary system for the twenty-first century. It also offers a much-needed analysis on reform from the perspective of the developing world.'

Joseph E. Stiglitz, Nobel laureate in Economics, University Professor at Columbia University, USA

'Once in a while one comes across something that is so self-evidently right that one is momentarily surprised that it has not already been introduced, until one reflects on the current mediocre "leadership" of the world economy. That was my reaction on reading José Antonio Ocampo's tour de force on reforming the international monetary "system". On topic after topic—reserves, adjustment, the capital account, emergency financing, debt workouts, the institutional infrastructure—he combines reason with judgment of what may reasonably be sought.'

John Williamson, Senior Fellow at the Peterson Institute for International Economics, USA

UNU World Institute for Development Economics Research (UNU-WIDER) was established by the United Nations University as its first research and training centre and started work in Helsinki, Finland, in 1985. The mandate of the institute is to undertake applied research and policy analysis on structural changes affecting developing and transitional economies, to provide a forum for the advocacy of policies leading to robust, equitable, and environmentally sustainable growth, and to promote capacity strengthening and training in the field of economic and social policy-making. Its work is carried out by staff researchers and visiting scholars in Helsinki and via networks of collaborating scholars and institutions around the world.

United Nations University World Institute for Development Economics Research (UNU-WIDER)
Katajanokanlaituri 6B, 00160 Helsinki, Finland
www.wider.unu.edu

Resetting the International Monetary (Non)System

José Antonio Ocampo

A study prepared by the United Nations University World Institute for Development Economics Research (UNU-WIDER)

OXFORD
UNIVERSITY PRESS

OXFORD
UNIVERSITY PRESS

Great Clarendon Street, Oxford, OX2 6DP,
United Kingdom

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 trade mark of
Oxford University Press in the UK and in certain other countries

First Edition published in 2017
Impression: 1

Published in the United States of America by Oxford University Press
198 Madison Avenue, New York, NY 10016, United States of America

British Library Cataloguing in Publication Data

Data available

Library of Congress Control Number: 2017939159

ISBN 978–0–19–871811–6

Printed and bound by
CPI Group (UK) Ltd, Croydon, CR0 4YY

Para Ana Lucía,
compañera de mi vida,
con todo mi amor

Foreword

The cruel, harsh world wars of the twentieth century were cataclysmic across the global stage, triggering extensive international efforts for cooperation and peace. International collaborative efforts in the 1940s saw the creation of the Bretton Woods institutions, the United Nations, and then GATT later in the decade. After some disappointments and non-starters, such as the International Trade Organization agreed to in Havana in 1948, we finally witnessed the creation of the World Trade Organization in 1995, half a century later. These organizations and institutions are colossal milestones in global cooperation and development.

The renowned author, José Antonio Ocampo, a world expert on financial and monetary systems, or non-systems as he 'affectionately' terms them, has crystallized a massive wealth of studies, global politics, and events—ranging across countries, regions, and years—hugely benefiting and drawing from his personal experience—as a scholar, the Executive Secretary of ECLAC, UN Under-Secretary-General for Economic and Social Affairs, Minister of Finance of Colombia, and Chairman of the Board of Banco de la República (Colombia's central bank)—for readers to delve into and learn from. This book, a sobering and educational read, will be of huge interest to central bankers, economists, finance ministries and industries, economic historians, scholars, and students alike. We are truly grateful to José Antonio for his meticulous analysis, summarizing, and skilled authorship, resulting in this fascinating book before us.

UNU-WIDER's work is supported by the governments of Denmark, Finland, Sweden, and the United Kingdom. Without this vital funding our research, capacity-building, and policy advisory work would be impossible.

Finn Tarp
Director, UNU-WIDER
Helsinki, March 2017

Preface

This volume provides an analysis of the global monetary system and the necessary reforms that it should undergo to play an active role in the twenty-first century. As the title indicates, its basic diagnosis is that it is an ad hoc framework rather than a coherent system—a 'non-system', a term that has old roots—which evolved after the breakdown of the original Bretton Woods arrangement in the early 1970s. The book places a special focus on the asymmetries that emerging and developing countries face within the current system, particularly their limited share in the creation of international liquidity and the inequities that this generates, given their strong demand for foreign exchange reserves as 'self-insurance'; the relation of this demand with their greater vulnerability to boom–bust financial cycles and thus to balance-of-payments crises; their greater susceptibility to the insufficiently developed 'global financial safety net', and the lack of an adequate international debt workout mechanism; and their inadequate voice and representation in international economic decision-making and in the International Monetary Fund (IMF) in particular. The volume therefore emphasizes the development dimensions of the global monetary system and of monetary reform.

It is organized in seven chapters. The first one provides a historical background to contemporary debates: the genesis, similarities, and differences of problems that the system has faced at different times. It looks sequentially at the design of the original Bretton Woods system; the tensions it faced from the 1960s and its collapse in the early 1970s; the management of that collapse, the failure to agree on a new system, and the resulting non-system; the maturing of these ad hoc arrangements, the reforms after the North Atlantic financial crisis, and contemporary debates on how to build up a stronger global financial safety net.

Chapter 2 analyses three major problems of the global reserve system: the asymmetric adjustment of deficit versus surplus countries; the dependence on economic fluctuations and the monetary policy of the main reserve-issuing country; and the large demand for foreign exchange reserves by developing countries as self-insurance. It then proposes two reform routes: transforming it into a fully-fledged multi-currency reserve system, or placing at its centre the

only truly global reserve asset, the IMF's Special Drawing Rights (SDRs). It argues that a complementary use of these two routes may be the only way forward. Under a mixed system, SDRs would become the source of financing for all IMF lending and satisfy in part the growing demand for reserves, but national currencies (regional in the case of the euro) would continue to be used as international means of payment and stores of value.

Chapter 3 looks at historical and current frameworks to manage international macroeconomic linkages. It considers first the evolving nature of global payments imbalances. It then focuses on the mechanisms of macroeconomic dialogue and cooperation that have been put in place at different times to guarantee the consistency of the macroeconomic policies of major economies. These mechanisms have operated sometimes within the IMF, but more frequently outside this institution—in recent years in the Group of Twenty (G20). It then analyses the functioning of the original Bretton Woods exchange rate system and its replacement in the early 1970s by a veritable non-system. It then argues for stronger international cooperation, aimed both at avoiding the contributions of exchange rates to the generation of global imbalances and the 'excess volatility' in the exchange rates of major currencies.

Chapter 4 reviews, in turn, the history and controversies associated with capital account management. It first looks at the transition, from the agreement at Bretton Woods that capital account regulations should be a normal policy instrument, to the gradual but fairly broad-based liberalization of the capital account that took place since the 1970s, first in developed countries and later in the developing world. This is followed by an analysis of the risks of capital account liberalization, particularly for emerging and developing countries, and the role and experience of capital account regulations in recent decades as a complementary instrument of counter-cyclical macroeconomic policy and as a financial stability tool—as part in both cases of the family of 'macroprudential regulations'.

Chapter 5 analyses the history and effectiveness of the two major mechanisms of resolution of balance of payments crises: emergency financing and international debt workout mechanisms. It argues that IMF lending has met its counter-cyclical objectives through history and has been improving since the 2007–9 North Atlantic financial crisis in terms of providing better lending facilities. However, it has faced significant criticisms associated with its conditionality, which expanded considerably in the 1980s and 1990s, with a return since the early part of the twenty-first century to the principle that it should focus on macro-relevant areas. However, conditionality continues to be the basic reason why borrowing from the IMF carries a stigma. In contrast to advances in the area of emergency financing, and despite the spread of collective action clauses, much remains to be done in the area of debt

restructuring. In this regard, it proposes a multilateral mechanism that offers a sequence of voluntary negotiations, mediation, and eventual arbitration with pre-established deadlines, similar to that used in the World Trade Organization's dispute settlement process.

Chapter 6 proposes a major reform of the institutional structure of the system based on three pillars. The first is a representative apex organization, which could take the form of the transformation of the G20 into a representative international institution that is part of the UN *system* (which includes the IMF and the World Bank). The second is the continuous reform of 'voice and participation' of developing countries in the Bretton Woods institutions and global regulatory bodies, and particularly in the IMF. The third is the design of a 'dense', multi-layered architecture, with the active contribution of regional, sub-regional, and inter-regional institutions, in a sense mirroring the denser architecture that is already in place in the system of multilateral development banks.

The final chapter serves as a summary of the major issues raised and proposals made in the volume. It proposes a comprehensive yet evolutionary reform that includes: (i) a global reserve system that mixes the multi-currency arrangement with a more active use of SDRs; (ii) stronger mechanisms of macroeconomic policy cooperation, including greater cooperation in exchange rate management and freedom to use capital account regulations as a complement to counter-cyclical macroeconomic policy and other instruments of financial regulation; (iii) additional automatic balance-of-payments financing facilities, and the complementary use of swap and regional arrangements; (iv) a multilateral sovereign debt workout mechanism; and (v) major reforms of the system's governance.

* * * * *

I have been dealing with the issues discussed in this volume in several positions over the past two decades. As Minister of Finance of Colombia and Chairman of the Board of Banco de la República (our central bank), I had to deal with the complexities of managing capital account volatility and its effects on exchange rates in a contemporary emerging economy. In that capacity, I also had the opportunity to speak as a representative of the Latin American countries in the 1997 Annual Meetings of the Bretton Woods institutions at Hong Kong, opposing the main reform proposal then on the table: the inclusion of the commitment to capital account convertibility in the IMF Articles of Agreement.

As a United Nations official for close to a decade, I was first in charge of coordinating, as Executive Secretary of the Economic Commission for Latin America and the Caribbean, and with the support of Ricardo Ffrench-Davis, the UN analysis of the implications of the East Asian crisis for the design of the international financial architecture (United Nations 1999). I then participated

in the preparations and contributed to the Conference on Financing for Development that took place in Monterrey, Mexico, in 2002, and coordinated the first evaluation by the United Nations of the advance in the implementation of its recommendations (United Nations 2005b, later published in a revised version as Ocampo, Kregel, and Griffith-Jones 2007). In my capacity as Under-Secretary-General for Economic and Social Affairs, I also had the opportunity to represent the United Nations in the meetings of the International Monetary and Financial Committee and to coordinate many activities with the Bretton Woods institutions.

In my return to academic life since 2007, as a professor at Columbia University's School for International and Public Affairs, I have done extensive research on the topics covered in this volume, organized and co-organized several workshops and conferences on these issues, and participated in many other meetings, including several organized by the IMF. During this period, I have also had the opportunity to participate as a member of the Commission of Experts Convened by the President of the UN General Assembly on Reforms of the International Monetary and Financial System, better known as the Stiglitz Commission (United Nations 2009). I was also asked by the IMF Board to chair the institutional evaluation of its Independent Evaluation Office (Ocampo, Pickford, and Rustomjee 2013) and, more recently, to participate in the Special Advisory Group on SDRs.

In my relations with the IMF through these two decades, I have had the opportunity to interact with the last five Managing Directors. I am especially grateful to Michel Camdessus, whom I first met when I was Minister of Finance of Colombia, and with whom I have continued discussing the issues analysed in this book until the present, as well as with Christine Lagarde in recent years. I have also had the opportunity to interact with and write about one of the most successful regional funds, the Latin American Reserve Fund (FLAR, according to its Spanish acronym).

In the academic world, I owe a special gratitude to Robert Triffin for his writings and his lectures when I was a student at Yale University, and to John Williamson, a major analyst of the international monetary issues for decades, who has heavily influenced my work and with whom I have discussed these issues on many occasions. My work over the past decade at Columbia University with Joseph Stiglitz has been very gratifying and a constant source of learning; I met him originally as my professor at Yale. I am deeply indebted to another of my Yale professors and my mentor, Carlos Diaz-Alejandro, above all for having taught me that historical analysis is essential to better understand economic issues. This is the methodology used here and throughout my academic work. Teaching for several years a course at Columbia University on Global Economic Governance with Kemal Derviş provided a constant opportunity to learn from his knowledge and experience.

I have written many academic articles on global monetary issues over the past decade. I thank my several co-authors on different topics: Bilge Erten, Kevin Gallagher, Stephany Griffith-Jones, Jan Kregel, Gabriel Palma, Shari Spiegel, Joseph Stiglitz, and Daniel Titelman. I have also organized conferences and edited volumes on these topics with several of them (Ocampo and Stiglitz 2008; Gallagher, Griffith-Jones, and Ocampo 2012a), as well as with Barry Herman (Herman, Ocampo, and Spiegel 2010a) and Martin Guzmán (Guzmán, Ocampo, and Stiglitz 2016). Although not a co-author, my interaction with Jonathan Ostry has been central to my work on these issues in recent years.

The idea for writing this book came from WIDER Annual Lecture 14—Reforming the International Monetary and Financial Architecture—which I delivered in December 2010 and was published as Ocampo (2011a). I want to thank UNU-WIDER Director, Finn Tarp, for his invitation to deliver the lecture, his encouragement to turn it into a book, and his support in this task. It has taken much longer than initially planned to complete because of other academic and policy commitments.

I want also to thank many other persons with whom I have discussed the issues raised here through the years and from whose writings I have learned: Manuel Agosin, Yilmaz Akyüz, Vivek Arora, Amar Bhattacharya, Jack Boorman, Claudio Borio, Lee Buchheit, Aldo Caliari, Guillermo Calvo, Sara Calvo, Richard Cooper, Roy Culpeper, Jane D'Arista, Randall Dodd, Barry Eichengreen, Gerry Epstein, Ricardo Ffrench-Davis, Jacob Frankel, Roberto Frenkel, Barbara Fritz, Ilene Grabel, Jo Marie Griegsgraber, Gerry Helleiner, Eric Helleiner, Jomo K.S., Jürgen Kaiser, Peter Kenen, Anton Korinek, Ruben Lamdany, Domenico Lombardi, Rakesh Mohan, Deepak Nayyar, Paulo Nogueira Batista, Maurice Obstfeld, Ugo Panizza, Avinash Persaud, Michael Pettis, Y. Venugopal Reddy, Dani Rodrik, Benu Schneider, Catherine Schenk, Moisés Schwartz, Andrew Sheng, Alan Taylor, Lance Taylor, Camilo Tovar, Edwin M. Truman, Marilou Uy, Ulrich Volz, William White, Charles Wyplosz, Yu Yongding, and Ming Zhang.

The conferences organized in the past by Jan Joost Teunissen under his 'Forum on Debt and Development' (FONDAD) and more recently by Marc Uzan under the 'Reinventing Bretton Woods Committee' have also been a significant source of learning.

I also owe special gratitude to my research assistants, and particularly to the invaluable support of Andrés Lizcano and Paola Arias in the first and last stages of this project, respectively. I want also to thank Juan Pablo García, Natalie Gómez, and Cristina Gutiérrez, who also helped me through the years in different parts of the project, and to Lenka Arriagada and Lorraine Telfer-Taivanen for their help in the preparation of the final manuscript.

The book benefits from several papers published through the years. Chapter 2 benefits from two early papers (Ocampo 2010a, 2010b), from two later and shorter pieces (Ocampo 2013b, 2017), and from my joint work with Bilge Erten (Erten and Ocampo 2013b). My work with her is also reflected in Chapter 4 (Ocampo and Erten 2014; Erten and Ocampo 2017), which also benefits from an early joint project with Joseph Stiglitz (Ocampo and Stiglitz 2008) and from my joint work with Kevin Gallagher and Stephany Griffith-Jones (Gallagher, Griffith-Jones, and Ocampo 2012b; Gallagher and Ocampo 2013). The ideas on debt workouts in Chapter 5 draw from Herman, Ocampo, and Spiegel (2010b) and from Ocampo, (2016), which was part of a recent project already mentioned (Guzmán, Ocampo, and Stiglitz 2016). Chapter 6 benefits from my joint work with Joseph Stiglitz (Ocampo and Stiglitz 2011), which is in turn a by-product of the UN Stiglitz Commission. Finally, Chapter 7 draws from my WIDER Lecture (Ocampo 2011a), and expands on Ocampo (2015b) and an earlier shorter paper (Ocampo 2011b). All chapters were also published in a preliminary form as WIDER Working Papers.

Let me add to this preface some terminological issues. Under the influence of Rakesh Mohan (see, for example, Mohan and Kapur 2014), I use the term 'North Atlantic financial crisis' to refer to what is generally known as the 'global financial crisis' (see also an earlier use of the term by Buiter 2008). The basic reason is that, although the crisis had global effects, its epicentres were the United States and Western Europe. Following my early work, I also consistently avoid the term 'capital controls'—which in my view carries a stigma—and refer to 'capital account regulations' or 'capital account management'. Throughout the volume, and in the title itself, I use the term 'developing countries' to include as well the so-called 'emerging economies' (a category that, it must be said, lacks a clear definition). To classify countries among different categories by income levels, I utilize the 2000 World Bank classification rather than that for a more recent year, because it reflects much better the relative standing of different countries during the long period covered in the analysis. Finally, I generally use 'dollars' to refer to the US dollar.

José Antonio Ocampo
New York, March 2017

Contents

List of Figures xix
List of Tables xxi
List of Abbreviations xxiii

1. A Brief History of the International Monetary System since Bretton Woods 1
2. The Provision of Global Liquidity: The Global Reserve System 45
3. Global Monetary Cooperation and the Exchange Rate System 75
4. Capital Account Liberalization and Management 109
5. Resolution of Balance-of-Payments Crises: Emergency Financing and Debt Workouts 139
6. The Governance of the International Monetary System 181
7. Reforming the (Non)System 207

References 233
Index 255

List of Figures

1.1 IMF loans as % of world GDP 9
1.2 World gold reserves 10
1.3 Foreign currency holdings, 1948–90 (million SDRs) 13
1.4 IMF quotas of % of world GDP and exports 19
1.5 Gold price (1980 dollars per troy oz) 26
1.6 Composition of reserves 27
1.7 US imbalances 32
1.8 World economic growth 39
2.1 Current account surplus or deficit of the eurozone economies (% of GDP) 48
2.2 US current account balance and real exchange rate 50
2.3 Foreign exchange reserves by level of development (% of GDP) 55
2.4 Total net drawings of SDRs 62
2.5 Share of major currencies in allocated foreign exchange reserves 66
3.1 Trade balances as percentage of world GDP (a, b) and world exports of goods (c, d) 80
3.2 Current account balances as percentage of world GDP (a, b) and exports of goods and services (c, d) 83
3.3 Nominal exchange rates, 1948–80 (dollars per local currency, 1948=100) 95
3.4 Exchange rate regimes from 1945 to 2010 in (a) high-income, (b) upper middle-income, (c) lower middle-income, and (d) low-income countries, according to Reinhart and Rogoff (percentage of countries in each category) 97
3.5 Exchange rate regimes from 1980 to 2011 in (a) high-income, (b) upper middle-income, (c) lower middle-income, and (d) low-income countries, according to Ghosh, Ostry, and Qureshi (percentage of countries in each category) 101
3.6 Instability of four major exchange rates: (a) real effective exchange rates and (b) coefficient of variation 103

3.7	Volatility of the euro/US dollar exchange rate (deviation with respect to the six-month-centred moving average in absolute value)	104
4.1	Chinn–Ito Index of capital account openness	114
4.2	Capital flows towards emerging and developing countries (% of GDP)	116
4.3	Emerging economies: spreads and yields of sovereign bonds, 1998–2016	118
4.4	Capital account regulations, 1995–2015	130
5.1	IMF lending	143
5.2	IMF lending relative to world GDP and trade	153
5.3	Weekly use of US Fed swap facilities (million dollars), 2008–16	162
5.4	Number of debt restructurings 1978–2013	168
6.1	Composition of commitments made in G20 Summits, 2008–15, by area	183
6.2	Redistribution of quotas and votes in the IMF (versus pre-2006 situation)	191
6.3	Multilateral development banks, assets by region, 2010 (% of GDP in each region)	201
6.4	Size of regional balance of payments facilities (% of regions' GDPs in 2013)	205

List of Tables

2.1	Accumulation of foreign exchange reserves	54
2.2	SDR allocations by level of development (in millions of SDRs)	60
2.3	Net SDR holdings by level of development (in millions of SDRs)	63
4.1	Chinn-Ito Index of capital account openness by region	114
4.2	International bonds and notes, by nationality of issuer, %	119
4.3	Capital account regulations in emerging and developing countries, 2015	131
5.1	The shifting geography of major IMF borrowers	145
5.2	Cases of large exceptional financing (over three times the quota level) (borrowing as % of quota at the end of each year)	155
5.3	Lending by multilateral development banks, 2004–16 (million dollars)	164
6.1	Distribution of quota according to different criteria (% of total quota)	193

List of Abbreviations

(a) Institutions

AMRO	ASEAN+3 Macroeconomic Research Office
ASEAN	Association of Southeast Asian Nations
BIS	Bank for International Settlements
C20	Committee of Twenty
ECB	European Central Bank
ECLAC	UN Economic Commission for Latin America and the Caribbean
ECOSOC	UN Economic and Social Council
EPU	European Payments Union
EU	European Union
FLAR	*Fondo Latinoamericano de Reservas* (Latin American Reserve Fund)
FOMC	Federal Open Market Committee
FSB	Financial Stability Board
FSF	Financial Stability Forum
G5	Group of Five
G7	Group of Seven
G10	Group of Ten
G20	Group of Twenty
G24	Group of Twenty-Four
GECC	Global Economic Coordination Council
IBRD	International Bank for Reconstruction and Development
ICC	International Chamber of Commerce
IDA	International Development Authority
IFC	International Finance Corporation
IIF	Institute of International Finance
IMF	International Monetary Fund
IMFC	International Monetary and Financial Committee
IMF-IEO	IMF Independent Evaluation Office

IOSCO	International Organization of Securities Commissions
LAIA	Latin American Integration Association
OECD	Organization for Economic Co-operation and Development
OEEC	Organization for European Economic Co-operation
UNCTAD	United Nations Conference on Trade and Development
UN-DESA	UN Department of Economic and Social Affairs
UNDP	United Nations Development Programme
WTO	World Trade Organization

(b) Other Abbreviations

BRICS	Brazil, Russia, India, China, and South Africa
CAC	collective action clause
CAR	capital account regulation
CFM	capital flow management measure
CML	capital market liberalization
CRA	Contingency Reserve Arrangement
CRU	collective reserve unit
ECF	Extended Credit Facility
ECU	European Currency Unit
EMS	European Monetary System
FCL	Flexible Credit Line
FDI	foreign direct investment
FSAP	Financial Sector Assessment Programme
FX	foreign exchange
GDP	gross domestic product
GRA	General Resources Account
HIPC	Heavily Indebted Poor Countries Initiative
LIC	low-income country
MAP	Mutual Assessment Process
MDB	multilateral development bank
MDRI	Multilateral Debt Relief Initiative
NIC	newly industrializing economy
PAHL	primary asset holding limit
PCL	Precautionary Credit Line
PPP	purchasing power parity

PRGF	Poverty Reduction and Growth Facility
RCF	Rapid Credit Facility
SDR	Special Drawing Right
SDRM	Sovereign Debt Restructuring Mechanism
SLF	short-term liquidity facility
URR	unremunerated reserve requirement

1

A Brief History of the International Monetary System since Bretton Woods

1.1 Introduction

The 1944 Bretton Woods Conference, which created the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (World Bank), and the San Francisco Conference, which created the United Nations one year later, were major landmarks in international cooperation—true 'acts of creation', to use the title of one of the best-known books on the founding of the United Nations (Schlesinger 2004). These success stories were particularly remarkable in the light of the failures of international political and economic cooperation in the 1930s. There were, of course, disappointments, particularly the incapacity to launch an additional leg of the system of economic cooperation, the International Trade Organization agreed to in Havana in 1948, as the US Congress failed to ratify the agreement; only one of its components, the General Agreement on Tariffs and Trade, approved one year earlier, was put in place. Almost half a century later, the World Trade Organization was created. In any case, there has never been another moment in the history of international cooperation that matches the end of the Second World War and the early post-war years.

In the economic area, the success of cooperation was reflected, in particular, in the rapid reconstruction of Western Europe and Japan, which led to the period of the fastest economic growth and, particularly, the fastest growth of international trade in world history. There were also disappointments, notably the inherent design problems, which in the case of the international monetary system—the subject of this book—finally led in the early 1970s to the collapse of the Bretton Woods arrangements, the failure to agree on an alternative system, and the de facto rise of the 'non-system' that has survived until the present. To this we can add the incapacity to line up the Communist countries as members of the Bretton Woods institutions, until 1980 in the case

of China (when it took from Taiwan the membership in the IMF) and after the fall of the Berlin Wall in the case of the Soviet bloc.

This chapter focuses on the international monetary system, as an introduction to the issues that are analysed in detail in the rest of the volume. The histories of the international monetary system and of the IMF in particular have, of course, been the subject of significant attention. This includes old and new histories of US–UK negotiations in the late war years and the agreement finally reached at Bretton Woods (Conway 2015; Gardner 1969; Steil 2013), as well as more recent analyses of the role of developing countries in those negotiations (Helleiner 2014). It also includes academic histories of the international monetary system (Eichengreen 2008; Helleiner 1994; Yago, Asai and Itoh 2015), the views of protagonists of that history (Solomon 1982), and the official and semi-official histories of the IMF (de Vries 1976, 1985, 1987; Horsefield 1969; James 1996). The chapter does not, therefore, aim to make a detailed reconstruction of the history of the system as such, but rather to serve as a historical background to the contemporary issues that are analysed in the rest of this volume: the genesis of the problems faced by the system at different times, their similarities and differences, and the role of emerging and developing countries in the system.

The chapter is divided into six sections, the first of which is this introduction. The second looks at the background of the debates and the design of the Bretton Woods system. The third analyses the tensions that the Bretton Woods monetary system faced from the 1960s until its collapse in the early 1970s. The fourth looks at the management of the collapse, the failure to reach an agreement on a new system, and the resulting non-system or ad hoc arrangements that followed. The fifth considers the following quarter century or so, during which these arrangements matured. The last section looks at current issues, which may be seen as the construction of a broader global 'financial safety net', to use a term that has become fashionable. This process started before the North Atlantic financial crisis[1] but developed fully after the outbreak of that crisis.

1.2 The Bretton Woods Monetary System

The major objectives of international monetary cooperation as agreed at Bretton Woods are best captured in Article I.ii of the IMF Articles of Agreement, which states that the purpose of the IMF is: 'To facilitate the expansion

[1] As pointed out in the Preface, I follow in this book the use of this term, particularly by Mohan and Kapur (2014) but also by Buiter (2008), rather than that of 'global financial crisis' because, although the crisis had global effects, its epicentres were the United States and Western Europe.

and balanced growth of international trade, and to contribute thereby to the promotion and maintenance of high levels of employment and real income and to the development of the productive resources of all members as primary objectives of economic policy'. This objective reflects the central relation that, in the conception of the Bretton Woods architects, the new international monetary system had with the reconstruction of world trade after its collapse during the Great Depression and the Second World War. It also shows the centrality of the new economic ideas that came from the Keynesian revolution, which placed employment as the central objective of macroeconomic policy. In a more indirect way, the growth objectives of developing countries were captured in the reference to the 'development of the productive resources' of its members.[2]

The rest of Article I can be read as instruments to achieve this major objective: (i) to create a permanent institution 'to promote international monetary cooperation' (Article I.i); (ii) 'to promote exchange stability, to maintain orderly exchange arrangements among members, and to avoid competitive exchange depreciation' (Article I.iii), which was deemed as essential to reconstruct international trade; (iii) to establish 'a multilateral system of payments in respect of current transactions' that would eliminate the 'foreign exchange restrictions which hamper the growth of world trade' (Article I.iv); and (iv) to provide IMF financing 'to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity' (Article I.v), meaning in this regard policies that could negatively affect employment in the country adopting them or generate negative spillovers that would have that effect on other countries.

Each of these provisions reflected the existing consensus on the problems that the previous system faced, particularly in three areas. The first was the view that the 'rules of the game' of the gold standard had been pro-cyclical and therefore guaranteed exchange rate (and monetary) stability at the cost of the employment objectives. Rather, the view was now enshrined that countries should undertake balance-of-payments adjustment but maintaining enough policy space to pursue the employment objectives of macroeconomic policies—in particular the capacity to adopt counter-cyclical policies during crises, as well as the growth objectives of developing countries—the 'development of the productive resources of all members'. This required the creation of new policy instruments to pursue the consistency between internal and external balances, particularly balance-of-payments financing and the possibility of adjusting the exchange rate to guarantee such balance.

[2] This was indeed the agreed language to proposals by India, with the backing of other countries, to incorporate the 'development' objectives of the Fund (see Helleiner 2014: ch. 9).

The second consensus was related to the chaos in exchange rate movements and international payments generated by the Great Depression and the final collapse of the gold standard, particularly after its progenitor, the United Kingdom, finally abandoned it in September 1931; it had already been abandoned during the First World War but was restored in 1925 under conditions that are generally perceived to have been unsustainable. Some countries had already abandoned the gold standard before Britain and others were forced to follow, sometimes with a lag. In the case of the United States, it was abandoned after a series of decisions adopted between April and June 1933 when gold coins and certificates were taken out of circulation, and convertibility of dollar[3] bills for gold and the right of creditors to demand payments in gold were abrogated, and in January 1934 when the Gold Reserve Act forced banks to hand their gold to the Treasury and allowed the President to change the official price of gold, which was immediately increased from US$20.67 to US$35 per troy ounce. Following a pattern that several countries had already faced when crises hit during the gold standard years, some developing countries had also abandoned convertibility before the United Kingdom, and others soon followed. A few countries retained the gold standard for a few more years, but the most important of them, France, finally abandoned it in 1936. However, this process led to competitive devaluations as well as the use of foreign exchange controls by many countries that hampered the international system of trade and payments. To facilitate trade and avoid competitive devaluations, it was then agreed at Bretton Woods that exchange rates should be normally fixed but could be adjusted 'to correct a fundamental disequilibrium' (Article IV, Section 5). This concept, like some others in the agreement, was never clearly defined, but its meaning was perhaps self-evident, as reflected in the severity of the balance-of-payments crises faced by specific countries at different times. The Great Depression had also led to broad-based protectionism and, under the leadership of Germany, to a myriad of bilateral trade agreements that ended up destroying multilateralism in trade and payments.

The third consensus was that capital flows had also had a large speculative component during the 1930s that had hampered rather than supported exchange rate stability. For this reason, the commitment to eliminate restrictions on current transactions that was adopted at Bretton Woods was not extended to capital flows. So, the freedom to regulate capital flows that did not hamper current transactions was adopted as an important element of the system. As the Articles of Agreement still read: 'Members may exercise such controls as are necessary to regulate international capital movements, but no

[3] Please note that, although the dollar is also a currency of other countries, I generally use the term throughout this book to refer to the US dollar.

member may exercise these controls in a manner which will restrict payments for current transactions' (Article VI, Section 3).

The proposals that the two fathers of the IMF, John Maynard Keynes and Harry Dexter White, placed on the table before the negotiations, shared these points of consensus and had other common elements, but also had disagreements in other areas. Notable among them was the design of the global reserve system.[4] In particular, Keynes (1942–3) held strongly the view that the major problem of all international monetary systems had been that they forced asymmetric balance-of-payments adjustment on deficit versus surplus countries: the former were forced to adjust, as they generally lacked adequate external financing or adequate reserves to manage crises, whereas surplus countries did not face similar pressures. Keynes' obsession with this issue was, of course, related to the fact that this asymmetry generates a global contractionary bias during crises.

Keynes' proposal to create an International Clearing Union was aimed at correcting this basic asymmetry by forcing surplus countries automatically to finance those in deficit—obviously within certain limits. Under the circumstances that characterized the world after the Second World War, it was clear, however, that this would imply that the United States was bound to become the major surplus country and would therefore have to provide large amounts of automatic financing. Therefore, it was unacceptable to the host of the Bretton Woods negotiations. White offered in return what came to be known as the 'scarce currency clause', under which other countries were authorized 'after consultation with the Fund, temporarily to impose limitations on the freedom of exchange operations in the scarce currency' (Article VII, Section 3b). However, this provision, which curiously is still in place, was never legally used[5] and the 'dollar shortage' that characterized the early post-Second World War period was managed in a different way—in the case of Western Europe and Japan, as we shall see, through US aid and specific arrangements for intra-European payments. The asymmetric adjustment problem, therefore, continued to be a feature of the system designed at Bretton Woods as well as of the non-system that succeeded it.

Of the two currencies that had served the role of major international monies since the First World War, it was also clear to negotiators that the dollar was

[4] See a fascinating account of these debates in Skidelsky (2000: part 2).

[5] For the first long decade after the launch of the IMF, the widespread use of foreign exchange restrictions for current account transactions by the European countries had, nonetheless, discriminatory effects against trading with the US and in favour of intra-regional trade. The European Payments Union, to which I refer later, may have had similar effects. The persistence of current account restrictions in the developing world for a much longer period could have had similar effects.

the only one that could be placed at the centre of the system. Sterling could not play that role as the United Kingdom would inherit from the Second World War major debt obligations with the United States as well as large sterling balances in the hands of other central banks, primarily but not only of the sterling area—an arrangement that had de facto been in place since September 1931 and was formalized in 1939 (Schenk 2010). Indeed, the tough negotiations between the United States and the United Kingdom to clean up the obligations that the latter had assumed during the war under the 'lend–lease' arrangement (which added up to US$22 billion) led to an agreement on a fifty-year loan of US$3.75 billion at 2 per cent interest and a thirty-year loan of US$650 billion at 2.375 per cent, but conditional on convertibility for current sterling-area operations that would have to be adopted within fifteen months. Fulfilling this commitment, the United Kingdom restored convertibility on 15 July 1947, but the rapid reduction of reserves forced it to suspend it again slightly over a month later, on 20 August (United Nations 1948: 18–19; Steil 2013: ch. 9 and 10). This early sterling crisis was the background for the flexibilities in the restoration of current account convertibility that were adopted from the late 1940s and which continued to prevail through the 1950s with European members and Japan, beyond the initial transition that was agreed (which formally came to an end in early 1952) and much longer with developing countries.

As much as it was clear that sterling could not be restored to the central role it had held in the past, and that it could not even be convertible, it was also clear to White that placing the dollar at the centre of the system was possible only if the dollar was backed by gold vis-à-vis other central banks. A peculiar system was then agreed in which dollar reserves of central banks were convertible into gold at the price fixed by the United States in January 1934, although maintaining the inconvertibility of dollars in circulation for gold established in 1933 for private agents. In fact, transactions among central banks in gold had continued after the abandonment of the gold standard in the 1930s—and in the case of the US, at that official price.

The system that then evolved, therefore, had four distinctive features:

- A global reserve system based on a dual gold–dollar standard, but with dollar reserves being the most dynamic element in reserve accumulation.
- A system of fixed exchange rates, but adjustable under 'fundamental disequilibrium'. In the Articles of Agreement, it was called a system of 'par values', but came to be known as 'adjustable pegs' in the economic literature. Under the original Article IV, countries were supposed to consult the IMF before modifying their exchange rates, a process that was supposed to be fairly automatic if the variation was under 10 per cent, but the Fund could object if it was larger. However, this possible objection was

rarely used[6] and, if anything, it rather became a frequent practice for the Fund to pressure countries (particularly developing countries) faced with balance-of-payments deficits to depreciate their currencies; there was also pressure on surplus countries to appreciate, but in this case, the IMF's leverage was very limited. Countries were also prohibited from engaging in 'any discriminatory currency arrangements or multiple currency practices except as authorized under this Agreement or approved by the Fund' and, if they had them in place before the agreement, to agree with the Fund on 'their progressive removal' (Article VIII, Section 3).

- Convertibility for current account transactions, which would be achieved in a gradual way in countries that lacked it—initially the broad majority of IMF members. In contrast to that, countries maintained the capacity to manage capital flows to insulate them from speculative capital flows and, therefore, there was no commitment to capital account convertibility (i.e., in current terminology, no obligation to liberalize the capital account).
- Official balance-of-payments support, financed by quotas, but limited in size, as they were supposed to finance only current account deficits. As country quotas were set one-quarter in gold and the rest in national currencies, and countries could initially access their full quota, this essentially meant that they could temporarily use their national monies to buy international currencies—a system that may thus be understood as a generalized swap arrangement. No conditionality was initially associated with such support, but it was introduced in 1952, when the stand-by agreements were created, which allowed automatic drawing on the gold tranche plus conditional access to four additional tranches of 25 per cent, thus increasing access to 125 per cent of quota. Conditionality included putting in place macroeconomic policies to achieve balance-of-payments equilibrium and encouraging current account convertibility.

Whether this was a coherent system or not was a major subject of debate in the 1960s, when its flaws were identified (see Section 1.3). In the early years, the massive dollar shortage that characterized the world economy led to a significant exercise of flexibility in the fulfilment of the rules and to the adoption of complementary policies.

Flexibility was exercised, in particular, in relation to the commitment to current account convertibility and the elimination of multiple currency practices. So, exchange controls were maintained for much longer than originally envisioned (de Vries 1987: ch. 1). Also, many countries maintained multiple currency practices, including a parallel flexible exchange rate market for

[6] There was only one important case: the objection to a French devaluation in 1948, but because it also included multiple-currency practices (Horsefield 1969: 202).

capital flows, which effectively meant that the exchange rate system had flexibilities that were not initially envisioned (Reinhart and Rogoff 2004). In contrast, countries were reluctant to modify their core exchange rates. A major depreciation of European currencies took place in 1949, which may be understood as the reflection of the fundamental disequilibrium created by the dollar shortage, but also by the strong balance-of-payments effects of the 1948–9 US recession on Europe and the rest of the world, with the United Kingdom being again strongly hit, including through capital flight (United Nations 1951: ch. 8). After that major realignment, changes in parities by advanced countries were rare. This may be seen as evidence of a commitment to the rules of the Articles of Agreement, but it could also be interpreted—as, in fact, it came to be interpreted—as evidence of the lack of adequate adjustment mechanisms in the Bretton Woods arrangements. Canada was, in turn, the pioneer in using flexible exchange rates (with some level of management), which it first put in place between 1950 and 1962.

The complementary policies were the Marshall Plan (European Recovery Act) and the European Payments Union (EPU). The former provided resources for the European reconstruction in amounts that neither the World Bank nor the IMF could have provided (Eichengreen 2008: ch. 4). Parallel support was also provided by the United States for the reconstruction of Japan. According to US balance-of-payments statistics, unilateral current transfers were massive in the decade 1946–55, reaching an average of 1.5 per cent of gross domestic product (GDP). In turn, the EPU became an excellent mechanism to multilateralize the myriad bilateral payments agreements that had been in place among its members for some time, but more importantly to reconstruct intra-European trade and payments while saving on the use of dollars for that purpose (Triffin 1957). The effects of the reconstruction of production capacities in Europe and Japan and the reconstruction of intra-European trade were already evident in the much weaker effects that the 1954 US recession had when compared to that of 1948–9 (United Nations 1955: ch. 5). The final success was the return of current account convertibility by fourteen Western European countries on 29 December 1958, which were joined by Greece five months later. This decision may be seen as the end of the most critical period of the dollar shortage. In 1961, nine European countries accepted the obligations of Article VIII of the Articles of Agreement on the elimination of multiple currency practices. Japan did so in 1964.

The transition took much longer in the developing world. Many of the countries maintained strong exchange controls and multiple exchange rates for an extended period. Indeed, as the situation of developed countries improved, that of developing countries became more difficult after the mid-1950s due to a cyclical downswing of commodity prices that lasted through most of the 1960s (Erten and Ocampo 2013a). So, as the first peak in the demand

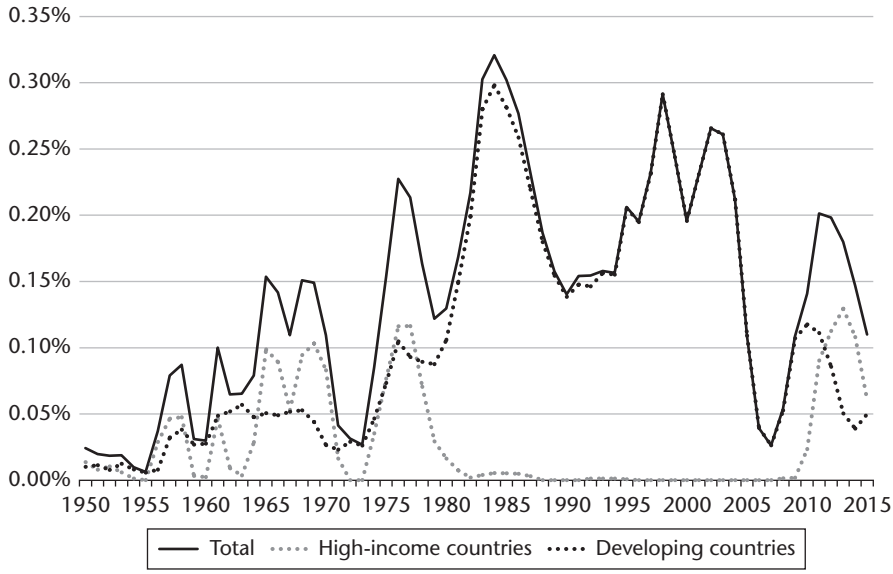


Figure 1.1 IMF loans as % of world GDP

Source: Author's estimates based on IMF database. World GDP according to the World Bank.

for Fund resources by developed countries eased in 1957–8, developing countries started their first period of large demand for balance-of-payments support in the late 1950s (Figure 1.1). As already indicated, an interesting element of the adjustment programmes that were put in place in developing countries was the active promotion by the IMF of changes in exchange rate parities.

In terms of long-term adjustment of the global reserve system, a significant trend that was visible during these years was an increase in the gold reserves in the hands of Western European countries. This meant that the United States, which held about three-quarters of world gold reserves at the end of the Second World War (excluding the Communist countries), held only about half by the end of the 1950s. However, this was not associated with a reduction of US gold reserves as such, but was rather due to the increase in world gold reserves concentrated in European countries (Figure 1.2). The big winner was Germany, which by 1957 had surpassed Switzerland and would soon surpass the United Kingdom as the second-largest holder of gold reserves in the non-Communist world.

Foreign exchange reserves, particularly dollar reserves, started to increase, although gradually, and continued to represent a minority share in overall reserves (see Figures 1.3 and 1.6). In contrast to initial predictions, the demise of sterling as the second reserve currency turned out to be a gradual process: the share of sterling in foreign exchange reserves fell from over 50 per cent in the early post-Second World War years, but it was still close to 30 per cent in the 1960s (Schenk 2010). This was thanks to the persistence of the sterling

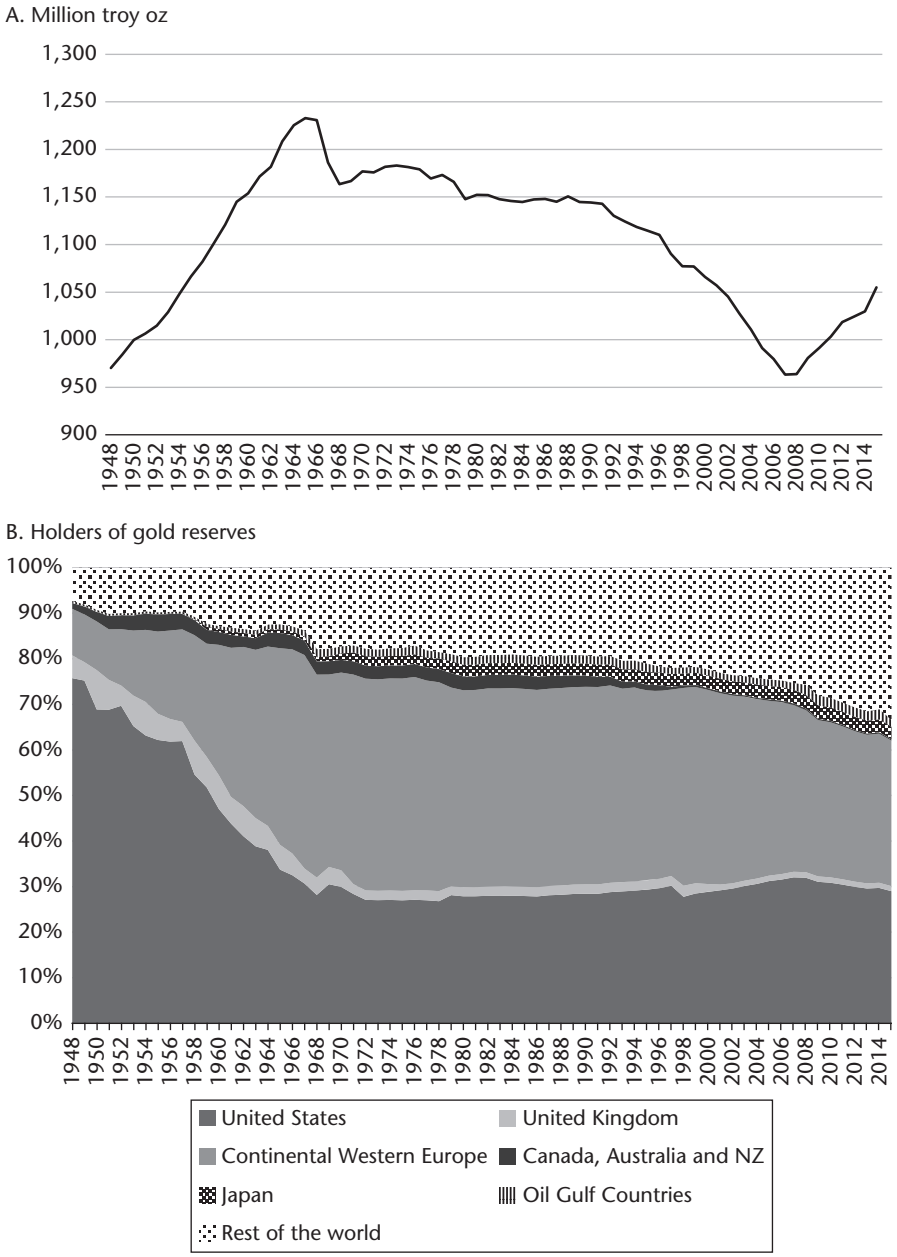


Figure 1.2 World gold reserves
Source: Author's estimates based on IMF database.

area, although with significant geographical changes in the demand for sterling assets, and the fact that a not insignificant part of world trade continued to take place in sterling, supported initially by dollar scarcity.[7]

1.3 Increasing Tensions and Collapse of the Bretton Woods Arrangements

As the dollar shortage came to an end, the international monetary system was shocked by the problems faced by the two major reserve-issuing countries. The United Kingdom experienced deep crises in 1961 and, particularly, in 1964–8, which led to a devaluation in November 1967. As a result, it became one of the major regular Fund borrowers, and was also supported by swap arrangements through the Bank for International Settlements (Borio and Toniolo 2006; Toniolo 2005: ch. 11). Such international support helped to smooth the decline of sterling as a global reserve, but the 1967 devaluation also forced the United Kingdom to sign the 1968 Sterling Agreements, by which it offered a guarantee of the dollar value of sterling balances as a counterpart to the commitment by sterling holders to limit diversification (Schenk 2010).

In the case of the United States, the strong trade and current account surpluses that had characterized the early post-war years came to an end in the early 1950s and experienced a further decline in the second half of the 1960s, though the trade and current balances generally remained in positive territory (see Figure 1.7). The weakening in the current account was reinforced by foreign investment by US firms and the adverse speculative attacks that it started to face. The United States managed this problem by regulating capital flows, with the introduction of the interest equalization tax in 1963 and restrictions on US investments abroad in 1965 (Solomon 1982: 47–9).

One of the results of the weakening of the US balance of payments and the decision of some European central banks to convert their dollar holdings into gold was the sharp reduction in the gold reserves of the major reserve-issuing country. US gold reserves fell by more than half between 1957 and 1968 and its share in world gold reserves dropped from 62 to 28 per cent (see Figure 1.2). The big 'winners' were the Continental European countries, particularly France, Italy, and Germany, in that order.

[7] According to Schenk (2010), when the demand for sterling assets declined in the Indian subcontinent in the early post-war years, it was replaced by Australia, New Zealand, and the colonies of the Far East and Africa. In turn, when Australia, New Zealand, and South Africa started to diversify in favour of dollar reserves in the early 1950s, the official demand for sterling increased in Hong Kong and the Middle East. Hong Kong became the major official holder of sterling assets in the late 1960s.

To manage the potential effects of this process on the international monetary system, the 'gold pool' was created in 1961 by eight countries (Belgium, France, Germany, Italy, the Netherlands, Switzerland, the United Kingdom, and the United States) to regulate the London price of gold and share responsibility for stabilizing the market. The Bank for International Settlements served as the secretariat for this new instrument, with the Bank of England as the operator (Toniolo 2005: ch. 11). The United States was obviously interested in slowing down its loss of gold reserves, but other countries also had a collective interest in the stability of the dollar in order to avoid potential capital losses on their dollar reserves. The mechanism worked smoothly in a first phase, between 1962 and 1965, thanks in part to incremental supply from South Africa, but faced increasing strains after 1966 due to growing doubts about the sustainability of the gold–dollar parity and declining sales by South Africa and the Soviet Union. France left the pool in the summer of 1967, and the very strong demand pressures led to its collapse in March 1968, leading to the decision of gold pool countries (without France) to adopt, on 18 March 1968, a two-tier market. The market shot up initially before stabilizing in 1969 (Eichengreen 2007: ch. 2).

The fall in US gold reserves was contained by the mix of the dual gold market and the implicit agreement by major partners to avoid converting their dollar reserves into gold. The stability in the gold market was also supported after the collapse of the gold pool by the balance-of-payments crisis that followed the 1968 political turbulence in France, which led to a loss of about a third of its gold reserves. Although the effective limits on the convertibility of dollar reserves into gold meant that the world had in a sense moved into a 'reluctant dollar standard' (Williamson 1977: 41), the growth of foreign exchange reserves ran at moderate rates until 1969: 5.7 per cent a year in 1957–69, similar to the 5.6 per cent rate of growth in 1949–57. It was only in 1970 and 1971 that, owing to the major problems faced by the US balance of payments, largely associated with the Vietnam War and speculative capital flows, the supply of foreign exchange reserves exploded (Figure 1.3). In short, the dollar shortage had been replaced, with a lag, by a dollar glut. Under these conditions, the global reserve system agreed at Bretton Woods was clearly unsustainable, and the United States finally unilaterally abandoned it on 15 August 1971 (see the discussion later in this section).

The 1960s were times of major debates on the international monetary system. Indeed, foreshadowing the views that became common after the evolution of international monetary arrangements in the 1970s, the famous Bellagio Group of thirty-two economists underscored the major inconsistencies in the existing arrangements by stating in 1964 that:

> The present international monetary mechanism is not a simple and logical 'system'. Rather, it is a set of arrangements which is the composite result of

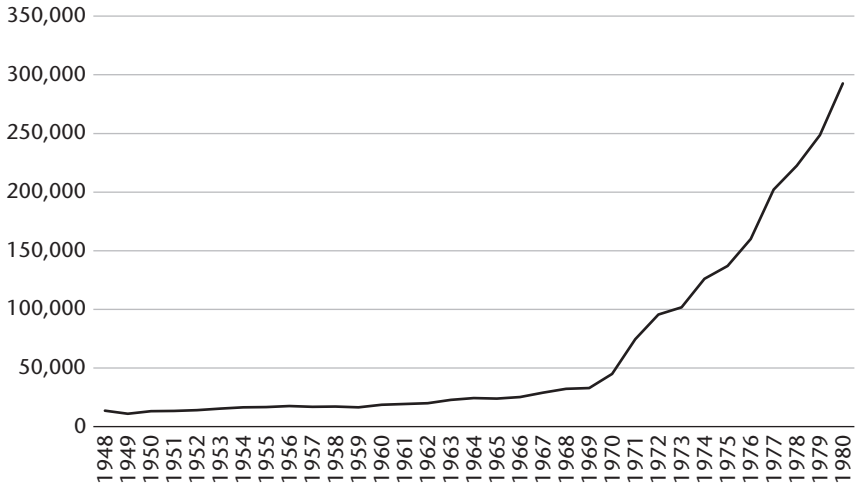


Figure 1.3 Foreign currency holdings, 1948–90 (million SDRs)
Source: Author's estimates based on IMF database.

> agreements, compromises among conflicting interests and opinions, adaptations to unforeseen developments in the evolution of world trade and finance, and precedents that grew out of ad hoc arrangements or individual policy decisions.
>
> (Machlup and Markiel 1964: 66–7)

The discussion on the nature of and the solutions to the problems that the system faced related to two central issues: those that characterized the global reserve system itself, and the lack of adequate adjustment mechanisms to correct payment imbalances,[8] with a common underlying factor behind both of these problems being growing capital mobility.

In the early formulation by Triffin (1961, 1968), the essential problem was the instability of the global reserve system related to the use of a *national* currency as an *international* currency. The essence of the problem, in his view, was that the only way to provide increasing global liquidity was for the issuer of that currency (i.e. the United States) to run balance-of-payments deficits. Such deficits generated, in turn, the risk of loss in the confidence in that currency. The loss of US gold reserves was the major manifestation of that problem in the 1960s; other manifestations came after the original reserve system had been abandoned.

[8] In the formulation of the Bellagio Group, the system had three different problems: (i) the inadequate functioning of the mechanism of adjustment to correct persistent payments imbalances, (ii) the provision of adequate international liquidity, and (iii) confidence in the reserve media (Machlup and Markiel 1964: 24). We subsume the latter two into the problems of the global reserve system.

The formulation of the problems of the global reserve system by the Bellagio Group focused on the stability of the dual gold–dollar standard. Despite the very different opinions among its members on how to reform the system,[9] one common view, which was largely in line with Triffin's formulation, was that the international liquidity-creating mechanism was inefficient, as it 'relies on deficits of the reserve-currency countries, which increases the ratio of liquid liabilities of these countries relative to their gold holdings, and thus [is] a growing threat to the value of the reserve holdings of other countries that undermines the confidence in the stability of the system' (Machlup and Markiel 1964: 74–5, 81, 89, and 94).

A closely associated feature of the Bretton Woods agreement related to the asymmetries in the correction of the imbalances among major economies. However, the United States and other developed countries held significantly different views on the nature of this problem. This became the central issue of debate as the crisis of the system advanced, finally leading to its breakdown. For the United States, the major problem was the asymmetries in the adjustment of surplus versus deficit countries. This was, interestingly, the same issue that Keynes had raised during the discussions leading to the Bretton Woods agreement, but reflected the fact that the United States was now in a deficit position—much as Britain was and was expected to be after the Second World War. This was furthermore complicated by the fact that the United States had great difficulty in initiating adjustment, which basically implied that, given the central role in the system and the fixed gold–dollar parity, the depreciation of the US dollar relative to other currencies to correct its growing fundamental disequilibrium depended on the willingness of surplus countries to appreciate their exchange rates. In the view of US authorities, this made the country vulnerable to the export-led or even mercantilist policies of other countries.

For other developed countries, the main issue was the major advantage that the United States had in terms of financing its deficits by issuing its own currency, thus avoiding the need that deficit countries had to adopt contractionary macroeconomic policies to correct their payment imbalances. This was the 'exorbitant privilege', a term coined by Valerie Giscard d'Estaing when France's finance minister but widely attributed to Charles de Gaulle. They also resented the loss of monetary policy autonomy that they increasingly faced in a world of growing capital mobility, and therefore the dependence on the monetary policy of the United States. When inflationary

[9] There were four proposals among the Bellagio Group members: (i) a semi-automatic gold standard, (ii) centralization of international reserves, (iii) moving to multiple reserve currencies, and (iv) fully flexible exchange rates.

conditions started to build up towards the end of the 1960s, this was reflected, in their view, in imported inflation, an issue that was regarded as particularly problematic by countries with strong anti-inflationary motivations, notably Germany.

In relation to the second problematic feature of the system, the major problems were the lack of a reliable adjustment mechanism to manage payment imbalances as well as the persistent asymmetries in the pressures that surplus and deficit countries faced to adjust (of course, in a broader sense the issue of the reserve-issuing versus other countries). Although a few called for a return to the harsh adjustment mechanisms that had characterized the gold standard, the majority view was that the system required greater exchange rate flexibility. Although the defence of a system of flexible exchange rates had been put forward by Friedman since the 1950s (see Friedman 1953), what many analysts meant was a more frequent use of changes in exchange rate parities. The old asymmetry related to the greater room to manoeuvre that surplus countries enjoyed in their balance-of-payment adjustment processes versus the strong pressures that deficit countries faced to adjust. There were major disagreements on the use of demand policies to correct balance-of-payments imbalances, particularly in the case of deficit countries that also faced domestic unemployment problems, as well as on the possible success of stronger coordination of national policies among major economies (Fellner, Machlup, and Triffin 1966).

There was, of course, a recognition that balance-of-payments disturbances differed substantially in source and duration and called for differentiated responses. It was agreed that enduring imbalances should give way to prompt corrective action, including changes in exchange rate parities, but temporary imbalances should be financed with reserves and balance-of-payments support by deficit countries, and by reserve accumulation or debt reduction by surplus countries. However, the prompt identification of how permanent or temporary the imbalance was in a particular country at a specific time, and therefore what type of adjustment was required, was difficult and sometimes impossible (Machlup and Markiel 1964: ch. 5). In terms of financial support to deficit countries, the duration of the support beyond the one-year stand-by programmes was a critical issue in the debate, as was the question of whether programmes should take into account if the source of the imbalance was an external shock rather than excess domestic demand. These issues were particularly critical for developing countries, in particular after the collapse of commodity prices in the mid-1950s.

An underlying factor behind both of these problems was the greater capital mobility that developed countries faced with the reconstruction of global capital markets, particularly in the form of the London-centred Eurodollar market that started to evolve in the late 1950s and the expansion and creation

of offshore financial centres.[10] Although capital mobility was still moderate relative to the gold standard years and to what would be the typical pattern later on (Obstfeld and Taylor 2004: part two), it became a growing threat to the par value system (Eichengreen 2008: ch. 4; James 1996: ch. 7; Obstfeld and Taylor 2017). A major reflection of that was the much larger magnitudes of intervention in foreign exchange markets that major developed countries had to do to maintain their exchange rate parities, as reflected in the significant increase in United Kingdom and German central bank interventions from the mid, but particularly the late, 1960s—a ten- to twenty-fold increase relative to the earlier post-Second World War period (Williamson 1977: 47–51). Speculating against an exchange rate peg could be quite a profitable one-way bet when exchange rate misalignment was evident to market agents. Here the asymmetries faced by surplus versus deficit countries were also evident, and in both cases troublesome. Surplus countries would face capital inflows that would expand the domestic money supply and generate inflationary pressures. Deficit countries would face stronger pressure on their reserves and might be forced to adopt contractionary macroeconomic policies, and would otherwise require much greater financing than under the Bretton Woods principle that the focus of international support should be on financing current account deficits.

There was a significant diversity of proposed solutions to these problems. Common features were the focus of authorities on the first set of problems and, therefore, on how better to generate international liquidity and the rather limited attention given to the adjustment problem. The latter was in open contrast to the academic consensus on the need for more exchange rate flexibility. Since the devaluation of sterling in November 1967, the uncertainties of France after the 1968 political turmoil, and the surpluses of Germany and Japan, authorities became interested in exchange rate flexibility, but more in internal discussions than in public debates.

An additional feature of the international debate was the forum for major policy debates. With the transformation in 1961 of the Organization for European Economic Co-operation (OEEC), created to manage the Marshall Plan, into the Organization for Economic Co-operation and Development (OECD), its Economic Policy Committee (Working Party 3), made up of the ten largest countries (which thus came to be called the 'Group of Ten', G10), became the main policy forum for major developed countries. This generated resistance not only from the IMF and developing countries, which saw

[10] The development of 'offshore finance' was also associated with tax elusion and evasion. The most important centre, Switzerland, had its origins in the 1920s and, after a pause during the Second World War and the early post-war period, experienced a boom from the 1950s to the 1970s, and would be joined by new offshore centres in several parts of the world, and notably so since the 1980s (Zucman 2015).

themselves excluded from the debates, but also from developed countries that were excluded from the G10 (notably Australia). This confrontation between a club of rich countries (later also the G5 and the G7) and a more representative treaty-based organization has become a central issue of the institutional arrangements for global monetary debates since then. It was mitigated in the 1960s and into the 1970s by the relative isolation that the United States faced within the G10, and therefore its willingness to bring the issues to the IMF—interestingly, to look for the alliance of developing countries. There was a diversity of views among European countries, as well as Australia, Canada, and Japan, which enriched the debate.

Proposed solutions included quite a diverse menu: (i) a return to some form of the gold standard (a position that de Gaulle favoured at one point), which would include an initial increase in the price of gold; (ii) the evolution into a fully flexible exchange rate system, in which no reserves would be required; (iii) the centralization of international reserves, making the IMF an effective world central bank; and (iv) even the evolution into a full dollar standard, in which the United States would share its monetary autonomy. However, the solution that became central in the discussion among authorities was the creation of a new global reserve currency.[11]

This proposal came in different versions. The essential proposal by the French was to create a collective reserve unit (CRU) tied to gold and outside the IMF. In turn, the suggestion of the United Kingdom in 1962 was the creation of a mutual currency account into which surplus countries could deposit their accumulating reserves in exchange for another asset—the predecessor of the substitution account that played a central role in the debates of the 1970s. This proposal served as a catalyst for the United States to propose in 1963 a discussion of international monetary reform in the G10. A major contribution to this debate was the 1965 report to the G10 by the Study Group on the Creation of Reserve Assets chaired by Rinaldo Ossola, then vice-chairman and later chairman of the Bank of Italy (see G10 1965). This report discussed several alternatives: (i) a reserve asset outside the Fund (the CRU proposal in some way), (ii) the creation of new assets or drawing rights in the IMF, and (iii) reserve assets in the Fund in exchange for countries' holding of currencies (the United Kingdom's mutual currency account proposal). There was no support for the first proposal in Europe outside France, and the United States favoured the second alternative. The group discussed the links between the new reserve asset and gold, the possible role of the IMF in reserve creation, and membership and rules of decision-making for reserve creation. A significant difference between France's CRU proposal and the other proposals for creating an international reserve asset

[11] See, among many, a summary of these debates in Solomon (1982: ch. 4 and 8). This set of proposals matched, to a significant extent, that of the Bellagio Group members (see footnote 9).

was that the former was seen as a substitute for dollars, whereas others were looking for a complement or a substitute for gold; both proposals aimed at controlling the expansion of the dollar as a reserve currency.

Reflecting US interest in the support from developing countries, the discussion was brought into the IMF, where negotiations took place in 1966–7, in parallel to those that continued in the G10. The IMF discussions dealt with whether it would be a drawing right or an asset, with the initial agreement leading to the concept of a 'reserve drawing right', but the French proposed the word 'special' to satisfy its view that it was a *drawing right* like any other that Fund members already had under the Articles of Agreement. The final agreement, according to the US negotiator, Robert Solomon, was that it was 'a drawing right in name and a unit in substance', as it was directly transferable (Solomon 1982: 142). Indeed, thanks to its transferability, it was a true reserve asset, but IMF members would have to make payments to the Fund on the net use of Special Drawing Rights (SDRs). It was also agreed that they could be used for payments to the IMF but not for new quota subscriptions and that a selected set of international organizations could also hold them. A group of experts convened by the United Nations Conference on Trade and Development (UNCTAD) also proposed the creation of a 'development link' in the associated allocations (UNCTAD 1965). This was not included in the agreement as allocations were made proportional to quotas, a matter discussed again as a major issue in the 1970s.

The creation of SDRs was agreed in the IMF meetings in Rio de Janeiro in September 1967, with the Board being given the task of preparing the draft changes in the Articles of Agreement. They were ready in mid-April 1968 and by July 1969 had received enough votes for ratification. Although opting out of this arrangement had been agreed as a possibility, basically to accommodate France, this country finally became a part of the agreement. The legacy of these debates on membership, however, led the division of the IMF accounts into 'general resources' and the 'SDR account' which limited the use of SDR allocations by countries and made it impossible to use them to finance IMF lending. Activation was agreed thanks to US surpluses in 1968–9 (which would soon disappear): 9.5 billion in three years, the first allocation being made in January 1970.

As indicated, the issue of more exchange rate flexibility remained outside the open policy debate, but there were advances in other areas. Notably, the Compensatory Financing Facility was created in February 1963 for members with shortfalls in export earnings that were temporary and out of countries' control; it had low conditionality as it did not require a stabilization programme. It was not limited to developing countries but it was essentially aimed at their call for a financing mechanism to manage crises that originated in external shocks. This was complemented by the agreement in September 1968 that programmes not going beyond the first credit tranche would not contain performance criteria

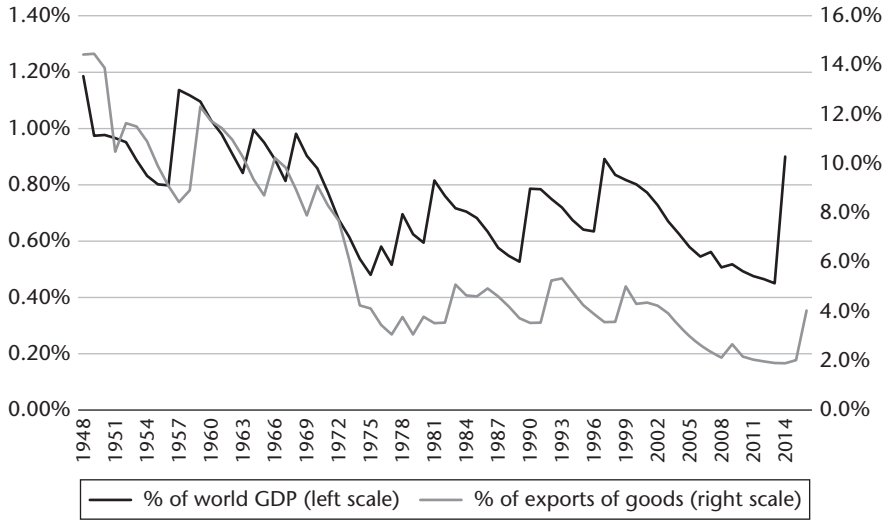


Figure 1.4 IMF quotas of % of world GDP and exports

Note: Exports of goods according to UNCTAD and world GDP according to the World Bank. For 2016 the new quota is compared to world GDP and exports in 2015.

Source: Author's estimates based on IMF database.

and by the creation of the Buffer Stock Facility in 1969 to help finance the contributions to commodity stabilization funds by countries that participated in such arrangements. Also, to increase the resources available to the Fund, the first increase in quotas was approved in 1959, followed in 1962 by the General Arrangements to Borrow, which provided additional financing from G10 countries in times of excess demand for Fund resources. New quota increases were agreed in 1965 and 1970. These increases kept IMF quotas around 1 per cent of world GDP after subscriptions were made, but they started to lag, in particular relative to world trade (Figure 1.4).

After the collapse of the gold pool, the United States pressed other countries not to convert their dollar reserves into gold, implying that the world had moved into a 'reluctant dollar standard'—to use again John Williamson's (1977) term. This system faced a myriad of problems due to US balance-of-payments difficulties in 1970 and 1971, the major effect of which was the explosion of dollar reserves in the hands of other countries. World non-gold reserves, which had been growing at a moderate pace until 1969 (5.7 per cent a year in 1957–69, as we have seen), exploded with a 41.9 per cent growth in 1970 and 55.1 per cent growth in 1971 (see Figure 1.3). This led Germany and the Netherlands to float and Austria and Switzerland to revalue in May 1971. In turn, Canada had returned to a system of floating in 1970. Despite convergence in interest rates between the United States and Europe, speculative movements accelerated in June and July 1971, and major foreign central banks had to purchase record levels

of dollars on August 12 and 13 (Solomon 1982: ch. 11). The dollar crisis led to the decisions taken by the US government at Camp David, and announced on 15 August 1971, to temporarily suspend convertibility of dollars into gold for other central banks—a decision that would prove to be permanent—as well as to impose a 10 per cent import surcharge and, on the domestic front, to decree a ninety-day wage and price freeze.

1.4 The Collapse of the System, the Failure to Reform, and the Resulting Non-System

The decisions of 15 August 1971 were the beginning of the collapse of the Bretton Woods arrangements. Their announcement was followed by turmoil in foreign exchange markets that led to the reluctant acceptance by the major developed countries of the need to move to a system of flexible exchange rates in March 1973, and to recurrent episodes of crisis during the rest of the 1970s and the first half of the 1980s. This was part of a broader set of events that shocked the global economy during the 1970s and early 1980s. The collapse of the Bretton Woods system was followed by the oil embargo of October 1973 and quadrupling of oil prices in December 1973, which generated global imbalances of a magnitude that had not been known since the dollar shortage period but which at the time had been repressed by current and capital account inconvertibility. The oil shock fuelled the inflationary pressures that had been evident since 1972 and, at the same time, led to the worst downturn of economic activity in the post-Second World War period. The growth recovery was insufficient and inflation was not entirely brought under control, and so the first oil shock marked the end of the post-war golden age of rapid economic growth, particularly for Western Europe, and the beginning of a period of slower world growth with higher rates of inflation, a mix that came to be known as 'stagflation'. Individual developed economies faced great difficulties, particularly the United Kingdom and Italy. Developing countries also slowed down but their growth remained faster (see Figure 1.8). However, some regions and countries faced unprecedented external deficits financed by the recycling of petro-dollars, building up major debt burdens for the first time since the 1920s. New shocks came in the early 1980s, particularly massive global imbalances and a new dollar crisis, as well as a major debt crisis in the developing world, particularly in Latin America; these developments are reviewed in Section 1.5.

Abandonment of the convertibility of dollars into gold led to two parallel processes to reform the international monetary system.[12] The first was the

[12] See, among the many other analysts of these processes, Eichengreen (2008: ch. 5), James (1996: ch. 9–10), Solomon (1982: ch. 11–13), and Williamson (1977), whose contributions I summarize in this section.

attempt to reconstruct a system of exchange rate parities among major currencies. The second was comprehensive negotiations to design a new international monetary system. The first took place in the context of the G10 and the second in the context of the IMF, in the Committee of Twenty (C20) that was created for that purpose. Both failed, and the result was a de facto transition to what can be adequately characterized as an 'ad hoc non-system' (Williamson 1977: xiii).

After the Camp David decisions, most developed countries floated (Japan with a lag) and France adopted a two-tier exchange rate system. Currency appreciation was limited by strong interventions in foreign exchange markets and capital controls. The G10 meetings that followed made evident the conflicts between the desire of the United States to guarantee a large current account improvement and the unwillingness of other countries to appreciate their currencies. The Smithsonian Agreement of 18–19 December 1971 generated a 7.9 per cent effective devaluation of the dollar, achieved with a mix of strong appreciation of Germany, Japan, the Netherlands, Belgium, and Switzerland, a small one for Italy and Sweden, no change in parities for the United Kingdom and France, and continued flotation of Canada (Williamson 1977: 60). Margins on both sides of the new parities were also increased from 1 to 2.25 per cent. Unrealistically, given that gold had already been priced in the market above the old parity for several years, and further increased as a result of the ongoing turmoil, the United States continued to hold that the official gold price would not be changed.

Speculation returned shortly after the agreement. As a result, in February 1972, Germany introduced a 40 per cent deposit requirement on borrowing from abroad, and the next month there were heavy purchases by central banks. In March 1972, the major European countries decided that they would try to maintain their exchange rate within a band of 2.25 per cent of each other—a system that came to be known as the 'snake'. However, pressures continued to build up, and in mid-1972 the British pound was allowed to float, Denmark withdrew from the snake, Italy threatened to do so, and Germany adopted even stricter capital controls. The market stabilized after the US Federal Reserve reactivated in July 1972 the swap network that had been suspended on 15 August 1971.

Crisis conditions returned in early 1973. In January, the United States ended wage and price controls, Italy adopted a two-tier foreign exchange market, and Switzerland floated. In February, Germany adopted stronger capital controls and the United States devalued the dollar vis-à-vis gold by 10 per cent (to US$42.22) and announced a willingness to eliminate capital controls by December 1974. Gold was soon priced in the market about double the new official price. In early March, European central banks closed their interventions and met to discuss a joint float, which

they soon adopted, and the United States and Japan agreed to do so on 16 March 1973.

The move to floating in March 1973 was widely regarded as temporary, as the C20 was discussing a return to the par value system, but the first oil shock made the return to parities unrealistic. Several short exchange-rate cycles followed, involving an initial depreciation of the dollar and appreciation of the West German mark and some other currencies (in some cases, including an appreciation of the mark within the snake), large interventions in foreign exchange markets (some of them coordinated among central banks), and complaints of chaos at critical moments. As discussed later in this chapter, floating was finally accepted as a de facto reality in 1976, after the failure of negotiations in the C20.

The C20 negotiations started with quite an ambitious agenda but failed on the two central issues that had been widely discussed in the 1960s: (i) the design of a new global reserve system and (ii) the design of proper adjustment mechanisms to correct payment imbalances. On some issues, there was broad consensus among members. On the reserve system, there was the widely shared aspiration to place the SDRs as the principal reserve asset and to reduce the role of gold—although with conflicting views on the latter issue. There was also agreement on the need to control global liquidity, but significantly different views on how to do so. With the move to floating among major currencies in March 1973, there was also agreement on new rules of valuation for the SDRs, which were agreed on 1 July 1974 on the basis of the 'standard basket' of currencies. A further agreement, as already indicated, was on the desirability of returning to the par value system.

In contrast, there were major disagreements on how to correct the asymmetries of the global reserve system, along the lines that had been on the table since the 1960s and mirrored the diverging interests of the main reserve-issuing country versus those of other major economies. The main US proposal was a reserve indicator system under which countries would be forced to reduce their reserves when they crossed a certain threshold. In particular, countries would not be able to convert their foreign exchange reserves into primary reserve assets (SDRs) if reserves exceeded primary asset holding limits (PAHLs). This was meant to be a presumptive rather than automatic signal, which could thus be overridden by comprehensive assessments of conditions of individual countries. If countries crossed the thresholds, they should have to take action and, if not, be subject to graduated pressures, which according to the discussion could take the form of a loss of SDR allocations, negative interest rates, ineligibility to borrow, or discriminatory exchange controls. As several researchers have indicated, there was a striking resemblance between this proposal and that of Keynes before the Bretton Woods negotiations. Preference for reserves rather than current account indicators reflected the

view that the rules should allow for freer capital movements. The United States was also of the view that holding of foreign exchange should not be banned and, therefore, that there should not be strong rules on reserve composition. It also indicated that it was willing to restore dollar convertibility once the US position was strong enough.

The main objective of the United States, as in the 1960s, was to achieve greater symmetry between deficit and surplus countries, whereas for Europeans the objective was to achieve symmetry between reserve-issuing and other countries. Their main proposal was to place asset settlement at the centre of the system—that is, convertibility of foreign exchange into primary reserve assets, which again was meant to be SDRs rather than gold. Of course, this was not an immediate demand on the United States, as they were conscious that there was a dollar overhang. The creation of a substitution account in the IMF would also be a useful instrument to manage existing or future overhangs of foreign exchange, an idea that the United States shared. However, Europeans rejected the indicator system, and particularly the PAHLs, because, in their view, it would enable the United States to escape adjustment when it ran deficits. Other problems with a reserve indicator related to the width of the reserve band (if too narrow, it would curtail the stabilizing role that reserves played), the possible speculation it could trigger, and the need to define it on net rather than gross reserves. In turn, the United States opposed asset settlement, basically because it claimed that it would deprive the system of elasticity. Europeans argued that elasticity would be better provided by lines of credit.

There were variants to these views. Italy proposed the use of cyclically adjusted basic balances rather than the level of reserves as the key indicator, as well as using the dollars in the substitution account as a buffer stock. Germany placed the control over global liquidity at the centre of any reform, which meant asset settlement but also restricting freedom of asset holders to switch into non-traditional reserve assets: this required controlling the potential multiple credit expansion generated by the Eurocurrency market, which meant restrictions on portfolio choice. France was, as usual, the major country supporting a role for gold but agreed on controls on surplus countries, and initiated the compromise proposal of a reserve ceiling beyond which countries would have to deposit a specific amount in the Fund, where it would carry a negative interest rate. Specific support by the United Kingdom to the substitution account was associated with the fact that it would have allowed it to (finally) dispose of its reserve-issuing role.

Developing countries were strong supporters of a development link in SDR allocations, which meant that they would be allocated a greater proportion of those rights than their share in quotas, with least developed countries given an even more generous allocation. As we have seen, this idea went back to

proposals by a group of experts convened by UNCTAD in the 1960s. The United States opposed the link as it thought that it would undermine the confidence in the SDRs, and Germany opposed it because of potential inflationary implications if they were allocated to countries likely to spend them; other European countries were willing to concede the link. Developing countries also pressed for a broader agenda of access to resources and a greater role of development issues in the IMF. They succeed in the creation of the Extended Fund Facility and the Development Committee. They favoured freedom in reserve composition—a view that they shared with the United States—and, therefore, opposed restrictions on placement of reserves in the Eurocurrency markets.

Among other countries, Japan played a minor role in the negotiations, and was a strong opponent of exchange rate flexibility and the reserve indicator. Canada was, as it had always been, a strong supporter of floating, and Australia of freedom to act. Given its role as a major gold producer, South Africa was a backer of a role for gold. Oil exporters called for reserve assets with attractive yields and the United States was conscious of the need to exempt them from the indicator system.

Success, therefore, was modest. It included the creation of a permanent IMF Council and the Development Committee, the adoption of the Extended Fund Facility under which developing countries could receive longer-term finance, and approval of the new valuation rules for the SDRs. By a paradox of history, only an Interim Committee rather than the Council was put in place in 1974. It only became a permanent arrangement, the International Monetary and Financial Committee, in 1999. However, there was no agreement on adoption of the SDR standard, correcting the asymmetries of the system, introducing the substitution account, or adopting a viable adjustment mechanism. Meanwhile, the collapse of the Smithsonian Agreement and the first oil shock served as a justification to abandon the quest for comprehensive reform.

Major discussion continued after the failure to reform. As the C20 was finishing its activities, the Executive Board agreed in June 1974 on some guidelines on floating, conceived as an interim measure (IMF 1974: 51, 112–16). Guidelines 1 and 2 indicated that countries should lean against the wind (defensive intervention). If they wanted to intervene other than defensively, guideline 3A indicated that they have to agree on a target zone with the IMF, and guideline 3B that the IMF could encourage countries to move in a certain direction. The other three guidelines concerned the application of a type of reserve indicator (guideline 4), no use of current account controls (guideline 5), and the need to take into account the interest of other countries (guideline 6).

The United States soon moved from the restoration of adjustable pegs to advocacy for floating. France continued to be concerned by the disorder introduced by floating, but finally accepted limited flexibility. A crucial step

forward was the US–French agreement in November 1974 to reform the Articles of Agreement to promote a 'stable system of exchange rates'. The annual meetings in Jamaica in 1976 served to amend the IMF articles to legalize this agreement and, more generally, existing practices. The new Article IV allowed freedom to choose an exchange rate regime within the commitment 'to assure orderly exchange arrangements and to promote a stable system of exchange rates' (Article IV, Section 1), which implied that countries should 'avoid manipulating exchange rates or the international monetary system in order to prevent effective balance-of-payments adjustment or to gain an unfair competitive advantage over other members' (Article IV, Section 1, iii), and are subject to IMF surveillance over their exchange rate arrangements (Article IV, Section 3). Beyond these very general guidelines, the precise meaning of 'manipulating' the exchange rate was never clearly defined, much as had been true of the concept of 'fundamental disequilibrium', but in this case it became a problematic issue. As a concession to France, but also as an indication of the strong reluctance to abandon the par value system that had been evident in the early 1970s, the new Article IV also maintained the possibility of returning to this system if approved by an 85 per cent vote—which, of course, gave veto power to the United States.

The system that evolved had, in fact, diverse arrangements. It included flexible rates among major currencies, but also a type of 'regional Bretton Woods' among European countries, which reflected the strong preference for more stable exchange rates among them to deepen intra-regional trade. For developing countries, and particularly for middle-income countries, there was much less of a sharp change relative to the past, as they had been using other forms of flexibility, including the crawling peg and managed floats (Reinhart and Rogoff 2004; see also Chapter 3 in this volume).

In the case of Europe, the snake was followed by the approval of the European Monetary System (EMS) in March 1979, which maintained limited exchange rate flexibility among its members and created the European Currency Unit (ECU) and credit facilities. Countries transferred 20 per cent of their gold and dollar reserves to the European Monetary Cooperation Fund (through renewable swap arrangements) and received ECUs in exchange. This followed the earlier goal, set in 1969–70, of forming a monetary union by 1980, which would only materialize in 1999 among a majority of members of the European Union after a crisis of the EMS in the early 1990s (see Section 1.5).

Gold also continued to be a subject of debate, on the basis of the consensus that its role would be reduced. Given the high concentration of gold reserves in the hands of developed countries, developing countries were particularly opposed to giving back a major role to gold, and argued that official gold revaluation would generate an arbitrary distribution of new liquidity and delay SDR allocations. In August 1975, consensus was reached on enhancing

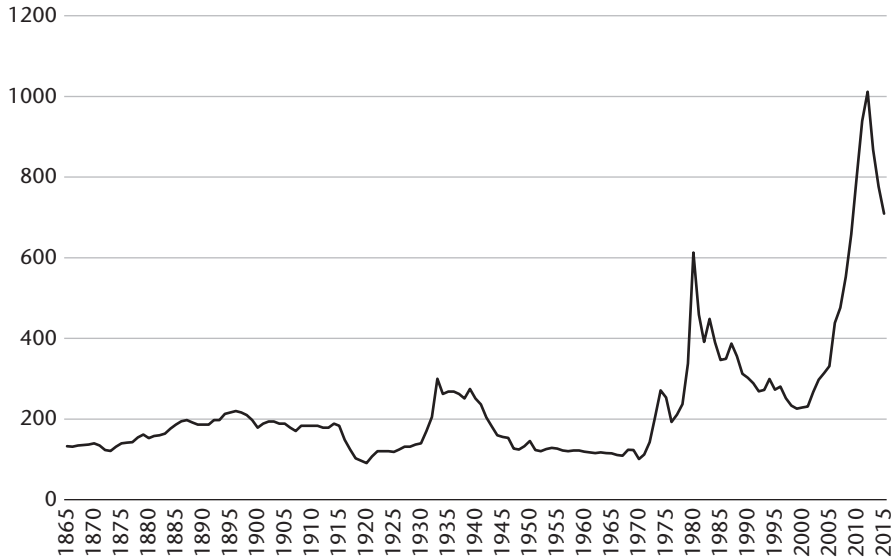


Figure 1.5 Gold price (1980 dollars per troy oz)

Note: Series deflated by the Manufacturing Unit Value (MUV) in world trade as estimated by Erten and Ocampo (2013a).

Source: Gold price according to UNCTAD since 1970. Before according to official US prices.

the role of SDRs, abolishing the official gold price and its monetary use in the IMF (particularly the obligation to use it in payments between the Fund and members), giving back to countries a sixth of the gold reserves and selling an additional sixth of Fund gold to constitute a trust fund for the benefit of developing countries, but allowing inter-central bank transactions at a mutually accepted price after a two-year transition.

The word 'demonetization' started to be used in 1975 in relation to gold. By then, the metal had effectively become a speculative asset, as the volatility of real gold prices since indicates, with peaks associated with major disturbances in foreign exchange markets—1980 and the aftermath of the 2007–9 North Atlantic financial crisis (Figure 1.5). In fact, after falling in the late 1960s, the quantity of gold reserves (in troy ounces) showed a very small downward trend through the 1970s and 1980s, and fell more sharply in the 1990s and 2000s, reflecting in particular the reduction of European gold reserves (see Figure 1.2). It is only in the aftermath of the North Atlantic crisis that there has been a small revival of gold reserves (see Section 1.6). Furthermore, as a result of the explosion of global liquidity that took place during the breakdown of the system and through the rest of the 1970s (see Figure 1.3), the share of gold in global reserves, calculated at the price of SDR 35 per troy ounce, fell to a small proportion by the end of the decade (Figure 1.6a). If estimated at market prices, it remained high, though volatile, in the 1970s, before a sharp decline in its share in global reserves in the 1980s and 1990s (Figure 1.6b).

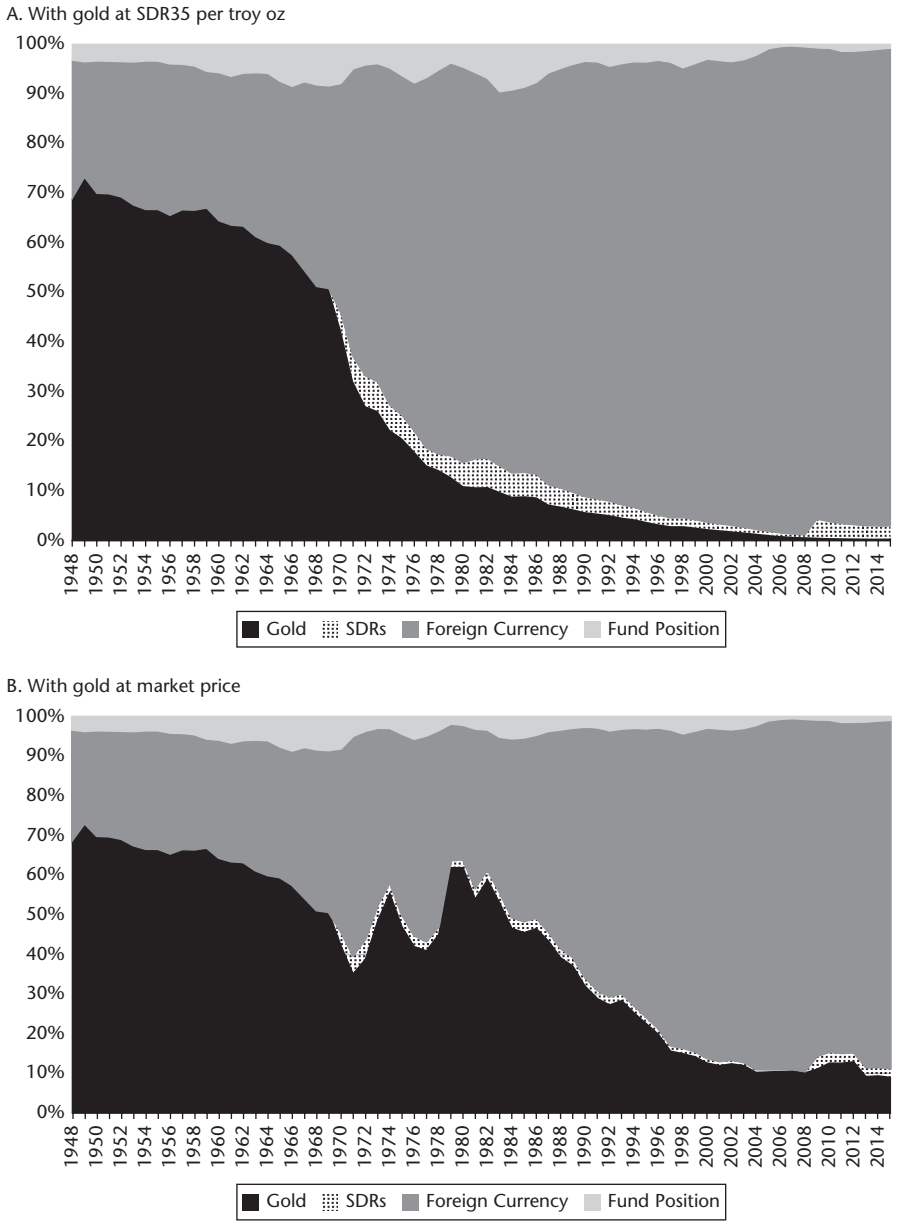


Figure 1.6 Composition of reserves

Source: Author's estimates based on IMF database.

The explosion of liquidity killed the expectation of 'making the special drawing right the principle reserve asset in the international monetary system', as it still reads in the Articles of Agreement (Article VIII, Section 7; Article

XXII). After the initial allocation of SDRs, the managing director of the IMF recommended new allocations in 1978, at a time of severe pressure on the dollar. These allocations were made in 1979–81. However, at their peak, in 1972, they represented 8.4 per cent of non-gold reserves and 6.1 per cent of total reserves (with gold estimated at US$35 per oz.; 5.1 per cent if estimated at market price), and reached a somewhat lower new peak after the second allocation, of 6.5 per cent of non-gold reserves and 5.8 per cent of total reserves in 1981–2 (3.0 per cent in 1981 with gold estimated at market price) and one-thirteenth of foreign exchange reserves, before becoming a marginal reserve asset in the following decades. An important decision, however, was the elimination of the reconstitution requirement in April 1981, which allowed a more active use of SDRs by countries, a move that benefited developing countries.

Lending facilities were also improved, deepening the trend that had been evident since the 1960s to generate larger and multi-year facilities, and with low conditionality when it involved managing external shocks. This required additional funding through new quota increases in 1976 and 1978, the now old General Arrangements to Borrow, and a credit agreement with Saudi Arabia. Following the IMF's view that the oil shock should be managed with financing rather than adjustment to avoid a major depression, an oil facility was created in June 1974 and extended in 1975, finally expiring in May 1976. It also had low conditionality—though slightly greater than the Compensatory Financing Facility—and counted with a subsidy account to finance developing countries. As already mentioned, the Extended Fund Facility was approved in 1974 to avoid recurrent one-year programmes: countries could borrow for up to three years, and repayment took place over four to eight years. The Fund also liberalized the Compensatory Financing Facility at the end of 1975, leading to a large increase in drawings, and allowed for a temporary enlargement of credit tranches in January 1977 from 25 to 37.5 per cent of quotas each. The Supplementary Financing Facility, which allowed lending substantially above quota, was also created in 1977 and became operational in February 1979. Finally, the repayment period for the Extended Fund Facility was extended for up to ten years in December 1979, and in fact this Facility was only used extensively starting in that year. All of these initiatives led to a peak in IMF lending in 1976–7 that, as a proportion of world GDP, surpassed the previous peak reached in the second half of the 1960s (see Figure 1.1). This included a large number of developed countries but also a few high-income ones—the United Kingdom, Italy, and Spain—that absorbed a significant share of IMF financing at its peak. In the case of the United Kingdom, the crisis faced during these years brought to an end the long transition away from its role as a major reserve-issuing country. In any case, most of the financing came, not so much from official sources (including

the IMF) but from recycling of oil surpluses through the private financial system at low or even negative real interest rates (de Vries 1987: ch. 6).

The ad hoc or de facto system that evolved, therefore, had the following features:

- A global reserve system essentially based on an inconvertible (fiduciary) dollar—a 'fiduciary dollar standard', as I will call it in this volume—but open in principle to competitive reserve currencies. This was complemented by sporadic issues of SDRs, which nonetheless came to play a secondary role after a good start, despite the formal commitment to make the SDRs the principal reserve asset of the system. Gold was largely demonetized but kept a role as a speculative reserve asset.
- Freedom for each country to choose its exchange rate regime, as long as they avoided 'manipulating' their exchange rates, a term that has never been clearly defined.
- Persistent commitment to effective convertibility of the current account, which developing countries finally came to abide by, but continued freedom to regulate capital flows—although, as we shall see, with growing capital account liberalization.
- Step-by-step increase in the size of official balance-of-payments support, and design of multi-year programmes. Larger financing was particularly important to manage volatile capital flows. Low conditionality to manage external shocks continued to be a characteristic of the system, but this feature soon disappeared. The additional resources needed to finance larger programmes came from a mix of quota increases and borrowing arrangements.
- Stronger surveillance, which has been largely ineffective vis-à-vis developed countries, and limited macroeconomic policy coordination, which essentially took place outside the IMF.

In the words of Williamson: 'What emerged after the C20 cannot be described as an international monetary "system", in so far as the word system implies a well-defined set of rights and obligations. Countries are free to do in large measure as they please' (1977: 74–5). It is true, as Solomon (1982: 363) claimed, criticizing Williamson's view, and as it had been argued by the Bellagio Group before, that Bretton Woods was hardly a fully coherent system, as in particular it lacked criteria to govern changes in par values, and had no systematic means for increasing reserves. However, the ad hoc system that came about as a result of the pressure of market forces and the failure to reform was even more distant from any coherent design. Furthermore, what emerged did not have the features of any of the alternatives discussed in the 1960s or the SDR-based system that the C20 aimed at. Rather, the fiduciary dollar

standard that emerged had more in common with the 'reluctant dollar standard' that had evolved at the end of the 1960s. Among its major problems, and in the light of the objectives set in the initiatives to reform the system in the first half of the 1970s, we could underscore the persistence of the major asymmetries between surplus and deficit countries and between the main reserve-issuing and other countries, the maldistribution of seigniorage and lack of control over the volume of international liquidity, and the high level of exchange rate volatility, particularly at critical times.

In any case, although the failure to reform did not lead to monetary collapse, strong disturbances became common. The next wave of problems came as a result of the 1979 Iranian revolution and the second oil shock, but particularly as a result of the decision of the United States to place inflation control at the top of its policy agenda. The decisions taken by the US Federal Reserve policy after Paul Volcker was named its chairman in 1979 made evident how the new arrangements had made the world come to depend even more on the monetary policy decisions of the major reserve-issuing country.

1.5 Maturing of the New Arrangements

The major shocks and the failure to reform in the 1970s were only the beginning of other major transformations of the international monetary system, some of them strongly related to changes in the international financial system. Three closely interrelated trends were particularly important. The first was the major current account imbalances of the major reserve-issuing country, as part of the larger global payment imbalances characteristic of the fiduciary dollar standard relative to the Bretton Woods years. This also implied that the net investment position of the United States deteriorated, turning negative from the late 1980s. The second was increased capital mobility, enhanced by the move towards flexible exchange rates but also by the gradual liberalization of the capital accounts. One of its major effects has been persistent exchange rate volatility. The third was the series of major crises in emerging and developing countries that was closely associated with strongly pro-cyclical external financing and was even more difficult to manage due to the lack of an adequate financial safety net and an appropriate sovereign debt restructuring mechanism.

International cooperation to manage these transformations was highly imperfect. In institutional terms, there was an accentuation of the tendency of developed countries to manage their coordination efforts through groupings of countries with limited membership—now not so much the G10 but the G7 and its predecessor, the G5. This tendency, plus the fact that industrial

countries largely ceased to use IMF resources after the late 1970s, implied that IMF activities focused increasingly on emerging and developing countries. The divorce between the handling of cooperation among developed countries outside the Fund and the management of the crises faced by emerging and developing countries from the late 1970s to the early 2000s within the Fund implied that, during this period, the IMF became a very controversial North–South institution.

The fairly permanent current account deficits of the United States have indeed been a striking feature of the global economy since the 1980s. Indeed, the current account of the major reserve-issuing country turned persistently negative from 1982, with only one year of surplus (1991); the trade balance deteriorated too, with persistent deficits from the mid-1970s (Figure 1.7a). Furthermore, both the magnitude of the deterioration of the US current account in the 1960s as well as the deficits it ran in 1971–2 and 1976–7, all of which had led to major controversies at the time, look quite modest relative to those experienced since the 1980s. This is part of a broader pattern of larger global payment imbalances that has characterized the world economy since the 1980s, in which the US imbalances have played a crucial role, generally matched by surpluses in Germany, Japan, China, and the oil-exporting countries at different times. The major precedent for this was the global imbalances generated by the oil shocks of 1973 and 1979, but those shocks turned out to be much more temporary than those that have followed since the 1980s (see Chapter 3).

An important effect of this trend was the transformation of the net investment position of the major reserve-issuing country from positive to negative in the late 1980s (Figure 1.7b). The sharply negative trend of the US net investment position since then has been interrupted by periods in which the current account balance improves and/or there are changes in asset valuations associated, among other factors, with exchange rate variations. A breakdown of the US net investment position (not shown here) indicates that net foreign direct investment continued to be positive (it has actually improved since the early twenty-first century) and it is, therefore, the net portfolio position that has become increasingly negative. This pattern implies that there is a sharp difference not only between current conditions in the United States and those that characterized the United Kingdom when it was at the helm of the international monetary system during the gold standard, but also between current conditions in the United States and those that prevailed during the Bretton Woods years.

There are several explanations for this pattern, all of which are associated with the fiduciary dollar standard. This standard eliminated restrictions on the accumulation of external liabilities by the United States, except of course the possible lack of confidence in the dollar that they may generate and the associated pressures on the dollar to depreciate. Indeed, these problems and

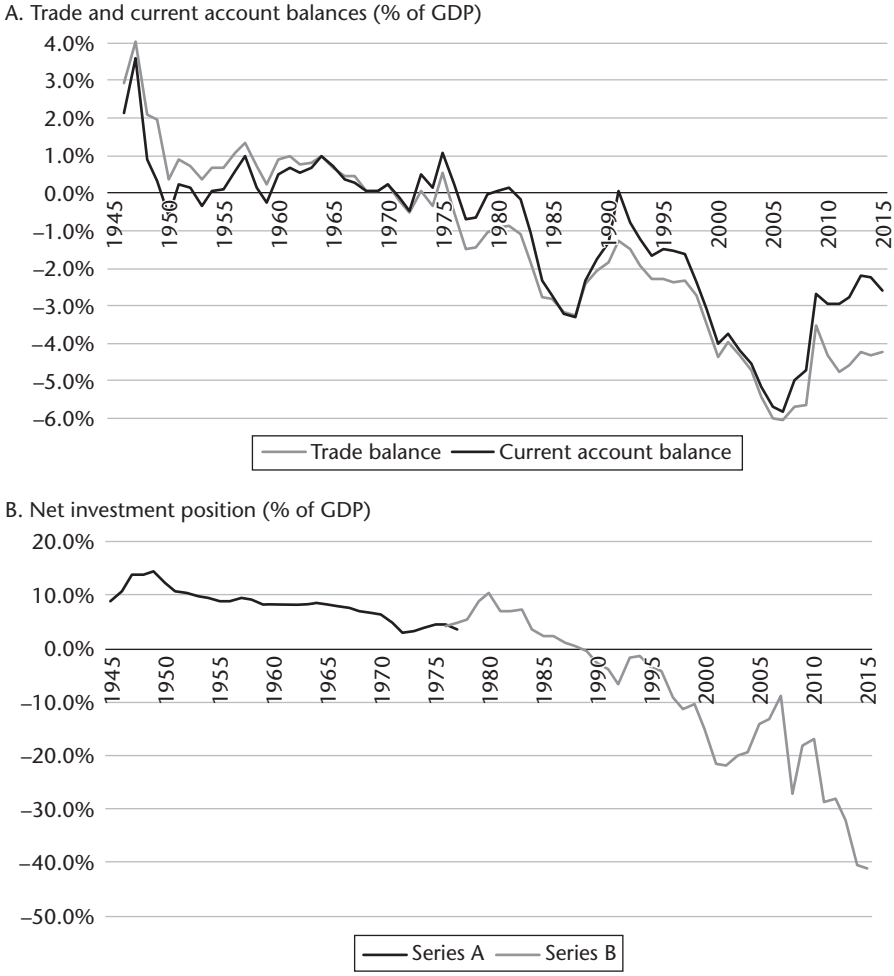


Figure 1.7 US imbalances

Source: Author's estimates based on data from the US Department of Commerce, Bureau of Economic Analysis, except Figure B, series A, which is estimated from the Historical Statistics of the United States.

the cycles in the real exchange rate of the US dollar are the manifestation of the Triffin dilemma under the new world monetary arrangements (see Chapter 2). However, the arrangements do contain a stabilizing element: the character of dollar assets as 'safe assets' and the United States as a 'safe financial haven' during periods of global turbulence. This is notably reflected in the demand for dollars as foreign exchange reserves, which has boomed in the developing world since the Latin American debt crisis of the 1980s and, particularly, the crisis in several emerging economies of the late twentieth and early twenty-first centuries, as a form of 'self-insurance' against

global financial volatility and the lack of an adequate global financial safety net to manage it (see Chapter 2). It was also reflected in the strong role played by the United States as a safe financial haven after the North Atlantic financial crisis, despite the fact that it was one of the epicentres of the crisis, and also despite the expectations that the very large imbalances accumulated since the early 2000s would generate a run on the dollar.

Cyclical swings in these trends have also been important. Notably, all corrections of the US current account deficit have been associated with a slowdown in world economic growth: the early 1980s, the early 1990s, and the late 2000s. This implies that the correction of the US current account deficit generates a recessionary effect on the global economy. In contrast, the only case in which a global slowdown was accompanied by a rising US current account deficit was in the early 2000s, when the rising US deficit served, in particular, to compensate the adverse effects on global demand generated by the massive crisis in the emerging and developing world—a pattern that some have referred to as the role of the United States as the 'consumer of last resort' during those years.

The major destabilizing role of US current account deficits took place in the early 1980s, when the strongly contractionary monetary policy adopted to fight inflation since 1979 succeeded in taming inflation but generated massive international monetary problems associated with the sharp increase in US interest rates—also affected by the larger fiscal deficits generated by the policies of the Ronald Reagan administration that took over in 1980—and the strong appreciation of the dollar. The international spillover included not only a global slowdown in 1980–2, which was stronger than that of 1974–5 (see Figure 1.8), but even larger payment imbalances and peak turmoil in the foreign exchange markets of developed countries, which can be understood as a new dollar crisis. It also sparked the debt crisis that shocked several developing countries and, particularly, Latin America, generating this region's 'lost decade'—a term coined at the time by the United Nations Economic Commission for Latin America and the Caribbean, but which has been used later in relation to other countries and regions of the world.

The negotiation of the enlarged global imbalances took place in the context of a new ad hoc elite club, the G5 (France, West Germany, Japan, United States, and United Kingdom), who agreed to intervene in currency markets to depreciate the US dollar in relation to the Japanese yen and the West German mark. This agreement was ratified in the Plaza (Hotel) Accord of September 1985, and was followed by the Louvre Accord of February 1987 among the larger G7, which also included Canada and Italy (although the latter declined to support the final agreement) to stabilize the exchange rates after the major realignment that had taken place in previous years. Massive adjustment of the yen, which was a major element of this agreement, fed into the speculative

bubble of the late 1980s in that country that ended up in a domestic financial crisis and Japan's own lost decade.

Exchange rate volatility among major currencies peaked with these events. Even though it declined later, it continued to be an intrinsic feature of the new regime. This was, of course, closely interrelated with capital mobility, which under the flexible exchange rate system gradually reached and, according to some indicators, surpassed the levels achieved during the gold standard years (Obstfeld and Taylor 2004: part two). The two phenomena were closely interrelated, as the flexible exchange rate system fuelled speculative flows that were not necessarily stabilizing, while capital mobility eroded the effectiveness of the capital account regulations that had been widely used during the Bretton Woods years to manage volatile capital flows. The basic reason was that flexible exchange rates generated a 'privatization of risk', to use Eatwell and Taylor's (2000) terminology, which induced capital flows associated with different perceptions of risk by market agents.

The shift towards liberalizing capital flows started with the United States in 1974 but then spread to the rest of the developed world in the second half of the 1970s and through the 1980s, and was essentially completed by these countries in the early 1990s. A major step in that direction was the decision by the European Union to end the liberalization of capital flows (adopt 'capital account convertibility') in 1990. Emerging and developing countries liberalized in a more gradual and limited way, and with significant regional differences, Latin America leading the way, although with a temporary reversal of the liberalization process during its debt crisis. This worldwide trend was reinforced by the multiplication and expansion of offshore financial centres.[13] In any case, IMF rules continue to allow countries to regulate capital flows. The attempt by the managing director of the IMF, with US support (and pressure), to change the Articles of Agreement in 1997 to impose the obligation of capital account convertibility on Fund members was defeated. Major constraints on capital account regulation came with free trade agreements, notably those with the United States (Erten and Ocampo 2016; see also Chapter 4 in this book).

Capital account liberalization, as financial liberalization in general, generated its own problems, particularly the frequency of both domestic financial crises and also twin crises (joint domestic and external financial crises) that followed liberalization episodes. One of the most important international episodes in this regard was the crisis generated in the EMS by the liberalization of the capital account in 1990, which led to massive turmoil in several European countries that were forced out of the agreed exchange rate parities. More

[13] See in this regard footnote 10.

broadly, liberalization made economies subject to the boom–bust cycles typical of financial markets and to the contagion of both optimism and pessimism among countries and agents in different phases of the cycles. The major episodes in this regard have been the series of crises in emerging and developing countries generated by boom–bust cycles of external financing, notably the Latin American debt crisis of the 1980s, the smaller Mexican financial crisis of 1994, and the sequence of financial crises in several emerging countries that began in East Asia in 1997, spread to Russia in 1998, and then affected Brazil and Argentina, and had strong effects on many developing countries. The spread of the North Atlantic financial crisis also belongs to this family, and affected in particular the European periphery (Cyprus, Greece, Ireland, Iceland, Portugal, and Spain), which in a sense behaved as emerging economies had done in the past.

The major problem of emerging and developing countries is the strong procyclical swings in external financing: strong booms followed by 'sudden stops' of external financing—to use a term *en vogue* since the mid-1990s.[14] Emerging and developing countries are also plagued by other forms of external shocks and by inadequate financing during crises. Notably among the former are the terms of trade shocks in commodity-exporting economies and, with the opposite sign, those of increases in oil prices in energy-dependent economies. As we have seen throughout this chapter, these issues received significant attention by the Fund in the second half of the 1950s and through the 1960s, and during the oil shocks of the 1970s, and returned to centre stage during the new downswing of commodity prices from the 1980s (mid-1980s in the case of oil) to the early 2000s. On many occasions, the difficulties experienced during crises are associated with the tendency to spend and even overspend the terms of trade and financing booms that precede them.

The major response of the international community was increased financing. This included new credit facilities, including the active use of those facilities that been created since the mid-1970s. Furthermore, in the face of the crisis of several emerging economies that started in East Asia, the IMF created the Supplemental Reserve Facility in December 1997, which served as the basic framework for the largest loans made to emerging and developing countries during this crisis. This facility came with short maturities, which were later extended, and penalty interest rates. For the poorest countries, the structural adjustment lines were created in the mid-1980s and transformed in 1999 into the Poverty Reduction and Growth Facility. IMF lending reached its

[14] The term was coined by Rüdiger Dornbusch in a paper on the 1994 Mexican crisis (Dornbusch and Werner 1994), in which he argued that 'it is not speed that kills, it is the sudden stop', but its popularization is due equally to the work of Guillermo Calvo (for whose early work on the subject, see Calvo 1998).

historical peak relative to world GDP in the mid-1980s, and a slightly lower peak in the late 1990s and early 2000s, as the result of major demands by emerging and developing countries (see Figure 1.1). In the intermediate period, demand for Fund resources remained at relatively high levels by historical standards owing to demands from Central and Eastern European countries of the Soviet bloc that joined the IMF after the fall of the Berlin Wall.

Quota increases agreed in 1983, 1990, and 1998 allowed this basic source of IMF financing to periodically catch up with the growth in world GDP, although at slightly lower ratios than had been typical up to the 1960s (see Figure 1.4). The share of quotas in world trade experienced a stronger reduction, particularly in the 1970s. However, the possibility of individual countries borrowing above quota, which became a standard feature with the changes in lending practices after the 1970s, allowed IMF lending to increase relative to world GDP even when overall quotas decreased as a proportion of that aggregate (Figure 1.1). Quotas were also complemented by borrowing mechanisms: the old General Arrangements to Borrow, which was expanded in 1983 to respond to the Latin American debt crisis, and the New Arrangements to Borrow with a larger group of countries (now thirty-eight), which became effective in 1998 and was a response to the massive crisis of the emerging economies.

The rise in lending to emerging and developing countries from the 1980s to the early 2000s came, however, with a major cost: increased conditionality. In contrast to the trends of the 1960s and 1970s, when conditionality had been eased as countries faced shocks of an external origin, conditionality was ratcheted up, now going clearly beyond the macroeconomic focus that was its typical feature into 'structural conditionality'—the name market reforms were given, with the World Bank as the leader. This process came in three phases, through which it became increasingly more intense: the Latin American debt crisis, the transition to capitalism of the former Soviet bloc, and the crisis of the emerging economies of the late twentieth and early twenty-first centuries (see Chapter 5). Even the oldest low-conditionality credit line, the Compensatory Financing Facility, languished under excessive conditionality and ceased to be used after the turn of the century.

Although lending to industrial countries came under tougher conditions in the late 1970s, no doubt the fact that the IMF concentrated its support on the emerging and developing countries served to consolidate conditionality. This trend was further reinforced by the victory of the market-reform agenda after the electoral successes of Margaret Thatcher and Ronald Reagan in 1979–80 in the United Kingdom and the United States, respectively. However, it generated the perception of the IMF as a controversial North–South institution. This problem reached its peak during the crisis of the late twentieth century, when it was perceived that some powerful countries were using IMF lending to push

for reforms in emerging economies (e.g. pressure on East Asian countries to open their domestic financial systems to foreign investment) that they had failed to get otherwise. As a result of the strong opposition to rising conditionality from the emerging and developing countries, new guidelines on conditionality were approved in 2002, underscoring the principle of ownership of policies by countries, the fact that structural conditions must be 'macro-relevant' and must be core competencies of the Fund (monetary, fiscal, and exchange rate policies, as well as financial system issues), and that conditions must be critical to achieve the programme goals (IMF 2002b). Despite the fact that conditionality was reduced, the pro-cyclical effects of some of its programmes were not eliminated, and it left a clear stigma to borrowing from the IMF that has not been entirely overcome.

The controversies surrounding IMF interventions in East Asia were the background for the Japanese proposal to create an Asian Monetary Fund. This idea was strongly opposed by the United States, but led to the 2000 Chiang Mai Initiative, which created a system of bilateral swap arrangements among the central banks of the member countries of the Association of Southeast Asian Nations (ASEAN), China, Japan, and the Republic of Korea (ASEAN+3), engulfing the former ASEAN swap arrangement. At the global level, and following Canadian proposals, the Financial Stability Forum and the Group of Twenty (G20) were created, including in the latter case major emerging economies in the follow-up to global macroeconomic and financial developments.

An additional problem was the lack of a framework to handle sovereign debt crises. This issue became particularly problematic during the Latin American debt crisis of the 1980s, when the region was unable, for the first time in history, to use default to handle the difficult conditions generated by overindebtedness mixed with a collapse of commodity prices.[15] Furthermore, the debt crisis was managed so as to avoid major losses by creditors, the most important of which were US banks. So in a very significant sense Latin American countries were pressured to service the debt to avoid a US banking crisis. The fact that IMF programmes were conditional on servicing private obligations made the institutions part of the instruments to force debt payments and avoid defaults. Additional financing and better rescheduling terms came after the launch of the 1985 and 1987 Baker Plans, but a debt relief initiative came only with the 1989 Brady Plan, seven years after the outbreak of the crisis, which was in any case modest relative to previous debt relief initiatives, notably that of the 1940s and 1950s to renegotiate the debts that had been accumulated by Latin America up to the Great Depression. After the launch of the Brady Plan, the IMF changed its policy in favour of the principle

[15] For an analysis of the handling of the Latin American debt crisis, see Devlin (1989), Bértola and Ocampo (2012: ch. 5) and Ocampo (2015a).

of 'lending into arrears', which was adopted in 1989 in relation to commercial debt and extended in 1998–9 to include bonds and a less stringent interpretation of what negotiating in good faith means.

It was only in the 1990s, after the 1994 Mexican crisis, that the discussion of better mechanisms to better handle sovereign debt crises entered into the international debate. The major initial initiative came from a G10 working party, which proposed introducing collective action clauses (CACs) into debt contracts (see G10 1996). This was followed by 2001–3 negotiations of a statutory mechanism—a sovereign debt restructuring mechanism. It failed because of the opposition of the United States (which had initially unleashed the negotiations) and also of various developing countries (notably Brazil and Mexico) that feared that a mechanism of this nature would impair their access to private markets. However, this led to the initiative by Mexico to introduce CACs into a March 2003 New York bond issue, which thereafter became regular practice, as was already the case with London bond issues. This is why individual voluntary renegotiations continued to be the norm.

The response of emerging and developing countries to increased conditionality, the perception of unfairness in the management of sovereign debt crises and, more generally, the deficiencies of the international financial safety net, was self-insurance in the form of accumulation of foreign exchange reserves. After the Latin American debt crisis, and particularly after the crisis of several emerging economies of the late twentieth and early twenty-first centuries, the accumulation of foreign exchange reserves in the hands of emerging and developing countries became massive (see Chapter 2). This was facilitated by the financial boom that took place from 2003 up to the North Atlantic financial crisis. In some cases, the degree of accumulation of reserves might have been excessive, and it had costs. An interesting implication is that this response also provided demand for safe assets from developed countries, particularly the United States, reinforcing the role of the dollar in the fiduciary dollar standard. In fact, it amounted to a transfer of resources to the major reserve-issuing country, making it clear that self-insurance generates an inherent inequity in the current international monetary system.

1.6 The North Atlantic Crisis and its Aftermath

The North Atlantic financial crisis threw the developed world into the first open recession since the Second World War (Figure 1.8) and revived fears of a new Great Depression. Although that outcome was avoided, the developed countries did experience as a group a longer-term slowdown in terms of economic growth, much as they had after the first oil shock, but now with strong deflationary rather than inflationary trends—in a sense as a 'stag-*de*flation'

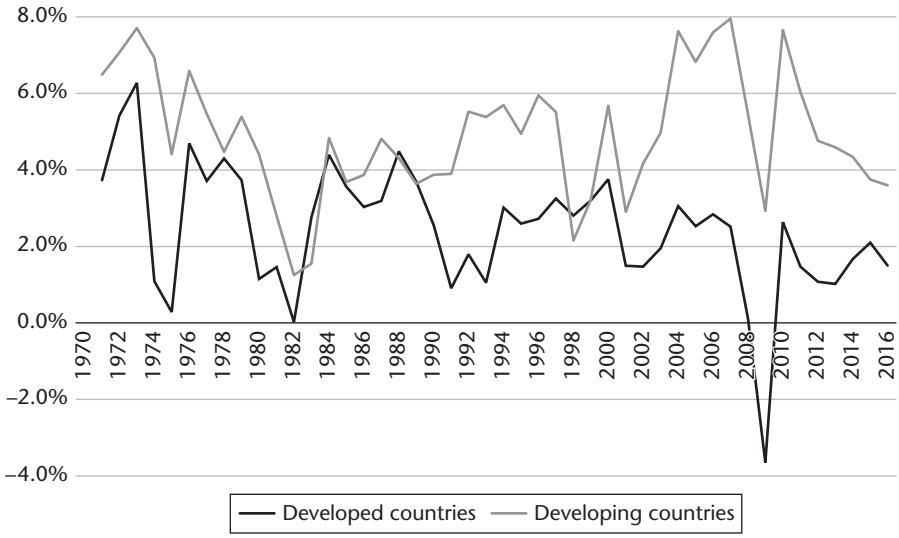


Figure 1.8 World economic growth
Source: United Nations; estimates at market exchange rates.

rather than stagflation. The developing world was less affected: it also experienced a strong slowdown but it was less intense and shorter than those it had experienced during the Latin American debt crisis and the crisis of several emerging economies in the late twentieth and early twenty-first centuries. The policy response introduced some changes in the international monetary system, but it did not reach the character of a 'Bretton Woods moment', nor was there any ambitious reform agenda similar to that which was on the table after the breakdown of the gold–dollar parities in the early 1970s. It did, however, lead to the strengthening of macroeconomic cooperation, as well as of the IMF and other mechanisms to provide international liquidity. The most important efforts took place in the G20, now upgraded to a heads of state grouping, which designated itself in Pittsburgh in September 2009 'the premier forum for our international economic cooperation' (see G20 2009a). This reproduced, in a new form, the preference of developed countries—and now, perhaps, some emerging countries—for elite clubs over treaty-based organizations.

In the first three meetings of the upgraded G20 in 2008–9, cooperation was enhanced in two critical areas of the international monetary system: agreement to undertake coordinated expansionary policies and to create new surveillance mechanisms for the macroeconomic policies of G20 members, and the provision of international liquidity. In 2010, there was also agreement on an IMF quota reform—which unfortunately took more than five years to become effective due to the lag of final approval by the US Congress. In a complementary manner, members also agreed to strengthening financial

regulation and supervision through the transformation of the Financial Stability Forum into the Financial Stability Board (which now included all G20 members), increasing international tax cooperation under the leadership of OECD, and avoiding protectionist policies, which in the latter case had deepened the global crisis during the Great Depression. However, reform efforts have been absent in other areas, notably in the global reserve system and the creation of an international debt workout mechanism.

The coordinated response to the crisis, first in an informal way through the major central banks and then in a formal way through the coordinated fiscal expansion agreed by the G20, can perhaps be considered the greatest success in terms of macroeconomic cooperation in history. In relation to the role of fiscal policies, the consensus broke down very soon, in the June 2010 G20 Toronto meeting, when several countries placed priority on public sector debt sustainability. Expansionary monetary policies of central banks continued to be the rule, except temporarily for the European Central Bank in 2011 and for the very gradual dismantling of the expansionary policies of the US Federal Reserve since 2013—reflecting in the latter case the better relative performance of the US economy. A major issue was the incapacity to fight very low inflation or open deflation in major economies, and the unprecedented spread of negative interest rates in several developed countries, the implications of which (and, particularly, their partial ineffectiveness) have been the subject of a heated debate. These effects are only starting to be overcome in 2017, one decade after the beginning of the crisis. Another effect of the crisis was to spark a new boom of financing towards emerging and developing economies, the risks of which were made evident during the downswing that these economies have experienced in recent years.

The G20 also launched during this crisis its own macroeconomic peer review framework, the Mutual Assessment Process. The relevant indicators were agreed by the G20 finance ministers and central bank governors, and the IMF was given the task of assessing the submissions of individual countries, aggregating them to assess their mutual consistency, and making policy recommendations (IMF 2011e). This has been combined with a proper IMF activity, which has been the strengthening of its multilateral and bilateral surveillance. In contrast to the success of the initial expansionary policy, these mechanisms have had very limited effectiveness, as reflected in the slow growth of the developed economies and a long lag in combating deflation—i.e. in the long period of stag-deflation that took place—as well as in the persistence of significant global imbalances.

In terms of financing, in a series of decisions taken throughout 2009, the IMF approved perhaps the most ambitious reform of Fund lending in history (IMF 2009c, 2009e). First, it created the first successful contingency credit facility, the Flexible Credit Line (FCL), which was soon demanded by three

countries. This followed three unsuccessful attempts to create such a facility in the early twenty-first century. This was complemented in 2010 by the creation of the Precautionary Credit Line (later called Precautionary and Liquidity Line), for countries with good policies but that do not meet the criteria for access to the FCL. Second, other credit lines were doubled in March 2009, and countries were allowed to use stand-by agreements for preventive purposes. This was accompanied by a reduction of conditionality, basically the elimination of the link between IMF disbursements and structural conditionality (the structural benchmarks), though maintaining some of the pro-cyclical features of macroeconomic conditionality, which have been particularly noticeable in the European programmes. Third, the concessional credit lines were also doubled and structured along three facilities: (i) Extended Credit Facility, which replaced the Poverty Reduction and Growth Facility, (ii) the stand-by lines, which can now be used for dealing with external shocks, and (iii) a rapid credit facility. Later, the IMF further reformed its concessional loan lines from a single design to a menu of options, which takes into account the vulnerability of countries to debt and their macroeconomic and public finance management capacity. All these reforms were accompanied by the elimination of several existing credit lines, including the Compensatory Finance Facility, which had ceased to be used owing to its increased conditionality (see Chapter 5).

This was accompanied by other forms of liquidity provision in the context of a broader global financial safety net. Notable in this regard was the massive provision of dollar liquidity to central banks of other developed countries through the US Federal Reserve swap facilities. A few emerging economies (Brazil, Republic of Korea, Mexico, and Singapore) were allowed access to this mechanism in 2008–9, but it remained essentially an instrument of cooperation among developed countries. European cooperation was enhanced by the creation of the temporary European Financial Stability Facility put in place in 2010, and the permanent European stability mechanism inaugurated in October 2012. The Chiang Mai mechanism was significantly expanded and multilateralized, and a monitoring unit to support it was put in place, but has so far not been used, possibly because of its link to IMF financing beyond a certain level. The BRICS (Brazil, Russia, India, China, and South Africa) also launched in 2014 a Contingency Reserve Arrangement and other initiatives of a smaller scale have been adopted in other parts of the world (see chapters 5 and 6).

The other important decision in terms of international liquidity provision was the largest issue of SDRs in history, also agreed to in 2009: SDR 161.2 billion, equivalent to US$250 billion. It was made together with an allocation for SDR 21.4 billion, which had been approved in 1997 but only became effective when the related changes in the Articles of Agreement were approved by the US Congress in June 2009. Together, they revived this dormant

mechanism of international cooperation, temporarily increasing their share in total global reserves to 3.9 per cent in 2009 (3.3 if gold is valued at market prices), below the peaks reached after the first two allocations. However, no agreement was reached on how to enhance the role of SDRs in the international monetary system.

Interestingly, the North Atlantic nations also revived somewhat the demand for gold as a monetary reserve (see Figure 1.2). The additional demand came from several countries, in particular China, the Russian Federation, Turkey, and India, in that order. However, the continuous reduction in gold reserves by some European countries, together with the sale of such reserves by a few countries experiencing deep balance-of-payments crises (notably Libya and Venezuela), generated a very moderate global increase of world gold reserves. Furthermore, and despite a new speculative boom in gold prices (see Figure 1.5), the share of gold in total reserves actually declined, even if gold is measured at market prices (see Figure 1.6b).

In terms of governance, the G20 supported and the IMF later agreed in 2010 to the doubling of IMF quotas and a redistribution of quotas and voting power to increase the share of developing countries in decision-making. Relative to the situation before the Singapore 2006 annual IMF meeting, when this issue was first revised, the quotas of developing and transition economies were increased by 3.9 percentage points, and their voting power by 5.3 percentage points—certainly much less than these countries expected (see Chapter 6: Figure 6.2). The voting power of the poorest countries was protected by increasing the basic votes of members. This decision was significantly delayed by lack of approval by the US Congress and only became effective in 2016. It reversed the very strong negative trend in the share of IMF quotas in world GDP, which had reached its lowest historical level in 2015 (see Figure 1.4). To provide resources to the IMF while the quota increase became effective, the New Arrangements to Borrow were increased in 2011, and new bilateral lending by individual countries was designed, also involving some emerging economies.

One area in which there was only very limited advance was in the mechanisms for the resolution of sovereign debt crises. Debt renegotiations between debtors and creditors continued to be the rule, the most important being the Argentine debt renegotiations of 2005 and 2010, and that of Greece in 2012. The unsuccessful litigation by Argentina in 2013–14 concerning the interpretation by US courts of the *pari passu* clause in bond contracts[16] prohibited the country from making payments on its restructured debts if it did not pay the holdouts in full, significantly reducing the incentives of any creditor to

[16] This clause has been generally interpreted as equal ranking but it was interpreted by New York courts in this case as equal 'ratable payments'.

participate in a restructuring process. This finally forced Argentina to reach an agreement with the holdouts in 2016. On the other hand, there was broad agreement on the need to aggregate different claims by including aggregation clauses in bond contracts guaranteeing inter-creditor equity. Based on these precedents, the IMF (2014b) proposed the inclusion of aggregation clauses in debt contracts as well as a revision of the *pari passu* clause. Mexico led the way again, by including the new clauses in a November 2014 debt issue in New York. Aggregation was included as an element to be covered in eurozone bonds from 2013, and some other countries had included them in their bond issues since 2003.

Viewed overall, the ad hoc international monetary non-system that arose out of the crisis of the early 1970s has proved to be fairly resilient. However, and despite some advances since then, some of its major gaps continue to have negative effects on the global economy. They relate to the deficiencies of the global reserve system, the weakness of global macroeconomic cooperation, the lack of an exchange rate system, the instability generated by procyclical capital flows particularly for emerging economies, and the absence of an adequate sovereign debt restructuring mechanism. Its governance structure continues to be deficient, in particular in terms of the predominance of elite clubs and the inadequate participation of emerging and developing countries in decision-making. These are the areas that must be the focus of future reforms. The remaining chapters of this volume explore in greater detail the nature of these problems and make proposals to overcome them.

2

The Provision of Global Liquidity

The Global Reserve System

2.1 Introduction

Since the collapse in the early 1970s of the dual gold–dollar exchange standard established under the 1944 Bretton Woods Agreement, the global monetary system has been primarily based on the use of fiduciary US dollars as means of payment and assets denominated in dollars as the major form of foreign exchange reserves. As pointed out in the previous chapter, although other characterizations are possible, this system can best be termed a 'fiduciary dollar standard'. Since other national and regional currencies (the euro, in particular) compete with the dollar for this international role, the system can also be described, but only secondarily, as one in which alternative fiduciary currencies from a few powerful economies compete with one another as reserve assets (secure stores of value) and international means of payment. Most of these currencies are from developed countries, with the exception of a recent entrant into that club, the renminbi. Flexible exchange rates among competing reserve currencies is another feature of the system—with the renminbi being the least flexible among them.

The reconstruction of global financial markets after their collapse during the Great Depression, which took off with the development of the Eurodollar market in the 1960s, added an additional feature, which is more the result of the functioning of global financial markets, but has profound implications for the monetary system: the strong pro-cyclical swings and outright volatility of finance, and particularly of financial flows across countries. This feature has had strong effects on emerging and developing countries (referred to simply as developing countries henceforth), which are subject to particularly sharp pro-cyclical swings in financing and associated macroeconomic risks (IMF 2011d: ch. 4; Frenkel 2008; Ffrench-Davis 2009; Ocampo, Kregel, and Griffith-Jones

2007: ch. 1; Prasad et al. 2003). This has also been true of peripheral Europe in recent years.

This is combined with the additional risks associated with the fluctuations of international trade. Some pro-cyclical features of international trade, particularly commodity price fluctuations, have old roots, but may have been accentuated in recent years by the financialization of commodity futures markets (UNCTAD 2009: ch. 3). In the absence of a global lender of last resort, the risks generated by pro-cyclical finance and trade created a defensive or precautionary demand for foreign exchange reserves by developing countries: the mechanism that has come to be called self-insurance, which also has important implications for the global monetary system (Aizenman and Lee 2007; Carvalho 2010; Ocampo 2010a; United Nations 2009).

As argued in this chapter, the current global reserve system is both unstable and inequitable. Like all preceding systems, it lacks mechanisms to mutually offset the balance-of-payments surpluses and deficits of different economies (i.e. global imbalances) without adversely affecting world economic activity. Although most of these macroeconomic effects are contractionary, particularly during crises, the fiduciary dollar standard can also generate expansionary effects during global business upswings. Conventional terminology refers to these effects as the global deflationary and inflationary biases of the system, but since their stronger effects are on world economic activity (i.e. on the intensity of the world business cycle) rather than on prices, I refer to them here as contractionary and expansionary biases, respectively.

The deficiencies of the global monetary system were at the centre of reform proposals formulated after the outbreak of the 2007–9 North Atlantic financial crisis. They included the proposal by the governor of the central bank of China to gradually eliminate the role that the dollar plays at the centre of the system (Zhou 2009). In turn, the 2008 Stiglitz Commission, convened by the president of the UN General Assembly, proposed that reforms of the global reserve system should be at the centre of the global reform agenda (United Nations 2009). The 2010 Palais Royal Initiative, convened by Michel Camdessus, Alexandre Lamfalussy, and Tommasso Padoa-Schioppa, also presented a series of reform proposals (Boorman and Icard 2011). However, in open contrast to the efforts to re-regulate finance, actions in this field remained limited and the reforms of the international monetary system did not fully enter into the Group of 20 (G20) or International Monetary Fund (IMF) agendas.

This chapter examines the major problems of the reserve system and analyses the particular role of special drawing rights (SDRs), the only global currency that has been created. It then explores alternatives to reform the system.

2.2 Major Problems of the Current System

The current reserve system has three fundamental flaws (Ocampo 2010a, 2010b). The first is that it suffers from the contractionary bias characteristic of any system in which the burden of macroeconomic adjustment falls on deficit countries. This is the issue emphasized by Keynes (1942–3) in the debates that preceded the creation of the Bretton Woods institutions. I will refer to this flaw as the *asymmetric-adjustment problem*.[1]

The second relates to the instabilities associated with the use of a national currency as an international currency. As this was underscored by Robert Triffin in the debates of the 1960s (Triffin 1961, 1968), it came to be called the *Triffin dilemma*. As we shall see, however, the nature of this problem was significantly transformed by the transition from the gold–dollar exchange standard to the fiduciary dollar standard.

As the accumulation of foreign exchange reserves by developing countries as self-insurance basically involves foreign exchange reserves, the system forces a net transfer of resources from those countries to the major developed economies that issue the global reserve currencies. This highlights the third flaw of the system: the *inequity bias* which, as pointed out by the 2001 Zedillo Commission, created as part of the preparations for the 2002 Monterrey Conference on Financing for Development, is a form of reverse aid (United Nations 2001).

Furthermore, the inequities of the system have increased with the huge accumulation of foreign exchange reserves in the developing world over the past two decades as a result of the need for self-insurance generated by procyclical capital flows to developing countries and the lack of adequate collective insurance to manage balance-of-payments crises. However, although such reserve accumulation may be a rational response of each developing country to the problems posed by the global system, it generates 'fallacy of composition' effects that contribute to global imbalances, and thus to the potential instability of the system (see in this regard IMF 2010a).

As the three flaws follow a historical sequence, it is appropriate to discuss them in terms of the historical debates on the design of the international monetary system.

2.2.1 *The Asymmetric-Adjustment Problem*

As already noted, the first of these problems was highlighted by Keynes during the debates that surrounded the creation of the IMF.[2] The fundamental

[1] In my previous work (Ocampo 2010a, 2010b, 2011a), I have called this the 'anti-Keynesian bias' of the system, to underscore that it has overall contractionary effects on global economic activity during crises.

[2] See a fascinating account of these debates in Skidelsky (2000, part two) and Conway (2015, part II).

problem is that the current system—and indeed, according to Keynes, all international monetary systems—places the burden of macroeconomic adjustment on countries running balance-of-payments deficits. These countries have to adjust either because they lack adequate external financing or because they regard as unsustainable or undesirable the associated increase of their debt ratios or, more generally, their net liability position vis-à-vis the rest of the world. Surplus countries may also face pressures to adjust, particularly those associated with the domestic expansionary effects that balance-of-payments surpluses generate. But the *external* pressures to adjust that they face are weaker or even non-existent. This asymmetric burden of adjustment generates, in turn, a global contractionary bias. This bias is particularly strong during global crises, when the lack of adequate financing forces deficit countries to adjust.

One of the best historical examples of asymmetric adjustment is that experienced by the eurozone in the years following the outbreak of the North Atlantic financial crisis. Figure 2.1 shows the massive adjustment that took place in the European periphery, with some (notably, Ireland, Portugal, and Spain) turning from large current account deficits when the crisis hit to

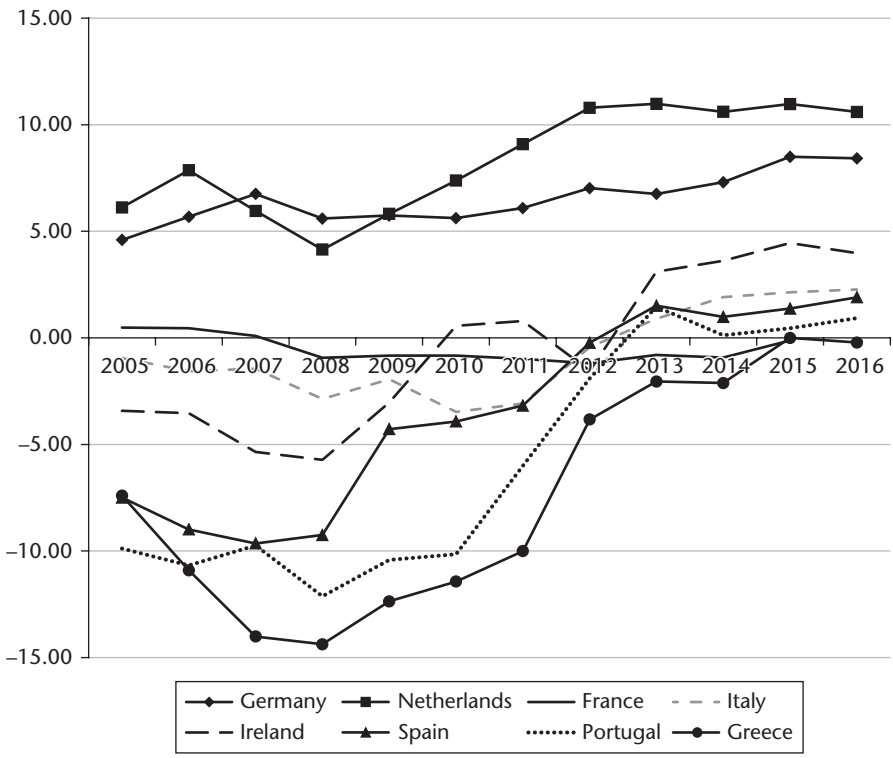


Figure 2.1 Current account surplus or deficit of the eurozone economies (% of GDP)
Source: IMF, *World Economic Outlook*.

a surplus after 2013. In contrast, the major surplus economies (e.g. Germany and the Netherlands) kept their large surpluses.[3] As a result, the net resulting surplus of the eurozone became one of the major sources of global imbalances in recent years (see Chapter 3).

Since Keynes' (1942–3) proposal to create a more symmetric system by establishing an International Clearing Union was not accepted, the Bretton Woods system was born with this inherent flaw. But even a system in which all deficit countries can automatically finance their deficits may still face a contractionary bias insofar as macroeconomic policy authorities respond asymmetrically to the building up of net external liability compared to net external asset positions.

2.2.2 *The Triffin Dilemma*

Keynes' analysis implied that the most fundamental problem of any international monetary arrangement is the operation of the adjustment mechanism in the face of global imbalances, rather than the specific asset that serves as the international currency (Kregel 2009). Nonetheless, the role of the dollar at the centre of the system also generated problems, which were extensively debated in the 1960s and came to be known as the Triffin dilemma. The essential issue, as Triffin emphasized, is that the use of a *national* currency as the key *international* reserve currency generates an inherent instability in the system. Given the importance that it has assumed in recent discussions, it is worth quoting the original formulation at length:

> [...] reactions of the outer countries [tend to generate] generalized waves of confidence or diffidence in the future convertibility and stability of the dollar. This makes the position of the center country highly precarious in the long run. It can, in the early phases of the popularity of its currency as a reserve instrument, finance much larger and more persistent deficits than it would be able to incur otherwise. If, however, the center country uses its leeway in this manner, the time is bound to come when other countries will shift from dollar hoarding to dollar dishoarding [...].
>
> On the other hand, if the United States restores full balance in its external transactions, it will cease to feed a world reserve pool [...].
>
> In either case, the use of a national currency as a prime feeder of reserve assets for the rest of the world is bound to introduce a highly erratic and unpredictable factor both in the much vaunted mechanism of balance-of-payments adjustment and in the actual pace of growth—or contraction—of the world reserve pool
>
> (Triffin 1968: 87–8).

[3] This is reflected in the overall surplus current account position of the eurozone. Owing to the strong recession in the periphery, Germany's surplus within the eurozone did decline, but this was compensated by rising surpluses with the rest of the world.

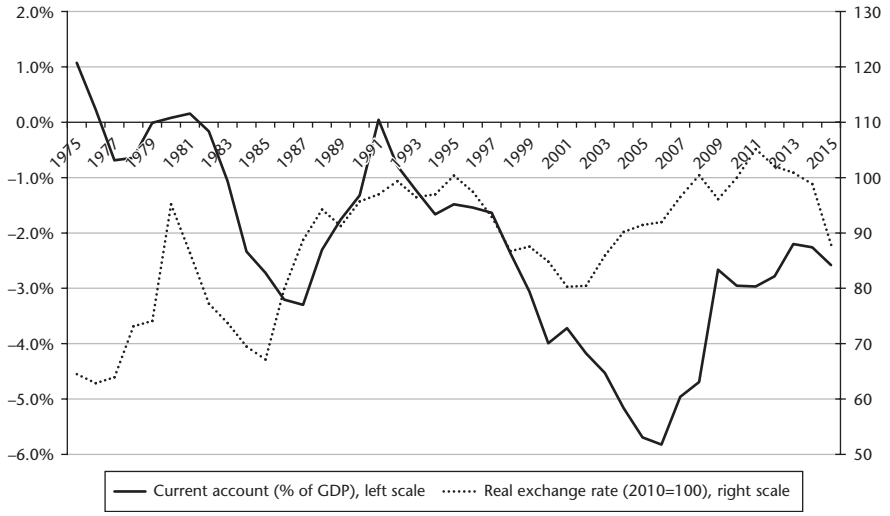


Figure 2.2 US current account balance and real exchange rate

Note: The real exchange rate is depicted here to show an increase when there is a real depreciation (the opposite convention to that used by the IMF). It is thus the inverse of the real exchange rate estimated by the Fund. For 1975–80, it is estimated on the basis of the Fund series with base 2000.

Source: IMF, *International Financial Statistics*.

The discussions of the 1960s focused on ways to create, in a more orderly (or, to use the preferred term at that time, less 'capricious') manner, an adequate supply of world liquidity free from the instabilities generated by the Triffin dilemma. The main reform was the creation of a global fiduciary asset—the SDRs—which was expected to become the main global reserve asset, an objective that did not materialize, and the world made a de facto transition to the fiduciary dollar standard.

As Figure 2.2 indicates, the joint evolution of the US current account deficit and the real exchange rate of the major reserve currency has been reflected in three dominant patterns since the mid-1970s: (i) a long-term tendency towards a deterioration of the current account balance; (ii) strong cycles of both the current account and the real dollar exchange rate; and (iii) although exchange rate fluctuations have played an important role in determination of the US current account, major corrections of US deficits—around 1980 and 1990, and in 2008—have been associated with US slowdowns or recessions which, in turn, had major contractionary effects on the world economy.

What this implies is that the fiduciary dollar standard did not eliminate the Triffin dilemma but rather changed its features. The United States is now able to run 'much larger and more persistent deficits than it would be able to incur otherwise' (Triffin 1968: 87), without facing the constraints that the convertibility of dollars for gold[4] posed until August 1971. Indeed, US current account

[4] I refer, of course, to the convertibility of dollars for gold for other central banks, as the convertibility for citizens was eliminated in 1933.

deficits became the rule rather than the exception, a fact that was soon reflected in that country's transition, in the late 1980s, from a net asset to a net liability position vis-à-vis the rest of the world (see Chapter 1). The implicit assumption of the new system was, of course, that flexible exchange rates would take care of adjusting the supply and demand for dollars. To the extent that the United States did not come to regard the actual or probable weakening of its currency as a problem to be corrected, this made US monetary policy even more independent than during the era of the gold–dollar exchange standard. This also implied that other countries came to be even more dependent on the effects of the monetary policy of the main reserve-issuing country, which has generally been managed with no regard to its spillovers on the rest of the world.

Interestingly, and contrary to Keynes' views, the transition also implied that, given the reduced constraints on US balance-of-payments deficits, the fiduciary dollar standard could actually have an expansionary rather than a contractionary bias, particularly during upswings in the business cycle. More generally, it has generated unprecedented—and, indeed, increasing—volatility in both the US current account and the real dollar exchange rate. As a result, the dollar has increasingly lost what, in fact, is the essence of a good international reserve asset: a stable value. A major implication of the strong fluctuations in the US deficit is, of course, that the generation of global liquidity has become even more erratic (or 'capricious') than under the original Bretton Woods system.

It should be emphasized, in any case, that the length and intensity of the most recent and longest phase of US current account deterioration, which took place during the 1990s and the first half of the 2000s, had determinants that go beyond the US economy. In particular, although the appreciation of the dollar in the second half of the 1990s helps explain the renewed deterioration in the current account, the magnitude of this deterioration was undoubtedly associated with the role of the US as the 'consumer of last resort' during the major crisis in emerging markets that started in East Asia in 1997. In this global context, the 2001 US recession only had minor effects on its current account. Furthermore, the deterioration of this deficit up to 2006, despite the gradual but strong depreciation of the dollar that started in 2003, can at least partly be explained by the fallacy of composition effects of self-insurance in the developing world (see discussion in Section 2.2.3).[5]

[5] Barbosa-Filho et al. (2008) have analysed the domestic dynamics of this process, which has been dominated by pro-cyclical household (and, more generally, private) borrowing, partly mitigated by counter-cyclical government borrowing—in sharp contrast to the traditional story of the 'twin' external and fiscal deficits.

The transition of the United States from a net investment position into a net liability position was, of course, an unprecedented feature for the country at the centre of the global reserve system, and is in sharp contrast to the conditions that characterized the United Kingdom when it was the centre of the system prior to the First World War. For many years, this has generated fears that official and private agents may be unwilling to continue to accumulate dollar assets (Summers 2004; Williamson 2004). In the words of Mateos y Lagos, Duttagupta, and Goyal (2011: 94), 'growing demand for safe (Treasury) assets would lead to indebtedness, which in time could undermine the confidence that is the basis for its reserve asset status'. These risks were also at the centre of the views expressed by the governor of the central bank of China in 2009 (Zhou 2009). In contrast to this perception, the 'Second Bretton Woods' literature (see Dooley, Folkerts-Landau, and Garber 2003) argued that growing US deficits were matched by a growing demand for dollar reserves by mercantilist developing countries, a fact that made the system stable. The North Atlantic financial crisis showed that dollar assets continue to be perceived as the safest assets. However, this has nothing to do with the Second Bretton Woods literature, but with the fact that the dollar and, particularly, US Treasury securities continue to be the most liquid assets in the world (Prasad 2014). This was reflected at the beginning of the North Atlantic crisis in the appreciation of the US dollar.[6]

From the point of view of the United States, its position at the centre of the current global reserve system has had both positive and negative implications. On the positive side, the most important advantage is that it does not face the constraint of dollar–gold convertibility, and thus enjoys greater monetary independence. As it has accumulated important net liabilities with the rest of the world, another interesting advantage is that dollar depreciation generates a positive wealth (real balance) effect, as such a change increases the value of foreign assets owned by US residents, while their liabilities remain unchanged. This also implies, however, that depreciation of the US dollar has a weaker effect in correcting its current account deficit, as the wealth and relative price effects of such depreciation run in opposite directions (United Nations 2005a: ch. 1). On the negative side, the fact that US current account deficits are necessary to provide a *net* supply of dollar assets to the rest of the world implies that it does not entirely capture the benefits of its expansionary monetary and fiscal policies (Stiglitz 2006: ch. 9).[7]

[6] However, this has nothing to do with the validity of the Second Bretton Woods hypothesis, as argued by its proponents (Dooley, Folkerts-Landau, and Garber 2009).

[7] See also the analysis of McKinsey (2009), which argues that the role of the dollar as the major reserve currency generate gains from seigniorage and reduced cost of financing for the government and domestic US agents, but losses associated with the effects of a stronger dollar on the trade balance.

The Triffin dilemma thus assumed new forms but did not disappear. In the words of Padoa-Schioppa (2011: 64), 'the stability requirements of the system as a whole are inconsistent with the pursuit of economic and monetary policy forged solely on the basis of domestic rationales in all monetary regimes devoid of some form of supranationality'. Expressed in different terms, the world economy is hostage to the monetary policy and the balance-of-payments cycles of the major reserve-issuing country.

2.2.3 *Growing Inequities of the System and their Instability Effects*

The accumulation of foreign exchange reserves generates a transfer of resources from developing countries to the United States and other reserve-issuing countries. This feature, which is the essence of the inequity bias of the system, was built into its initial post-war design. However, these transfers remained limited as long as developing countries' foreign exchange reserves were not sizable. As Table 2.1 and Figure 2.3 indicate, this was true up to the 1980s, when the foreign exchange reserves of low-income and middle-income countries (i.e. developing countries) were only slightly larger as a proportion of their gross domestic product (GDP) than those of high-income countries.[8] The major exceptions at the time were the (Persian) Gulf countries and other high-income non-OECD (Organization for Economic Co-operation and Development) countries, a group dominated by Hong Kong and Singapore.

In contrast, over the past quarter century, foreign exchange reserves of developing countries have boomed and diverged from those of industrial countries. China has been the most aggressive and by 2002 it already held reserves equivalent to 20 per cent of its GDP, which increased to over 40 per cent by 2007; this country's reserves peaked at 48 per cent of GDP in 2009 before falling in recent years, to 31 per cent in 2015. By 2007, middle-income and low-income countries, excluding China, also held reserves equivalent to between 19 and 27 per cent of their GDP, depending on the specific category of countries studied; although they have fallen in recent years, particularly for low middle-income and low-income countries, they remain at levels significantly above those that were typical until the late 1990s. Reserve accumulation did pay off, as reflected in particular in the reduced vulnerability of most parts of the developing world during the North Atlantic financial crisis. In contrast, the trend for high-income core OECD countries remained fairly constant at around 2 to 3 per cent of their GDP, with the major exceptions

[8] As indicated in the Preface, the 2000 World Bank classification is used in this volume rather than a more recent one as it reflects much better the relative standing of different countries and regions of the world during the whole period covered in the analysis. Please note that this and the following data thus differ from that presented in Erten and Ocampo (2013b), which used the 2011 classification.

Table 2.1 Accumulation of foreign exchange reserves

	Annual average changes in reserves (millions US$)						Reserves as % of GDP						
	1982–90	1991–7	1998–2002	2003–7	2008–12	2013–15	1980	1990	1997	2002	2007	2012	2015
High-income: OECD	48,361	36,733	40,096	76,952	254,887	10,009	2.9	3.3	3.4	3.8	3.9	6.1	6.5
Core OECD	39,487	9,490	12,437	3,092	186,916	23,125	3.0	3.4	2.9	2.2	1.5	3.5	3.7
Japan	6,896	24,598	23,975	72,374	54,446	–15,099	2.3	2.5	5.1	11.6	21.9	20.6	29.3
Others	1,978	2,644	3,684	1,486	13,525	1,983	2.8	6.5	6.8	8.5	6.0	7.0	8.4
High-income: non-OECD	5,565	18,350	16,273	46,181	68,302	21,510	10.4	28.3	39.7	46.5	44.3	48.5	56.8
Gulf countries	–169	534	421	19,427	12,496	9,644	7.9	9.4	10.5	15.5	22.8	14.7	24.4
Others	5,734	17,816	15,852	26,754	55,805	11,866	13.9	38.0	49.7	61.6	61.7	83.1	85.4
Upper middle-income	3,827	26,967	30,288	213,695	190,065	–110,250	7.3	5.3	8.0	13.2	19.9	23.5	26.0
Lower middle-income	3,540	29,308	31,346	463,332	415,600	–378,266	5.3	3.5	11.3	17.1	34.8	32.0	28.7
China	2,280	16,515	21,428	280,533	345,465	–247,177	1.3	8.2	14.9	19.9	43.4	39.4	30.8
Excluding China	1,261	12,793	9,919	182,800	70,135	–131,089	6.9	2.3	8.9	14.2	26.7	21.7	23.6
Low-income	758	7,433	8,399	81,483	33,800	17,881	5.8	2.3	6.6	12.2	18.3	13.1	12.8
World	62,051	118,791	126,401	884,701	964,102	–441,527	3.7	3.7	5.2	6.8	11.3	14.8	14.9
Excluding China and Japan	52,876	77,678	80,999	531,795	564,191	–179,251	3.9	3.9	4.9	5.4	8.0	10.7	10.9

Source: World Bank, World Development Indicators, based on information from IMF. Country classification by level of development according to the World Bank in 2000.

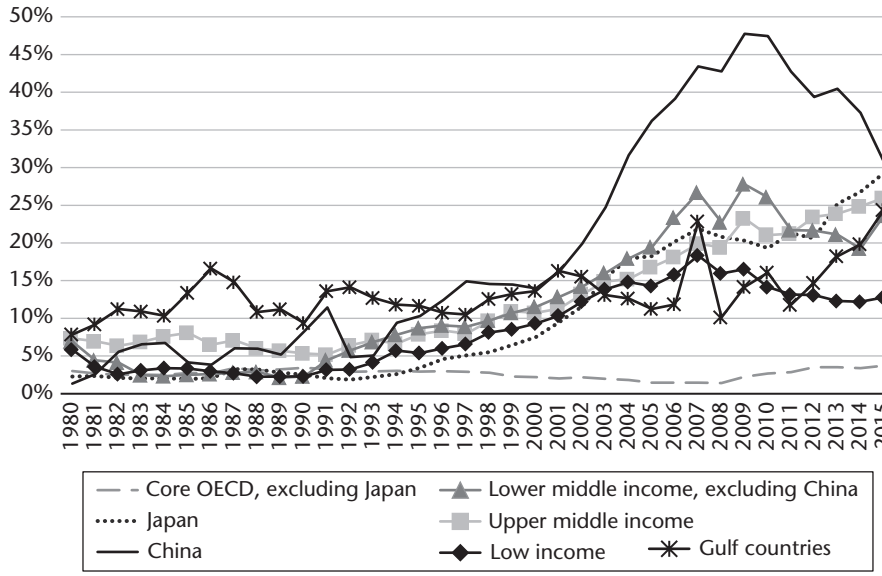


Figure 2.3 Foreign exchange reserves by level of development (% of GDP)

Source: Author's estimates; World Development Indicators, based on information from the IMF. Series refer to total reserves minus gold. Country classification by level of development according to the World Bank in 2000.

of Japan and high-income non-OECD countries. After the North Atlantic crisis, the gap between developing countries and OECD countries narrowed somewhat, because of some reserve accumulation in developed countries and a reduction in the reserves as a proportion of GDP held by China and some categories of developing countries. Also, with the strong reduction of Chinese reserves since mid-2014, its reserves relative to GDP have been approaching those of other middle-income countries.

The major waves of foreign exchange reserve accumulation thus followed the two major financial crises experienced by the developing world in the post-Second World War period: the mainly Latin American debt crisis of the 1980s and, even more strongly, the broad-based crisis of emerging market countries that started in East Asia in 1997 and then spread to Russia, Latin America, and Turkey. In this sense, reserve accumulation can be seen as a response by developing countries to the risks generated by increased openness—opening up of trade, domestic financial liberalization, and capital account liberalization—and particularly, as a way of protecting themselves against global financial instability. It also reflected the lack of appropriate global institutions to manage crises in developing countries and the particular deficiencies associated with the only form of collective insurance available: conditional IMF lending.

There are three competing explanations for this increase in the demand for reserves by developing countries. The first, which is the most compelling, is

that reserve accumulation is the result of self-insurance in a broad sense, which includes what I will call the 'counter-cyclical motive'. This interpretation receives its most important support from the fact that the major waves of reserve accumulation have followed the two most important financial crises in the developing world.

A second explanation is provided by the aforementioned Second Bretton Woods literature (see Dooley, Folkerts-Landau, and Garber 2003). According to this school of thought, the basic explanation for reserve accumulation is mercantilism, particularly by East Asian countries that undervalue their exchange rates as part of their export-led strategies. A reinforcing factor may be the lack of appropriate mechanisms for exchange rate coordination in export-led economies, which generates incentives to keep exchange rates competitive—a point made by Sakakibara (2003) in calling for increasing macroeconomic policy coordination in East Asia. One implication of this view is that, for these countries, the benefits of stable and competitive exchange rates exceed the costs of reserve accumulation. An implication at the global level is that, for the same reason, these countries are willing to continue financing the US current account deficit.

The idea that competitive exchange rates and strong current account balances tend to accelerate economic growth in developing countries has a respectable tradition in the development literature (e.g. see Frenkel and Rapetti 2010; Frenkel and Taylor 2007; Prasad, Rajan, and Subramanian 2007; Rodrik 2008). However, this interpretation misses one important empirical fact: that reserve accumulation in the developing world is closely associated with fluctuations in capital flows; that is, it tends to smooth out the pro-cyclical pattern of capital flows that affect developing countries (Ocampo 2010a, 2010b). Indeed, one basic explanation provided in the literature for the strong association between a strong current account and economic growth is that it reduces dependence on volatile capital flows.[9]

A third explanation for reserve accumulation is the 'financial stability' motive (Obstfeld, Shambaugh, and Taylor 2008). The basic argument is that international reserves are necessary for financially open economies to counter the incentives to eventually transform money balances into foreign exchange (i.e. capital flight). However, the fact that reserve fluctuations are closely associated with capital account cycles means that it is difficult to distinguish this motive from that of self-insurance.

The self-insurance motive can therefore be understood, in a broad sense, as the attempt by developing countries to manage the strong pro-cyclical shocks they face in a globalized economy. These shocks originate in the

[9] See a very interesting analysis of the 'mercantilist' vs. 'precautionary' motives for holding reserves in Aizenman and Lee (2007), which shows the stronger evidence in favour of the second motivation.

pro-cyclical patterns of the capital flows to these countries, but also in the pro-cyclical patterns of commodity prices and, to a lesser extent, in the volume of international trade. In this sense, the demand for reserves is the result of the application of a broad precautionary principle learnt from financial crises. In particular, experience indicates that allowing the real exchange rate to appreciate and the current account to deteriorate sharply during foreign exchange booms almost inevitably leads to balance-of-payments crises—and, very commonly, to twin balance-of-payments and domestic financial crises—once the temporary condition of foreign exchange availability comes to an end. It makes sense, therefore, to respond to cyclical swings in export revenues by accumulating foreign exchange during booms to be used during subsequent crises.

Insofar as cyclical shocks from the capital or trade accounts tend to generate pro-cyclical macroeconomic policy responses (Kaminsky, Reinhart, and Végh 2004; Ocampo and Vos 2008: ch. 4; Stiglitz et al. 2006), active foreign exchange management can be seen as an attempt to increase the room for manoeuvre to adopt counter-cyclical macroeconomic policies (Ocampo 2008; Ocampo, Rada, and Taylor 2009: ch. 7). In this sense, in a broader sense, the self-insurance motive can be called the *counter-cyclical motive*. It is also important to emphasize that it is generally associated with intermediate foreign exchange regimes. Smoothing out the effects of external shocks on the exchange rate is, thus, an essential feature of self-insurance or counter-cyclical foreign exchange management.

Interestingly, in the case of capital account fluctuations, it is now broadly agreed that the self-insurance motive goes beyond the so-called Guidotti–Greenspan rule, according to which countries should keep foreign exchange reserves at least equivalent to short-term external liabilities. Indeed, to the extent that capital account fluctuations involve medium-term cycles (Ocampo, Kregel, and Griffith-Jones 2007: ch. 1), the demand for precautionary international reserves should be proportional to *total* external liabilities, with the proportion larger for economies that have liberalized their capital accounts.

Foreign exchange reserve accumulation is obviously costly, both because foreign exchange reserves have low yields and because there are costs associated with sterilizing its domestic monetary effects (Rodrik 2006). Some alternative strategies should be considered. Saving exceptional export receipts and associated fiscal revenues from natural resource-intensive activities has long been accepted as good practice, with its counterpart in reserve accumulation. In contrast, exchange rate flexibility to increase the room for manoeuvre of counter-cyclical monetary policy has been the instrument preferred by defenders of orthodox inflation targeting. But this is *not* a good substitute, as it merely transfers the pro-cyclicality of foreign exchange availability to the exchange rate and is likely to reproduce the risks that self-insurance is trying

to avoid, particularly the generation of unsustainable current account deficits during booms.

In this regard, one paradox of macroeconomic policy management that has characterized developing countries in recent decades is that exchange rate flexibility has been generally complemented by active interventions in foreign exchange markets and a rising demand for reserves. This has made flexible but highly interventionist exchange rate regimes—i.e. intermediate regimes—quite common in the developing world. This is not so much a reflection of 'fear of floating' but rather a recognition that, as much as fixed exchange rates clean, floats generate pro-cyclical effects on the economy, albeit of a different nature (Ocampo 2008).

In this sense, and when the source is pro-cyclical capital flows, a better strategy is to regulate capital flows (a topic that is dealt with in detail in Chapter 4 in this volume) or adopt any other form of macro-prudential regulation that reduces the vulnerability to financial shocks.[10] In particular, to the extent that regulations on capital inflows during booms are able to reduce the magnitude of reserve accumulation, they reduce the cost of foreign exchange management. In fact, the need to accumulate reserves when capital inflows are excessive destroys the rationale for capital inflows in the first place, as it does not generate any real transfer of resources towards the recipient country. It also undermines the other rationale for capital account liberalization: to diversify risks, as countries feel they need larger foreign exchange reserves to protect themselves against capital account reversals.

Obviously, the choice of self-insurance is associated with the fact that the globalized economy we live in lacks adequate collective insurance. Furthermore, available IMF crisis lending is deemed unacceptable by many countries because of the conditionalities typically attached to it. In the past, these have included adoption of pro-cyclical macroeconomic policies during crises, which self-insurance seeks to avoid or at least mitigate. Therefore, the self-insurance or counter-cyclical motive behind developing countries' high demand for foreign exchange reserves is associated with *both* the pro-cyclical capital account and trade shocks that they face, and the perception of inadequate mechanisms at the global level to provide liquidity to developing countries during balance-of-payments crises.

What matters from the point of view of the global reserve system is the recognition that self-insurance, though rational from the point of view of an individual country, generates fallacy of composition effects that tend to worsen global imbalances and can generate a global contractionary bias.

[10] See the evidence of this effect after the North Atlantic financial crisis in Aizenman, Cheung, and Ito (2015), which also indicates that access to swap arrangements has also been associated with a reduced demand for reserves.

Indeed, if large groups of developing countries follow this route, they generate a mix of stronger current accounts and an additional demand for safe assets that can be used as reserves. If the first is dominant, contractionary effects on the world economy will be generated unless matched by current account deficits in other (mainly developed) countries. If the second prevails, then they must be matched by the supply of such assets by developed countries to avoid having contractionary effects. In any case, they could reduce interest rates for safe assets, a factor that some have identified as one of the elements behind the asset bubble in advanced countries prior to the 2007–9 North Atlantic financial crisis. Through either of the two channels, the inequities of the system contribute to global imbalances.

Therefore, self-insurance is not only costly for individual countries, but also a source of global instability. However, the problem cannot be solved simply by asking developing countries to appreciate their currencies and to generate current account deficits during the good times, as this has proved to be a risky combination in the past. This was revealed again during the North Atlantic crisis in the collapse of several Central and Eastern European economies that pursued this strategy, as well as several on the periphery of the eurozone, although in that case without the ingredient of exchange rate appreciation. We must start by addressing the reason for the desire for self-insurance, namely the strongly pro-cyclical capital and trade flows and the inadequacy of collective insurance for balance-of-payments crises, the issues that will be dealt with in chapters 4 and 5 of this volume.

2.3 Special Drawing Rights

SDRs are defined by the IMF as an international reserve asset. However, although countries receive interest on holdings of SDRs, they also have to pay interest on the allocations they receive. In this sense, SDRs are peculiarly both an asset and a liability, and perhaps should be best considered as a credit line which can be used unconditionally by the holder—that is, an unconditional overdraft facility. This is, of course, a legacy of the debates of the 1960s, when France, against the view of most countries (including the United States), opposed the idea of creating a pure reserve asset and preferred to create a 'drawing' facility similar to the tradition of IMF credit lines (Solomon 1982: ch. 8).

According to existing rules, the IMF makes general allocations of SDRs following three criteria: a *long-term* need, of a *global* character, and with the purpose of *supplementing* existing reserve assets. Five-year-period reviews are undertaken to decide whether such a need exists. So far, three general SDR allocations have been made. The first was in 1970–2 for a total amount of 9.3 billion SDRs, and the second in 1979–81 for 12.1 billion SDRs. The last

Table 2.2 SDR allocations by level of development (in millions of SDRs)

	Allocations (in million SDRs)			Share in total allocations, %		
	1970–2	1979–81	2009	1970–2	1979–81	2009
High-income: OECD	6,796	7,906	108,879	73.6	65.8	59.6
United States	2,294	2,606	30,416	24.8	21.7	16.6
Japan	377	514	11,393	4.1	4.3	6.2
Others	4,125	4,786	67,070	44.7	39.8	36.7
High-income: non-OECD	17	127	3,588	0.2	1.1	2.0
Gulf countries	0	78	2,057	0.0	0.7	1.1
Excluding Gulf countries	17	49	1,531	0.2	0.4	0.8
Middle-income	1,488	2,730	54,173	16.1	22.7	29.6
China	0	237	6,753	0.0	2.0	3.7
Excluding China	1,488	2,493	47,420	16.1	20.7	26.0
Low-income	933	1,254	16,095	10.1	10.4	8.8
Total allocations	9,234	12,016	182,734	100.0	100.0	100.0

Source: Author's estimates based on IMF data and on World Bank classifications by level of development in 2000.

took place in 2009 and included two different decisions: (i) an allocation for 21.4 billion SDRs had been approved by the Board of Governors of the IMF in 1997, which was meant to equalize the benefits of new (those that joined after the previous SDR allocations) and old fund members, but only became effective when the related changes in the IMF Articles of Agreement were approved by the US Congress in June 2009; and (ii) in response to the North Atlantic financial crisis, the G20 agreed to boost liquidity through new SDR allocations, which involved the issuance of 161.2 billion SDRs, equivalent to US$250 billion and was approved by the IMF Board in July 2009. Interestingly, although allocations are made according to long-term needs, the 2009 allocations were clearly argued on counter-cyclical grounds (IMF 2009d). The previous allocations in 1979–81 and the delayed one in 1997 also coincided with crises in the world economy.

As the SDR allocations are made according to IMF quotas, they are much larger for high-income countries. Table 2.2 shows that, during the first set of allocations in 1970–2, high-income countries received 74 per cent of total allocations, whereas middle-income countries received 16 per cent and low-income countries only about 10 per cent (using World Bank classifications by levels of development in 2000). The distribution improved slightly over time. During the second round of allocations in 1979–81, the share of high-income countries declined to 67 per cent, whereas that of middle-income countries increased to 23 per cent and that of low-income countries rose marginally. In 2009, the share of middle-income countries continued to rise to close to 30 per cent, but that of low-income countries fell to slightly below 9 per cent. The decline in the share of high-income countries to 62 per cent implied, as in the previous period, a falling share of OECD countries partly compensated by the rising share of high-income non-OECD countries.

SDRs are 'central bank money', since essentially only central banks accept them as means of payment and private parties are not allowed to hold them under current rules. In addition, SDRs can be used to pay IMF obligations, and they can be held by a few other international organizations such as the multilateral development banks and the Bank for International Settlement. A core difference between SDRs and other reserve assets is, however, that they cannot be directly used to intervene in the foreign exchange market. They have to be converted into the currency needed to undertake those interventions.

SDRs can be transacted in two ways: (i) transactions by bilateral agreement between participant countries, after which the IMF typically mediates the transaction; and (ii) transactions by designation whereby if a member country has balance-of-payments needs and there is no country willing to buy its SDRs, the IMF has the legal right to designate members with strong external positions to exchange SDRs for freely usable currencies, up to the point where the holdings of the buying country above allocation (i.e. excess holdings) are equal to twice their allocations. This designation mechanism is essential to maintain the liquidity of the SDRs, but it has not been used for over two decades, as voluntary arrangements have worked well. This has been facilitated by the fact that some central banks actively manage their SDR holdings as part of their reserve portfolio strategy, and operate in a sense as 'market makers'. This group of countries includes Austria, Belgium, Denmark, Finland, France, Germany, Japan, Netherlands, Norway, Sweden, Switzerland, United Kingdom, and Venezuela. The ECB operates as an additional market maker. All of these participants have two-way arrangements for buying and selling SDRs, except Germany, which has only a one-way arrangement to sell SDRs (IMF 2009d).

A review of history indicates certain trends in the SDR market that are important for understanding how the market has functioned so far. The first important fact of note is that there is a growing amount of SDR transactions. Figure 2.4 shows net SDR drawings by IMF members, estimated as the sum of the difference between allocations and holdings by individual countries. It indicates that the use of SDRs has grown over time, with accelerations coinciding with periods of global financial stress. These include the depreciation of the US dollar in the late 1970s, which even led the United States to use part of its SDRs; the 1980–4 Latin American debt crisis; the crisis of the European exchange rate mechanism in the early 1990s; the series of crises in emerging economies in the late 1990s and early 2000s; the North Atlantic financial crisis; and the 2014–16 period of collapse of commodity markets and falling capital flows towards emerging markets. Over the long-term, the trend in the use of SDRs has been clearly positive. Since the early 1980s SDR drawings fluctuated between 30 and 50 per cent of total allocations. As a proportion of

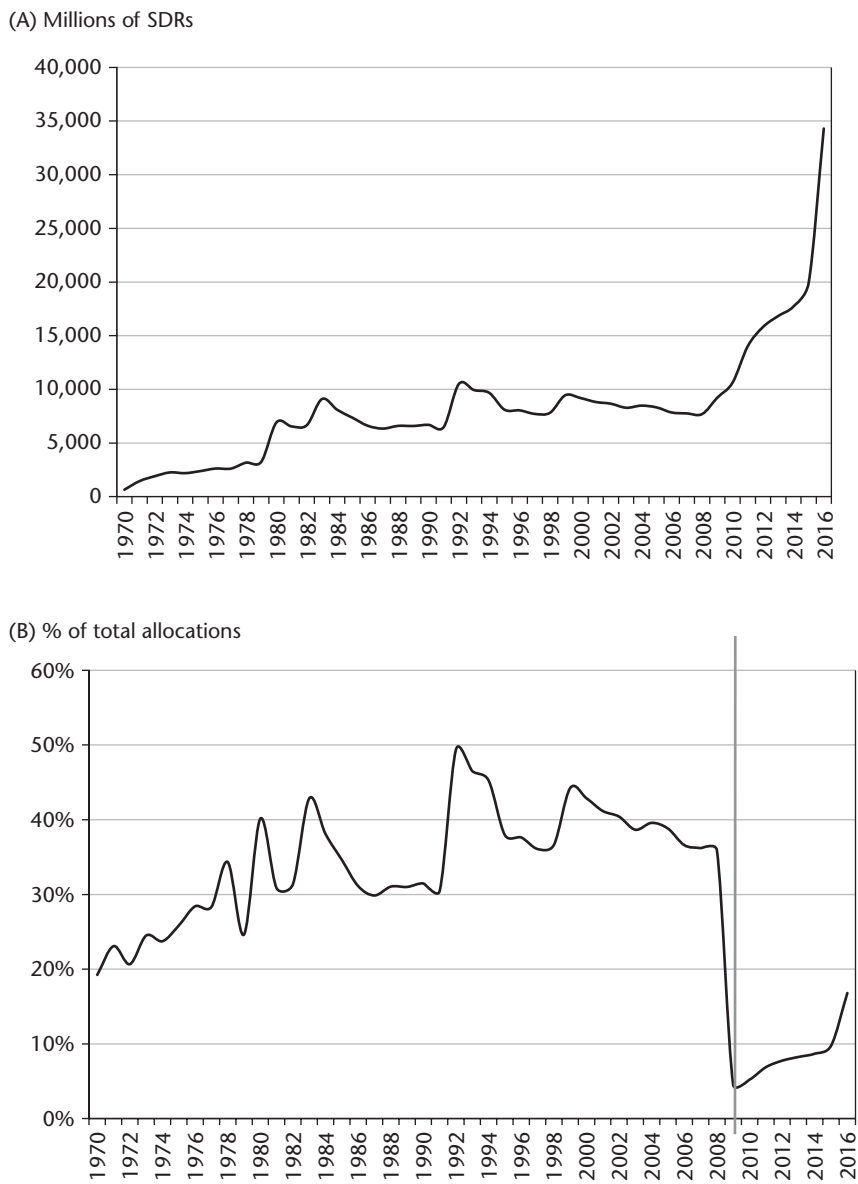


Figure 2.4 Total net drawings of SDRs

Source: Author estimates based on IMF data. Net drawings are estimated as the difference between allocations and holdings of SDRs of individual countries.

allocations, the market fell substantially with the large 2009 issue of SDRs, but has since then renewed its upward trend.

Table 2.3 shows the net SDR holdings of countries according to their levels of development at peak years of net drawings. Several interesting patterns

Table 2.3 Net SDR holdings by level of development (in millions of SDRs)

	Net holdings (in million SDRs)							Net holdings as % of allocations to each group						
	1980	1983	1992	1999	2009	2011	2016	1980	1983	1992	1999	2009	2011	2016
High-income: OECD	–3,203	–3,178	–4,233	24	1,012	–1,937	–8,233	–26.5	–21.6	–28.8	0.2	0.8	–1.6	–6.7
United States	–1,996	–100	1,285	2,639	1,563	479	1,046	–49.4	–2.0	26.2	53.9	4.4	1.4	3.0
Japan	640	957	–96	1,044	1,090	576	1,169	88.6	107.3	–10.8	117.1	8.9	4.7	9.5
Others	–1,847	–4,035	–5,422	–3,659	–1,640	–2,993	–10,449	–25.2	–45.3	–60.8	–41.1	–2.2	–3.9	–13.8
High-income: non-OECD	–34	54	139	17	318	233	–604	–41.4	37.7	96.5	10.0	8.5	6.3	–16.2
Gulf countries	–23	28	122	–9	116	120	–384	–67.9	35.1	155.2	–11.9	5.4	5.6	–18.0
Excluding Gulf countries	–11	27	17	26	201	113	–220	–23.2	40.9	26.3	28.9	12.6	7.1	–13.8
Middle-income	–1,190	–1,808	–2,203	–1,033	–256	–3,273	–13,061	–36.3	–42.9	–52.2	–24.1	–0.4	–5.6	–22.4
China	–42	83	68	303	990	732	197	–37.0	35.1	28.8	127.9	14.2	10.5	2.8
Excluding China	–1,148	–1,891	–2,271	–1,336	–1,246	–4,006	–13,258	–36.3	–47.5	–57.1	–33.0	–2.4	–7.8	–25.8
Low-income	–1,016	–1,925	–2,144	–1,928	–4,360	–5,733	–7,886	–57.5	–88.0	–96.8	–87.0	–23.8	–31.4	–42.7
Total net drawings	–6,918	–9,105	–10,510	–9,455	–9,232	–14,021	–34,302							
Total allocations	17,231	21,249	21,278	21,377	203,984	203,984	204,155							

Note: – sign indicates net drawings, + sign indicates net holdings. The numbers are totals of each income group in millions of SDRs.

Source: Author's estimates based on IMF data and on World Bank classifications by level of development in 2000. Net holdings or drawings are the difference between allocations and holdings of SDRs of individual countries.

emerge. Interestingly, high-income OECD countries, excluding Japan, have been net users of SDR allocations. Japan has been mostly a buyer, accumulating SDRs above its allocations. The United States drew almost 2 billion SDRs in 1980 and was a still a net seller in 1983, but has been a net buyer thereafter. In turn, high-income non-OECD countries have overall been net buyers of SDRs, except in 1999 for the Gulf countries and in recent years for both categories of countries included in this group. All of this indicates that SDRs are effective reserve assets even for the richest countries of the world.

In any case, developing countries tend to use their SDR holdings more frequently and in larger magnitudes. As seen in Table 2.3, middle-income countries have had net drawings in all peak years. China has been an exception, drawing its SDR allocations only in 1980 and being a net buyer since then. As a share of allocations to the group, middle-income countries, excluding China, drew much larger shares than high-income countries, ranging from 32 to 54 per cent of their allocations prior to 2009. In turn, the use of SDR allocations is highest for low-income countries. Before the 2009 allocation, they drew over 80 per cent of the SDRs they were allocated. After the most recent allocation, middle-income and low-income countries have renewed their active use of SDRs, drawing a peak 23 and 43 per cent respectively of their allocations by 2016 (excluding China from the first group).

An analysis of net drawings and net purchases by individual countries indicates that predominantly the high-income countries and oil-rich middle-income countries sold and bought large amounts of SDRs during peak years (Erten and Ocampo 2013b: Table 9.4). Among these, the United States was the largest drawer of SDRs in 1980, followed by the United Kingdom, Australia, and Canada. The highest net holder was Japan, followed by Germany, Belgium, Saudi Arabia, and Iran. Saudi Arabia remained among the top five net buyers of SDRs. China joined the net buyers in 1999, and became the third largest buyer in 2008, followed by the United States and Japan. The United Kingdom, interestingly, remained the largest seller until 2010, when Ukraine displaced it from that position. Several Gulf and European countries have also actively used their SDR holdings in recent years.

Three major conclusions can thus be derived from studying the market for SDRs. First, despite their low share in allocations, developing countries tend to use their holdings more frequently for their balance-of-payments needs. Allocations of SDRs and, particularly, asymmetric allocations—an issue to which I return in the Section 2.4—would thus have positive development implications. Second, SDRs are, in any case, an important reserve asset for developed countries, as reflected in their dominant role both on the buyer and seller side. Third, the market is, however, very small, as at their peak in 2016 net drawings have only reached 34 billion SDRs, a minute proportion of global reserves.

2.4 Reforming the System

2.4.1 *Alternative Reform Routes*

Despite the fact that the United States was at the centre of the financial meltdown generated by the bankruptcy of Lehman Brothers in September 2008, the dollar strengthened during the peak months of turmoil, and has continued to be the undisputed major reserve currency. This was the result of two factors. The first was the demand for dollars to finance withdrawals from non-banking financial institutions in the US—an important part of the strong deleveraging process unleashed by the crisis. The second was the 'flight to safety' in the context of a limited supply of alternative safe assets. In particular, the absence of a unified European bond market and the perception by many agents that the euro is backed by a heterogeneous group of countries of unequal strength meant that the assets of only a few European countries are considered comparable with those of the United States as safe assets, but their supply is limited. The recent crisis has thus clearly shown that the 'network externalities' in the use of money continue to favour the US dollar, and that in today's world there is no alternative for the market for US Treasury securities in terms of liquidity and depth.

Despite the undisputed leadership of the dollar as the major global reserve currency, the three major problems of the system are still present: (i) the asymmetric-adjustment problem and the contractionary effects it generates on the world economy; (ii) the dependence of the world economy on the main reserve-issuing country, whose monetary policy is managed with no regard to its spillovers on the rest of the world, and which faces a strong deterioration in its net liability position (see Chapter 1 in this regard); and (iii) the large demand for self-insurance by developing countries, which may also have contractionary effects on the world economy, and the scarcity of safe assets to satisfy the growing demand for reserves.

One way the system could evolve is by becoming a fully-fledged multi-currency reserve system—a characteristic that, as has been pointed out, is only its secondary feature. Indeed, the system continues to be essentially a fiduciary dollar standard. As Figure 2.5 indicates, the US dollar has represented over three-fifths of global allocated foreign exchange reserves[11] since 2002. In terms of foreign exchange transactions, the US dollar is also the indisputable leader, as it is involved in between 85 and 90 per cent of all bilateral deals (BIS 2016).

[11] Allocated reserves refer to those for which central banks report their currency composition. Their share in total foreign exchange reserves decreased from 78 per cent at the turn of the century to 53 per cent in 2004, but has increased since then to 70 per cent.

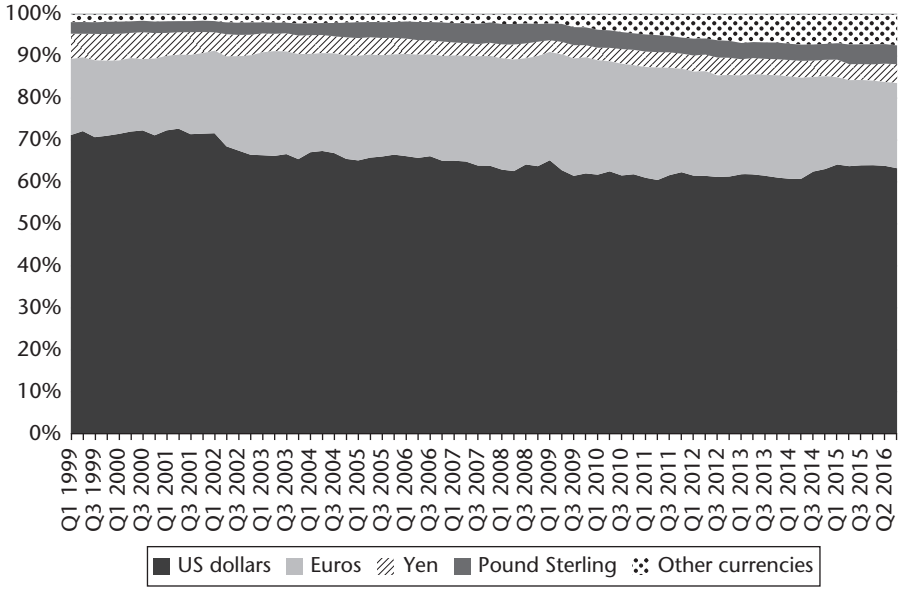


Figure 2.5 Share of major currencies in allocated foreign exchange reserves
Source: Estimated from data from the International Monetary Fund.

In both roles, the US dollar is followed by the euro, which increased its share in global reserves to about a quarter of allocated reserves in the years after its launch in 1999. Interestingly, that share was very resilient during the North Atlantic financial crisis and even during the peak of the eurozone crisis in 2011–12, but has fallen to about a fifth in recent years. A major factor behind the relative shares of the US dollar and the euro is their bilateral exchange rate: an appreciation of the dollar tends to increase its share in world foreign exchange reserves, and a depreciation has the opposite effect.

During the first decade of the twenty-first century, other currencies represented about a tenth of such reserves, with the yen experiencing a downward and the British pound a rising trend. However, after the North Atlantic financial crisis there has been a diversification towards other currencies, particularly the Australian and Canadian dollars and the renminbi, with the Swiss franc maintaining a small share; the share of these other currencies has increased from around 2 per cent to over 7 per cent since then.

The rise of the renminbi implies that, for the first time in history, a currency from a developing country is playing the role of a reserve currency. This reflects, of course, the explicit Chinese policy to internationalize its currency, which includes the creation of swap arrangements with several central banks, allowing some payments of Chinese exports to be made in its currency, and using Hong Kong and London as major centres for renminbi transactions. The

recent inclusion of the Chinese currency in the SDR basket is a recognition of its emerging role as a reserve currency (IMF 2015c), but the possibility of a larger role for the renminbi depends on several conditions that can only materialize in the long term: deep and liquid domestic financial markets, and a liberalization of financial and foreign exchange markets that Chinese authorities have adopted in a gradual way, as they generate major macroeconomic policy challenges (Yu 2012). In fact, the problems that Chinese foreign exchange markets have experienced in recent years in the face of large capital outflows from the country may lead to a temporary reversal in its rise as a global reserve currency.

The major advantage of a multi-reserve currency arrangement is that it would provide all—especially developing—countries the benefit of diversifying their foreign exchange reserve assets. However, none of the other deficiencies of the system would be addressed. In particular, it would continue to be inequitable, as the benefits from the reserve currency status would still be captured by developed countries (with China partly benefiting from reserve diversification). Also, this reform would neither eliminate the contractionary bias of the system during crises nor reduce developing countries' demand for reserves for self-insurance purposes.

The exchange rate flexibility among major currencies is, paradoxically, both an advantage and a potential cost of a multi-currency system. The benefit would be derived from the absence of a major problem that two previous systems faced: namely, the eventual unsustainability of fixed rate parities. This was, indeed, a major explanation for the collapse of bimetallism in the nineteenth century and of the Bretton Woods fixed gold–dollar parity in 1971. However, although substitution among currencies facilitates diversification, it could also enhance exchange rate volatility among the major reserve currencies. Given their high demand for foreign exchange reserves, developing countries would suffer disproportionately from the instability of reserve currencies' exchange rates. Furthermore, all individual currencies would continue to lack the basic advantage that a global reserve system should have: a stable value.

The alternative reform route would be to design an architecture based on a truly global reserve asset, which could also have broader uses in the global monetary system. This would fulfil the objective included in the IMF Articles of Agreement of 'making the special drawing right the principal reserve asset in the international monetary system' (Article VIII, Section 7; Article XXII). As Triffin (1968) envisioned, this would complete the transition apparent since the nineteenth century of putting *fiduciary* currencies (or fiat money) at the centre of modern monetary systems.

This reform, which will be discussed in greater detail in Section 2.4.2, would certainly meet the objectives outlined by the governor of the central bank of China: 'An international reserve currency should first be anchored to a stable

benchmark and issued according to a clear set of rules, therefore to ensure orderly supply; second, its supply should be flexible enough to allow timely adjustment according to the changing demand; third, such adjustments should be disconnected from economic conditions and sovereign interests of any single country' (Zhou 2009: 1). But, in addition to providing a more orderly international monetary system rid of the Triffin dilemma, which is what these objectives imply, desirable reform should also correct, at least partially, two other problems of the system: the lack of pressure on surplus countries to adjust, and the specific asymmetries that developing countries face due to pro-cyclical capital flows and the absence of adequate collective insurance.

These two alternative routes could be mixed in a number of ways, and in fact their complementary use may be the only possible way forward. In such a mixed system, the SDRs would continue to be purely central bank money, letting other currencies continue to play the role of means of payment and part of the function of stores of value. SDRs would help to supplement the growing demand for 'safe assets', the role that has largely been played by the dollar, but which could come under threat at some point due to the strong deterioration in the US net liability position over the past decades and particularly since the outbreak of the North Atlantic financial crisis. In turn, to manage the instabilities of a multi-currency system, a substitution account should be created in the IMF to allow central banks to change their reserve composition without affecting markets. This proposal has been on the table since the 1970s, to manage periods in which countries have reduced their demand for dollar reserves.

There are, of course, other reform routes. One would be to return to Keynes' proposal for an International Clearing Union or a similar solution (e.g. see D'Arista 1999), or to create a new institution, a Global Reserve Bank (Stiglitz 2006: ch. 9). Independently of their virtues, such proposals do not seem viable in a world unwilling to adopt major reforms.

There have also been proposals to restore a greater role to gold.[12] However, such a return to what Keynes called a 'barbarous relic' would be a non-starter. In particular, it would be inconsistent with the 'embedded liberalism' of earlier post-war arrangements—that the commitment to free markets is tempered by a broader commitment to social welfare and full employment (Eichengreen 2008; Ruggie 1998).

[12] The most surprising was probably the proposal by Robert Zoellick (2010), as president of the World Bank, in the run up to the Seoul G20 summit: 'The system should also consider employing gold as an international reference point of market expectations about inflation, deflation and future currency values.' This formed part of a proposal that also involved the use of multiple currencies.

2.4.2 *An SDR-Based Global Reserve System*

The nature of the expectations on SDRs that a reformed system must meet would be different today from what they were when this instrument of international monetary cooperation was created.[13] The issue of inadequate provision of international liquidity, which was at the centre of early post-war debates and the discussions that led to the creation of the SDRs in the 1960s, is not important now, except during crises with global repercussions, such as the North Atlantic financial crisis. If anything, the fiduciary dollar standard has actually exhibited an expansionary bias for long periods of time. However, this underscores the fact that the world still needs a less 'erratic and unpredictable' system for providing global liquidity, to use Triffin's characterization, or a system that ensures an 'orderly supply' of the international reserve currency, if we prefer the formulation of the governor of the central bank of China. However, other problems that also received attention in the 1960s continue to be significant or even more important today, particularly the need for a more symmetric system, developing countries' access to liquidity, and associated equity issues.

The initial allocations of SDRs in 1970–2 were equivalent to 8.4 per cent of the world's non-gold reserves (see Figure 1.6). But despite the new allocations made in 1979–81, which brought accumulated allocations to 21.4 billion SDRs (slightly over US$33 billion), the total accounted for an insignificant 0.4 per cent of world non-gold reserves prior to the 2009 allocations. These allocations brought the stock of SDRs to 3.7 per cent of global non-dollar reserves in 2009, still a very modest amount. It has been falling again since then.

An ambitious reform to address the problems of the current reserve system and the shortfall of safe assets would thus be to design an SDR-based global reserve system, or at least to move towards a fully SDR-funded IMF. The major advantages of the IMF acting as a quasi-world central bank are threefold: (i) sharing seigniorage (e.g. the seigniorage would accrue to the IMF member states according to their quota distributions or alternative SDR allocation formula, instead of the reserve-issuing countries); (ii) delinking the creation of international reserve assets from any particular national or regional currency, thus helping to overcome the Triffin dilemma; and (iii) controlling liquidity in a counter-cyclical way.

Proposals for SDR allocations in recent years have followed two different approaches. The first is issuing SDRs in a counter-cyclical fashion, thus avoiding

[13] See good summaries of the debates of the 1960s in Solomon (1982) and Triffin (1968). An interesting contrast between the role of SDRs then and now is provided by Clark and Polak (2004) and Williamson (2009). A recent perspective on the role of SDRs is provided by Erten and Ocampo (2013b) and the Triffin International Foundation (2014).

doing so during booms (or even destroying during these periods those previously made), when they could feed into world inflationary pressures, and concentrating their issuance during periods of world financial stress, when they would have counter-cyclical effects (Akyüz 2005; Camdessus 2000; Ffrench-Davis 2007; Ocampo 2002; United Nations 1999). The second approach proposes regular allocations of SDRs reflecting additional world demand for reserves (IMF 2011f; Stiglitz 2006: ch. 9). The two approaches can be combined, as it can be agreed to make regular allocations—say every five years, following IMF practices—that are nonetheless made contingent on global monetary conditions, with the IMF Board deciding when they are made effective.

Proposals for the size of new allocations vary on the basis of the criteria used to estimate them. The most recent IMF report uses three conventional criteria: reserve coverage of imports (which is not important today), coverage of short-term debt, and broad money (IMF 2011f). Their estimates suggest a considerable rise in the projected demand for reserve assets. While the five-year estimates in 2009 (IMF 2009d) were around US $700–900 billion, the projection for the same period rose to US$800–1600 billion in 2011. On an annual basis, the IMF recommends SDR allocations of US$350–400 billion to maintain a stable level of supply for global reserve assets. Other proposals have been in the range of around US$200–300 billion annually (see Erten and Ocampo 2013b: Table 5). The Stiglitz Commission, for example, made the case for regular allocations in the range of US$150–300 billion a year (United Nations 2009: ch. 5). A later recommendation by a group of experts was larger: US$240–400 billion (Stiglitz et al. 2011). Although these allocations would contribute to the diversification of reserves, SDRs would still represent a small share of reserve holdings. For example, the IMF (2011a) estimated that an annual allocation of US$200 billion would increase the share of SDRs in total reserves to about 13 per cent by the 2020s.

The most important element of the reform would involve moving to a fully SDR-based IMF with clear counter-cyclical objectives. This would involve counter-cyclical allocations of SDRs, which would generate unconditional liquidity, together with counter-cyclical IMF financing, made entirely in SDRs, to provide conditional liquidity to countries facing balance-of-payments crises.

One possibility would be the mechanism proposed by Polak (1979, 2005: ch. 7–8) almost four decades ago: IMF lending would be done during crises, creating new SDRs, in a way similar to how lending by central banks creates domestic money (a mechanism heavily used during and after the North American financial crisis), but such SDRs would be automatically destroyed once such loans are repaid. There would, of course, be limits on the magnitude of such lending, overall and for individual countries borrowing. The alternative that I suggest, which would also combine the allocations of SDRs with the

lending capacity of the IMF, is to treat those SDRs not used by countries to which they are allocated as deposits in (or lending to) the IMF that can be used by the institution to lend to countries in need.

A crucial advantage of these proposals is that they would solve the recurrent problem of making more resources available to the IMF during crises. Note, in this regard, that the traditional solution has been to allow the IMF to borrow from member states under different modalities. But this mechanism is problematic, as it is not truly multilateral and, as Kenen (2001) has pointed out, gives excessive power to the countries providing the financing. This mechanism is thus sub-optimal to quota increases and both are, in turn, sub-optimal relative to a fully SDR-based IMF along the lines outlined.

This reform, however, requires a change in the IMF Articles of Agreement. Crucial in this regard is the elimination of the division between general resources and SDR accounts of the IMF (Polak 2005: part II), which severely limits the use of SDR allocations by countries and makes it impossible to finance IMF lending by using SDR allocations. Furthermore, another advantage of an SDR-based IMF is that it would eliminate the need for the IMF to manage a multiplicity of currencies, only a fraction of which can be used for IMF lending.

This solution would also make clear what 'backing' for SDRs involves. Strictly speaking, as with national currencies, the essential issue is not backing, but the willingness of parties to unconditionally accept fiat money when paid by another party. Backing would be provided by lending and investments made with SDR deposits. During booms, the normal instrument could be bonds from member countries that have a high level of liquidity and can be redeemed in convertible currencies. During crises, part of such bond holdings would be redeemed to generate funds to lend to countries facing balance-of-payments crises. Both aspects would again mimic the way central banks operate.

2.4.3 *Complementary Reforms*

These proposals must be complemented by reforms in other areas. Those that specifically relate to the role of SDRs deserve a mention here.

First, it should be emphasized that an SDR-based IMF would facilitate the task of increasing the size of the IMF, which has significantly lagged behind that of the world economy since the 1970s, particularly in relation to capital flows (IMF 2009a; see also Figure 1.4). This would, in turn, reinforce the provision of collective insurance. Of course, in a fully SDR-based IMF, quotas would have entirely different implications to what they have today. In particular, they would not involve actual contribution of resources to the institution, but would still determine the shares of countries in SDR

allocations, their borrowing limits, and, together with assigned basic votes, their voting power.

Second, mechanisms could be built in the design of the system to help improve adjustments to global imbalances (see in this regard Chapter 3). In particular, global macroeconomic policy cooperation should aim at avoiding the asymmetric-adjustment problem and the contractionary bias it generates. The crucial element would, of course, be larger collective insurance. This could be mixed with a rule that penalizes countries with large surpluses and/or excessive reserves, relative to the size or their economies, by suspending their right to receive SDR allocations. Of course, the definition of excessive reserves would have to take into account the exceptional demand for reserves by developing countries.

Third, and crucial from the point of view of developing countries, the solution adopted must reduce the special asymmetries that these countries face, reflected in the huge disparities in demand for reserves between developing and developed economies, which are at the centre of both the inequities of the current reserve system and the contractionary bias that large reserve accumulation by developing countries can potentially generate. This could be done through a mix of two types of reforms: (i) asymmetric issues of SDRs, giving larger allocations to countries with the highest demand for reserves, mainly developing countries; Williamson (2009, 2010) has proposed that these countries would receive 80 per cent of SDR allocations and the remaining 20 per cent would be allocated to industrial countries; an alternative would be to explicitly introduce the demand for reserves as one of the criteria for SDR allocations; and (ii) the creation of a 'development link' in SDR allocations, as proposed by the Group of Experts convened by the United Nations Conference on Trade and Development (UNCTAD) in the 1960s (see UNCTAD 1965); one possible mechanism would be allowing the IMF to buy bonds from multilateral development banks with the SDRs not utilized by member states, which would then finance the investment demands of developing countries.

Another potential development link that has been proposed by several authors is to use SDR allocations to developed countries to finance additional aid for the poorest countries and the provision of global public goods, such as combating climate change (ActionAid 2010; Ffrench-Davis 2007; Soros 2002; Stiglitz 2006: ch. 9). This proposal has many virtues, but poses the problem that such transfers are fiscal in character, and may thus require the approval of national parliaments on every occasion. Donating SDRs for development or combating climate change is also costly for countries, since they would still have to pay interest on the donated SDRs to the IMF. As an alternative, Bredenkamp and Pattillo (2010), among others, have suggested managing both problems by implementing the proposal of former IMF Managing Director Dominique Strauss-Kahn to use SDRs to support efforts to control

climate change. According to this proposal, donating countries would place unutilized SDRs as equity in trust funds, which can be the capital of a Green Fund but could also be a development fund with other objectives such as infrastructure. The return on these equity investments would then be used to service the interest payments on used SDRs. A certain oversubscription of the equity of the said fund would, in turn, guarantee the liquidity of the SDRs for each individual country.

Fourth, as envisioned in the debates of the late 1970s, and pointed out more recently by Bergsten (2007) and Kenen (2010a, 2010c), among others, it would be useful to create an IMF substitution account that would allow countries to transform their dollar reserves into SDR-based assets issued by the IMF to provide stability to the current system. Furthermore, this may be an essential complement between SDR reform and a multi-currency system. In a transition similar to the three-stage one envisioned by Kenen (2010a, 2010c), one could think of three periods in which the functions of the substitution account would change until the SDR becomes a fully developed reserve asset. In an early period, countries could exchange the reserve assets they have for SDRs issued for that purpose by the substitution account. The June 2009 IMF decision to issue SDR-denominated bonds to some emerging economies could be considered a step in that direction. In a subsequent period, each county that has a need to intervene in the foreign exchange market would be able to freely transfer some of its SDR claims for the currency of intervention in the hands of the substitution account, or by selling its normal SDR allocations to the country issuing the currency that it needs to access. In a final phase, the substitution account would be consolidated with the general accounts of the IMF and any distinction between the SDRs created through substitution and those created by periodic allocations would disappear. A substitution account could still be kept to help the IMF regulate changes in the demand by central banks for other reserve assets.

A major issue is how the potential losses of a substitution account would be distributed among IMF members, a basic reason why initiatives in that direction have not been approved in the past. It is probably inevitable that the potential costs should be shared between the reserve-issuers (the United States and the eurozone countries) and the reserve-holders (the majority being developing countries). The primary reason why the latter should share in the costs is that they benefit from the stability in the value of the reserves that the account would offer. That said, it would be essential to negotiate how to distribute the potential costs of this mechanism. There are conflicting estimates of what would have been the potential costs had the substitution account been adopted in the past, with Kenen (2009, 2010b) providing a positive, and McCauley and Schenk (2014) a negative view.

It could be added that reforms could either limit SDRs to their role as a reserve asset and means of payment among central banks (as it is now, and proposed above for a mixed system) or allow its broader use, as proposed in the past by several authors (Cooper 2010; Eichengreen 2011; Kenen 1983; Padoa-Schioppa 2011; and Polak 2005: part II). However, aside from this imposing additional demands on the reform of the system, the private use of SDRs could not only generate problems of its own—particularly speculative changes in the demand for this global reserve asset. It could also face strong opposition to a reform of the system by the United States. For this reason, it may be better to let national or regional currencies continue to play the major role in private transactions. This would imply that, although the role of the dollar as the major reserve asset would be partly eroded, it would still keep its role as the major international means of payment, also creating demands for associated services of the US financial system (Cooper 1987: ch. 7). As long as central banks agree to accept SDRs from one another in exchange for convertible currencies, SDRs can perform the function of store of value (reserve asset) as well as medium of exchange in inter-central bank transactions.

Finally, the reform of the system should include regional monetary arrangements, an issue to which I will return in Chapter 7 of this volume. Indeed, as I have argued in the past (Ocampo 2002), the IMF of the future should be conceived as the apex of a network of regional reserve funds—that is, a system closer in design to the European Central Bank or the Federal Reserve System rather than the unique global institution it currently is.

3

Global Monetary Cooperation and the Exchange Rate System

3.1 Introduction

The recent North Atlantic financial crisis placed world macroeconomic and financial stability at the centre of the global agenda. The first objective of cooperation in this area may be understood as guaranteeing an adequate supply of liquidity at the international level and the global coherence of macroeconomic policies, particularly those of major countries. A second objective calls for a coherent set of regulations that helps prevent financial crises as well as instruments to manage crises when they occur.

The need to strengthen financial regulation and supervision has been a clear priority in recent years. Under the coordination of the Financial Stability Board (FSB), re-regulation of finance has been going on at an unprecedented scale in the industrial world, although it is plagued by delays in implementation, insufficient coordination, and political economy pressures to weaken the reform efforts. The emerging economies have undergone similar processes since the 1980s after their own financial crises, which was no doubt one of the reasons why they were able to avoid domestic financial turmoil during the North Atlantic crisis, with the exception of some emerging economies of Central and Eastern Europe that had not been involved in similar efforts in the past. Two remarkable absences from the FSB agenda have been the links between regulations on domestic finance and those of cross-border capital flows, and the lack of initiatives to introduce better international debt workout mechanisms. These issues have been dealt with in the framework of the International Monetary Fund (IMF), and thus as part of the discussions about global monetary reform. The IMF has also been actively involved in designing better credit lines, including contingency facilities. These issues are discussed in chapters 4 and 5 in this volume.

The global architecture for *macroeconomic* stability has not received similar attention. Such architecture includes the global reserve system—the way international liquidity is provided, the subject of Chapter 2—and the management of the macroeconomic linkages among different economies and potential policy spillovers in a system in which each country runs its own macroeconomic policies—regionally in the case of monetary policies in currency unions, notably the eurozone. The management of these linkages, the centre of attention in this chapter, may be understood as involving at least three separate issues: (i) the management of global payments imbalances, (ii) the consistency of the different national or regional macroeconomic policies, and (iii) the exchange rate system.

The problems generated by global imbalances have been a major source of concern at different times, leading to discussions on the need for proper adjustment mechanisms, with exchange rates being the major focus of attention, but also monetary and fiscal policies. Global imbalances were at the centre of attention in the early days of the 'dollar shortage' and during the 1960s, when there was a growing sense that the international monetary system lacked adequate adjustment mechanisms. They were next the focus of the global agenda during the two oil shocks of the 1970s and the need to facilitate adjustment of the oil-importing countries and to 'recycle' the oil surpluses with that objective in mind. The imbalances came back in the 1980s in an entirely different form: a rapid increase of the current account deficit in the United States in the first half of that decade, which was matched by the rising surpluses in other developed countries, notably Japan and Germany. They were again on the agenda prior to the North Atlantic crisis, primarily in the form of a large deficit in the United States, matched by old and new sources of surpluses, particularly those of the oil-exporting economies and Japan in the first case, and China in the latter.

The exchange rate issues were central in the design of the Bretton Woods system and during the early years of the IMF. They became a major focus of the global agenda with the growing balance of payments pressures faced by major economies in the late 1960s and early 1970s, which led to the decision of the United States to abandon dollar–gold convertibility in August 1971. This was followed by the failure to return to a system of fixed parities, the consequent decision to let the exchange rates of major economies float in March 1973, and the equally unsuccessful attempt to negotiate a new international monetary system in 1972–4 through the IMF's Committee of Twenty. Exchange rate issues have repeatedly been back on the agenda in the form of the pressure on surplus economies to appreciate their currencies, and the volatility and misalignment that the floating of major exchange rates generates.

The links between global imbalances and exchange rate misalignments have been the subject of international negotiations among major economies, generally outside the IMF but sometimes using and innovating on Fund mechanisms of dialogue and surveillance. Many (or, perhaps, most) of them have failed. Pressures aimed at encouraging surplus economies to appreciate their currencies have been a recurrent issue since the 1960s, when they focused on Germany. As indicated in the previous paragraph, the exchange rate system was the central issue in the early 1970s and the instability of the exchange rate of major economies continued to be a source of concern through the rest of the decade, enhanced by the additional problems generated by the 1973 and 1979 oil shocks. The Plaza and Louvre accords of 1985 and 1987 centred on the major adjustments needed in the exchange rates of major economies with strong deficit or surplus positions: the United States, and Japan and Germany, respectively.

In turn, rising global imbalances led to the IMF initiative to launch a multilateral consultation in 2006, which did not deliver any significant results. After the outbreak of the North Atlantic financial crisis, several common actions were undertaken, in an informal way by major central banks, and in a more formal way through the Group of Twenty (G20), with the coordinated expansionary policies launched in the early part of the crisis perhaps being the major historical success in terms of macroeconomic cooperation. During this crisis the G20 also launched its own peer review framework, the Mutual Assessment Process (MAP), and the IMF enhanced its own macroeconomic surveillance, but the success of these mechanisms has been limited.

This chapter reviews these issues. It is divided into four sections, the first of which is this introduction. The second looks at the evolution of global imbalances. The third analyses mechanisms that have been put in place to manage macroeconomic linkages among major economies. The fourth looks at the exchange rate system—or, more properly, 'non-system'. The issues associated with the global reserve system and cross-border capital flows are analysed in chapters 2 and 4 of this volume.

3.2 The Changing Nature of Global Imbalances

Macroeconomic policy is perhaps the best example of the tension between the strength of globalization and the persistence of economic policies that continue to be mainly national—regional in the case of monetary policy in currency unions. The net result is that the world lacks a mechanism that guarantees the consistency of the macroeconomic policies adopted by the major economies, including those which issue reserve assets. The major manifestations of this problem are global payments imbalances.

The major issue raised by imbalances is the asymmetric adjustment of deficit and surplus economies which, as we saw in chapters 1 and 2, was raised by Keynes (1942–3) in his writing before the Bretton Woods negotiations. Owing to the international liabilities that deficit countries accumulate, they are eventually forced to adjust, either as the result of the adverse domestic effects that deficits and debts generate, or the interruption or worsening conditions of external financing—with destabilizing speculation contributing to accelerate adjustment on many occasions. Pressures to adjust are also faced by surplus economies, particularly in the form of expansionary effects of current account surpluses, capital inflows, and the monetary effects of foreign exchange reserve accumulation; however, they are more responsive to domestic policies that can weaken their effects. This asymmetry implies, therefore, the risk that these imbalances will generate global slowdowns or recessions.

The situation is, of course, quite different when it involves reserve-issuing countries, and notably the United States. In this case, the major effect of surpluses or deficits—in either the current or the capital accounts, or both of them—is on the supply of global liquidity and the accumulation of net asset positions of other countries vis-à-vis the United States. In the early post-war period, the major issue was the dollar shortage and, given the trade surplus that the United States also enjoyed at the time, the need to create global liquidity through capital outflows and official transfers (notably, as we will see, through the Marshall Plan). With the change from a surplus to a deficit position, the balance of payments in the United States has generated a different problem since the 1960s: excess dollar liquidity, which created pressures on US gold reserves in the 1960s and, after the abandonment of the dollar–gold parity in 1971, cyclical swings in the exchange rate of the US dollar.

Beyond these global risks, imbalances generate externalities on trading partners. Current account deficits may be welcome, particularly when they reflect higher investment rates associated with rapid economic growth that are financed by foreign savings. However, on other occasions, countries may be concerned that deficits are the result of negative spillovers generated by exchange rate undervaluation or other policies of trading partners. In turn, authorities may respond to deficits by increasing domestic protection or increasing export incentives, which other countries will regard as negative spillovers.

The need for proper and hopefully symmetrical adjustment mechanisms has been at the centre of global debates since the negotiations leading to the Bretton Woods agreement. They include, in particular, the role that the exchange rate plays in correcting balance-of-payments disequilibria. This principle was enshrined in the IMF Articles of Agreement in the form of the possibility of modifying exchange rate parity when a country faced 'fundamental disequilibrium' in its balance of payments. It was also agreed that all

countries would be subject to IMF surveillance on their macroeconomic policies and associated peer pressure if there were signs of such policies leading to imbalances and generating negative spillovers on other countries.

However, the reluctance of surplus and even deficit countries to adjust their exchange rate parities led to a call for a more flexible system, which became a subject of increasing debate in the 1960s. With the move to a more flexible exchange rate system in 1973, the debate moved to the volatility and, even more, to the exchange rate misalignments that foreign exchange markets could generate, and to the negative effects that exchange rate movements could have on trade, by generating unfair competition. In turn, it has been argued that IMF surveillance has always been considered not only a weak but also an imbalanced mechanism, as IMF staff may be less candid in their evaluation of major countries, and in any case Article IV consultations are likely to exercise only weak influence upon them. In contrast, conditionality does have a strong influence on countries using IMF resources, but it is obviously only exercised vis-à-vis deficit countries, and it is, therefore, one of the asymmetric features of adjustment processes.

Global imbalances have been a persistent feature of the international economic system, but their nature has significantly changed through time, following a dynamic in which the correction of previous imbalances is followed by a new set of disequilibria, sometimes of a similar nature but also with novel features.

The early years of the IMF were dominated by the dollar shortage, the essential features of which were the trade surpluses of the United States and the oil-exporting countries and the trade deficits of most European economies, with significant differences among them. The magnitude of these imbalances was small relative to world gross domestic product (GDP) or world trade compared to what they would become later on (see Figure 3.1). However, this was largely because the deficits were 'repressed' through a mix of protection, controls on current payments, and, in some countries, multiple exchange rates. The depreciation of major European currencies vis-à-vis the US dollar in 1949 (see Section 3.4) may have also contributed to limit the imbalances.

The 1960s saw a transition of the United States from a trade surplus to a deficit, as a prelude to a situation that would become a persistent feature of the major reserve-issuing country in later decades. This was accompanied by the rise of the first strong surplus position of a major European economy, that of Germany, which was also accompanied by major differences in the balances of different European countries, thus generating pressure for Germany to appreciate its currency vis-à-vis both the United States and other European partners. Japan also moved into a surplus position in the mid-1960s but this would only become a subject of attention later on. The growing imbalances

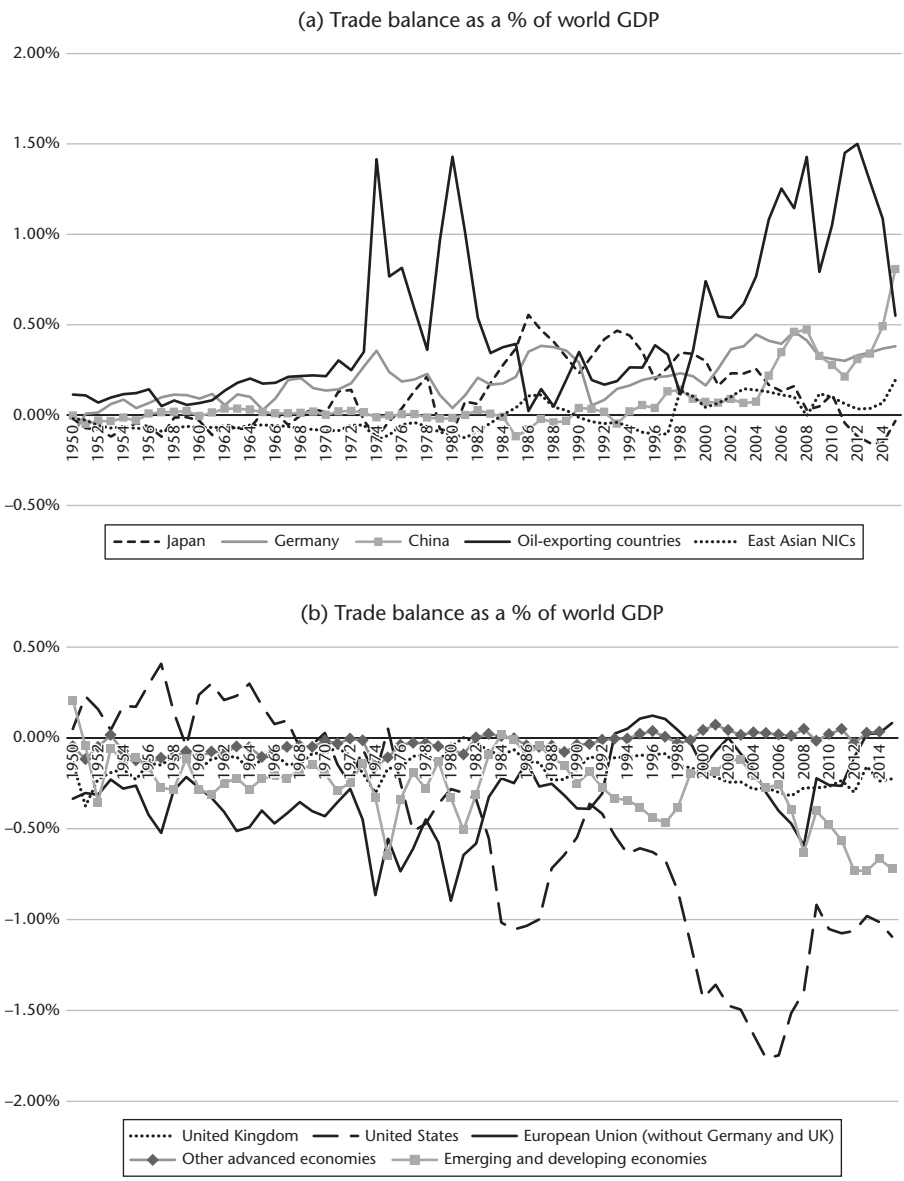


Figure 3.1 Trade balances as percentage of world GDP (a, b) and world exports of goods (c, d)

Notes: Oil exporting countries: Algeria, Angola, Iran, Iraq, Kuwait, Libya, Nigeria, Norway, Qatar, Russia, Saudi Arabia, United Arab Emirates, and Venezuela; East Asian NICs (Newly Industrializing Economies): Hong Kong, Republic of Korea, Singapore, and Taiwan POC

Source: Author estimates based on UNCTAD trade series.

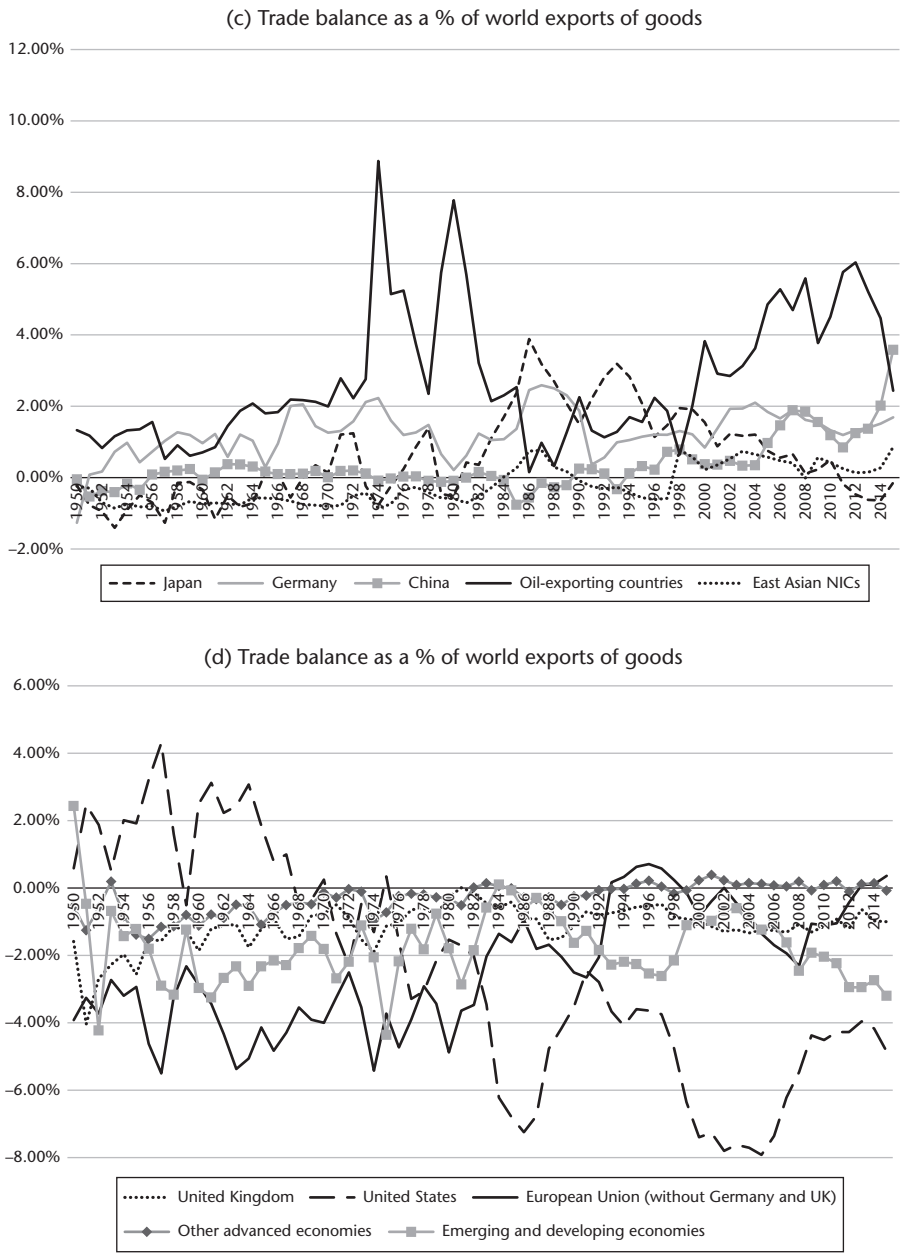


Figure 3.1 Continued

that characterized this period led to a series of debates on how to guarantee more balanced international payments (e.g. see Fellner, Machlup, and Triffin 1966; Roosa 1965) and how to replace the dollar-based global reserve systems (Triffin 1961, 1968).

The imbalances exploded in the 1970s to levels that were unknown before, in terms of world GDP and world trade (Figure 3.1). The source of imbalances at this point in time was the oil-exporting countries, and therefore the major issue was how to 'recycle' petrodollars. The major feature of the surplus of these economies was the strong peaks reached after the 1973 and 1979 shocks, but also their rapid erosion as these economies massively increased their imports; so, in a sense, these surpluses were self-correcting. High oil prices affected many developed countries, but the imbalances that now took centre stage in the debate were those of non-oil developing countries. The unregulated and oligopolistic character of the lending by banks that intermediated the petrodollars, and the inadequate risk assessment by lenders and borrowing countries, would lead to the first major contemporary crisis in the emerging and developing world, the centre of which was Latin America (Bértola and Ocampo 2012: ch. 5; Devlin 1989).

The 1980s were characterized again by global imbalances among major developed countries, but now of a much larger magnitude than those of the 1960s and early 1970s and without the self-correcting feature that characterized the imbalances created by the oil shocks of the 1970s. The major source was now the massive deficit of the United States induced by the high interest rate policy adopted by the Federal Reserve in 1979–80 to break inflation, mixed with the expansionary fiscal policies of the Ronald Reagan administration that took office in early 1981. The counterpart was the surplus of other developed countries, which now had a new major actor in Japan. Germany also contributed to the imbalances with a strong surplus, as well as the correction of the deficits that other European economies and advanced countries had run during the second oil shock. Figure 3.2, which complements Figure 3.1 with comparable data on current account imbalances available only since 1980, indicates that the peak imbalances were reached in 1986, after which a rapid adjustment followed, to a large extent induced by the Plaza and Louvre accords of 1985 and 1987, which forced a massive adjustment of the Japanese yen (see Section 3.4). Despite this, the reduction of the Japanese surplus was mild relative to the correction of the US deficit, and Japan continued to run large current account surpluses during the following decades.

A new wave of massive current account imbalances took off in the late 1990s but had two entirely different phases: the first was associated with the outbreak of the crisis in several emerging economies that started in 1997 in East Asia and then spread to Russia and Latin America; the second was the world economic boom of 2003–7. The main effect of both was again a rising

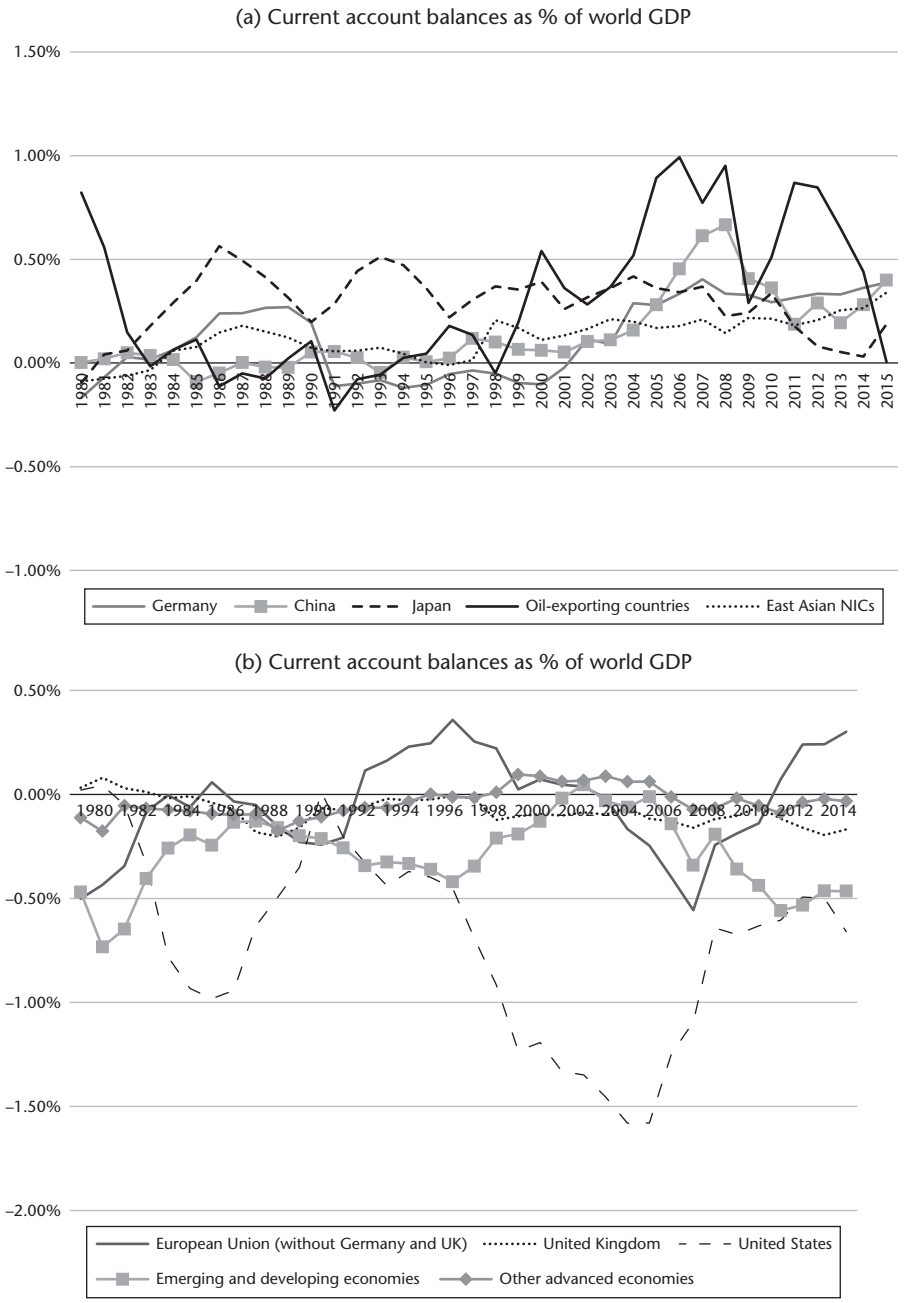


Figure 3.2 Current account balances as percentage of world GDP (a, b) and exports of goods and services (c, d)

Note: Oil exporting countries: Algeria, Angola, Iran, Iraq, Kuwait, Libya, Nigeria, Norway, Qatar, Russia, Saudi Arabia, United Arab Emirates, and Venezuela; East Asian NICs (Newly Industrializing Economies): Hong Kong, Republic of Korea, Singapore, and Taiwan POC

Source: Author estimates based on statistics from the IMF *International Financial Statistics* and updates in the *World Economic Outlook*.

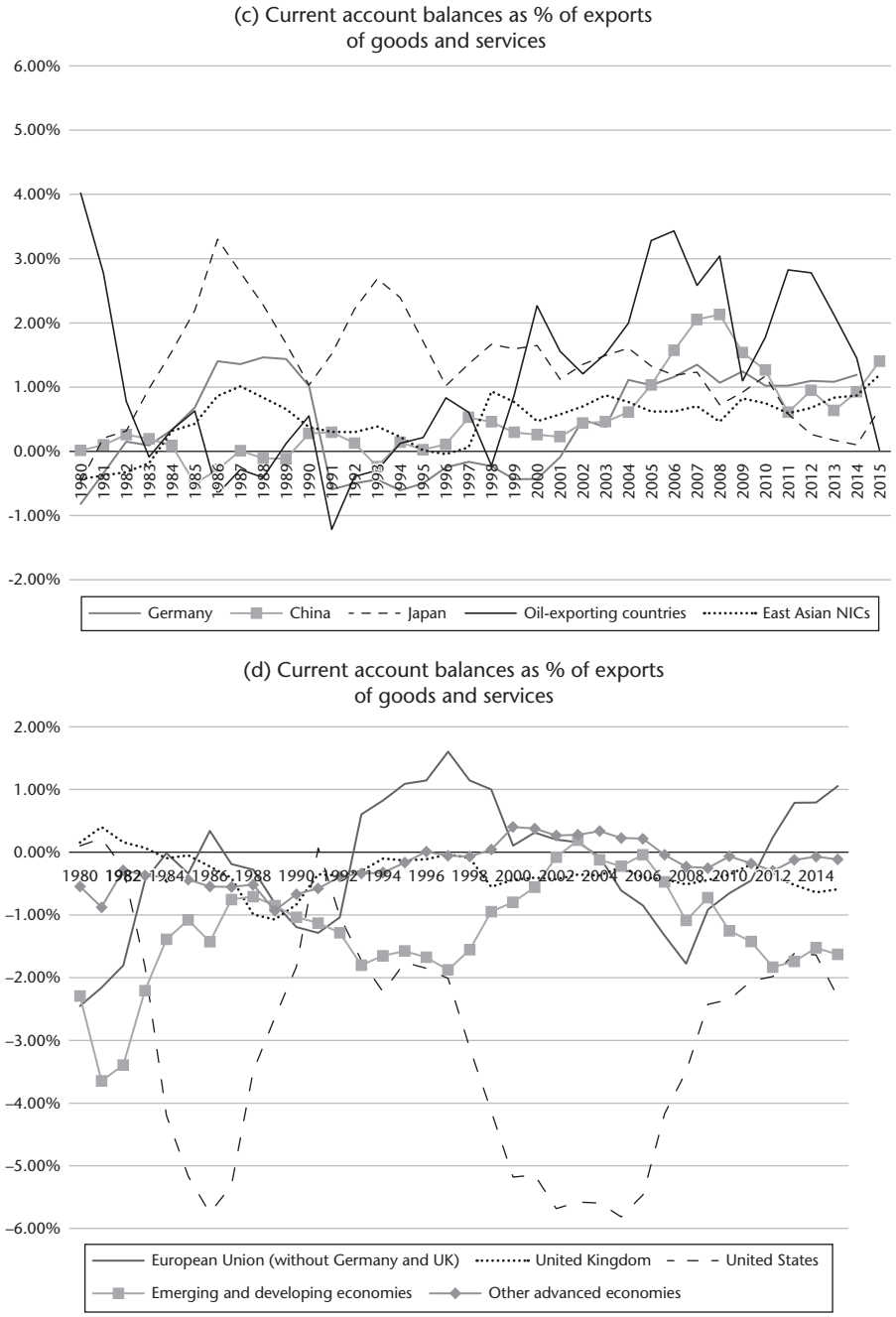


Figure 3.2 Continued

US deficit, which experienced a massive increase after the East Asian crisis and only started to moderate at the end of the succeeding global boom. In terms of world GDP, the US current account deficit reached a historical peak in 2005–6 (1.6 per cent), although relative to global trade the imbalances were similar to those of the mid-1980s but lasted at high levels for a longer period (Figure 3.2).

In turn, as a result of the crisis several emerging and developing countries experienced since 1997 and the adjustment policies they adopted, their trade and current account balances improved substantially in the last years of the twentieth century. The surpluses of the East Asian newly industrializing economies (NICs) turned structural from 1998. In contrast, the balances of other emerging and developing countries started to deteriorate again with the recovery of these economies in the early 2000s.

The European Union also experienced major changes: from a current account surplus position in 2002–4 to a deficit at the end of the boom. However, this was a reflection of sharply diverging trends among different countries: a massive increase in the German surplus, as well as those of a few other economies (Sweden, Netherlands, and Austria), together with rising deficits in the 'periphery', both in the Western ones (notably Spain, Greece, Portugal, and Ireland, in that order) and in the Central and Eastern ones (Poland, Bulgaria, Hungary, and the Baltic countries), together with those of France, Italy, and the United Kingdom.

In any case, after 2003 global imbalances came to be dominated by the massive and rising surpluses in China and the oil-exporting countries. During these years China came to play the role that Germany and Japan had performed in previous decades. In turn, the surpluses of oil-exporting economies turned out to be more persistent than they had been after the 1973 and 1979 shocks. The resilient imbalances of Japan and the European economies mentioned in the previous paragraph completed the sources of payment surpluses.

Broadly, the dominant characteristic of global imbalances in the run-up to the North Atlantic crisis was, therefore, the massive US deficits that absorbed the surpluses of China, Japan, the East Asian NICs, Germany, and the oil-exporting countries. A major effect was escalating US net liabilities with the rest of the world (see Chapter 1, and particularly Figure 1.7), a major counterpart of which were the booming foreign exchange reserves of emerging and developing countries, in particular of China and the oil-exporting countries. Although many saw the importance of these trends and their implications for global financial stability, few saw a significant problem for the global monetary system as such;[1] some even saw it turning into a stable Second

[1] My contributions and those of my colleagues at the United Nations were some of the few that tied these problems with the instability and inequities of the global reserve system. See Ocampo, Kregel, and Griffith-Jones (2007: ch. 4), which was based on a previous UN report (United Nations 2005b). Another important exception was Stiglitz (2006: ch. 9).

Bretton Woods (Dooley et al. 2003). The IMF did recognize the risks associated with these imbalances and, in 2006, created a framework to monitor and eventually correct them (see Section 3.3).

The North Atlantic financial crisis led to major changes in these trends. The most important was, no doubt, the significant reduction of major current account imbalances, and particularly the US deficit and the Chinese and Japanese surpluses. In contrast, the European Union became a major source of imbalances. As a whole (excluding the UK), it went from running a deficit to a surplus, but this trend reflected the sharp recessionary adjustment of its peripheries (both in Western and Eastern Europe, with only Poland experiencing an expansion) while maintaining the large German and Dutch surpluses, and a mixed situation in the case of other countries. In the eurozone, which was at the centre of this process, this implied that monetary unification effectively led to exchange overvaluation in some countries (the periphery) and undervaluation in others (notably in Germany), a phenomenon that has shown to be costly to correct, as 'internal devaluation' of the periphery has not been compensated by rapid enough 'internal revaluation' of the centre. In a sense, this is a hard form of asymmetric adjustment, in fact reminiscent of the 'rules of the game' of the gold standard.

In turn, the oil-exporting countries first experienced a short-term reduction of their imbalances but then, in 2011–12, became again the major source of surpluses. The net result of the shrinking US deficits and the rising surpluses of the European Union and the oil-exporting economies was the strong pressure on non-oil emerging economies to weaken their current accounts—a pressure that was transmitted mainly through booming capital inflows. As indicated, the Chinese surplus fell substantially (by about two-thirds relative to world GDP between 2008 and 2013), while non-East Asian emerging and developing economies went from running a surplus to a significant deficit by 2012.

Interestingly, when global current account imbalances were reduced and became less concentrated after the North Atlantic crisis, this was accompanied by a persistent deterioration in *stock* imbalances as measured by the net investment position of different countries (IMF 2014c: ch. 4). The most important element of this trend was the continuous deterioration in the net investment position of the US, indeed at a fairly rapid rate—a reflection, to a large extent, of its status as a 'safe haven' (see Chapter 1).

These trends changed significantly in 2014–15 as a result of major changes in global economic conditions: the very uneven recovery of developed countries, the slowdown of China, and the crisis in many parts of the developing world, largely associated with the reversal of capital flows and, in economies dependent on natural resources, with the collapse of commodity prices. The surplus of oil-exporting economies disappeared in 2015 and the deficit

of non-oil emerging and developing countries declined. At the same time, the US deficit started to increase again, with Germany and the rest of the European Union (the UK again excepted) continuing to generate large surpluses. The Japanese and Chinese surpluses also increased, to some extent as a result of the falling cost of commodity (particularly oil) imports.

As these trends indicate, there is no single cause of global imbalances. Furthermore, they reflect both structural as well as cyclical phenomena. The strong pressure for the United States to run persistent deficits is, of course, the main structural factor. Other structural factors are the surpluses of Germany (and a few other European economies) and East Asia, which have reached high levels at different times but have remained fairly resilient since then: Germany since the 1960s, Japan since the mid-1960s but particularly in the 1980s, the East Asian NICs during the crisis of the late 1990s, and China since the 2003–7 boom. As it is well known, these surpluses can be interpreted alternatively as the result of high levels of industrial competitiveness or of high savings rates. In the case of East Asian economies, several authors have understood them to be the result of an explicit development model, designed originally by Japan but later spread to other East Asian economies, which mixes an undervalued currency, lagging wages relative to labour productivity, and financial repression, to encourage high levels of savings and investment (e.g. see Pettis 2013). The surplus of oil-exporting countries is another structural feature, but it also experiences sharp cyclical variations, which were sharper in the 1970s and early 1980s than they have been in the twenty-first century. Emerging and developing countries also experienced strong cyclical variations associated with pro-cyclical swings in capital flows combined with variations of commodity prices in natural resource-dependent economies.

3.3 Macroeconomic Policy Cooperation

To manage these imbalances, the world economy counts on insufficiently developed mechanisms of macroeconomic policy dialogue and cooperation. The IMF is the major instrument of cooperation of a multilateral character. Article I.i of the IMF Articles of Agreement defines its first purpose: 'to promote international monetary cooperation through a permanent institution which provides the machinery for consultation and collaboration on international monetary problems'. In practice, however, most mechanisms of macroeconomic cooperation have operated outside the IMF through groupings of major economies, and thus predominantly as mechanisms of what I have called 'elite multilateralism' (Ocampo 2011a) rather than through the formal multilateral organization that the world has created for that purpose. Their

effectiveness has been quite diverse, and many of these negotiations have been concerned with the role of exchange rates in the system, a topic that is subjected to additional attention in Section 3.4.

The major constraint in this area is that political incentives are heavily weighted in all countries to focus on domestic problems, with the national publics poorly disposed to make serious sacrifices to shore up international cooperation. Therefore, international macroeconomic cooperation is only likely to succeed when there is clear view of the *national* advantages of international cooperation (Frieden et al. 2012). This is mixed with the trade-offs that countries face and national authorities may not recognize (or recognize in different and even inconsistent ways), the belief by major players that the international spillovers of their policies are too small to offset the costs of macroeconomic policy cooperation, and the fact that gains from such cooperation are largely appropriated by small countries with limited voice in the associated decision-making (Ostry and Ghosh 2013).

The major mechanism of cooperation in the era of the dollar shortage was the Marshall Plan, which provided, in 1948–51, more than four times the drawing rights of the European countries in the IMF and more than six times the maximum obligations of the United States under the IMF Articles of Agreement (Eichengreen 2008: 96). This included the support for the European Payments Union, which served as the main mechanism to reconstruct intra-European payments and, therefore, trade (Triffin 1957), and which was essential for the return of most Western European countries to current account convertibility in December 1958. In turn, with the imbalances of the 1960s, including the implications of the end of the US surplus position but also the realignment of European currencies, the major forum for macroeconomic policy dialogue became the Economic Policy Committee (Working Party 3) of the Organization for Economic Cooperation and Development (OECD), which was made up of ten developed countries (eleven later on) and thus became known as the Group of Ten (G10) (Solomon 1982: ch. 3). The OECD had been created in 1961 out of the former Organization for European Economic Co-operation (OEEC), which had been formed to administer the Marshall Plan. Although the G10 was the major mechanism of dialogue, the regular discussions among authorities of major developed countries in the IMF and the Bank for International Settlements (BIS) also contributed to the, in any case, relatively weak cooperation in place. In the latter case, cooperation included the network of swap arrangements developed in the 1960s that eventually linked a dozen central banks of developed countries and the BIS (Borio and Toniolo 2006; Toniolo 2005: 387–8).[2]

[2] This mechanism had precedents in borrowing among major central banks during crises at the times of the gold standard (Eichengreen 2008: 33–4).

Two unique processes that did take place in the IMF were the discussion leading to the creation of Special Drawing Rights in the 1960s, and those on reforming the international monetary system in 1972–4 through the Committee of Twenty. The first succeeded but had limited long-term implications, whereas the second failed. The IMF was also a major actor in financing to manage the effects of oil shocks, particularly in developing countries, and created low-conditionality facilities for this purpose, using in part financing provided by the oil-exporting countries. (See chapters 2 and 5 on these issues.)

The major macroeconomic policy negotiations of the early 1970s were those aimed at restoring the system of fixed parities after the United States unilaterally eliminated the dollar–gold parity in August 1971. Negotiations again took place outside the IMF, leading in particular to the Smithsonian Agreement of November 1971, the failure of which would result in generalized floating among major currencies in March 1973. Although the Committee of Twenty maintained the expectation of a return to a system of fixed parities, the end of its work in 1974 led to the final acceptance of flexible exchange rates as a de facto more than a desired reality, and to the elimination of the role of gold in the international monetary system. These decisions were ratified in an amendment to the IMF Articles of Agreement that was approved in 1976 and came into effect in 1978 (Solomon 1982: ch. 12–13).

The major negotiations of the 1980s among developed countries included the new ad hoc agreements among the Group of Five (G5) (France, West Germany, Japan, the United States, and the United Kingdom) to depreciate the US dollar in relation to the Japanese yen and the West German mark by intervening in currency markets. This agreement was ratified in the Plaza Accord of September 1985, and was followed by the Louvre Accord of February 1987 among the Group of Seven (G7) (the G5 countries plus Canada and Italy, although the latter declined to support the final agreement) to stabilize the exchange rates after the major realignment that had taken place in previous years.

The G7 continued to be the major forum for dialogue after these accords.[3] After the crisis of several emerging economies that started in East Asia in 1997, the Group of Twenty (G20) was created in 1999 as a forum for the finance ministers and central bank governors of a broader group of countries, in particular to give a voice to major emerging economies. It also included Australia, Russia, and the European Union. This was complemented by the creation of the Financial Stability Forum (FSF), as an institution of the G7,

[3] The Group of Seven had a history that went back into the 1970s. As a forum of heads of state, it deals largely with political issues. I refer here to the G7 decisions at the level of ministers of finance, including during the IMF meetings.

giving it the task of preventing another major financial crisis—a task in which it, of course, miserably failed.

The IMF temporarily regained the initiative in 2006 with the launch of a multilateral consultation involving five major actors (China, the euro area, Japan, Saudi Arabia, and the United States). The commitments of the parties were presented to the International Monetary and Financial Committee (IMFC) and the IMF Board in April 2007 (IMF 2007a), but it led to no significant results, as it lacked ownership by the leading countries and, in any case, was superseded by later mechanisms of cooperation.

The final ascent of the G20 was sparked by the decision of the United States to convene a forum at heads-of-state level in November 2008 and the later decision of the G20 in Pittsburgh in September 2009 to designate itself 'the premier forum for our international economic cooperation'. In turn, the FSF was transformed into the Financial Stability Board (FSB), with the major task of strengthening financial regulation and supervision; its membership was extended to all G20 and a few other countries with an important role in the international financial system. It has been complemented by informal cooperation among leading central banks, which has been critical since the outbreak of the sub-prime crisis in the United States in mid-2007, particularly through the very active use of swap credit lines such as those extended by the Federal Reserve to other developed countries' central banks and, temporarily, to four emerging economies (see Chapter 2). As indicated, central bank cooperation through swap arrangements went back to the 1960s, but the scale of their use to provide dollar liquidity reached unprecedented levels after the Lehman Brothers collapse in September 2008—indeed several times larger than IMF resources, although of a very short-term character. There was also a joint decision by major central banks to reduce interest rates in October 2008, but otherwise there has been no coordination of either interest rates or, more recently, of unconventional monetary policy (Mohan and Kapur 2014).[4]

G20 macroeconomic cooperation was very successful in the initial phase of the crisis, when it assumed the form of a 'Keynesian consensus', leading to fairly coordinated expansionary monetary and, to a lesser extent, fiscal policies. Its major successes were averting a new Great Depression as well as a protectionist wave such as that which had deepened the crisis of the 1930s. However, in relation to the role of fiscal policies, the consensus broke down at the June 2010 G20 Toronto meeting, when it became clear that there was a deep division between countries that continued to defend expansionary policies to face the weakness of aggregate demand and those that came to place priority on public sector debt sustainability. This implicit consensus on

[4] In any case, it can be said that there has been emulation or common learning in both areas since the North Atlantic crisis.

expansionary monetary policy among developed countries' central banks was more persistent, except for the temporary lapse of the European Central Bank, which partly reversed its monetary stimulus in 2011, before shifting again to a clear expansionary policy at the end of that year. Given the asymmetries in the recovery of the developed countries, the United States also gradually moved away from expansionary policies, with the announcement of tapering of quantitative easing in May 2013, its systematic implementation in 2014, and the first increase in the rate of federal funds since the North Atlantic crisis in December 2015, followed by a new rise in December 2016 and several expected in 2017.

Continued monetary stimulus in advanced economies generated a major disequilibrium vis-à-vis emerging economies that recovered faster and more strongly after the North Atlantic financial crisis, led by China, and which implied that emerging economies required less accommodative monetary policies. This induced a strong and persistent incentive to shift capital towards the emerging world, generating strong monetary and exchange pressures—a phenomenon that came to be known as the 'currency wars', a term coined by the then Brazilian Finance Minister Guido Mantega. With the change in monetary conditions in the United States from 2013, the strong slowdown and later recession in many emerging economies in 2014–15, and the uncertainties surrounding the Chinese stock market in 2015–16, capital flows went into reverse, confirming once again the great volatility of flows towards emerging and developing countries (IMF 2016: ch. 2). However, in contrast to the explicit or implicit cooperation among the central banks of developed countries to avoid the deepening of the crisis and to promote a recovery, the spillovers that these policies have had on emerging economies have been generally ignored and, therefore, have not been a subject of cooperation (Mohan and Kapur 2014).

The Mutual Assessment Process (MAP), launched in 2009 in Pittsburgh to implement the 'framework for strong, sustainable, and balanced growth', is the major instrument of macroeconomic policy cooperation among members of the G20. In a two-step process that took place in Paris and Washington in February and April 2011, the G20 finance ministers and central bank governors agreed what 'the persistently large imbalances that require policy action' are: '(i) public debt and fiscal deficits; and private savings and private debt; (ii) and the external imbalances composed of the trade balance and net investment income flows and transfers, taking due consideration of exchange rate, fiscal, monetary, and other policies' (G20 2011a). This was followed by the determination of the indicative guidelines against which each of the indicators would be assessed, which are explicitly 'not targets' but 'reference values' that determine which countries would be subject to an in-depth review. For this purpose, the ministers and governors determined that complementary use would consist of

economic models with statistical analysis based on each country's historical trends, a comparison with other countries at a similar level of development, and all G20 members (G20 2011b). It was agreed that economies that show large imbalances in at least two exercises and represent more than 5 per cent of the G20's GDP at either market value or purchasing power parity prices should be subject to particular scrutiny in the associated imbalance.

In practice, the IMF provides the main technical support. In particular, the IMF was asked 'to assess the coherence, consistency, and mutual compatibility of G20 members' policy frameworks' using three different activities: (i) assessing the submissions of individual countries, (ii) aggregating them to assess their mutual consistency, and (iii) making policy recommendations (IMF 2011e). This is reflected in regular IMF analyses that are presented simultaneously to the G20 and to the IMF Board. This activity, which is defined as 'technical assistance to G20 members', generates an obvious tension between the truly multilateral character of the IMF and the specific ownership of the MAP by the G20. This tension is enhanced by the fact that G20 decisions are policy proposals rather than enforceable strategies, and must therefore be brought to treaty-based organizations such as the IMF to be adopted by them for the global community (Derviş and Drysdale 2014). Throughout this process, non-G20 members of the IMF find themselves in an awkward position. Therefore, a better institutional model was the consultation on multilateral imbalances that took place in the IMF in 2006–7, among a limited number of major economies but accountable to the full IMF membership. As already indicated, however, this process led to no significant results.

G20 activities have been combined with a proper IMF activity, which has been the strengthening of surveillance, both multilateral and bilateral. Indeed, it can be said that surveillance and the significant modernization of credit lines have been the two major activities undertaken by the IMF since the North Atlantic financial crisis, with the former perhaps having the most important global implications. This process aimed at overcoming the massive problems that were identified by the IMF's Independent Evaluation Office (IMF-IEO 2011) in its analysis of surveillance in the run-up to the crisis, particularly the lack a proper identification of the financial vulnerabilities of the US and the UK, and of a proper analysis of the links between macroeconomic and financial vulnerabilities. According to the IMF-IEO, this reflected major cultural problems in the way the IMF operated, including 'groupthink' and lack of capacity to 'speak truth to power'. In more traditional IMF language, the latter was a reflection of the lack of 'even-handedness' in bilateral surveillance.

The triennial surveillance review of 2011 and prior actions taken have led to an unprecedented strengthening of IMF surveillance. At the multilateral character level, it includes the use of major IMF publications: the *World Economic*

Outlook (and associated regional outlooks), the *Global Financial Stability Report*, the new *Fiscal Monitor*, launched in 2009, and the *Consolidated Multilateral Surveillance Report*. They also include reports that link bilateral and multilateral surveillance, particularly the 'spillover reports' for the 'systemic 5' (US, UK, eurozone, Japan, and China), the first of which was issued in 2011 (IMF 2011g) with others following annually since then, and the pilot External Sector Reports assessing global imbalances, which were created as a result of the 2011 triennial surveillance review, the first of which was issued in 2012 (IMF 2012b). These reports aim at analysing beyond exchange rates to consider a detailed examination of current accounts, reserves, capital flows, and external balance sheets. We can add to this list reports to the G20 (e.g. see IMF 2015b) and the IMF-FSB Early Warning Exercises presented to the IMFC, the methodology of which was defined in 2010 (IMF 2010b). In turn, the major instrument of bilateral surveillance continues to be the Article IV consultations. Its major changes are the more in-depth consideration of financial issues and, theoretically, more candid assessments, particularly for major economies. As part of the modernization of IMF surveillance, in 2010 it was decided that twenty-five jurisdictions with systemically important financial sectors must be subject to the Financial Sector Assessment Programme. Parallel exercises are also undertaken by the IMF and the FSB to analyse global financial risks and by the FSB to coordinate regulatory reform.

It is quite clear that no elaborate system of surveillance and macroeconomic policy dialogue had been developed before the one put in place after the North Atlantic financial crisis. There has also been an improvement in the even-handedness with which the IMF treats its different members and, in fact, to a stronger surveillance of the economies with more systemic effects. The system can be criticized, in any case, for its complexity and the lack of a proper integration of the risks of the real economy, which are the subject of MAP, with those generated by financial globalization, which are under the purview of both the IMF and the FSB (Bradford and Lim 2014). It can also be criticized for the tension it generates between the 'club' character of the G20 (elite multilateralism) and the truly multilateral character of the IMF—mixed, in turn, with the still largely unfinished agenda of IMF reform on voice and participation of emerging and developing countries (see Chapter 6).

Furthermore, whether this process carries 'traction', to use a typical IMF term, and particularly the capacity to influence the policies of major economies is, of course, *the* main question. The basic issue is that the system that has been put in place continues to rely essentially on a mix of stronger surveillance and peer pressure. However, such forces continue to be weak, as reflected in the limited effect that this cooperation has had in avoiding a new

wave of global imbalances, as well as in guaranteeing a more symmetric adjustment of surplus and deficit eurozone countries and avoiding the creation of a large eurozone payments surplus. As indicated, limited attention has also been given to the spillovers generated by expansionary monetary policies in developed countries on emerging markets and mitigating the boom–bust cycle of external financing in emerging and developing countries generated since the North Atlantic financial crisis. The growing global risks and vulnerabilities generated in 2014–16 by the slowdown in China, renewed volatility in capital flows towards emerging and developing countries, the collapse of commodity prices, and rising geopolitical tensions, have been recognized by the G20 (see, for example, G20 2016). However, the response has been perceived to be generally weak and shows, once again, the conflicting views among G20 countries evident since 2010 on the use of fiscal policy to sustain aggregate demand as opposed to guaranteeing debt sustainability. Some even perceive that major countries are actually immersed in a war of competitive depreciations.

So, going forward, it is essential to move to more specific *targets* for specific macroeconomic indicators, not merely to 'reference values'. In this regard, it is important to use simple indicators that summarize a significant amount of information. Interestingly, this is what was suggested by the US on several different occasions: a 'reserve indicator system' in the 1970s, and current account target zones in the initial phase of the North Atlantic financial crisis (Derviş 2010). These indicators, which may be understood as measures of global payments flows and stock imbalances, should be complemented with those on global macroeconomic conditions, particularly measures of global output (employment) gaps and international inflationary or deflationary pressures. They could include the broader set of indicators chosen by the G20 for the MAP. In any case, complexity may not be a good starting point for an incipient process. This may actually be one of the deficiencies of MAP. For that reason, a small set of simple indicators may be better, giving in any case space for specific policy packages which would be adopted by countries to correct existing imbalances.

Another proposal, which can be seen as complementary, is that by Ostry and Ghosh (2013), according to which there would be explicit 'guideposts' to limit negative externalities, particularly to avoid exchange rate misalignments—through exchange rate but also other macroeconomic policies—and avoid exporting financial instability through the capital account.

Given the centrality of exchange rate policies in guaranteeing an orderly international monetary system, this is perhaps the most critical area that the international community should explore to achieve better forms of macroeconomic cooperation. This is the issue to which I now turn.

3.4 The Exchange Rate Non-System

Exchange rate stability was seen as an essential element of the Bretton Woods agreement. This objective was thus explicitly incorporated as one of the objectives of the IMF, and was seen as crucial to guarantee another purpose: 'to facilitate the expansion and balanced growth of international trade'. As this was part of the broader objective of 'promotion and maintenance of high levels of employment', it was agreed that exchange rates could be adjusted to guarantee simultaneous external and domestic balance. However, this was expected to be done only when economies faced 'fundamental disequilibria', in order to avoid the negative spillovers on other countries, in particular the competitive devaluations that were widely regarded to have badly damaged the world economy in the 1930s. It initially included the principle that large modifications of the exchange rate parities (over 10 per cent) would have to be subject to consultation with the IMF.

The system of fixed but adjustable pegs worked well for over a quarter century, with some de facto flexibilities (Figure 3.3). Major adjustments were required in 1949 during the early years of the dollar shortage, which generated a strong depreciation of several major European currencies in September, with the British pound facing the strongest depreciation, followed by the West German mark and, to a lesser extent, the Italian lira and French franc. The yen was also effectively depreciated in April 1949, although Japan was not yet

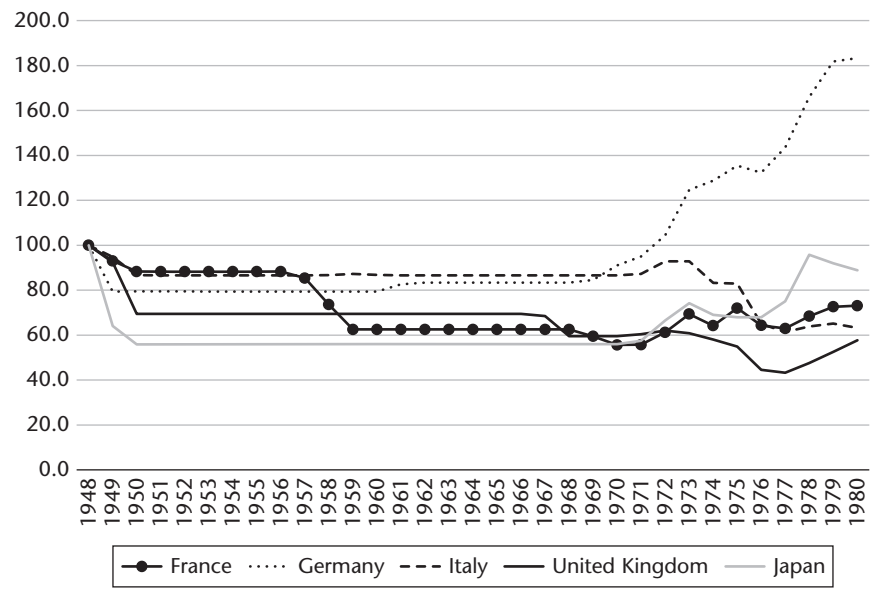


Figure 3.3 Nominal exchange rates, 1948–80 (dollars per local currency, 1948 = 100)
Source: Author's estimates based on IMF, International Financial Statistics.

an IMF member. Major currencies were largely stable after that, with only one large adjustment of the franc in 1958. However, there was an increasing pressure to adjust major exchange rates from the late 1960s, associated with both US balance of payments as well as intra-European imbalances. They generated pressures to further depreciate the pound and the franc, but also to appreciate the Deutschemark and the yen (although in the latter case it only became effective in 1971).

The system included several de facto flexibilities, which have been highlighted in a now classic paper by Reinhart and Rogoff (2004). These involved multiple exchange rates and active use of parallel floating exchange rate markets (considered as cases of managed floating by these authors); in any case, according to the Bretton Woods agreement, these multiple exchange rate regimes were expected to be eventually eliminated. This practice was used by several European countries before the restoration of convertibility in 1958. In turn, Canada also adopted an explicit system of managed floating in the 1950s. Aside from the active use of similar flexibilities, middle-income countries facing a mix of inflationary pressures and balance-of-payments difficulties found the use of crawling pegs and bands increasingly attractive, particularly after the mid-1950s. Low-income countries were more commonly under a fixed exchange rate than middle-income countries. For this reason, as estimates by these authors indicate (Figure 3.4), the predominance of fixed exchange rates during the heyday of the Bretton Woods currency arrangements was stronger in high- and low-income countries, with the former gradually moving in the 1950s and 1960s from using the aforementioned flexibilities to strict pegs. Needless to say, during the decolonization process that took place during these years, most countries left the currencies or currency unions with the imperial powers and created their own national monetary systems.

In the light of the growing global imbalances that characterized this period, discussions in the 1960s increasingly focused on whether the international monetary system had effective adjustment mechanisms and, particularly, whether it should move into a system of more flexible exchange rates. The very early defender of flexible rates was Friedman (1953). The debates of the late 1960s and early 1970s can be illustrated with the argument in favour of flexible rates by Johnson (1970)—similar in many ways to those proposed early on by Friedman—and those in support of fixed exchange rates by Kindleberger (1970, 1972).

Flexible rates were basically defended on the grounds that they generated an automatic mechanism of adjustment while at the same time giving national macroeconomic and, particularly, monetary policy the freedom to focus on domestic objectives, choosing the mix of unemployment and inflation that they found desirable. According to these views, flexible rates also helped

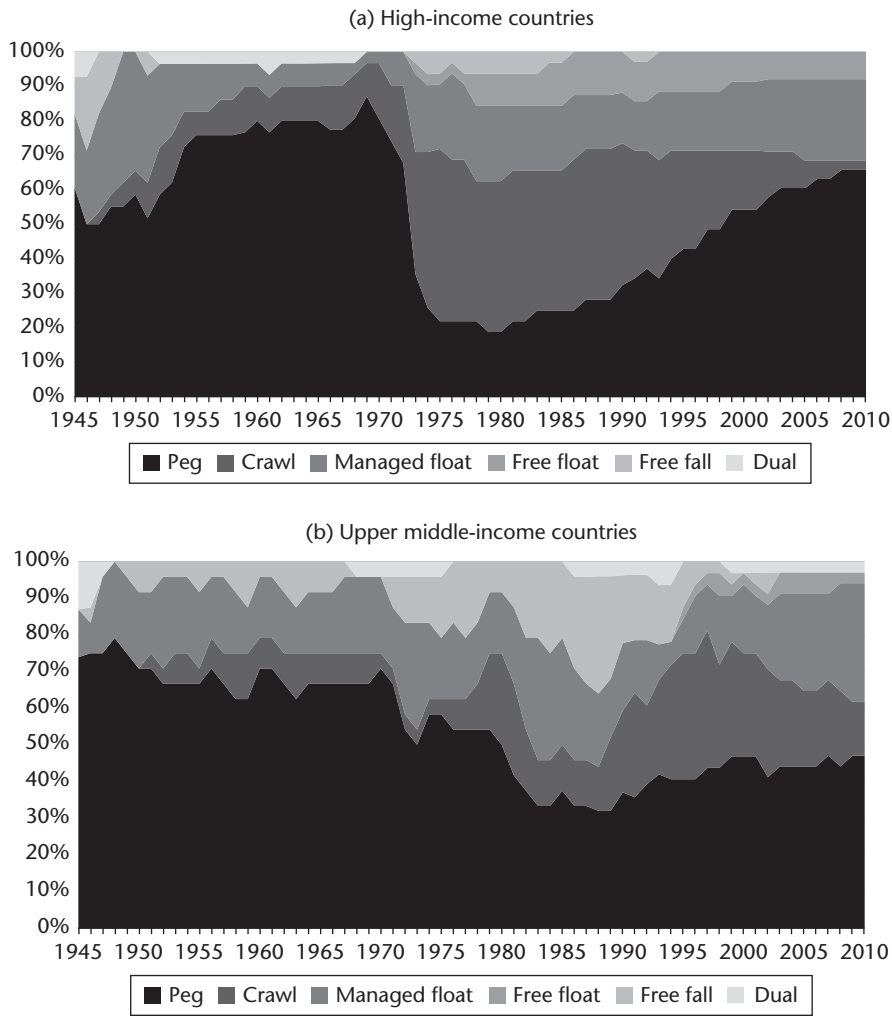


Figure 3.4 Exchange rate regimes from 1945 to 2010 in (a) high-income, (b) upper middle-income, (c) lower middle-income, and (d) low-income countries, according to Reinhart and Rogoff (percentage of countries in each category)

Source: Author estimates based on dataset for Ilzetzki, Reinhart, and Rogoff (2008), using their 'coarse' classification. Income categories according to World Bank using 2000 income levels.

eliminate the balance-of-payments rationale for interventions in international trade and capital movements, as well as the destabilizing speculation that could be created by expectations of changes in currency pegs. In any case, it was accepted that small countries were unlikely to enjoy much monetary autonomy and, for that reason, that they should continue to peg to a major currency.

In turn, the defence of fixed exchange rates was based on the fact that they facilitated fair international trade by reducing the uncertainties associated with

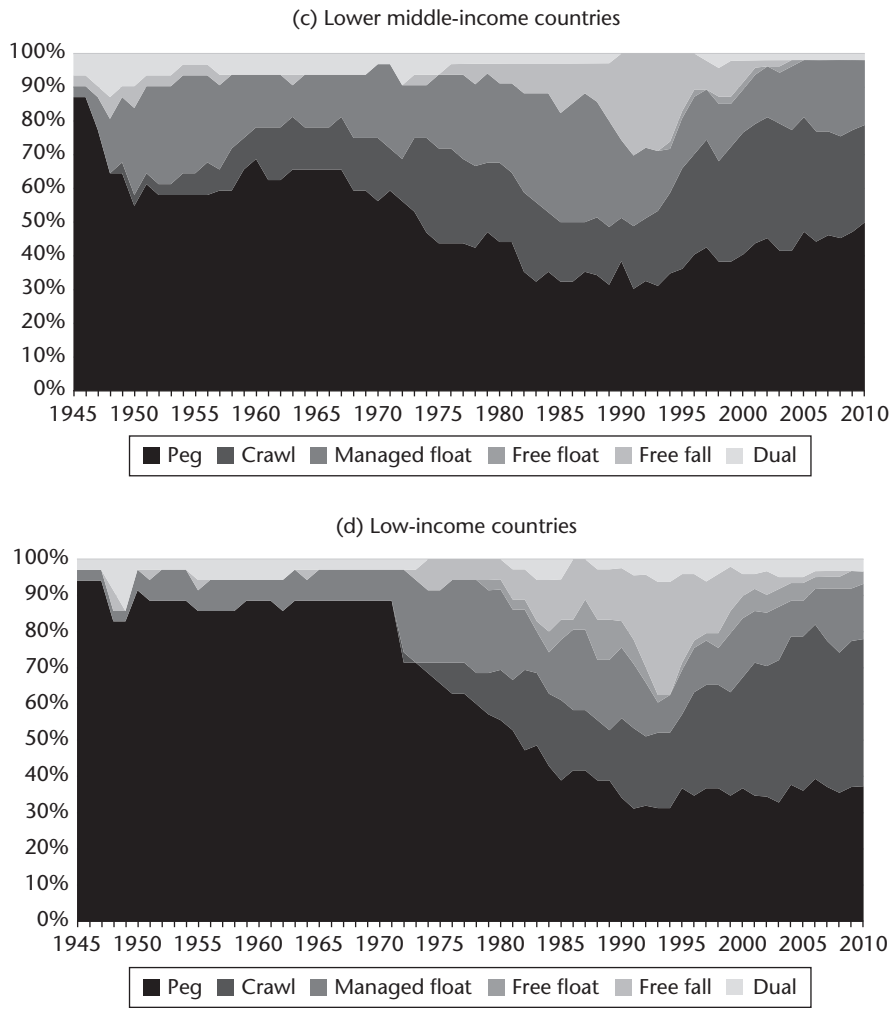


Figure 3.4 Continued

exchange rate variations and costs of hedging to manage such uncertainties. The defenders of fixed rates also held the view—based on past history, particularly that of the 1930s—that flexible exchange rate markets were characterized by market imperfections and destabilizing speculation. According to Kindleberger (1970, 1972), flexible exchange rates would also eliminate the public good of international money as a unit of account, store of value, and standard of deferred payment, particularly if the major international currency (the US dollar) eventually became part of a system of flexible rates—as it soon did.

Given the predominance of fixed rates in both high- and low-income countries, the breakdown of the Bretton Woods exchange rate arrangements

was sharp for these two groups of countries, but particularly for the former. In the case of high-income countries, the early champion of (managed) floating, Canada, had returned to this system in 1970. In turn, there was a major divergence between the decision of the United States and Japan to float (in the latter case with several other forms of interventions) and that of European countries to maintain less exchange flexibility among themselves and jointly float vis-à-vis the US dollar through the system initially known as the 'snake', which formally became the European Monetary System (EMS) in 1979. This was clearly associated with the view that limited flexibility was essential to guarantee fair trade in deep integration processes, such as the European Union's (at the time the European Economic Community's) single market.[5] What this implied, in a sense, is that the original Bretton Woods 'fixed but adjustable pegs' system remained in place within Europe, with somewhat larger flexibilities. After the EMS came under stress in 1992, largely because of the decision to consolidate the single market by eliminating all regulations on cross-border capital flows, this led to the decision that deep integration required a common currency—as, of course, is true in integrated national markets. The remaining elements of the Bretton Woods-type arrangement of the EMS thus gave way to the currency union in 1999. This decision, plus the expectation of candidate countries to join, and the requirement that stable exchange rates had to be in place for several years before joining, generated the renewed trend towards fixed rates in high-income countries shown in Figure 3.4.

Trends in the middle-income countries were quite different. For the two groups of middle-income countries shown in Figure 3.4, which had been more actively using some form of exchange rate flexibility, the transition of the early 1970s was less sharp. In any case, fixed exchange rates were increasingly abandoned by both these two groups as well as by low-income countries. Floating became more common among all these groups, but to a large extent forced by high levels of inflation, giving rise to a special category that Reinhart and Rogoff (2004) characterize as 'free falling' exchange rates. This category increased in the 1970s and 1980s, peaking in the early 1990s before falling sharply, as part of the worldwide reduction in inflation rates.

An interesting feature of the transition was, in any case, that the system of freely floating exchange rates defended by Friedman (1953) and Johnson (1970) continued to be rarely used, except among major currencies. Since it was adopted by the US, one of its major implications is that the core currency of the system, the fiduciary dollar, became an unstable currency, losing the essential advantages of international money highlighted by Kindleberger

[5] See an excellent analysis of the predominance of this over other objectives of exchange rate policy in Wyplosz (2006).

(1970, 1972). Most European countries moved into a currency union, whereas most developing countries, but also some developed countries (including the earlier champion of flexibility, Canada), ended up in some form of managed floating. Indeed, according to an alternative classification of exchange rate regimes offered by Ghosh et al. (2015), the popularity of greater flexibility increased among emerging and developing countries in the 1990s only to give way to more managed flexibility after the crises they experienced in the late twentieth century (see Figure 3.5). Interventions in foreign exchange markets responded to the basic indictment of Williamson that 'the exchange rate is too important to be treated as a residual' (1983a: 59). However, it implied a pragmatic rejection by the authorities of many countries of what came to be known as the bipolar view defended by Fischer (2001), among others, according to which only freely floating exchange rates or hard pegs are stable exchange rate regimes. (I return to this issue later in this section.)

The breakdown of the original Bretton Woods arrangement thus gave a veritable 'non-system', characterized by the proliferation of exchange rate regimes and even open divergence of regime trends among countries with similar levels of development. This was based on the principle agreed in 1976 that they were free to choose any exchange rate regime they preferred. The only constraint, according to new Article IV of the IMF Articles of Agreement then approved was that countries should 'avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain an unfair competitive advantage over other members'.[6] This was also the centre of the June 2007 decision on bilateral surveillance, which replaced the 1977 decision on surveillance of exchange rate policies that had been adopted after the collapse of the Bretton Woods arrangement (IMF 2007b). The essential problem, of course, is that the IMF has failed to determine what 'manipulation' means.

The centrality of the exchange rate regimes is derived from three different factors: (i) their effects on international trade, (ii) their central role in correcting global payments imbalances, and (iii) the potential role that exchange rate regimes have on the macroeconomic stability of individual countries. Of course, we should also take into account that exchange rate movements may also reflect divergence in other macroeconomic policies.

In relation to the first issue, a major concern is that there is no mechanism in the international system linking world trade and exchange rate rules. This is paradoxical, given that exchange rate movements can have stronger and faster effects on trade than the painstaking negotiations on trade rules. For this reason, some have suggested that exchange rate issues should be brought

[6] See a broad discussion of the implications of the new Article IV in IMF (2006).

into the World Trade Organization's dispute settlement mechanism (Matoo and Subramanian 2008). However, this may end up weakening one of the few successful dispute settlement mechanisms available at the international level. This decision would also ignore the fact that exchange rates have many other macroeconomic dimensions, which is essentially why they should be under IMF jurisdiction.

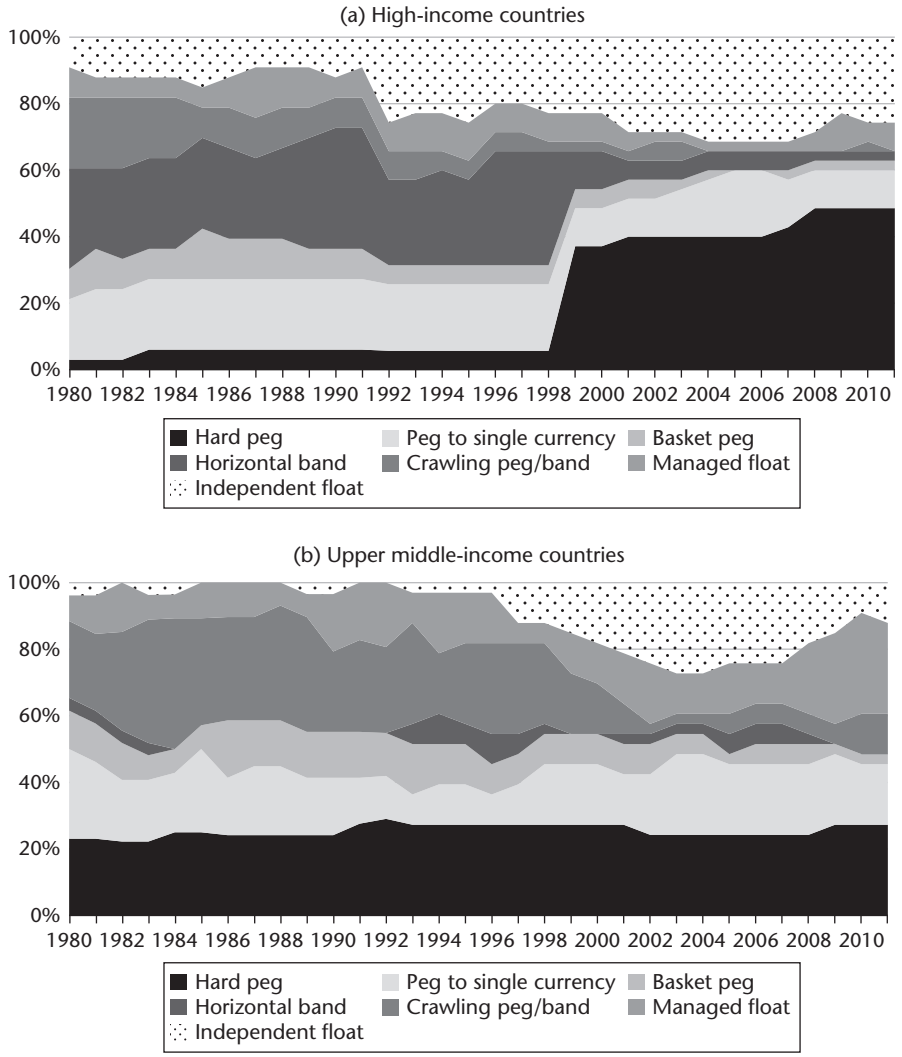


Figure 3.5 Exchange rate regimes from 1980 to 2011 in (a) high-income, (b) upper middle-income, (c) lower middle-income, and (d) low-income countries, according to Ghosh, Ostry, and Qureshi (percentage of countries in each category)

Source: Author estimates based on data from Ghosh et al (2015). Income categories according to World Bank, using income levels of 2000.

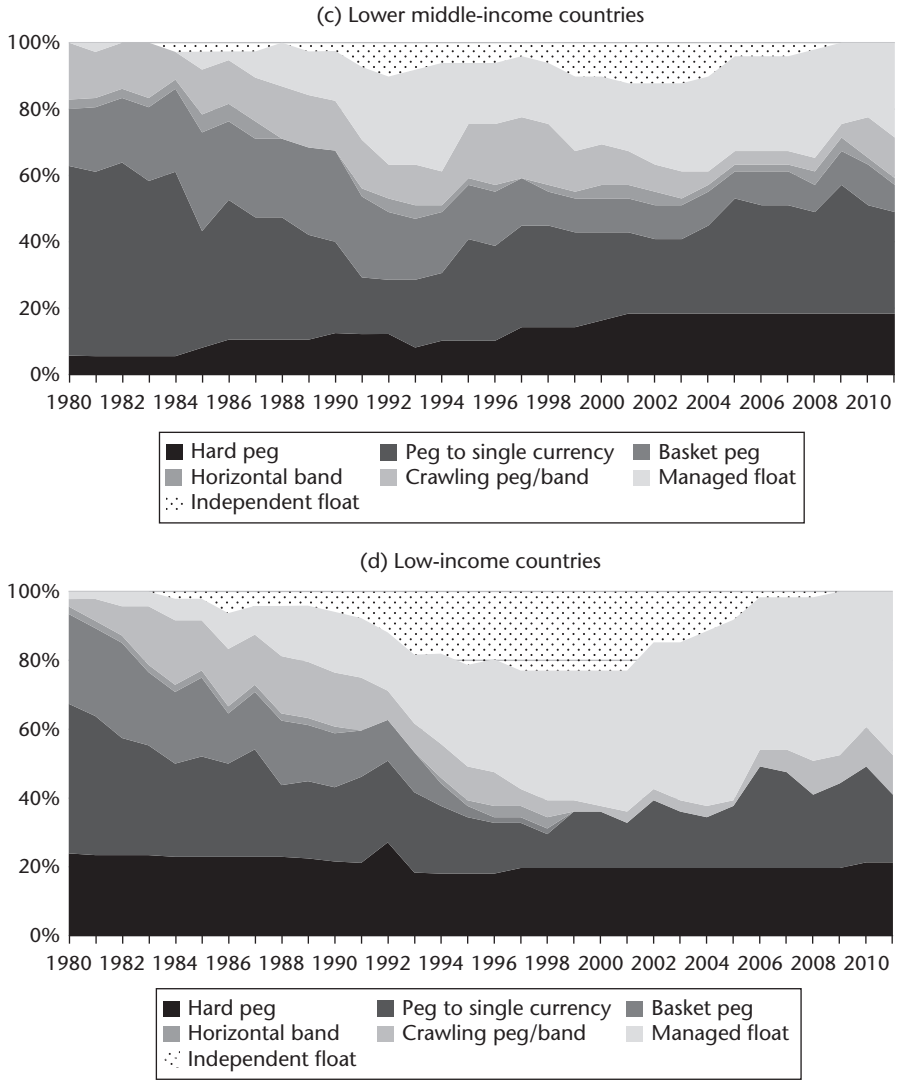


Figure 3.5 Continued

In relation to the second topic, the exchange rate non-system has also failed to meet two additional purposes set out in the IMF Articles of Agreement: to 'lessen the degree of disequilibrium in the international balance of payments' and 'to promote exchange stability'. One basic reason for that is that exchange rate movements are essentially determined in the contemporary world by financial flows, which may follow patterns that have little relation to 'macroeconomic fundamentals'. Following Williamson (1983a, 2007), it is essential in this regard to differentiate between exchange rate *volatility* and *misalignment*.

In relation to the first, there is no doubt that the non-system that evolved from the collapse of the Bretton Woods arrangement in the early 1970s generated instability in the exchange rates of major countries. Measured by real effective exchange rates, volatility peaked in the early 1980s, associated with the major appreciation and later depreciation of the US dollar, and massive appreciation of the Japanese yen and, to a lesser extent, of European currencies, which were the focus of the Plaza and Louvre accords. However, exchange rate volatility among major currencies has remained an essential feature of the system, and tends to increase during crises, particularly owing to the volatility of the exchange rate of the US dollar (see Figure 3.6).

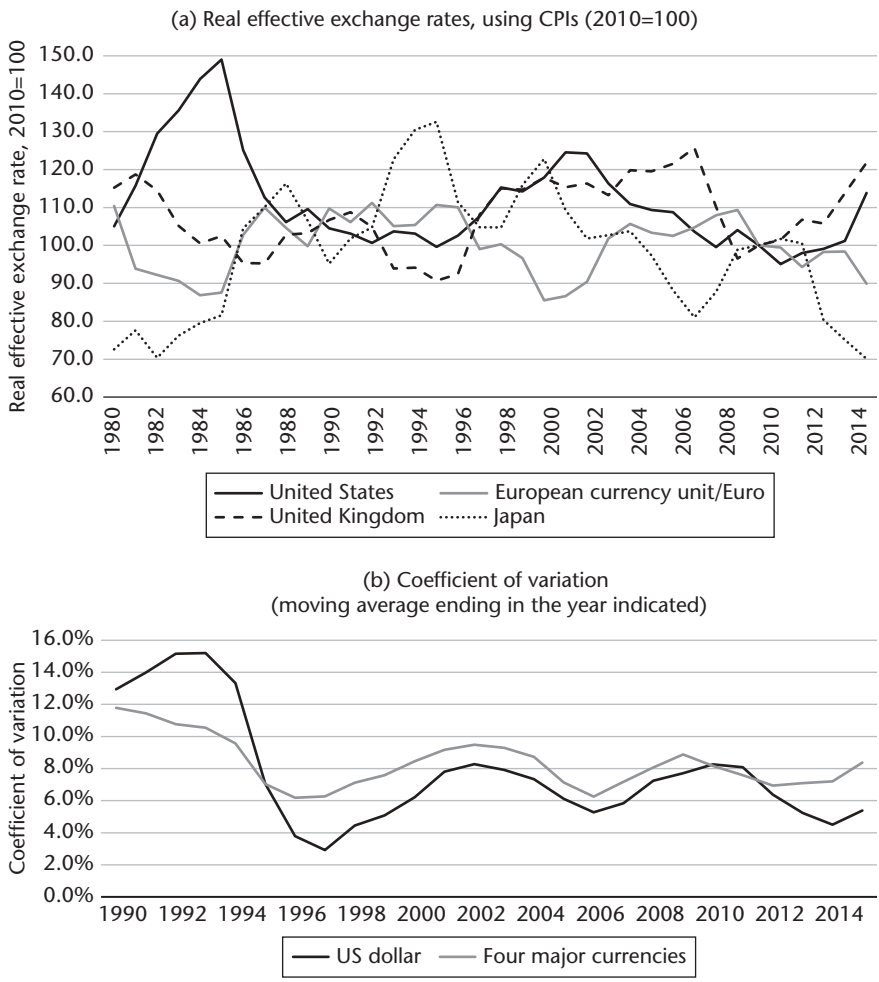


Figure 3.6 Instability of four major exchange rates: (a) real effective exchange rates and (b) coefficient of variation

Source: Author's illustration based on IMF, *International Financial Statistics*.

Indeed, as Figure 3.7 illustrates, since the launch of the euro in 1999, the daily volatility of the most important bilateral exchange rate has been high. In particular, crisis episodes have led to an 'excess volatility' of the euro/dollar rate: during the burst of the technology bubble in the US in the early 2000s, after the collapse of Lehman Brothers in September 2008, during the first major crisis of the eurozone—that of Greece—in 2010, and as a by-product of the turbulence experienced by Chinese financial markets in 2015. It is unclear what purpose the high level of volatility between the world's two most important currencies serves.

An equally or even more important concern is whether exchange variations help correct balance-of-payments disequilibria or not, and if they do not whether this is because of the lack of response of current accounts to exchange rates or because of exchange rate misalignments—understood as movements in the opposite direction to what would be required to correct existing current account imbalances. Some authors have argued that the degree of exchange rate flexibility has no effect on the current account adjustments (Chinn and Wei 2013), but others have claimed that it does, if a proper specification of exchange rate flexibility is used (Ghosh et al. 2013). The IMF (2015a: ch. 3) has provided complementary evidence that exchange rates continue to have effects on individual countries' trade balances, with some exceptions (Japan

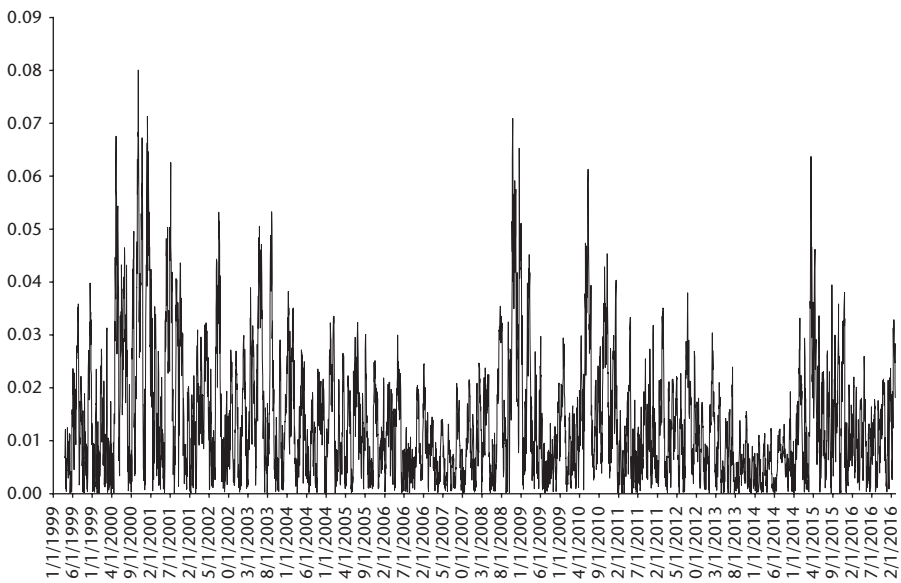


Figure 3.7 Volatility of the euro/US dollar exchange rate (deviation with respect to the six-month-centred moving average in absolute value)

Source: Author's estimates based on Bloomberg data available in Datastream.

being the most important) and with less sensitivity to exchange rates for the trade in intermediate goods associated with the expansion of international value chains. It can also be added that exchange rate volatility has not had a negative effect on world trade, as is reflected in particular in the trade boom that the world economy experienced in 1986–2007, during which real export growth reached levels similar to the 'golden age' (1950–73) of post-war developed countries and the elasticity of trade to world GDP reached a historical peak.[7] Nonetheless, IMF (2014c: ch. 4) analysis has indicated that exchange rates played a secondary role in correcting global imbalances during the North Atlantic financial crisis.

A more important problem is, therefore, the fact that exchange rates do not always respond to 'fundamentals', incorporating all the information that is available at a specific moment in time, but rather follow boom–bust financial cycles or even random walks (Williamson 1983a, 2007). Under these conditions, agents may be unable to use forward markets to cover risks, as forward rates may simply follow the spot market instead of helping reduce the uncertainties associated with variations in current rates. The results are the major misalignments that characterize foreign exchange markets and help generate the global imbalances that periodically erupt in the system. After the North Atlantic financial crisis, for example, this has been reflected in the growing surplus of the eurozone that has coincided with the weakening of the euro, and the pressure on the US dollar to appreciate which in turn has again increased the US deficit.

In relation to the third issue, there is now a broad-based agreement that an inadequately flexible exchange rate and soft pegs generate significant macroeconomic and financial vulnerabilities—balance-of-payments risks in the first case, and excessive credit expansion, foreign borrowing, and exchange rate mismatches in portfolios, in the second. However, there is also growing consensus that the bipolar view is wrong: that hard pegs are not a panacea and that floating exchange rates may generate misalignments. Indeed, hard pegs may be sustainable, but generate major recession risks, as strikingly shown by the experience of the Baltic countries and the eurozone periphery during and after the North Atlantic financial crisis. And although some intermediate regimes, particularly those with insufficient flexibility, are associated with higher risk of crises, other intermediate regimes, which Ghosh et al. (2015) refer to as 'managed floats', *do* reduce the risk of crises and are

[7] Using United Nations data, real exports reached two periods of fast growth after the Second World War: 1950–74, when they grew at 7.4 per cent a year, and 1986–2007, when they grew at a rate of 7.3 per cent. However, the elasticity to world gross domestic product at market exchange rates was much higher in the latter than in the former period: 2.39 versus 1.55.

compatible with a large element of monetary policy autonomy (see also Fischer 2008; Frankel 2004). This shows why the pragmatic choice of intermediate regimes by a growing group of emerging economies makes sense, including through interventions aimed at correcting misalignment, very active counter-cyclical foreign exchange reserve management, and, in some cases, use of capital account regulations. This means that some forms of 'fear of floating' (a phrase coined by Calvo and Reinhart 2002) are well justified.

There is, finally, a recent heated debate about whether, in the presence of capital mobility, exchange rate flexibility effectively contributes to macroeconomic policy autonomy—following the well-known 'trilemma' of open economies[8]—and, more broadly, whether exchange rate flexibility acts as an effective shock absorber, helping countries partially insulate themselves from external shocks. In this regard, Rey (2015, 2016) has expressed the strong view that the world of large capital flows has transformed the 'trilemma' into a 'dilemma': that under free capital mobility, exchange rate flexibility does *not* provide monetary policy independence—and particularly independence from US monetary shocks—and, therefore, that policy autonomy is only possible if capital flows are regulated. In contrast to this view, Obstfeld and Taylor (2017) argue that flexible rates still serve as a shock absorber for domestic interest rates, GDP, and investment, although they offer no protection against external financial or real shocks.

The system could, therefore, be improved by introducing elements that enhance the capacity of exchange rates to contribute to correcting global imbalances and to provide a reasonable level of macroeconomic and financial stability. Returning to fixed exchange rates among major currencies is, of course, impossible, because of the magnitude of capital flows, but also inconvenient, given that exchange rates must serve also to adjust different priorities of macroeconomic policies among major countries. The best system is probably one of reference rates among major currencies, suggested soon after the breakdown of the Bretton Woods agreement by Ethier and Bloomfield (1975), and later on, in different variants, by Williamson (1983a, 2007). This implies that major countries would follow some form of managed floating around multilaterally agreed parities or bands—which could be very soft bands. One of the advantages of such a system is that it would also give some guidance to markets, which may help avoid extended periods of deviation from equilibrium. Interventions in foreign exchange markets, as well as other macroeconomic policies, would support the movement of exchange

[8] The 'trilemma' is associated with the initial formulations of the Mundell–Fleming model of open economy macroeconomics by Mundell (1963) and Fleming (1962). For its history and historical evidence of its validity, see Obstfeld, Shambaugh, and Taylor (2005), and Obstfeld and Taylor (2017).

rates towards the agreed parities or bands (i.e. reinforce depreciation if the currency is perceived to be overvalued and appreciation if it is undervalued). Intervention rules would also provide an implicit definition of what 'manipulating' the exchange rate means: interventions that push the exchange rate away from the agreed parities.

In this framework, the process leading to the determination of exchange rate parities would have to take into account all macroeconomic determinants of exchange rates, and would thus summarize a significant amount of information. A simpler approach would be to look directly at payments disequilibria, and particularly at current account imbalances, which, as we know, is equivalent to looking at saving–investment imbalances. This could be done, for example, by defining current account target zones, as I argued at the end of Section 3.3. In any case, it should be recognized that the focus should be on the effects of overall economic policy packages on national savings and investment, not just exchange rate policies.[9]

[9] This is the strong view expressed by Pettis (2013).

4

Capital Account Liberalization and Management

4.1 Introduction

The abandonment of the gold standard during the Great Depression of the 1930s and the rise of Keynesian thinking led to the view that domestic macroeconomic objectives, notably that of guaranteeing full employment, should prevail over the need to maintain both fixed exchange rates and open capital accounts. The view that capital flows had had destabilizing effects in the first half of 1920s and in the 1930s also shifted policy opinion in favour of managing the capital account. Capital account regulations—the term I will use rather than 'controls'[1]—and foreign exchange controls became widespread features of economic policy management, even in developed countries.

The 1944 Bretton Woods agreement followed this then mainstream view. Countries were allowed to regulate capital flows according to their domestic policy priorities. The aim of rebuilding international trade was reflected, nonetheless, in the commitment to eventually liberalize all restrictions on trade transactions—i.e. current account convertibility. Fixed exchange rates were also viewed as essential to rebuild an orderly international trading system. Based on the experience of the 1920s and 1930s, speculative capital flows were seen as an obstacle to this objective. This provided an additional argument for regulating capital flows. Countries were nonetheless left with the possibility of modifying the exchange rate under 'fundamental' external imbalances.

The early post-war years were also characterized by the persistence of the collapse of international capital markets that had taken place during the Great Depression. The major early debates on the capital account were related to capital flight from Western Europe to the United States. With the

[1] This follows my early work on this subject (Ocampo 2003a). As we will see, these regulations can adopt different modalities.

reconstruction of the global financial system from the late 1950s, in the form of the Eurodollar market, capital account volatility became again a major source of large balance-of-payments crises. Developed countries responded again by strengthening capital account regulations to manage these crises, particularly the severe international financial instability that characterized the Bretton Woods system of fixed exchange rates and dollar–gold convertibility in the mid-1960s and the years that followed its collapse in 1971–3. In the developing world, aside from a few countries, strong capital account regulations continued to be the rule throughout this period.

The change towards capital account liberalization from the mid-1970s, which started with the US but was soon followed by other developed countries, together with booming capital flows, accelerated by the recycling of petrodollars, would turn the mainstream viewpoint upside down, with capital account openness rapidly becoming the new orthodoxy. In this context and after capital account liberalization had been adopted by developed countries, the pressure on emerging and developing countries to liberalize their capital accounts became a central issue in policy and academic debates. Despite major crises, capital account liberalization spread to the developing world in the 1990s and 2000s. In this context the IMF's Managing Director Michel Camdessus tried to incorporate capital account convertibility in the IMF Articles of Agreement in 1997, but this initiative failed to gather the necessary consensus.

The 2007–9 North Atlantic financial crisis represented a new, partial turning point in this debate. As part of the recognition that financial stability requires strong prudential regulations, including regulations that focus on the macroeconomic dimensions of financial stability, managing capital flows is seen now as part of the family of 'macroprudential' regulations, particularly for emerging countries subject to strong boom–bust cycles in external financing. This has been reflected in a moderate reversal of the capital account liberalization trends that had spread since the mid-1970s, as well as in the IMF's adoption of an 'institutional view' on capital account liberalization and management in 2012. Nonetheless, this has not settled the debate. One central element of current controversies is whether regulations are effective or not in a world in which free capital movements have become the rule, and whether there should be some form of international coordination to guarantee their effectiveness and/or avoid spillovers for countries not willing to regulate the capital account.

This chapter analyses the controversies around capital account management and the experiences of capital account regulations in emerging economies in recent decades. It looks first at the evolution of capital account liberalization since the 1970s and its relation to boom–bust cycles in global finance, with a focus on emerging economies. It then reviews the controversies around the

effects of capital account liberalization and the evidence of success or failure with capital account management.

4.2 The Return of Global Finance and Capital Account Liberalization

The two parents of the Bretton Woods arrangements, John Maynard Keynes and Harry Dexter White, shared the criticism of the liberal financial order that had prevailed until the early 1930s. In particular, they saw free capital movements as one of the major sources of financial instability and of the collapse of the world economy in the 1930s, and thus, in the discussions that preceded the 1944 agreement, strongly defended countries' rights to the full freedom to manage their capital accounts (Keynes 1942–3; Conway 2015: parts I and II; Steil 2013: ch. 6). This reflected, above all, their view that international capital movements should not be allowed to disrupt the autonomy of states to adopt the monetary policy stance consistent with their domestic priorities, to achieve in particular the overriding objective of guaranteeing full employment. Free capital flows were also seen as incompatible with stable exchange rates, which were conceived as essential for the reconstruction of international trade in the post-war years. Based on the experience of the 1920s and 1930s, pro-cyclical capital flows were indeed viewed as a source of the foreign exchange disturbances and competitive devaluations that led to widespread use of protectionism and the collapse of the multilateral trading order in the 1930s.

As part of the commitment to rebuild the international trading system, the Bretton Woods agreement included the obligation on countries to eventually eliminate regulations affecting trade and, more broadly, *current account* transactions, but gave them full freedom to manage *capital account* operations according to their domestic policy priorities. To increase the effectiveness of capital account regulations, in his early contributions to the debate White even flirted with the idea of mandatory international cooperation to guarantee that capital account regulations were fully effective. The opposition of US financial interests, which argued that such regulations should be temporary at best, led to significant change in this view, and even to the proposal by the US that countries should facilitate the international flow of productive capital, which was supposed to be the source of stable capital flows (Helleiner 1994: ch. 2).

The final agreement therefore included the provision that 'Members may exercise such controls as are necessary to regulate international capital movements, but no member may exercise these controls in a manner which will restrict payments for current transactions' (Article VI-3 of the Articles of Agreement). To reinforce this, it also set the principle that IMF funds should be facilitated to finance balance-of-payments deficits associated with current

account deficits, but not those originating in the capital account. So, it was also agreed that, with the exception of the reserve tranche, members could 'not use the Fund's general resources to meet a large or sustained outflow of capital' (Article VI-1). It did include some provisions on cooperation, and particularly that 'Exchange contracts which involve the currency of any member and which are contrary to the exchange control regulations of that member maintained or imposed consistently with this Agreement shall be unenforceable in the territories of any member. In addition, members may, by mutual accord, cooperate in measures for the purpose of making the exchange control regulations of either member' (Article VIII-2b). However, whereas the freedom to regulate capital flows has been extensively used by IMF members, these provisions on cooperation have meant little in practice.

Contrary to the spirit of these agreements, the early post-war negotiations between the US and the UK forced the latter to liberalize its capital account. Thus, in 1945 the US offered a large fifty-year loan at a low interest rate, plus a significant write-down to clean up the liabilities that the UK had assumed with the so-called 'Lend-Lease' military cooperation, but conditioned this support on convertibility for current sterling-area operations within fifteen months. According to these commitments, the UK adopted convertibility on 15 July 1946, but was forced to suspend it slightly over a month later, on 20 August (United Nations 1948: 18–19; Steil 2013: 276–83, 309–11). In contrast, the UK and other European countries asked for cooperation to control capital flight and force the return of those capital flows that had left Europe, but these pressures ran against the financial interests of the US, which blocked any action in that regard. Eventually, the US, the European Allies, and Japan settled on the broad-based use of capital account regulations outside the US, gradual liberalization of current account transactions—facilitated within Europe by the European Payments Union, created in 1950, and the Marshall Plan—and parallel cooperation with Japan to finance both reconstruction and its severe dollar shortage (Helleiner 1994: ch. 3). The 1949 devaluations, which were particularly large for Japan and the UK, further contributed to the balance-of-payments adjustment of the US allies. All this helped to facilitate a more stable period that eventually did away with the dollar shortage (see Chapter 1 in this volume). Current account convertibility was restored in major Western European countries in 1958 and, in a more administered way, by Japan in 1964, but capital flows continued to be strongly regulated in both cases.

The reconstruction of private global finance began to take shape in the late 1950s in the Eurodollar market—or the Eurocurrency market, as it later spread to other currencies. The development of that market had followed several initiatives adopted by British authorities since the early 1950s to reconstruct London's role in global finance, which went beyond its role in the sterling area (which continued to be subject to capital account regulations). The return of

global finance came with the pro-cyclical pressures exercised by capital account movements: outflows in countries undergoing balance-of-payments deficits and inflows in those facing surpluses. The radical shift from the dollar shortage of the first decade or so of the post-war years to pressures on US gold reserves, generated by US balance-of-payments deficits, implied that the US had now joined the group of countries using some form of regulation of capital movements, starting with the 1963 interest equalization tax. The growing disturbance in the international monetary system generated increasing capital account pressures as the decade advanced, which led in turn to strengthened regulations focused on either inflows (Germany being a pioneer in this regard) or outflows (including France and the UK in Western Europe, but also the US), depending on the balance-of-payments positions of the individual countries. The active use of capital account regulation continued after the collapse of the original Bretton Woods system of dollar–gold convertibility (for central banks) and fixed exchange rates in 1971–3.

The shift towards liberalizing capital flows started with the US in 1974 but then spread to the rest of the developed world in the second half of the 1970s and through the 1980s, and was essentially completed by the early 1990s. This is shown in Figure 4.1, based on the well-known index of capital account liberalization designed by Chinn and Ito (2006, 2008).[2] Liberalization proceeded at a gradual but fast rate in Western Europe, Japan, and Oceania (Australia and New Zealand) (see the regional breakdown in Table 4.1). This coincided with an explosion of global finance, enhanced by the recycling of petrodollars. The move towards flexible exchange rates also contributed to the explosion of global finance, as it created a demand for asset diversification.

Capital account liberalization demanded, in turn, new forms of intervention. The most important was liquidity financing during periods of strong tension in capital markets through 'lending of last resort', mainly provided by swap arrangements among the central banks of major developed countries, and particularly the US Federal Reserve, given the prominent role of the US dollar in the global monetary system. This is how the tensions generated by the 1987 US stock market crash, the 11 September 2001 terrorist attacks on the US, and the 2007–9 North Atlantic financial crisis were managed. The latter also included funding by the European Central Bank to countries of the European periphery through the liquidity provided by the payments system (TARGET2). The interventions unleashed by the expansion of global finance also included the creation of the Basel Committee on Banking Supervision in late 1974 to cooperate and harmonize prudential regulation of banking systems. This was a clear response by the Group of Ten to the disruption in

[2] The index has a minimum value of –1.86 and a maximum value of 2.44.

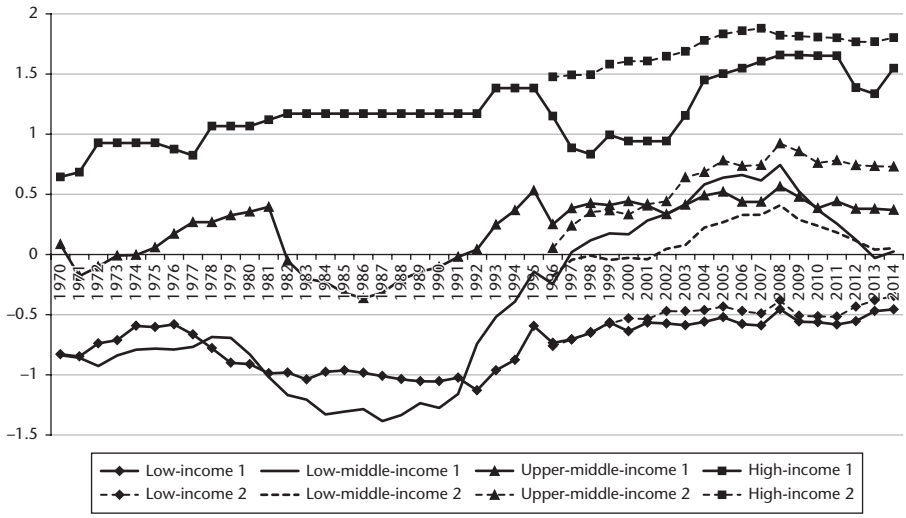


Figure 4.1 Chinn–Ito Index of capital account openness

Note: The series indicated by 1 refer to 104 countries; those indicated by 2 refer to the larger sample of 174 countries.

Source: http://web.pdx.edu/~ito/Chinn-Ito_website.htm. Country classification by level of development according to the World Bank in 2000.

Table 4.1 Chinn–Ito Index of capital account openness by region

	Smaller sample (104 countries)							Larger sample (174 countries)			
	1970	1980	1990	1997	2007	2011	2014	1997	2007	2011	2014
North America	2.389	2.389	2.389	2.389	2.389	2.389	2.389	2.389	2.389	2.389	2.389
Oceania	–0.658	–0.126	2.389	2.130	1.740	1.740	2.130	0.621	0.227	0.432	0.503
Europe	–0.259	0.059	0.755	2.112	2.308	2.166	2.166	0.973	1.707	1.607	1.587
Asia	–0.561	–0.172	–0.178	–0.133	–0.055	–0.137	–0.101	–0.327	–0.165	–0.236	–0.201
Latin America and Caribbean	0.077	–0.128	–0.950	0.674	1.292	0.982	0.801	0.179	0.683	0.425	0.297
Middle East and North Africa	–0.674	–0.543	–0.496	–0.219	0.260	0.270	0.101	0.354	0.823	0.802	0.834
Sub-Saharan Africa	–0.984	–0.922	–1.062	–0.871	–0.766	–0.730	–0.591	–0.752	–0.563	–0.516	–0.416
Memo: Developed OECD	–0.035	0.316	1.038	1.989	2.271	2.168	2.203				

Source: Author's estimates based on http://web.pdx.edu/~ito/Chinn-Ito_website.htm.

international financial markets after the collapse of the original Bretton Woods arrangements, in particular the bankruptcy generated by the foreign exchange losses made by some banks active in the Eurocurrency market.[3]

[3] Germany's Bankhaus Herstatt in June 1974 and the Franklin National Bank of New York in October of the same year.

As became clear in due time, and notably during the North Atlantic financial crisis, regulation to manage the explosion of global finance came with a significant lag.

Capital account liberalization was much slower and less widespread in the emerging and developing world. Indeed, it experienced a reversal in the 1980s, when several middle-income countries actually reinforced their regulations (see Figure 4.1). This was particularly noticeable in Latin America, where there was a large number of middle-income countries with open capital accounts in the late 1970s, prior to the debt crisis they experienced in the 1980s, the first regional crisis in the new world of global finance (see Table 4.1). The liberalization process sped up in the 1990s, led by Latin America. Lower middle-income countries then caught up with their high middle-income partners. However, the diversity of capital account regimes in these two country categories meant that the average level of liberalization remained significantly below that of high-income countries. Liberalization was even more limited in low-income countries. The trends towards liberalization also seem to have reached a peak at the turn of the century, with the East Asian and, perhaps even more so, the North Atlantic crises representing a turning point towards a moderate reversal of the liberalization trends (more on this in Section 4.4). Looking at trends by region, Latin America and the Caribbean continued to have more open account regimes relative to the Middle East and North Africa, Asia, and, particularly, sub-Saharan Africa.

The two major problems for emerging and developing countries were the particularly strong pro-cyclical swings in financing and the associated macroeconomic risks they faced (Prasad et al. 2003; Ocampo, Kregel, and Griffith-Jones 2007: ch. 1; Ffrench-Davis 2009; Agosin and Huaita 2012) and, in contrast, the lack of the 'financial safety net' provided by swap arrangements between central banks, which essentially benefited only developed countries until very recently—and, even recently, only benefited a few emerging countries, and in a very partial manner.[4] What this implies is that the integration of developing countries into global financial markets has been a *segmented integration*: an integration into a market segmented by risk categories, in which high-risk borrowers are subject to strong pro-cyclical swings and higher and more volatile risk premiums (Frenkel 2008).

[4] The US Federal Reserve extended the swap credit lines to a few emerging economies (Brazil, Republic of Korea, Mexico, and Singapore) during the peak of the North Atlantic crisis, but only temporarily so. There is also a current wave of swap arrangements among some emerging economies, with China as the major player, and two multiple-country arrangements: the Chiang Mai Initiative of ASEAN+3 (Association of Southeast Asian Nations Plus Three) between China, Japan, and the Republic of Korea, launched in 2000, and the new BRICS (Brazil, Russia, India, China, and South Africa) contingency reserve arrangement, approved in 2014. These issues are analysed in other chapters in this volume.

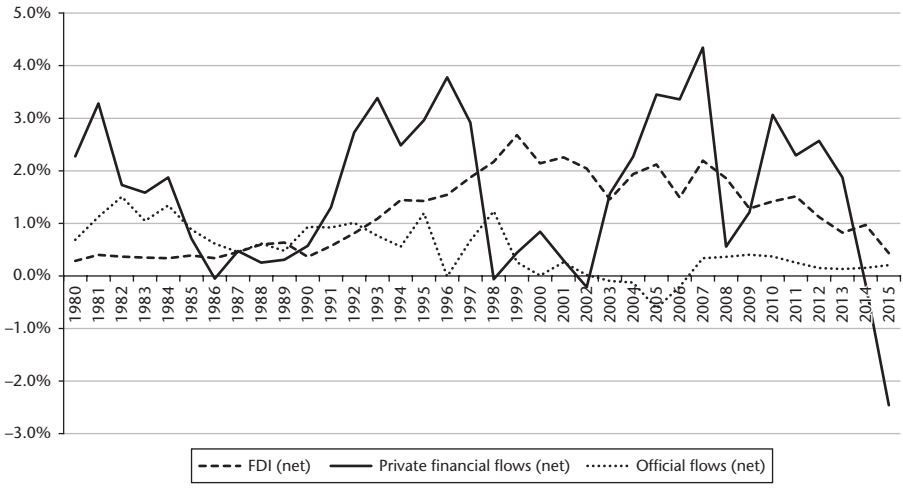


Figure 4.2 Capital flows towards emerging and developing countries (% of GDP)
Source: Estimated from data from the Institute of International Finance.

The greater volatility of financial flows to emerging and developing countries is shown in Figure 4.2. As can be seen, these countries have experienced four boom–bust cycles in external financing since the mid-1970s. The first boom took place in the second half of the 1970s, and was strongly associated with the recycling of petrodollars, and followed by a sharp downturn associated with the Latin American debt crisis of the 1980s. A new boom was experienced from 1991 to mid-1997; it was temporarily interrupted by the Mexican crisis of December 1994, and finally ended with the series of crises in the emerging world that started in Thailand in July 1997 and then spread to other East Asian economies, Russia, Latin America (led by Argentina and Brazil), and Turkey.

The third boom then took place as part of the broader global financial expansion of 2003–7. It started to weaken after the crisis of the subprime mortgage market in the US in the summer of 2007 and the subsequent crises of several US and European financial institutions, and ended with the worst collapse of global finance since the Great Depression after the bankruptcy of US investment bank Lehman Brothers in September 2008. However, in contrast to the two previous downturns in financial flows to emerging and developing countries, this downturn was much shorter, thanks to the strong expansion in global liquidity generated by the US Federal Reserve and the central banks of other developed countries, and the relative strength of emerging and developing countries, associated to a large extent with the 'self-insurance' provided by the massive accumulation of foreign exchange reserves that had taken place after the emerging economies' crisis of the late twentieth century (see Chapter 2). Indeed, flows towards these economies started to

recover less than a year after the collapse of Lehman Brothers, and were followed by a new boom in 2010–13. This boom has weakened since the announcement of the tapering of Federal Reserve asset purchases in May 2013, which led to a gradual reduction in such purchases until they totally ceased in October 2014. A series of later events in global markets, notably the end of the 'super-cycle' of commodity prices in 2014 and a series of disturbances in Chinese capital markets from 2015, led to the end of this fourth cycle. The intensity of the downturn of capital flows shown in Figure 4.2 has been associated to a large extent with capital outflows from China, to which this country's authorities responded in 2016 with a strong upsurge of regulations on capital outflows.

These financing cycles, but also the variable intensity of the downturns, are also visible in the evolution of sovereign risk spreads (referred to simply as spreads in the remainder of this chapter) and yields of bonds from emerging economies. Figure 4.3 reproduces the history of these two indicators since the end of the second cycle. Spreads and yields rose dramatically, particularly after the Russian default of August 1998, remained very high for around four years due to new crisis events elsewhere in emerging markets, and only returned in the first months of 2003 to the same levels as in the first semester of 1998. Spreads fell substantially through the third aforementioned boom and reached their recent historical lows prior to the US subprime crisis during the (northern hemisphere) summer of 2007 and then rose sharply after the Lehman Brothers collapse. However, emerging economies' bond spreads and yields remained well below the levels of the late twentieth and early twenty-first centuries, and although spreads never returned to pre-subprime crisis levels, yields did fall to pre-crisis levels by late 2009, and continued to fall, reaching historical lows in early 2013, prior to the Federal Reserve announcements in May of that year. The significant reduction in US Treasury bond yields, which serve as the reference to estimate spreads of other agents, since the North Atlantic crisis helps to explain such low yields. What is more remarkable is that emerging economies' spreads were only marginally affected during the worsening of the crises of the peripheral European economies in 2010–12, were only moderately affected by Federal Reserve tapering in 2013–14, and had also been resilient in the face of major shocks in commodity markets and Chinese financial markets since 2014.

One element that makes emerging economies and developing countries particularly sensitive to disturbances in developed countries' finance is the relatively small share they have in global finance. This is shown in Table 4.2, which estimates the shares of different issuers in the total supply of international bonds and notes. The share of emerging and developing economies peaked at 14.8 per cent in December 1997 and shows a strong cyclical pattern. Even its strong recovery after the North Atlantic financial crisis has not led to a

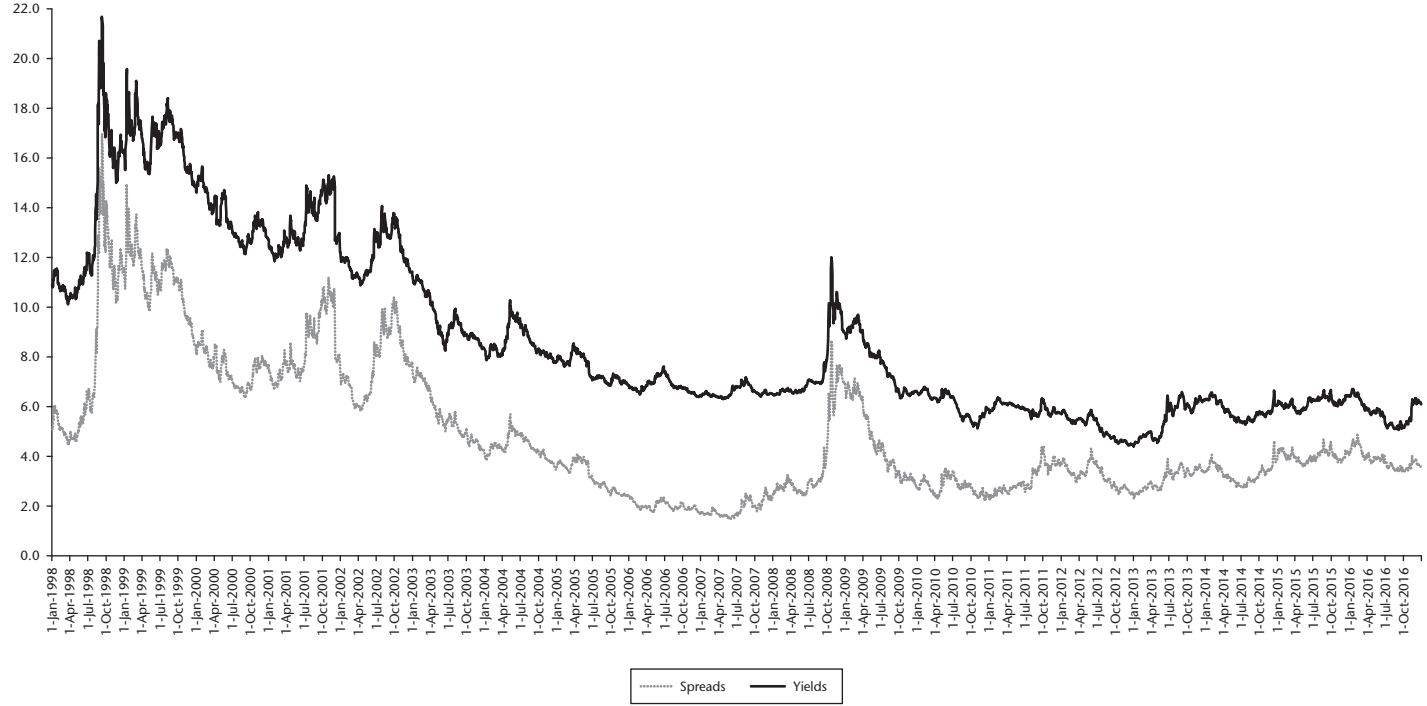


Figure 4.3 Emerging economies: spreads and yields of sovereign bonds, 1998–2016

Source: Author estimates based on JPMorgan data available in Datastream

Table 4.2 International bonds and notes, by nationality of issuer, %

	Dec.80	Dec.90	Dec.97	Dec.02	Dec.07	Dec.13	Jun.15
Developed countries	70.1	79.8	74.5	83.9	88.3	81.0	78.1
North America	23.5	17.9	18.2	28.0	22.0	16.7	18.6
Developed Europe	36.0	35.8	44.7	51.1	62.0	59.9	54.8
Developed Asia	10.6	26.0	11.6	4.8	4.3	4.4	4.8
Offshore centres	0.5	0.2	1.3	1.6	1.3	1.5	1.7
Emerging and developing	9.3	6.9	14.8	8.6	6.7	10.9	13.2
Africa and Middle East	3.1	0.3	0.5	0.6	0.9	1.5	1.8
Asia and Pacific	1.1	1.7	4.5	2.1	1.9	3.4	4.7
Emerging Europe	0.4	0.7	1.7	1.5	1.7	2.8	2.7
Latin America and Caribbean	4.7	4.2	8.1	4.4	2.2	3.3	4.0
International organizations	20.1	13.1	9.4	5.9	3.7	6.6	7.0

Source: Author's estimates based on data from Bank for International Settlements.

return to the level reached in 1997. The share would be even lower if we included US domestic bonds, which can be seen as international assets, given the role of the US dollar as the major global currency. What this means is that small ripples in developed countries' financial markets can generate massive disturbances in financial flows towards emerging and developing countries.

For these economies the mix of higher volatility in finance, in part associated with this fact, and the perception of emerging-market assets as risky, together with the lack of adequate financial safety nets, is what has generated the need for 'self-insurance' in the form of large accumulations of foreign exchange reserves, a topic that was analysed in Chapter 2 of this volume. As already indicated, this self-insurance partly explains the reduced intensity of the two most recent downturns in financial flows towards emerging and developing countries, as reflected in the evolution of risk spreads in yields (the strong contraction in capital flows shown in Figure 4.2 being associated with capital flight from China). In turn, the major disturbances in global financial markets have generated a partial return to more intensive capital account management in some emerging and developing countries, and a nuanced defence of capital account regulations by the IMF, two issues to which I shall return in Section 4.4.

Financial cycles are, of course, a broader feature of financial markets, as underscored by the classic analysis of this issue by Charles Kindleberger (see the most recent edition of his classic book in Kindleberger and Aliber 2011), and more recently emphasized by Reinhart and Rogoff (2009). According to the IMF, financial market volatility has increased over time and has spread to transactions that are generally considered to be less volatile—particularly foreign direct investment (IMF 2011d: ch. 4). Indeed, beyond the volatility of external finance experienced by emerging and developing countries, one of

the most remarkable features of global finance has been the very strong boom–bust cycle of cross-border finance among *developed* countries, which has been the result of the sharp increases in gross cross-border flows since the 1980s but particularly since the late 1990s (Borio 2016; Obstfeld 2012). According to the McKinsey Global Institute (2013), cross-border flows among developed countries reached a level in 2007 which was almost five times the average of 1995–2002 but then in 2008–9 fell to a very small fraction of this boom level before experiencing a partial recovery in later years. The collapse of cross-border finance was particularly sharp for peripheral European countries, which this time displayed behaviour patterns not unlike those of emerging economies in previous decades, leading to massive use of the liquidity provided by the European Central Bank payments system and a series of joint European–IMF packages.

The volatility of finance and its reflections on global financial markets has been the subject of heated debate in recent decades, as well as equally sharp controversies around the virtues and costs of the capital account liberalization that took place since the 1970s and the usefulness of stronger regulation of cross-border financial flows. Most of these debates related to emerging and developing countries but, as we shall see, they can be equally relevant for (at least some) developed countries. These are the issues to which I now turn.

4.3 Effects of Capital Account Liberalization

4.3.1 *Boom–Bust Cycles and Associated Market Failures*

Advocates of capital market liberalization believed that, by overcoming the negative effects of 'financial repression', it would increase economic efficiency, reduce risk, strengthen macroeconomic discipline, and promote institutional development. Opening up the capital account would, according to this view, improve the allocation of savings and, therefore, growth. It would also enhance stability by allowing countries to tap into diversified sources of funds to finance consumption and investment. It would also have 'collateral benefits', which include financial market and institutional development, better governance, and macroeconomic discipline.[5]

The basic problem with this view is that it is predicated on well-functioning capital markets (e.g. limited information imperfections and perfect forecasting of future events) and inter-temporal smoothing, characteristics that are generally absent in financial markets (Stiglitz 2008). Critics of capital market liberalization (CML)—and financial liberalization in general—have, therefore,

[5] See the early contributions of McKinnon (1973) and Shaw (1973) and the later ones by Mishkin (2006) and Kose et al. (2009).

pointed out that it could result in severe financial crises with high development costs.[6] According to this alternative view, the pro-cyclical nature of capital flows and the volatility associated with open capital accounts may lead to *more* rather than less macroeconomic volatility, and particularly to stronger business cycles—*real* macroeconomic instability, in the terminology that I shall use here. The uncertainties associated with volatile financing may, in turn, reduce investment and long-term economic growth. Similarly, the discipline imposed by open capital accounts on macroeconomic authorities is not necessarily a positive force for long-term sustainable growth, as it may reduce the space for counter-cyclical macroeconomic policies.

Although the evidence that CML was not associated with faster economic growth or higher levels of investment had important precedents (see, for example, Rodrik 1998), the intellectual battle over the effects of CML was for the most part settled by a major IMF study, published in 2003 (Prasad et al. 2003). This study showed that there is overwhelming empirical evidence that CML increases real macroeconomic instability in developing countries, and to a lesser extent in developed countries. This was also the major conclusion of the Commission on Financial Stability convened by the Bank for International Settlements after the outbreak of the North Atlantic financial crisis and chaired by Rakesh Mohan (BIS 2009). Pro-cyclical capital flows have indeed been at the heart of many of the crises in the emerging and developing world since the 1980s. Even when capital flows were not the direct cause of the crises, they played a central role in their propagation. The crises in the European periphery after the outbreak of the North Atlantic financial crisis show that these problems are also present in (at least some) developed countries.

Equally strong evidence comes from later studies which show that countries that have grown more are those which have relied less, not more, on capital flows for growth, and have therefore run stronger current account balances (Prasad, Rajan, and Subramanian 2007, and Gourinchas and Jeanne 2007). In a more recent exercise, Jeanne, Subramanian, and Williamson (2012: ch. 3) performed a 'meta-regression' analysis using six measures of financial globalization (three de jure and three de facto measures) for the period 1970–2007 and several sub-periods within that time span, and found very limited evidence of a link between financial liberalization and growth, except partly for developed countries and for portfolio equity flows.

The evidence of the strong pro-cyclicality of cross-border flows and the equally strong effect they exercise, particularly on the dynamics of emerging and developing countries, indicates that there may be macroeconomic

[6] See, among the extensive literature on the subject, the papers collected in Ocampo and Stiglitz (2008), including the overview of that volume by Ocampo, Spiegel, and Stiglitz (2008), from which this section partly borrows.

failures, which together with imperfections inherent in the functioning of capital markets imply that financial markets are essentially volatile. Imperfections in capital are associated with externalities and coordination failures, which are reflected in the contagion of both optimism and pessimism. In addition, risk (or insurance) markets are imperfect even in developed countries, but such markets are particularly weak, or absent, in most emerging and developing countries.

Boom–bust cycles in financial markets are, therefore, characterized by the twin phenomena of volatility and contagion. The essential reason for volatility is, as emphasized by Keynes, the uncertainty generated by the absence of information about the future, and the need of market players to base their decisions on expectations about the future performance of the economy and capital markets. This means that, in contrast to the orthodox view that rational speculation helps to stabilize markets, financial markets during booms tend to generate the phenomenon that has been called since the late 1990s 'irrational exuberance'[7] followed by the opposite phenomenon, which can be termed 'unwarranted gloom'. They tend to generate successive phases of 'appetite for risk' (which is generally underestimation of risks) followed by 'flight to quality' (risk aversion), to use the terminology of financial markets. Bubbles even appear and burst in developed countries with well-functioning markets and the best available standards of prudential regulation and supervision. This is consistent with Minsky's (1982) view that financial markets follow an unstable endogenous dynamic, as they generate excessive risk-taking by market agents during booms—indeed, this risk-taking increases the longer the boom lasts—that eventually lead to crises. A similar explanation has been suggested by White (2005), who underscored how the 'search for yield' characteristic of low interest rate environments generates incentives for credit creation, carry trade, and leverage that easily build up asset bubbles. In developing countries with thin or small markets, there exists a short-term bias in financial markets (as discussed in Section 4.3.2), bubbles are easier to create, and their effects can be devastating.

Volatility is reflected, as we have seen, in the pro-cyclical pattern of spreads and country risk premiums (which narrow during booms, and widen during crises), but also in variations in the *availability* of financing (the presence or absence of credit rationing) and in maturities (the reduced availability of long-term financing during crises, or the use of options that have a similar effect). The feedback between increases in spreads, debt accumulation, and short-term macroeconomic expectations during crises can be highly destabilizing, particularly in the presence of high debt ratios. Different types of capital flow

[7] The term was made famous by Greenspan (1996). The best analysis of this issue has been provided by Shiller (2000).

are subject to different volatility patterns. In particular, the higher volatility of short-term capital indicates that reliance on such financing is highly risky (Rodrik and Velasco 2000), whereas the lower volatility of foreign direct investment (FDI) vis-à-vis all forms of financial flow is considered a source of strength. Nonetheless, as already indicated, FDI has also become more volatile, largely because it has become increasingly financialized.

Capital account cycles involve short-term movements, such as the very intense movements of spreads and the interruption of financing (rationing), as was observed with emerging economies after the 1998 Russian crisis and on a worldwide scale at the peak of the North Atlantic financial crisis. More importantly, however, in the case of emerging and developing countries, they also involve *medium-term* cycles, as the experience of these countries over the past four decades indicates (see Section 4.2).

The increasing use of derivative products is an additional source of volatility. Although the accelerated growth of derivative markets has helped to reduce 'micro-instability', by creating new hedging techniques that allow individual agents to cover their microeconomic risks, it might have increased 'macro-instability'. In the words of Dodd (2008), if short-term capital flows can become 'hot' money, under critical conditions derivatives can turn into 'microwave' money, speeding up market responses to sudden changes in opinion and expectations. Derivatives have also reduced transparency by allowing large off-balance-sheet positions that are difficult to regulate.

The expectations that drive financial agents' decisions are based on information about current conditions, which is in turn inherently incomplete and costly to process. This makes it rational for every agent to base her/his decisions on the opinions and actions of others, generating the twin phenomena of contagion and associated herding behaviour. Herding behaviour takes place even in 'normal' times but can be particularly devastating in periods of high uncertainty when 'information' becomes unreliable and expectations become highly volatile. Indeed, when views converge, the information that underlies crises may be factually imprecise or incorrect, but it may still prevail in the functioning of the market, engendering 'self-fulfilling prophecies'. The worst is the case of 'correlated mistakes': unexpected news is reported that contradicts the general opinion, and all market players realize simultaneously that they were wrong and pull their funds out of certain asset classes, triggering panics.

There are many market patterns and practices that exacerbate this problem. Major market players—investment banks, credit rating agencies, international financial institutions—use the same sources of information and tend to reinforce each other's interpretations of events. Since these market players have better access to relevant information and are better able to process it than others, others are likely to follow their lead, reinforcing herd behaviour. The pro-cyclical patterns of credit ratings and the effect they have on the

behaviour of other agents have a similar effect. Furthermore, market-sensitive risk management practices, as well as other features of financial market operations (such as benchmarking indices and evaluation of managers against competitors) also tend to reinforce herding behaviour (Persaud 2000). The tendency of countries (as well as firms) to find themselves clustered in certain risk categories, a standard operating procedure in financial markets, has a similar effect.

Many of these practices tend to reinforce the short-term bias of financial agents. Others may have similar effects, such as the practice of requiring firms, even in advanced financial markets, to announce short-term profit forecasts—which are inherently uncertain. The fact that bank regulations require less capital for short-term debt to satisfy capital adequacy standards tends to reinforce this market pattern.

Contagion of opinions and expectations is only one of several explanations for the spread of crises from one country to another. The financial linkages that characterize a globalized financial world can spread problems from one area to another. Financial agents that incur losses in some markets are often forced to sell their assets in other markets to recover liquidity (or pay off their short-term obligations, including margin calls). Similarly, in periods of euphoria, access to finance in one part of the world economy can facilitate investments in others, and gains in one country can lead to investments elsewhere, often involving greater risk. Trade linkages can also play an important role in this regard, as can the correlation in the movements of different commodity prices—which may have been exacerbated by the 'financialization' of commodity markets—and their effects on commodity-dependent economies.

Contagion is an externality, and thus a market failure. An interrelated set of market failures involves creditor or investor coordination problems, which is particularly relevant during periods of capital flight. Investors are more likely to remain in a country as long as other investors also do so. But if some investors start to believe that the country will face a crisis and begin to move their money, it will be in the interest of others to do the same. This may lead to a rush to pull out their funds, causing the markets to collapse, and leading to domestic responses in recipient countries—exchange rate overshooting, stock market collapses, rising interest rates to stop capital flight, and recession—that further feed into the run. Since the markets usually rebound afterwards, investors would be better off collectively if they had left their funds in the country.

Real macroeconomic instability has adverse effects on growth. The higher risks associated with such instability increase the return required by investors, reducing long-term investment. Crises are often followed by an extended period of slow economic growth. Indeed, strong crises generally shift the growth trajectory, placing countries onto a lower GDP growth path when they start to recover. This is the story of Latin America after the debt crisis of

the 1980s, of Indonesia and some other East Asian economies after the Asian crisis, and of the European periphery after the North Atlantic crisis. In turn, crises are characterized by an enormous destruction of organizational and informational capital, as firms and financial institutions are forced into bankruptcy.

The economic effects of CML also have social implications, because new opportunities accrue disproportionately to the rich, whereas the adverse effects of volatility may disproportionately impact the poor. There is, indeed, an empirical relationship between capital account openness and income inequality, which is associated with the fact that inequality frequently increases after capital account liberalization.[8] There may be multiple reasons for this result: the poor are most vulnerable to macroeconomic volatility because they have the least ability to cope with risk; the increasing mobility of capital weakens the bargaining position of labour; and international financial integration may constrain governments' redistributive policies.

The supporters of CML generally recognize that liberalization requires sufficiently strong and stable financial institutions, which means, in turn, that a strong regulatory framework needs to be in place before liberalization takes place. It is generally recognized in the literature that this warning was not taken into account in the case of many emerging and developing countries, which generally liberalized their capital accounts without strong regulatory frameworks in place. But even economically advanced countries have found it difficult to establish sufficiently effective regulatory structures to avoid crises. This is reflected in the financial crises experienced by Japan and Scandinavia in the last decade of the twentieth century, or of the US and several Western European countries during the North Atlantic financial crisis. In many cases this shows the strong power of financial interests, which are able to avoid strengthening regulation, particularly during periods of euphoria, when even regulators tend to underestimate risks. Furthermore, authorities tend to lag behind financial innovations, many of which are actually designed to circumvent or avoid regulation. The regulatory lag in the face of the growth of derivative markets in recent decades is a clear demonstration of this fact.

4.3.2 *Particular Issues of Emerging and Developing Countries*

There is a fairly general recognition that the problems analysed above are more powerful in the case of emerging and developing countries, and therefore that CML has generated risks and has made it more difficult for developing countries to achieve real macroeconomic stability (see, for example, Schmukler 2008).

[8] See Charlton (2008) and Furcile and Lougani (2013).

There is a relatively broad recognition that it has also failed to help these countries achieve faster rates of economic growth.

One of the basic reasons why CML has a particularly strong negative effect on emerging and developing countries is that their financial markets are thinner. In particular, they are characterized by a strong prevalence of short-term financial assets and liabilities, which generates variable mixes of maturity and currency mismatches in portfolios. This means that, during crises, creditors might not allow borrowers to roll over short-term loans, thus generating a liquidity crunch; but if the loans are rolled over, borrowers are subject, in any case, to the risks associated with interest rate fluctuations. To overcome the short-term bias of domestic financial markets, firms that have access to foreign credit (generally larger firms) often borrow abroad for their longer-term needs; but if they lack revenues in foreign currencies, they incur currency mismatches. When domestic financial institutions use foreign funds to finance domestic currency loans, they incur a currency mismatch that increases the risk of a meltdown if the currency depreciates; if they lend those funds domestically in foreign currencies to avoid currency mismatches in their portfolios, they merely transfer the associated risk to those firms that lack foreign-exchange revenues.

These mismatches would cause less concern if there were an adequate development of futures markets where firms could cover their risks. However, those markets, when available, tend to have relatively short-term coverage and a strong pro-cyclical performance, and become even shorter-term or even entirely shut down during crises. All of this implies that the fact that developing countries' agents bear the brunt of exchange rate and interest rate risk, even when the source of the capital account fluctuations is external in origin, is a fundamental market failure of international capital markets.

Furthermore, when capital accounts are liberalized, the scope for counter-cyclical monetary policy is restricted. In particular, if, to avoid the 'trilemma' of open economies, authorities opt for more exchange rate flexibility, they face a difficult trade-off between monetary autonomy and exchange rate stability. During booms, authorities can adopt counter-cyclical monetary policies, but only at the cost of a stronger exchange rate appreciation, which may lead to unsustainable current account deficits and rising risks of a balance-of-payments crisis; it may also lead to deterioration in the competitiveness of tradable sectors that may have adverse effects on long-term growth. During crises, authorities may be forced to increase interest rates to avoid capital flight. If they avoid this and instead reduce interest rates, exchange rates may overshoot, leading to a rise in domestic inflation and increasing debt burdens for firms indebted in external markets, some of which may be forced into bankruptcy. Avoiding exchange rate overvaluation during booms is therefore

critical to escape a destabilizing trajectory of external debts associated with sharp exchange rate depreciations during crises.

Governments may also be expected by external financial agents to behave in ways that generate 'credibility' during crises, which means that they are judged according to their capacity to adopt pro-cyclical austerity policies. But such policies generate economic *and* political economy pressures to also adopt equally pro-cyclical policies during booms: private agents will then resist the restrictions that authorities may impose on their ability to spend, and governments may be only too happy to have some breathing space after a period of austerity. Therefore, although counter-cyclical fiscal policy can potentially be used to help moderate booms, it faces severe pressures to do so; as is widely recognized, it is also not as flexible an instrument as monetary or exchange rate policies. This helps explain why there is widespread evidence that fiscal accounts are highly pro-cyclical in the developing world (Kaminsky, Reinhart, and Végh 2004). Therefore, in contrast with the notion that financial markets should have a disciplining effect, unstable external financing distorts, to a great extent, the incentives that *all* domestic agents face throughout the business cycle, inducing pro-cyclical behaviour from both private agents and macroeconomic authorities.

There are ways to avoid these trade-offs, the most important of which is the accumulation of foreign exchange reserves during booms which can be used to increase the policy space that authorities have during crises. Counter-cyclical foreign exchange reserve management has indeed been a widespread practice in recent decades. However, such 'self-insurance' is costly: from a country perspective, it involves accumulating an asset that has low yields (foreign exchange reserves) to compensate for the entry of private capital inflows which have higher yields/costs; if reserve accumulation is sterilized, central banks will also incur losses associated with the difference between interest receipts from the investment of reserves and the costs of the domestic instruments used for sterilization purposes.

Other ways to manage the associated risks may merely shift those risks, rather than correct them. For example, the risks faced by the domestic financial sector can be counterbalanced by prudential regulation of domestic financial activities that is stricter than international (Basel) standards, but this raises the cost of financial intermediation and may restrict the development of new financial services. The move to a 'hard peg'—a currency board regime or dollar/euro-ization—to eliminate currency risks reduces even further or may altogether eliminate the space for counter-cyclical policies. There is, therefore, a very profound sense in which the financial and macroeconomic constraints faced by emerging and developing countries that have opened up their capital accounts are inescapable.

Furthermore, the pro-cyclical fiscal policies induced by CML have long-term costs. Cuts in social sector spending generate losses—e.g. forgone nutrition, education, or healthcare—that may never be reversed for those who did not have access to the associated government programmes and services during crises; government services may themselves lose human and organizational capital, which generates long-term losses in terms of efficiency and effectiveness. In turn, stop-and-go public-sector investment policies might leave some projects (e.g. roads) unfinished, at least for several years, increasing the cost and reducing the productivity of public-sector investment (Ocampo 2003b).

4.4 Capital Account Regulations

4.4.1 *The Case for and Effectiveness of Capital Account Regulations*

The case for regulating cross-border capital flows rests, therefore, on the need to increase the policy space for counter-cyclical macroeconomic policies, as well as to correct (possibly through 'second-best' interventions) financial market failures. Capital account regulations (CARs)—the term and acronym that I will use here to refer to these interventions—play, therefore, a dual role: as a *macroeconomic* policy tool, and as a *financial stability* tool. As a macroeconomic policy tool, they provide greater room for counter-cyclical monetary policies. During booms, they increase the space necessary to undertake contractionary monetary policies while avoiding the additional exchange rate appreciation pressures that such monetary policies can generate by attracting additional capital flows. By mitigating exchange rate appreciation, they also reduce the risks that rising current account deficits will generate a future balance-of-payments crisis, and equally avoid adverse effects on tradable sectors that may be crucial for long-term growth. In turn, during crises, they can create some room for expansionary monetary policies while containing capital flight and excessive exchange rate depreciation that would otherwise be partly transferred onto domestic inflation and lead to a destabilization of debt ratios. On the other hand, when viewed as a financial stability tool, CARs recognize the fact that pro-cyclical behaviour and, particularly, reversibility vary significantly according to the nature of capital flows, with debt portfolio flows and short-term bank lending being particularly volatile.

CARs can also be justified from a welfare economics perspective. This framework views volatile capital flows as negative externalities imposed on recipient countries that can be reduced or eliminated through some form of intervention. These externalities result from the fact that individual investors and borrowers do not take into account—or ignore—the effects of their financial decisions on the level of financial stability in a particular country. As a classic case of market failure, the situation calls for Pigouvian taxes (that is, taxes on

cross-border financial activities and other regulations) and/or other interventions to correct for the market failure and restore efficiency (Korinek 2011).

As with prudential regulations, CARs can be either quantitative (administrative) or price-based, but there are more complex typologies (see, for example, IMF 2011b). There are also terminological differences: IMF (2011b) coined the term 'capital flow management measures', whereas Epstein, Grabel, and Jomo (2003) suggested the concept of 'capital management techniques'. Quantitative regulations include: prohibitions or ceilings on certain capital flows, derivative operations, or net exposure in foreign currencies; minimum stay periods; and restrictions on foreign investors taking positions in domestic securities or rules on what type of agent can undertake certain capital transactions (e.g. residents versus non-residents, corporate versus non-corporate). In turn, price-based regulations include unremunerated reserve requirements on capital inflows (URRs) and taxes on capital inflows or outflows.

All of these belong to the family of what have come to be called 'macroprudential regulations'. This is a concept that was proposed before the North Atlantic financial crisis,[9] but has only received widespread acceptance after the crisis. This includes acceptance in the IMF's 'institutional view' of capital account regulations (capital flow management measures) as part of the macroprudential family.

Following Erten and Ocampo (2017) and prior work by Schindler (2009) and Ostry et al. (2012), it is useful to differentiate four different types of (de jure) CARs: (i) capital inflow restrictions; (ii) capital outflow restrictions; (iii) financial sector regulations; and (iv) regulations on the domestic use of foreign exchange (FX-related regulations, in short). The first and second cover regulations across six asset categories: money market instruments, bonds, equities, financial credits, collective instruments, and direct investment. The third relate to different forms of discrimination between residents and non-residents, including the capacity of non-residents to hold domestic accounts, as well as limits on residents' capacity to borrow and hold accounts abroad. FX-related regulations refer to the restrictions on the domestic use of foreign currencies: on lending locally in such currencies, the purchase of locally issued securities denominated in foreign currencies, differential treatment of deposit accounts in such currencies, and limits on foreign exchange positions.

Figure 4.4 plots the intensity with which CARs were used by fifty-one emerging and developing economies from 1995 to 2015. As it indicates, the most frequently used are FX-related regulations, followed by capital outflow restrictions, capital inflow restrictions and financial sector regulations, in that order

[9] See, for example, the concept of 'counter-cyclical prudential regulations' in Ocampo (2003a), as well as the work of the Bank for International Settlements on what was termed the 'macroprudential perspective'.

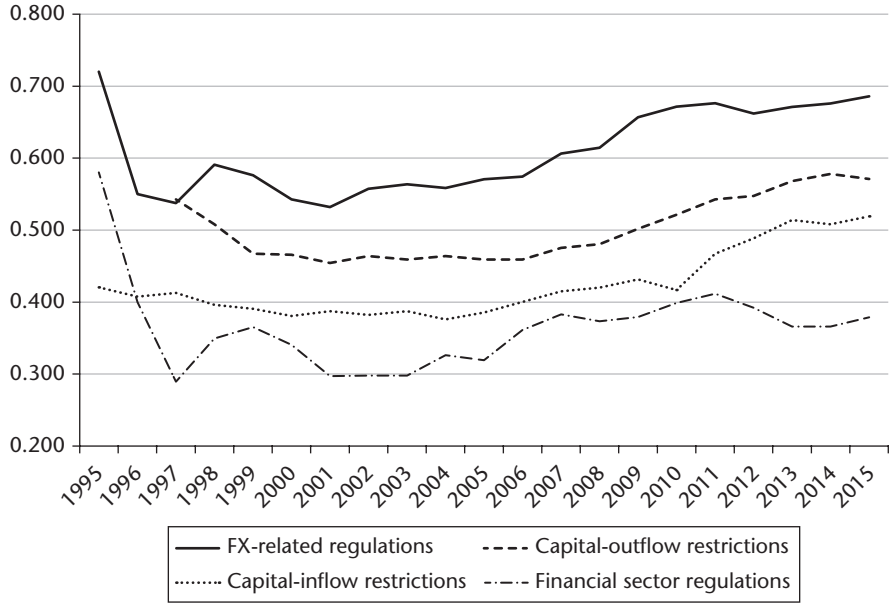


Figure 4.4 Capital account regulations, 1995–2015
Source: Erten and Ocampo (2016) and updates for recent years according to the same methodology.

(though the mix was somewhat different in the early years shown in this figure). Countries were reducing regulations in the run-up to the East Asian financial crisis, particularly FX-related and financial sector regulations; in fact, the latter became the least used form of regulation during these years. Emerging economies responded to that crisis by strengthening FX-related and financial sector regulations but generally maintaining or loosening capital outflow and inflow restrictions. During and after the North Atlantic financial crisis, there was a general move to strengthen most CARs—the exception being financial sector regulations.

By region (Table 4.3), South and East Asia have the highest average scores for all indicators of capital account restrictiveness, followed by the Middle East and North Africa. Eastern Europe and Latin America are the most liberalized regions, with Latin America having both stronger FX-related and financial sector regulations. Lower-income countries have stronger regulations in all areas, and there is a different mix between the two groups of middle-income countries, with the upper middle-income countries discriminating less between residents and non-residents (financial sector regulation) but using the other types of regulation more strongly than lower middle-income countries.

A complementary way to look at CARs is to see them as part of a continuum which runs from regulations on financial transactions by domestic residents in the domestic currency (traditional prudential regulation, including

Table 4.3 Capital account regulations in emerging and developing countries, 2015

	Capital-inflow restrictions	Capital-outflow restrictions	Financial sector regulations	FX-related regulations
A. By geographical area				
Eastern Europe	0.439	0.461	0.178	0.517
Latin America	0.450	0.467	0.444	0.667
Middle East and North Africa	0.548	0.643	0.571	0.786
South and East Asia	0.792	0.833	0.467	0.875
B. By income level				
Upper-middle-income	0.509	0.574	0.278	0.694
Lower-middle-income	0.458	0.521	0.403	0.656
Low-income	0.722	0.778	0.611	0.833

Source: Based on the methodology and sources indicated in Erten and Ocampo (2016).

counter-cyclical prudential regulations), to those on domestic residents in foreign currency (FX-related regulations), and finally to those involving domestic agents' transactions with foreign residents.

As components of the broader family of regulations, those that focus directly on the capital account can be partly substituted by domestic prudential regulations. For example, a good practice that belongs to the last category but can have effects on external capital flows is that of managing the net foreign exchange exposure of domestic financial institutions, which is a fairly generalized practice. This may take the form of forbidding banks and other domestic financial intermediaries from holding net liability positions in foreign currency, or of managing such liability positions in order to encourage or discourage demand for foreign exchange at different phases of the business cycle, as has been practised in Colombia for decades. Another interesting case is Peru's use of differential reserve requirements for domestic banks' liabilities (deposits, but it can also be applied to external borrowing) in domestic versus foreign currencies; this is, of course, only useful in the partly dollarized financial system that Peru has. A disadvantage of focusing on domestic financial system regulations is that it leaves aside direct borrowing abroad by non-financial agents, and thus may lead to more borrowing of this type to sidetrack prudential regulations. A specific advantage of other forms of CARs is that they limit such arbitrage. A further alternative is a more active use of tax provisions applying to foreign-currency liabilities (see, for example, Stiglitz and Bhattacharya 2000).

Most of the literature on the effectiveness of CARs comes from the analysis of individual countries applying such regulations.[10] This method allows for

[10] See, among others, several IMF papers (2011b, 2011c, 2012a, 2012e) and papers by IMF experts (Ariyoshi et al. 2000; Ostry et al. 2010, 2011, 2012; and the literature reviews of Forbes et al. (2012), Kawai and Lamberte (2010), Magud and Reinhart (2007), Magud, Reinhart, and Rogoff (2011), Ocampo (2008), and Ocampo and Erten (2014).

concrete studies of individual countries' experiences as well as the use of higher-frequency data than is possible in cross-country analyses. But it does not allow for comparison with countries facing the same external conditions but not using those regulations. Multi-country studies, as well as cross-country regression analysis, facilitate, in principle, such comparisons.

There is a broad-based consensus in the literature on two positive effects of CARs. The first is that they help improve the composition of capital inflows, tending to lengthen the maturity of external debt obligations. The second is that they increase monetary policy independence, in the sense that regulations on inflows allow countries to increase domestic interest rates during booms and, more generally, adopt contractionary monetary policies without strong effects on the exchange rate. This means that CARs can partly delink the effects of capital flows on interest and exchange rates and, therefore, reduce the trade-off that authorities face between monetary policy autonomy and exchange rate stability.

In contrast, there has been more debate on the effects in other areas, particularly on overall capital inflows and on exchange rates. Exchange rate effects are generally found to be temporary or statistically insignificant. This implies that CARs generally operate as 'speed bumps'[11] rather than permanent restrictions. This could, of course, be interpreted as suggesting that they need to be dynamically adjusted to take into account the response of the private sector, including 'innovations' to circumvent regulations.

Furthermore, this as well as other effects may depend on the nature and strength of the regulations. In particular, traditional quantitative regulations may be better at reducing inflows than URRs. In turn, in a comparative study of the effects of CARs on inflows in Chile, Colombia, and Malaysia in the 1990s, Ocampo and Palma (2008) concluded that the harsher 1994 Malaysian regulations had a stronger effect than those of Chile or Colombia, and that, among the latter, Colombia's were more effective because they were also stronger, as measured by the tax equivalent of the URR. Similarly, the strong tax on outflows introduced by Malaysia in 1998 is generally considered to have been very effective (Kaplan and Rodrik 2002). Using two instruments simultaneously may also enhance their effectiveness. So, exchange rate interventions may have stronger effects on exchange rates if accompanied by CARs.

Most papers look at the effects of CARs on capital inflows and exchange rates as separate effects, but they are in fact two manifestations of the same effect. In my work with Bilge Erten (Erten and Ocampo 2017), we have tried to correct for this problem by creating an overall index of the 'foreign exchange pressure' generated by capital flows, which can be reflected either

[11] This is the term used by Palma (2002) and Ocampo and Palma (2008).

in reserve accumulation or exchange rates—with the mix depending on other macroeconomic policies. Using this methodology, we find that CARs reduce foreign exchange pressures. This in effect is true of emerging and developing countries but not of developed countries.[12]

Overall, therefore, there is significant evidence that CARs improve the composition of capital flows towards less reversible flows and increase monetary independence without sacrificing exchange rate objectives. They also may have a desirable effect on exchange rates, but this effect is contested by some authors.

CARs also have interesting real effects. This first analysis of this issue came with the work by IMF researchers (Ostry et al. 2012). They showed that countries that used CARs before the North Atlantic financial crisis were able to mitigate the contraction of GDP during the crisis. In Erten and Ocampo (2017), we explored this same issue but with a dataset covering more years, which also helped to allow an analysis of the recovery from the crisis. We found that using CARs helped countries avoid both a stronger impact of the crisis and overheating during the recovery, indicating overall that CARs are a good counter-cyclical instrument.

The literature has also discussed the advantages and disadvantages of different forms of regulations. The first issue relates to the effects of regulation on inflows versus outflows. There is a significant bias in the current debate against regulating outflows. But the empirical evidence goes in the opposite direction, indicating that regulations on outflows are more effective than regulations on inflows.[13] On price- versus quantity-based regulation, it has been generally argued that price-based regulations, in particular URRs, have the advantage of being more market-friendly. But again, the evidence in the literature, including IMF research, is that quantity-based regulations are generally more effective. In fact, simple quantity-based regulations—in particular, prohibiting certain financial agents, particularly banks, from undertaking certain transactions—are also used in domestic prudential regulation, with no associated stigma. In terms of temporary versus permanent regulations, the major issue is whether countries have institutions in place that can utilize them when needed. So, using permanent regulatory systems and instruments that can be used in a counter-cyclical way—including phasing out regulations temporarily during periods where there are no balance-of-payments pressures—is better than improvising institutions to manage either booms or crises, which tends to generate poor results.

[12] As Erten and Ocampo (2017) underscore, the results of Klein (2012), which indicate that regulations have no effect on exchange rates, are distorted by the inclusion of developed countries in the cross-country analysis. When Klein's data is used but developed countries are excluded, CARs are found to have statistically significant effects on the exchange rate.

[13] See the older research from the IMF (Ariyoshi et al. 2000) and Erten and Ocampo (2017).

In terms of residents versus non-residents, the view of the IMF and many analysts is that countries should not discriminate between residents and non-residents. But this may in fact be impossible, as residents and non-residents have a significant difference in their demand for the domestic currency of the recipient countries—non-residents obviously demand less than residents and possibly in a more unstable way. For that reason, it may make sense to discriminate between them. Thus, although countries should try to focus their regulations on currencies rather than residency, even regulations that focus on currencies will, de facto, discriminate between residents and non-residents.

Finally, in this regard, there is also a general agreement that different types of flows should be regulated in different ways. In general, it is agreed that CARs should aim in particular at the most volatile flows, which are generally bank lending and portfolio flows (particularly debt portfolio flows). In contrast, trade financing should be subject to no restrictions and foreign direct investment should be exempted from CARs. However, this old wisdom is debatable, as FDI often (and even increasingly) takes the form of lending by the headquarters of firms to their subsidiaries, and equity investments in infrastructure projects are frequently financed by bond issues in international markets. Exemptions on FDI may in fact become significant loopholes in the regulations.

The basic disadvantage of capital market regulations is, of course, that they *segment* domestic from international markets. It can be argued, however, that this recognizes the fact that markets are already segmented—and, therefore, CARs can be understood as 'second-best' interventions. Indeed, the flaw of CML is that it does not recognize the implications of segmentation. In policy terms, the alternative, or, even better, complementary policy instrument is that of active interventions in foreign exchange markets and associated counter-cyclical management of foreign exchange reserves. It can be argued, however, that if the basic problem of CARs is that they segment capital markets, the major disadvantage of reserve accumulation is that it is costly. A more active use of CARs is a less costly form of intervention.

More generally, and given, in particular, the strong constraints that emerging and developing countries face in the current globalized financial world, these two forms of intervention should be seen as complements and not as substitutes in the design of counter-cyclical macroeconomic policies. In a nutshell, this means that CARs should thus be seen as an *integral* component of the policy package to be adopted in order to guarantee macroeconomic stability in a broad sense (Ocampo 2008).

4.4.2 *Recent Global Policy Debates*

One of the most interesting developments in the area of CARs in recent years has been the revival of views on the positive role that these can have in the

international system. This represents, in a sense, a partial return to the original Bretton Woods agreements that were discarded in the era of capital account liberalization. In particular, these views stand in sharp contrast to the 1997 proposal by the IMF to include the commitment to capital account convertibility in the Articles of Agreement.[14]

The G20 adopted, during its 2011 summit, a set of 'coherent conclusions for the management of capital flows' (G20 2011c), but the most important multilateral effort to rethink the role of these regulations was that undertaken by the IMF in 2011 and 2012, proposing what it called first a 'possible policy framework' (IMF 2011b, 2011c) and later an 'institutional view' (IMF 2012a, 2012e). This exercise was backed by significant research by IMF staff (see, in particular, Ostry et al. 2010, 2011, 2012). As a result of this exercise, the IMF has recognized that capital flows carry risks and that, under certain circumstances, capital flows should be regulated to moderate both surges and sudden stops in external financing. In keeping with the discussions above, it sees such interventions as a complement to a counter-cyclical macroeconomic policy. The full liberalization of capital flows has still been kept as a long-term objective for countries, but it has been advised that this should only be adopted when nations reach a certain threshold of financial and institutional development.

The IMF thus recommends that nations could use 'capital flow management measures' (CFMs) alongside other macroeconomic policies: counter-cyclical monetary and fiscal policies, active foreign exchange reserve management, and macroprudential domestic financial regulations. However, it has been emphasized that CFMs should be used only after other instruments of macroeconomic policy management have been adopted—i.e. after building up reserves, letting currencies appreciate, and strengthening fiscal policy—and thus as a sort of 'intervention of last resort'. This perspective was, nonetheless, more nuanced in the 2012 'institutional view' than in the 2011 proposal.

The IMF's view also favours regulations on inflows and is critical of those on outflows, which it recommends should only be used in crisis or near-crisis conditions. The IMF also recommends that all interventions should be essentially temporary in character and that they should discriminate on the basis of currency but not on that of residence. The case for temporary measures goes against its own recommendation to strengthen the associated institutional framework, which is better served if regulations are seen as a permanent toolkit for countries. In contrast, improvising interventions under crisis situations may actually make them ineffective. In turn, as discussed in Section 4.4.1, the objective of non-discrimination is hard to achieve, as CARs almost by necessity require

[14] The most important review of debates in recent years is provided by Gallagher (2014). A critical analysis of IMF decisions has been provided by Gallagher and Ocampo (2013), from which this section partly borrows.

some discrimination between residents and non-residents, reflecting the segmentation that characterizes financial markets in an international system.

The continuous advocacy for the liberalization of the capital account as a long-term objective is also problematic, as the existing literature overwhelmingly finds no strong correlation between capital account liberalization and growth, especially in emerging and developing countries. In the words of Jeanne, Subramanian, and Williamson (2012: 5): 'the international community should not seek to promote totally free trade in assets—even over the long run—because [. . .] free capital mobility seems to have little benefit in terms of long-run growth and because there is a good case to be made for prudential and non-distortive capital controls'. This is consistent, as we have seen, with new theoretical research which indicates that CARs can be the optimal policy for internalizing the externalities associated with risky capital flows (Korinek 2011). This indicates that CARs should therefore be used as permanent interventions, just as prudential regulations are used in domestic finance on a permanent basis.

So, a more ambitious policy framework should recognize that CARs should be used on a permanent basis, as an integral component of a counter-cyclical macroeconomic policy package, preferably based on permanent regulations that are strengthened or weakened in a counter-cyclical way, and dynamically modified to respond to developments in global and local capital markets. It should also recognize that there should be no presumption in favour of the regulation of inflows over outflows, and that it may be difficult to avoid discriminating between residents and non-residents. These elements, together with those that relate to international cooperation to regulate capital flows, can be formulated in terms of a set of guidelines for the use of CARs (see Box 4.1).[15]

In any case, a major advance of the IMF institutional view was the recognition that there is no obligation to adopt capital account convertibility under the IMF Articles of Agreement, an issue that was settled after the 1997 debates. Countries have therefore full freedom to manage their capital account. In the words of the major grouping of developing countries in the Bretton Woods institution, the G24: 'Policy makers of countries facing large and volatile capital flows must have the flexibility and discretion to adopt policies that they consider appropriate and effective to mitigate risks' (G24 2011: par. 8).

Crucially, the IMF has boldly noted that its own recommendations and the freedom that countries have to adopt CARs under its Articles of Agreement may be at odds with other international commitments, in particular trade and investment treaties that restrict the ability to regulate cross-border finance.

[15] This alternative framework is the result of an academic debate that took place whilst IMF Board discussions were taking place. See a full collection of contributions to this debate in Gallagher, Griffith-Jones, and Ocampo (2012a).

Box 4.1 GUIDELINES FOR THE USE OF CAPITAL ACCOUNT REGULATIONS

- CARs should be seen as an essential part of the macroeconomic policy toolkit and not seen as measures of last resort.
- CARs should be considered differently in nations where the capital account is still largely closed in contrast with those nations where CARs are prudential regulations used to manage an open capital account.
- Price-based CARs have the advantage of being more market neutral, but quantity-based CARs may be more effective, especially in nations with relatively closed capital accounts, weaker central banks, or when incentives to bring in capital are very large.
- CARs can be seen as alternatives to foreign exchange reserve accumulation, particularly to reduce the costs of reserve accumulation.
- CARs should not be seen as solely temporary measures, but should be thought of as permanent mechanisms to be used in a counter-cyclical way to smooth booms and busts. Their permanence will strengthen the institutional capacity to implement them effectively.
- Investors can increasingly circumvent CARs through mis-invoicing trade flows, derivative operations, or FDIs that are in fact debt flows.
- Therefore, CARs should be seen as dynamic, requiring a significant degree of market monitoring and 'fine-tuning' as investors adapt and circumvent regulation.
- It may be useful for effective CARs to distinguish between residents and non-residents.
- The full burden of managing capital flows should not be on emerging markets and developing countries, but the 'source' countries of capital flows should also play a role in capital flow management, including supporting the effectiveness of those regulations put in place by recipient countries.
- Neither industrialized nations nor international institutions should limit the ability of nations to deploy CARs, whether through trade and investment treaties or through loan conditionality.
- Industrialized nations should examine more fully the global spillover effects of their own monetary policies and evaluate measures to reduce excessive outflows of short-term capital that can be undesirable both for them and emerging countries.
- The stigma attached to CARs should be removed, so nations have ample confidence that they will not be rebuked for taking action. The IMF could play a valuable role in taking away the stigma of CARs, as well as doing comparative analysis of which CARs are most effective.

Source: Based on Gallagher, Griffith-Jones, and Ocampo (2012b).

In its own words, 'even where the proposed Fund institutional view recognizes the use of inflow or outflow CFMs as an appropriate policy response, these measures could still violate a member's obligations under other international agreements if those agreements do not have temporary safeguard provisions compatible with the Fund's approach' (IMF 2012e: 42). Indeed, many trade and investment treaties lack the appropriate safeguards (Gallagher and Stanley 2012). This is true if countries have made commitments on financial service

liberalization within the WTO and OECD but, more importantly, is true of several regional and bilateral agreements. In particular, in treaties with the US, it is stated that all forms of capital must flow 'freely and without delay' among trade and investment partners. The IMF correctly suggests that its institutional view could help guide future trade treaties and that the IMF could serve as a forum for such discussions. Such provisions should be revised to make them consistent with the IMF's institutional view and the provisions under its Articles of Agreement.

Finally, among the most interesting elements of the IMF's institutional view is the recognition that source countries should pay more attention to the potentially negative spillover effects of their macroeconomic policies. In this regard, the essential problem since the North Atlantic financial crisis has been the asymmetry created by the dissimilar strength of different economies. Given the autonomy that countries have to run their monetary policy, this induces capital flows that may run counter to the policy objectives of other countries. In short, a 'multi-speed' global economy creates a need for a 'mirror asymmetry' in monetary policies, which would be very difficult to manage without some restrictions on capital flows.

This leads to an analysis of whether there should be some form of explicit global cooperation in this field. One positive step would be to design mechanisms by which source countries cooperate with countries adopting CARs, helping to make those regulations effective. This would imply, in a sense, a return to the views that Harry Dexter White espoused prior to the Bretton Woods negotiations. This might require, as Jeanne, Subramanian, and Williamson (2012) have proposed, the adoption of an international regime determining which regulations are appropriate and which are not, as well as an IMF code of good practice for capital account policies. In their view, a basic advantage of such a code would be to reduce the stigma associated today with the use of CARs. A disadvantage would obviously be the loss of the full autonomy that countries have in this regard under the current Articles of Agreement.

Cross-border capital account regulations should be seen, therefore, as an essential element of the global monetary system. Actually, the basic principle that should guide actions in this field is the 'embedded liberalism' under the auspices of which the IMF was built: that it is in the best interest of all members to allow countries to pursue their own counter-cyclical macroeconomic policies, even if this requires blocking free capital movements. It is therefore positive that the Fund has recognized that CARs can play a positive role, as part of the broader family of macroprudential regulations.

5

Resolution of Balance-of-Payments Crises

Emergency Financing and Debt Workouts

5.1 Introduction

The need to adopt counter-cyclical macroeconomic policies to manage business cycles was the major contribution of the Keynesian revolution to macroeconomic policy-making. In relation to the effects of balance-of-payments fluctuations, what this implied was the need to break the pro-cyclical response to crises that was expected under the 'rules of the game' of the gold standard. According to those rules, countries with balance-of-payments surpluses were expected to let the domestic money supply expand, whereas those experiencing deficits were supposed to allow monetary contraction and associated deflation to take place—normally complemented by stringent fiscal adjustment—to bring economies back to macroeconomic balance. These pro-cyclical requirements of the gold standard were made more stringent for many countries—notably commodity-producing developing countries—by the boom–bust cycles in external financing. During crises, this meant that the intensity of the crisis was enhanced by the interruption of external financing—a 'sudden stop' in financing, to use the term in vogue since the mid-1990s.[1]

To at least mitigate these pro-cyclical patterns and, particularly, the severity of the adjustment process during crises, an essential element of the Bretton Woods agreement was the creation of official emergency balance-of-payments financing by the IMF. The instrument has changed considerably over time, particularly to manage the large boom–bust cycles in private external financing that have characterized major world business cycles since the mid-1970s, leading in particular to major redesigns of IMF facilities during the crises of

[1] For the origins of this concept, see footnote 14 in Chapter 1.

emerging economies of the late 1990s/early 2000s and, more recently, of the 2007–9 North Atlantic financial crisis.

When the problem is not illiquidity but insolvency, it is widely recognized that financing is not the appropriate response. This implies that it is essential to accompany emergency financing with debt workouts to manage problems of over-indebtedness. The two problems are, of course, interrelated as, if badly managed, a problem of illiquidity can turn into one of insolvency. However, debt workouts have had the opposite history to that of official financing. In fact, in the absence of financing of any sort, defaults and later debt restructuring with variable 'haircuts' were common phenomena in the nineteenth century and the first half of the twentieth century, reaching a historical peak during the Great Depression of the 1930s and later debt restructurings. Although these practices did not disappear after the Second World War, and a new mechanism was designed in the 1950s to renegotiate official bilateral debts (the Paris Club) and some ad hoc initiatives have been adopted in recent decades, no regular multilateral instrument has yet been put in place to manage unsustainable debt burdens.

This chapter analyses the dual history of these two instruments. The first part looks at IMF emergency financing and some complementary mechanisms. The second considers debt workouts. Both summarize the policy debate that has taken place in recent decades and present proposals on how to move forward.

5.2 IMF Emergency Financing

5.2.1 *A Brief History of IMF Lending*

In the original design, one quarter of the IMF's quotas had to be deposited in gold and the remainder in each country's currency. The latter has always been largely a bookkeeping entry into the Fund's balance sheet but also an obligation on countries with convertible currencies to effectively provide the resources to the Fund when needed. In turn, countries' maximum cumulative borrowing limits were initially capped at the level of the quotas, with annual drawings of up to one quarter of this. What this implied was that, in the face of crises, the member country could, first, temporarily convert into foreign exchange its gold quota contribution and, if more than that were required, could essentially swap for convertible foreign exchange (basically US dollars in the early years) its domestic-currency quota. The first came to be known as the 'gold tranche' and the latter as the 'credit tranches', which were expanded in 1952 from three to four tranches of 25 per cent, thus allowing countries to borrow up to 125 per cent of their quotas. These rules were set under the 'stand-by' facilities created in 1952, which also introduced an element of

policy conditionality and performance test to access Fund resources (James 1996: 78–81). These limits were withdrawn from the Articles of Agreement in 1978 and since then have been set by the Board (see Section 5.2.2). With the gradual de-monetization of gold in the 1970s and the earlier creation of Special Drawing Rights (SDRs) in 1969, countries were allowed to pay the first tranche in SDRs or convertible currencies; it then came to be known as the 'reserve tranche'.

A peculiarity of this system has been that the IMF has to manage a multiplicity of currencies, many of which are inconvertible and therefore cannot be used for lending (Polak 2005). During periods of exceptional demand for resources, the Fund thus has to raise additional resources to lend. This is done by borrowing from members through a series of 'arrangements to borrow': first the 'general' (created in 1962 and expanded in 1983) and later the 'new' arrangements to borrow (activated in 1998 but tripled during the North Atlantic financial crisis), the former including only developed countries but the latter also some emerging countries.

Although it could be argued that financing was limited, it was associated with a basic principle on which IMF lending was initially based: that it was expected to finance *current account* imbalances, as they had, according to Keynesian theory, the strongest effects on economic activity and employment. This focus was also consistent with the aim of promoting international trade. The two objectives were interrelated, as stated in Article I.ii of the Articles of Agreement, which sets as a basic function of the Fund 'To facilitate the expansion and balanced growth of international trade, and to contribute thereby to the promotion and maintenance of high levels of employment and real income and to the development of the productive resources of all members as primary objectives of economic policy'. Capital account fluctuations were supposed to be managed through controls on capital flows (see Chapter 4 in this volume).

The credit limits were expanded through time as a proportion of quotas. The first major step took place in the mid-1970s using the compensatory financing facilities, the first of which had been created in 1963 to cope with negative trade shocks (especially the deterioration in the terms of trade), but was considerably expanded in its scope and complemented by special oil facilities to respond to the 1973 oil shock. This facility came to represent about half of IMF loans in the second half of the 1970s. The 1974 Extended Fund Facility had also allowed for additional financing relative to quotas and the Articles of Agreement had themselves given the freedom to exceed quotas under exceptional circumstances. However, as we shall see in Section 5.2.2, the major jumps in the rules regarding the ratio of borrowing to quota took place at the turn of the century and were associated with a basic twist in the principles of IMF lending, which from the 1960s started to provide financing for *capital*

account shocks, which are of a much larger magnitude than the current account imbalances that the original design aimed at. Although some authors still argue that the Fund should keep its original focus on current account imbalances (Akyüz 2005), this is no longer a viable alternative.

Historically, IMF lending has played two essential roles: a transitory and a permanent one. The former was managing the severe 'dollar shortage' of the early post-war years. This function was particularly important in relation to Western Europe, until it made its transition to current account convertibility in 1958. It included managing the problems generated by the inconvertibility of the secondary major international currency, the British pound. The permanent function is providing counter-cyclical financing to countries facing balance-of-payments crises of either domestic or external origin. The first are generated by domestically induced excess domestic demand or exchange rate overvaluation, whereas the latter have their origins in trade but also, increasingly, in financial shocks.

The severe instability that several developed countries faced in the years that preceded the final collapse of the original Bretton Woods arrangement in 1971 is perhaps the earliest case of counter-cyclical financing to manage external capital account shocks, and was associated with the effects of speculative flows in the Eurodollar market on individual countries. In turn, the rapid increase of IMF financing since 2009 is the most recent case of counter-cyclical financing involving capital account shocks that have affected several high-income countries. In relation to the developing world, the collapse of commodity prices in the mid-1950s and the oil shocks of the 1970s are two early cases of counter-cyclical financing to manage trade fluctuations, but the heyday of IMF financing is associated with the series of major capital account shocks that emerging countries had faced since the 1980s. We shall return to these issues in Section 5.2.2.

The use of Fund resources has significantly changed over time, both in terms of the groups of countries classified by levels of development, and also the variable geography of regions experiencing severe balance-of-payments crises. As Figure 5.1.A shows, the major users of lending facilities in the early years were high-income countries (using the 2000 World Bank classification), which remained very important until the mid-1970s. Indeed, high-income countries represented more than half (and in some years close to three-quarters) of IMF financing during about half of the first three and a half decades of IMF history.[2] High-income countries essentially ceased to use Fund resources in the 1980s only to reappear as the major borrowers during

[2] In particular, in 1948–50, 1952, 1956–8, 1965–70, and 1975–7.

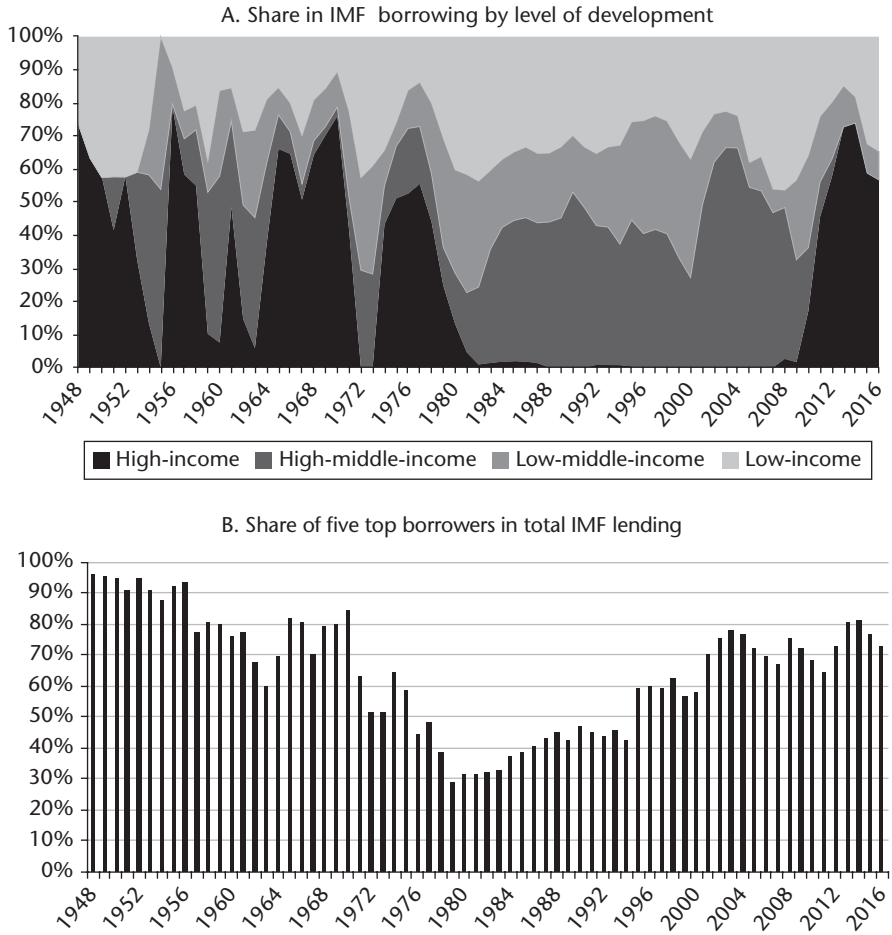


Figure 5.1 IMF lending

Source: Author's estimates based on IMF database, using World Bank classification of countries by income in 2000.

the North Atlantic financial crisis. As we shall see, the economies involved have changed over time. Low-income countries—notably India—have also been important borrowers since the early years and have represented throughout the Fund's history around 30 per cent of borrowing. However, IMF lending focused on middle-income countries between the 1980s and the North Atlantic financial crisis, responding to the series of major crises that these countries faced: the debt crisis of the 1980s, primarily in Latin America, the December 1994 Mexican crisis, and the succession of crises in the emerging economies that started in East Asia in 1997 and then spread to Russia, South America, and Turkey.

A persistent characteristic of IMF lending, which is not generally recognized in public debates, is its concentration in a few large borrowers. Indeed, as Figure 5.1.B indicates, the five largest borrowers at any specific moment have made up 60 per cent or more of IMF lending. The only exception was in the two decades from the mid-1970s to the mid-1990s, when the group of borrowers was more diversified.

The variable geography of IMF lending is summarized in Table 5.1, which shows the five major borrowers in any year. As shown, the early decades were dominated by three high-income countries (UK, France, and Australia, the latter primarily in the 1950s) and India. High-income countries continued to be important in the 1960s and 1970s, with Italy and Spain becoming new major borrowers in the 1970s alongside the UK. Important middle-income countries came to the Fund on a large scale in the 1950s and 1960s, primarily South American nations (Argentina, Brazil, Chile, and Colombia), as well as Turkey, Iran, and Egypt. Some of them dropped out as major borrowers in the 1970s (particularly Brazil, Colombia, and Iran), but the Philippines and Sri Lanka joined the group of major borrowers. In turn, Indonesia and Pakistan joined India as major low-income borrowers.

As indicated, the hegemony of middle-income countries in IMF lending was the result of the succession of emerging-country crises beginning in the 1980s. Latin America was predominant in the 1980s and 1990s, with Mexico and Venezuela joining Argentina, Brazil, and Chile as major borrowers. The Republic of Korea, Turkey, and the Philippines were also important in the first half of the 1980s, together with two low-income countries, India and Pakistan. Two transition economies, Russia and Hungary, joined the group in the 1990s. In turn, with the outbreak of the East Asian crisis and its contagion to other regions, the major borrowers were the Republic of Korea, Russia, Argentina, Brazil, and Turkey among middle-income countries, and Indonesia among the low-income ones. Finally, with the outbreak of the North Atlantic financial crisis, the largest borrowers were concentrated in Europe, both Western (Greece, Iceland, Ireland, and Portugal) as well as Central and Eastern (Hungary, Romania, and Ukraine), with Pakistan becoming the most important non-European borrower from the mid-2000s.

Overall, therefore, Fund lending has also historically benefited all categories of countries and all regions. The list of countries that have been more frequently (ten years or more) in the IMF list of large borrowers includes high-income countries (UK and France) as well as middle-income (Argentina, Brazil, Turkey, Mexico, Chile, Russia, the Republic of Korea, and the Philippines) and low-income ones (India, Pakistan, and Indonesia) from all parts of the world. Interestingly, if we define 'graduation' as the condition of having been a large, frequent borrower for at least ten years and having ceased to be so for at least two decades, France and the UK stand as the earliest examples,

Table 5.1 The shifting geography of major IMF borrowers

2000 classification	No. of years	1948–49	1950s	1960s	1970s	1980s	1990s	2000s	2010–16
High-income countries									
United Kingdom	22	1948, 1949,	1950, 1951, 1952, 1956, 1957, 1958,	1961, 1964, 1965, 1966, 1967, 1968, 1969,	1970, 1971, 1976, 1977, 1978, 1979,	1980			
France	10	1948, 1949,	1950, 1951, 1952, 1953, 1957, 1958,	1969,	1970				
Australia	7	1949,	1950, 1951, 1952, 1953, 1954,	1961					
Greece	7								2010, 2011, 2012, 2013, 2014, 2015, 2016
Ireland	6								2011, 2012, 2013, 2014, 2015, 2016
Portugal	6								2011, 2012, 2013, 2014, 2015, 2016
Italy	5				1974, 1975, 1976, 1977, 1978				
Spain	5		1959,		1975, 1976, 1977, 1978				
Netherlands	3	1948, 1949,	1950						
Denmark	2	1948,	1952						
Japan	1		1957						
Canada	1			1962					
New Zealand	1			1967					
Iceland	1							2008	

(*continued*)

Table 5.1 Continued

2000 classification	No. of years	1948–49	1950s	1960s	1970s	1980s	1990s	2000s	2010–16
Upper middle-income countries									
Argentina	32		1957, 1958, 1959,	1960, 1961, 1962, 1963, 1964,	1972, 1973, 1976,	1985, 1986, 1987, 1988, 1989,	1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999,	2000, 2001, 2002, 2003, 2004, 2005	
Brazil	24		1951, 1953, 1954, 1955, 1958, 1959,	1960, 1961, 1962, 1963, 1965,		1983, 1984, 1985, 1986, 1987, 1988, 1989,	1990, 1999,	2001, 2002, 2003, 2004	
Turkey	19		1953, 1954, 1955,		1970, 1979,	1980, 1981, 1982, 1983,		2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009	
Mexico	15					1984, 1985, 1986, 1987, 1988, 1989,	1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998		
Chile	13		1959,	1964, 1965, 1966, 1968,	1972, 1973, 1974, 1975,	1987, 1988, 1989,	1990		
Korea, Republic of	11					1980, 1981, 1982, 1983, 1984, 1985, 1986,	1997, 1998, 1999,	2000	
Venezuela	7						1990, 1991, 1992, 1993, 1994, 1995, 1996		

Hungary	5						1991, 1992,	2008, 2009,	2010
Uruguay	1							2005	
Lower middle-income countries									
Russia	12						1993, 1994, 1995, 1996, 1997, 1998, 1999,	2000, 2001, 2002, 2003, 2004	
Philippines	10		1955,		1971, 1972, 1973, 1977, 1978, 1979,	1980, 1981, 1982			
Egypt	9			1960, 1962, 1963, 1964, 1965, 1966, 1967,	1971, 1979				
Colombia	7		1954, 1955, 1956,	1963, 1967, 1968, 1969					
Romania	5							2009,	2010, 2011, 2012, 2013
Sri Lanka	4			1968,	1970, 1971, 1973				
Iran	3		1955, 1956,	1960					
Dominican Rep.	1							2007	
Low-income countries									
India	37	1948, 1949,	1950, 1951, 1952, 1953, 1954, 1957, 1958, 1959,	1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969,	1974, 1975,	1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989,	1991, 1992, 1993, 1994, 1995		
Pakistan	21				1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979,	1981, 1982, 1983, 1984,		2005, 2006, 2007, 2008, 2009,	2010, 2014, 2015, 2016

(*continued*)

Table 5.1 Continued

2000 classification	No. of years	1948–49	1950s	1960s	1970s	1980s	1990s	2000s	2010–16
Indonesia	15		1956,	1966, 1969,	1970, 1971, 1972,		1997, 1998, 1999,	2000, 2001, 2002, 2003, 2004, 2005	
Ukraine	11						1996,	2006, 2008, 2009,	2010, 2011, 2012, 2013, 2014, 2015, 2016
Bangladesh	2				1974,			2007	
Congo, D.R.	2							2006, 2007	
Myanmar	1		1956						
Sudan	1							2006	

Source: Author's estimates based on IMF database, using World Bank classification of countries by income in 2000.

followed by Chile and India.[3] At the same time, however, new large borrowers always come into the picture.

5.2.2 *Changes in Financing Instruments to Manage Capital Account Crises*

After the 1994 Mexican crisis, the need to create new credit lines to manage balance-of-payment crises caused by sudden stops in external financing began to be recognized by the Fund. This problem is exacerbated by the fact that, as argued in Chapter 4, the pro-cyclical behaviour of capital flows to developing countries reduces the policy space to adopt counter-cyclical macroeconomic policies. Although IMF conditionality has traditionally relied on austerity (and, in this sense, pro-cyclical) policies, it may nonetheless mitigate the strength of or even eliminate the need to adopt pro-cyclical policies in the face of a sudden stop in external financing. The North Atlantic financial crisis may have represented a partial turning point in this regard as, in the face of the recessionary risks that the world economy faced, the Fund took an openly counter-cyclical perspective on the economic policies that industrialized

[3] Philippines also drops out from the list of large borrowers but continues to be a borrower until 2005.

countries and, with greater caution, emerging and developing countries, should adopt. This was only partly reflected in the conditionality associated with several of the European programmes, which were strongly pro-cyclical in their design.

The two essential elements of this policy were, first, the acceptance of a much larger scale of financing relative to quotas than had been typical in the past—'exceptional access' in Fund terminology—a point to which I have referred in Section 5.2.1, and, second, the search for contingency or precautionary financing instruments to mitigate and hopefully avoid the contagion effects of crises.

Although there were important precedents that go back to the 1960s, the annual and cumulative amounts of borrowing had increased since 1979, and have essentially been managed to give freedom to respond to the need for exceptional amounts of financing during capital-account crises (IMF 2001). However, as we shall see, it was under these new facilities created to manage the emerging market crises of the late 1990s/early 2000s and, even more, the North Atlantic financial crisis, that lending reached very high levels relative to quotas. Contingency credit lines have had a more chequered history.

Exceptional financing came with conditions, which were explicitly set in the early 2000s in terms of four criteria: '(i) the member is experiencing exceptional balance-of-payments pressures on the capital account resulting in a need for Fund financing that cannot be met within the normal limits; (ii) a rigorous and systematic analysis indicates that there is a high probability that debt will remain sustainable; (iii) the member has good prospects of regaining access to private capital markets within the time Fund resources would be outstanding, so that the Fund's financing would provide a bridge; and (iv) the policy programme of the member country provides a reasonably strong prospect of success, including not only the member's adjustment plans but also its institutional and political capacity to deliver that adjustment' (IMF 2003). This was accompanied by stronger procedures for decision-making and programme evaluation. A major concern of all these principles is that they create a bias towards larger members, which could not be reconciled with the principle of uniformity of treatment of member states. Furthermore, a major exception to these principles was given to Greece in 2010: although the IMF staff judged that debt was not sustainable—a fact that was confirmed with the later debt restructuring in 2012, which many analysts judged to be, in any case, insufficient—it was given leeway to include an exception for those cases in which there was 'a high risk of international systemic spillovers', an exception that the IMF staff later judged to have been inappropriate (IMF 2013a). The lack of formal debt workouts that countries could then be asked to use under unsustainable debt burdens is, of course, a basic constraint in making these judgments.

In the context of the financial turmoil that the developing world faced after the 1997 East Asian crisis, the IMF created two new credit facilities. The first, the Supplemental Reserve Facility, created in December 1997, served as a framework for the large loans made during the crises in the late twentieth and early twenty-first centuries. This facility came with short maturities, which were later extended, and penalty interest rates (a surcharge of three percentage points above the normal rate for IMF loans during the first year, which was increased by 0.5 points at the end of that period and every six months thereafter until reaching five percentage points), which were at the time exceptional provisions in the light of prior IMF lending history, but became regular policies in relation to exceptional financing.

The other, the Contingent Credit Line, had a more preventive aim. However, it was never used because doing so was perceived as an indicator of vulnerability, and it was suspended in 2003. In 2006 the IMF proposed an alternative line, called the Reserve Augmentation Line. Although the proposal was positive in some respects, since it was an automatic credit line, doubts were raised about the prequalification process and the scale of the resources.

Curiously, the creation of these lines coincided with the weakening of the Compensatory Finance Facility, which languished due to its excessive conditionality and had ceased to be used since the turn of the century.

For the poorest countries, the structural adjustment lines created in the mid-1980s were transformed in 1999 into the Poverty Reduction and Growth Facility, in order to explicitly place the focus on poverty reduction. In January 2006, a credit line was added for those countries, aimed at facilitating recovery after negative shocks—not just those coming from trade but also from natural disasters—and conflicts in neighbouring countries.

The North Atlantic financial crisis led to further reforms in all of these areas. Following the demand for a precautionary credit line, the IMF Board responded in October 2008 with the creation of the short-term liquidity facility (SLF). It provided rapid access to loans for countries with 'sound macroeconomic policies' and could be disbursed without the traditional IMF ex-post conditionality. Loans had a three-month maturity and were renewable twice during a twelve-month period; borrowing limits were up to 500 per cent of a country's quota. Yet, as the crisis deepened and spread through the developing world, no country called upon the SLF. In fact, the same day that the IMF announced the creation of the SLF, the US Federal Reserve finalized reciprocal swap arrangements with Mexico, the Republic of Korea, Singapore, and Brazil—four countries which would most likely have qualified for IMF loans under the SLF. These swap lines, although shorter in terms of maturities, were clearly superior to IMF loans in terms of flexibility and lack of conditionality. Two countries, Mexico and the Republic of Korea, which were potential users of the SLF, used the Fed's facilities (see Section 5.2.4), indicating that

they viewed the SLF as inferior to the Fed swap line. Indeed, Mexico openly praised the SLF but explicitly said it would not use it.

As a result of strong pressure to take more daring measures, in March 2009 the IMF approved perhaps the most ambitious reform of Fund lending in history (IMF 2009c). This reform was adjusted later on to improve its novel features. First, the IMF created the Flexible Credit Line (FCL), which had preventive purposes and lacked ex-ante conditionality, for countries with solid fundamentals but a risk of facing problems in their capital account. Although three countries rapidly used this credit line, the fact that it has not been used by other countries could indicate that it is not sufficiently attractive. Its terms were improved in August 2010, when the scale of the resources was increased and the period for which it could be used was extended. Reflecting the discussions surrounding similar credit lines in the past, the additional problem of this facility is that it artificially divides countries into two groups: those which have 'good' policies and those which the IMF does not classify under this category, which can obviously increase the risks that the market perceives for countries in the second group.[4]

This is why the other reforms adopted in March 2009 were probably of greater importance. The first of these was to double the other credit lines and to allow a wider use of the ordinary Fund agreements (the stand-by agreements) for preventive purposes (the so-called 'high-access precautionary arrangements'). In August 2010, an additional step was taken, with the creation of the new Precautionary Credit Line (PCL) for countries which the IMF deems to have good policies but which do not meet the criteria for the FCL. It was later transformed into the Precautionary and Liquidity Line, to allow countries to use it to obtain funds of rapid disbursement for six months. The other significant reform introduced in March 2009 was to eliminate structural benchmarks, and thus the relationship between IMF disbursements and structural conditionality. These reforms were accompanied by the elimination of several existing credit lines, including the compensatory finance facility.

In terms of low-income countries, the IMF made new announcements about its concessional credit lines (IMF 2009e). Apart from doubling the credit limits, in accordance with the March 2009 reforms, it increased the global capacity of the IMF loans to these countries through three facilities: (i) the Extended

[4] Just before the creation of the FCL, the then United Nations Development Programme (UNDP) Administrator, Kemal Derviş (2008) expressed at the time concern that programmes such as the SLF and the Fed's swap facilities effectively created two groups of countries. In this regard, he pointed out that such an 'all or nothing categorization will create serious political tensions . . . [and] will also make it politically difficult for these governments [who are left out] to engage in such negotiations if other countries have immediate access to assistance from the IMF or Central Bank swaps'.

Credit Facility (ECF), which replaced the Poverty Reduction and Growth Facility (PRGF) and provides help to countries with difficulties in their balance of payments; (ii) the stand-by lines, which can now be used for dealing with external shocks (which used to be addressed, as we saw, through a special credit line) and other balance-of-payments needs; and (iii) a rapid credit facility for limited support during emergencies (such as a natural disaster or a temporary external shock) with a limited conditionality, called the Rapid Credit Facility (RCF). The IMF also decided that all low-income countries would receive an exceptional cancellation of all owed interest payments on concessional loans until the end of 2011, as well as lower rates of interest on future loans.

In December 2009, the IMF further reformed its concessional loan lines from a single design to a menu of options (IMF 2009f). The menu aimed to be more flexible to different situations facing low-income countries in relation to two factors: their vulnerability to debt and their macroeconomic and public finance management capacity ('capacity' in IMF terminology). Within this framework, countries whose debt vulnerability is high will always have concessionary loans, but those with limited vulnerability and high capacity can eventually access non-concessionary facilities.

Shortly after the creation of the Flexible Credit Line, three countries requested and were granted access to it. Interestingly, on the eve of the 2 April 2009 G20 meeting in London, Mexico became the first country to use the new facility. As was pointed out earlier in this section, it had explicitly refused to use the SLF, and now requested almost three times the amount borrowed during its 1994 crisis. Poland and Colombia soon joined. Since these initial approvals expired, the three countries have continued to demand these credit facilities, but none has drawn on them, nor have there been new users of the FCL. This raises questions both as to whether it is a good criterion that countries should be recurrent demanders, and also why the facility has not been used by other nations. In turn, only one country (Morocco) has demanded the Precautionary Credit Line. The limited use of these contingency lines reflects, no doubt, the 'stigma' associated with borrowing from the IMF.

After the Lehman Brothers collapse, demand for IMF loans grew rapidly. A novelty was the fact that, for the first time since the 1970s, the IMF included high-income countries among its borrowers: Greece, Iceland, Ireland, and Portugal. To these we should add the large loans to several countries of Central and Eastern Europe (particularly Romania and Ukraine, as well as Hungary in the early years of the crisis) and Pakistan. Several middle-income countries have also used IMF credit lines since the collapse of Lehman Brothers, including the preventive facilities, but demand from these countries has fallen. In the case of low-income countries, demand has been steadier and, as we have

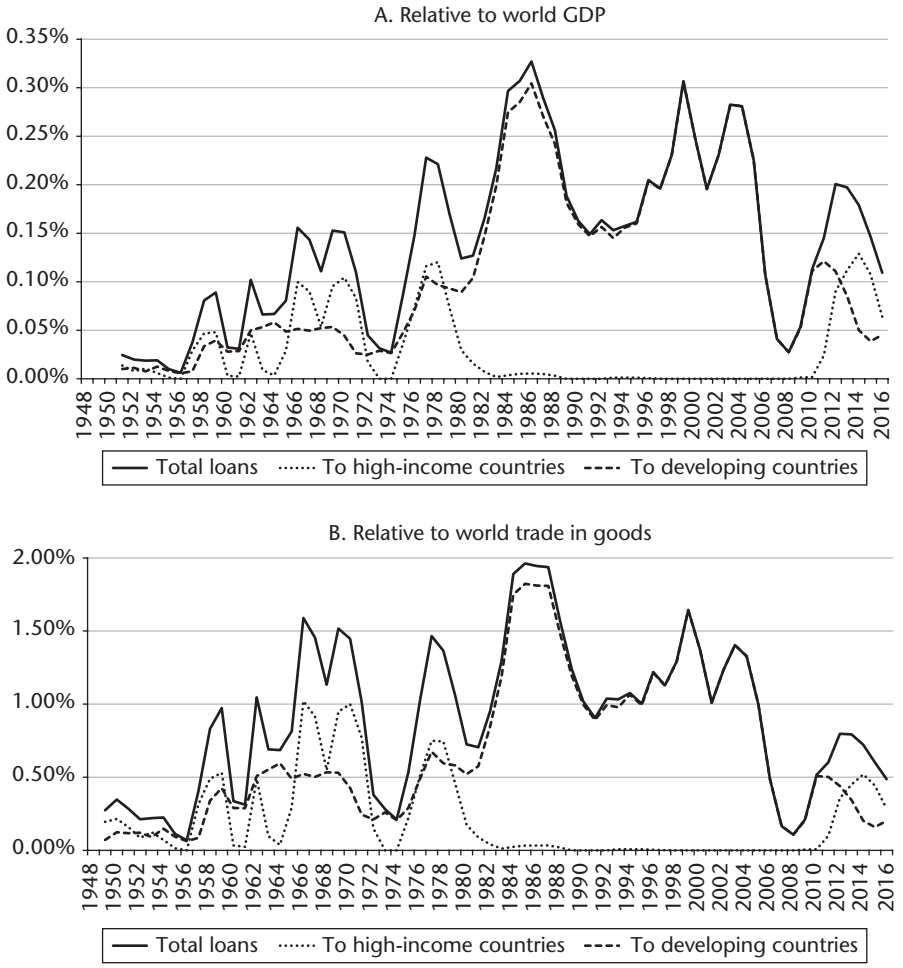


Figure 5.2 IMF lending relative to world GDP and trade

Source: Author's estimates based on IMF database, using World Bank classification of countries by income in 2000.

seen, preceded the North Atlantic financial crisis but absorbed a limited amount of resources.

Overall, as Figure 5.2 shows, IMF lending has clearly fulfilled its countercyclical role. The largest amounts of IMF lending up to the 1970s were associated with borrowing by high-income countries, with peaks during the turbulence that preceded the collapse of the original Bretton Woods arrangement in 1971 and after the first oil shock. Developing countries were also large borrowers after that oil shock. The two peaks that followed, which surpassed previous levels relative to both world GDP and world trade, were associated with the emerging countries' crises of the 1980s and the late 1990s/early

2000s. The most recent peak reached during the North Atlantic financial crisis involved, like that of the second half of the 1970s, both high-income and developing countries. In turn, lending experienced sharp reductions after all these peaks. This was particularly so in the years prior to the Lehman Brothers collapse, when demands for IMF resources were very low, and came mainly from low-income countries; only one low-middle-income country, Honduras, had demanded a stand-by agreement prior to the Lehman bankruptcy, in April 2008.

It is important to underscore, however, that there has been a clear downward trend in IMF lending relative to world GDP and, particularly, world trade over the past three decades. Indeed, recent levels of financing are, relative to trade in goods, only about two-fifths of the historical peak in IMF lending in the mid-1980s. They are even lower relative to the trade in goods and services (not shown) and, particularly, relative to any financial aggregate. For example, if we calculate IMF lending relative to the Bank for International Settlements data on outstanding debt securities (which is, however, a fragmented series for the 1980s), recent lending is only slightly over one-tenth of the relative levels of the mid-1980s.

On the other hand, as a result of decisions regarding exceptional financing, the ratio of large loans to quotas sharply increased during the three most recent lending cycles. Table 5.2 summarizes the evolution of that ratio for the five top borrowers, defining exceptional financing as borrowing over three times a country's quota. As the table indicates, during the 1980s, the average level of exceptional financing was 3.7 times the quota amount, with the Republic of Korea, Mexico, and Turkey as the countries with the largest relative amounts of borrowing. This increased to 6.6 times during the 1995–2007 cycle, with Turkey and the Republic of Korea as the worst cases. In the most recent cycle, 2009–13, it reached 8.8 times, with Greece, Portugal, and Ireland as the cases where the ratio reached the highest levels, in a few cases over 20 times the quota level.

Fund lending has thus clearly met its counter-cyclical objective, but it has tended to lag behind other global aggregates over the past three decades. This is despite the fact that the international financial system demands the IMF to be more active as a source of emergency financing, particularly to manage capital account shocks. The responses it has adopted during recent crises and particularly during the North Atlantic one have been overall improvements but it needs to continue making progress in designing financing facilities that are automatic and have simpler prequalification processes. These two conditions are particularly important to overcome the stigma associated with borrowing from the IMF, which is closely related to the conditionality associated with it, the issue to which I now turn.

Table 5.2 Cases of large exceptional financing (over three times the quota level) (borrowing as % of quota at the end of each year)

First cycle: 1980s			Second cycle: 1995–2007			Third cycle: 2008–16		
Korea, Republic of	1981	418%	Mexico	1995	607%	Turkey	2008	465%
	1982	446%		1996	527%		2009	426%
	1984	345%		1997	384%	Hungary	2008	406%
Philippines	1981	309%		1998	339%		2009	735%
Turkey	1981	379%	Korea	1997	1026%		2010	735%
	1982	440%		1998	1501%	Iceland	2008	476%
	1983	349%	Russia	1998	318%	Ukraine	2009	510%
Mexico	1987	312%	Indonesia	1998	431%		2010	674%
	1988	306%		1999	359%		2011	674%
	1989	332%		2000	400%		2012	511%
	1990	395%		2001	349%			
	1991	406%		2002	313%			
				2003	333%		2015	561%
			Turkey	2000	333%		2016	418%
				2001	1165%	Romania	2009	591%
				2002	1685%		2010	951%
				2003	1682%		2011	1026%
				2004	1437%		2012	899%
				2005	1063%		2013	506%
				2006	600%	Ireland	2011	879%
				2007	380%		2012	1315%
			Argentina	2001	525%		2013	1548%
				2002	498%		2014	940%
				2003	493%		2015	300%
				2004	429%			
				2005	314%	Pakistan	2009	463%
			Brazil	2003	628%		2010	549%
				2004	531%			
			Uruguay	2005	526%		2015	348%
						Greece	2010	1110%
							2011	1592%
							2012	1719%
							2013	2113%
							2014	1817%
							2015	1154%
							2016	416%
						Portugal	2011	1117%
							2012	1787%
							2013	2076%
							2014	2228%
							2015	1589%
							2016	621%
Average		370%			661%			874%

Note: Borrowing as per cent of quota at the end of each year.
Source: Author's estimates based on IMF database.

5.2.3 *IMF Conditionality*

Debates on IMF conditionality are almost as old as the Fund. The early years were the period in which countries had almost automatic access to IMF lending, despite the opposition to such automaticity by the United States.

But the US position finally prevailed and conditionality was adopted as Fund policy in 1952, when the stand-by facilities were created, except for drawings on the gold or reserve tranche. The essential defence of conditionality was that it was necessary to guarantee that countries could return to sustainable balance-of-payments positions and could repay their loans—or, in Fund terminology, that Fund resources were safeguarded. Under crisis conditions, adjustment generally meant adopting contractionary macroeconomic policies. This was, of course, a partial return to the 'rules of the game' of the gold standard, though now mitigated by access to some limited amounts of financing and the possibility of depreciating the exchange rate, both of which helped smooth out the adjustment process. It was always understood, of course, that adjustment should be less severe when deficits were expected to be temporary and self-correcting.

Adjustment maintained the essential asymmetry between surplus and deficit countries and the global recessionary bias that this generates. In a sense, this problem became worse in the post-Second World War years, as surplus countries were no longer subject to the rule that forced them to automatically expand their money supply—a rule that had been implemented, in any case, with latitude to avoid excessive monetary expansion even under the gold standard. This asymmetry was the reason why Keynes had advocated automatic financing of deficits (Keynes 1942–3), a view that, as we saw in Chapter 1, was defeated in the negotiations that led to the Bretton Woods agreement.

In the 1960s, the debate on automaticity vs. conditionality became associated with the *origins* of balance-of-payments deficits, in particular with whether they were generated by expansionary domestic policies or by adverse external shocks—in the terminology that became fashionable, under 'circumstances beyond a country's own controls'.[5] This was the background to the decision to design fairly automatic credit facilities, notably the compensatory financing facility in the 1960s and the oil facilities in the 1970s; the latter did not last too long, but the first one did, indeed until 2009, though, as mentioned in the Section 5.2.2, it had ceased to be used long before because of the gradual dismantling of its low-conditionality features. It could, of course, be argued in defence of conditionality that, unless external shocks were strictly temporary in nature, countries still had to adjust. This is the basic reason why the views in favour of conditionality eventually won, once again, and the automatic facilities created in the 1960s and 1970s were dismantled.

The nature of the debate entirely changed in the 1980s and 1990s, when it became associated with the growing scope of the structural conditionality

[5] This is probably the main issue that was debated around 1980. See the edited volume by Williamson (1983a) and his own summary of that debate (Williamson 1983b).

attached to lending, which went well beyond macroeconomic issues. This process started with the Latin American debt crisis but even more so with the transition from socialist to market economies in Central and Eastern Europe. Criticisms of the costs of structural adjustment were already common in the 1980s but came to the fore after the East Asian crisis.[6] Critics emphasized that macroeconomic policy conditions tended to be pro-cyclical and thus enhanced rather than mitigated the effects of external shocks but, on top, that both both macroeconomic and structural conditionality were rigid and uniform ('one size fits all') and not tailored to countries' specific characteristics. They also underscored the fact that economic liberalization programmes associated with structural conditionality reflected orthodox views on economic reforms, the effects of which were controversial and excessively intrusive on domestic decision-making processes. They thus violated the principle of 'ownership' of policies by countries, which became widely recognized as a precondition for policies to be effective. Furthermore, some critics also underscored the fact that those conditions often reflected pressures from influential countries on what they wanted specific borrowing countries to do (e.g. open up their financial sectors to foreign investment, particularly during the East Asian crisis).

As a result of these pressures, in the late 1990s the IMF began to reconsider the fiscal and structural conditions attached to its programmes. This led to the drafting of an interim guidance note on conditionality in 2000, but particularly to the approval of the IMF Board, in September 2002, of new guidelines on conditionality (IMF 2002b). The new guidelines put at the centre three basic principles: (i) member countries' *ownership* of policies, or in terms of the guidelines, that 'the member has the primary responsibility for the selection, design, and implementation of its economic and financial policies'; (ii) the requirement that structural conditions should be '*macro-relevant*' and mainly focus on the core competencies of the Fund (monetary, fiscal, and exchange rate policies, as well as financial system issues); and (iii) the need to streamline conditionality, which came to be known as 'parsimony', which implies that conditions must be *critical* to achieve the programme goals. Additional principles included tailoring policies to country needs, which means that policies should be relevant to the specific country, including its capacity to implement them, clarity in the specification of conditions, and coordination with other institutions, particularly the World Bank in areas that are not the core competencies of the Fund.

Further efforts were made in later years to implement these principles. In 2005, the IMF Board reviewed the application of the new guidelines and

[6] For the early criticism of the high costs of structural adjustment, see Cornia, Jolly, and Stewart (1987). The best-known criticism after the East Asian crisis is that of Stiglitz (2002).

concluded that progress had been made. However, in 2008 the IMF's Independent Evaluation Office (IMF-IEO) completed an assessment of structural conditionality in IMF-supported programmes (IMF-IEO 2007). The report highlighted that conditionality needed to be even more focused and relevant. A new plan approved in May 2008 called for sharpening the application of the 2002 guidelines on conditionality by demanding better justification of 'criticality', establishing explicit links between goals, strategies, and conditionality, and enhancing programme documents.

There was at the time an open debate about whether or not conditionality was in fact being streamlined. Whereas Abdildina and Jaramillo-Vallejo (2005) found evidence that the average number of conditions had declined, Killick (2005) found that there was no reduction in the number of conditions in programmes for low-income countries and that reliance on conditionality remained high. The latter was probably correct, as more recent evaluations by the Fund indicate that the number of conditions actually increased in 2002–4 (IMF 2012c: Figures 8 and 12).

The IMF-IEO evaluation gave an in-depth numerical analysis of conditionality over time and across sectors. Reviewing the entire lending operations of the Fund between 1995 and 2004, it found that IMF programmes for both middle- and low-income countries had an average of seventeen structural conditions, and found no statistically significant difference in the number of conditions after the 2002 guidelines were approved. In Poverty Reduction and Growth Facility (PRGF) arrangements, the average number of conditions had declined from sixteen to fifteen, while in stand-by arrangements financed by IMF's the General Resource Account, they had risen from eighteen to nineteen.

The report showed, however, that conditionality had shifted away from privatization of state-owned enterprises and trade reform into IMF core areas: tax policy and administration, public expenditure management, and financial sector reform. Furthermore, even though the number of conditions had not declined significantly, the bulk of structural conditions had only limited structural depth: more than 40 per cent of them called for preparing plans or drafting legislation and about half called for one-off easily reversible changes. The IMF-IEO's conclusion was that the streamlining initiative had not reduced the volume of conditionality, partly because structural conditions continued to be used to monitor other initiatives such as donors' support programmes and the European Union (EU) accession process. Also, in some cases, economic authorities in countries requested specific conditionality to help them leverage their domestic policy goals.

A later investigation indicated that additional advances were achieved after the IMF-IEO's recommendations were incorporated into conditionality policy. In particular, the volume of conditionality decreased in stand-by

arrangements and continued to concentrate in macro-relevant areas, but these two advances were less typical in programmes involving low-income countries (Griffith-Jones and Ocampo 2012). For the first type of programme, the average number of structural conditions per country in the period 2008–10 was 16.5, but this average was biased by a few highly conditional programmes, particularly that of Ukraine; if this programme is excluded, the average for 2008–10 fell to 14.3 compared to 19 in the period analysed by the IMF-IEO. For low-income country programmes, the average number of structural conditions per country in the period 2008–10 was 14.5, very similar to the earlier period. As per the content of the structural conditions, the study found that, although most conditions were in the Fund's core mandates—public financial management and financial sector soundness—, it continued to push conditions in areas beyond these mandates, though less so if compared to the period before 2007. These non-core areas included state-owned enterprise reform, social policies, civil service reform, and regulatory reform; this was particularly so for low-income countries.

As we saw in Section 5.2.2, two major reforms were introduced in this area in 2009: the elimination of structural performance criteria for all programmes and ex-ante conditionality for the Flexible Credit Line. The 2011 evaluation by the Fund (IMF 2012c) showed the positive effects of the first of these decisions. It indicated that structural performance criteria had increased in 2002–4 and remained stable in 2004–8, but their discontinuation led to a sharp reduction, particularly in General Resources Account (GRA) programmes. This was reinforced by a reduction in structural benchmarks and prior actions, but quantitative performance criteria had remained constant throughout the period analysed (2002–11) at 5–6 per review. However, this process was interrupted in 2010 and, particularly, in 2011, when structural benchmarks increased again, largely associated with some highly conditional programmes with European countries. This has been confirmed in an independent study, which analysed loans approved between October 2011 and August 2013, and found that the number of structural conditions was increasing, driven by the high number of conditions in some specific programmes—for Côte d'Ivoire, Cyprus, and Greece, in particular (Griffiths and Todoulos 2014).

Aside from this advance in 'parsimony', conditionality became more focused on core Fund competencies. Indeed, structural conditionality has increasingly focused on core Fund areas, particularly on fiscal, followed by financial sector, issues, and particularly in stand-by programmes, with a relative growth of fiscal and decline of financial issues in 2002–11. Monitoring of external debt has also been important in PRGF programmes. In turn, after declining up to 2009, conditionality on macro-social critical issues increased in 2009–11 (particularly civil service and public employment and wages, and pension reform), while wage bill ceilings for low-income countries have

tended to disappear. Aside from the reversal of these positive trends in 2010–11, the IMF review also indicated that the depth of structural conditions had actually increased, indicating that there was a trade-off between the volume and the depth of conditionality. A final troublesome conclusion was that there was inadequate coordination with surveillance, as only 48 per cent of conditions were foreseen in prior Article IV consultations, although the review argued that this was partly due to changing global economic conditions.

One final troublesome issue relates to the character of some of the macroeconomic policies adopted in IMF programmes, which many analysts continue to perceive as pro-cyclical (Weisbrot et al. 2009).[7] However, the record here has probably improved as a reflection of the clearer IMF preference for counter-cyclical policies during the North Atlantic financial crisis—though not in the programmes with eurozone countries. An evaluation of fiscal policies in IMF reports (including not only programmes but also Article IV consultations) indicated, indeed, that in 2008–9 most countries introduced fiscal stimulus programmes, but also that premature expenditure contraction (particularly measured as a proportion of GDP) became common in 2010 and tended to intensify in later years (Ortiz et al. 2015). This is confirmed by Griffiths and Todoulos (2014), who underscored the persistence of politically sensitive conditions in 2011–13 programmes, related in particular to tax and spending policies, including social security reform. In several of the countries entering into a funding agreement with the IMF, it may be fair to say that adjustment policies were required to correct overly expansionary (and thus pro-cyclical) policies during boom years or imposed by policy decisions adopted by countries themselves (e.g. decisions to maintain the currency board in the case of Latvia, or for eurozone countries to remain as members of the currency union).

Overall, therefore, there have been advances since the mid-2000s in reducing the volume of structural conditionality—though with some backtracking since 2010—and focusing it in macro-relevant areas that are within the competence of the IMF. Eliminating structural benchmarks, and thus the relationship between IMF disbursements and structural conditionality, was a significant step forward in 2009, as well as the creation of a preventive credit line that carries no ex-ante conditionality. This is very important, as current, as well as historical conditionality, are the reasons why borrowing from the IMF carries a stigma that, as we shall see in Section 5.2.4, is not present in other forms of counter-cyclical financing.

[7] This study indicated that in 31 out of 41 countries with IMF agreements, countries had been subject to pro-cyclical fiscal and/or monetary policies, and that the IMF had relied on overly optimistic growth forecasts. The latter issue has been emphasized in several evaluations of the IMF throughout the years.

5.2.4 *Complementary Financing Mechanisms*

The response to the North Atlantic financial crisis included a myriad of complementary financing mechanisms in addition to IMF emergency lending: the largest issuance of Special Drawing Rights (SDRs) in history (see Chapter 2 in this regard), the active utilization of central banks' swap credit lines, the creation or expansion of regional monetary arrangements, and the rapid expansion of lending by multilateral development banks (MDBs). Overall, this is certainly the most ambitious response of official counter-cyclical financing in history.

Many swap credit lines have been created in recent years, including those China has extended to other emerging and developing countries.[8] However, because of the role that the US dollar plays in the global monetary and financial system, Federal Reserve funding is particularly critical for other central banks. Strains in dollar funding overseas can also disrupt financial conditions in the US and it is thus of interest to the Fed itself. Like other facilities of its kind—and, in fact, like IMF funding itself—Federal Reserve funding involves transactions in which dollar liquidity is exchanged, at the prevailing market exchange rate, for a similar amount of the currency issued by the central bank drawing on the Fed facility. It involves also a commitment by the foreign central bank to buy back its currency on a specified future date (which can be the next day or as much as three months later) at the same exchange rate, thus eliminating any exchange rate risk. Between 12 December 2007 and 29 October 2008, the Federal Open Market Committee (FOMC) authorized swap arrangements with fourteen foreign central banks, which expired on 1 February 2010. In May 2010, in response to the re-emergence of strains in short-term dollar funding markets abroad, dollar liquidity swap lines with five developed countries' central banks were re-established. Since then, these authorizations have been extended several times.

The first wave of swap credit lines included four emerging economies (Brazil, the Republic of Korea, Mexico, and Singapore), which were given credit lines for up to US$30 billion. Two of these countries, Mexico and the Republic of Korea, which were potential users of the IMF's short-term liquidity facility (SLF) that had been created in October 2008, activated the Fed lines in order to help private firms who were facing a scarcity of dollar liquidity after the Lehman collapse, indicating that they viewed the SLF as inferior to the Fed swap line, both in terms of speedy access to dollar liquidity and lack of conditionality.

[8] Its development bank has also facilitated large amounts of financing to other emerging and developing countries.

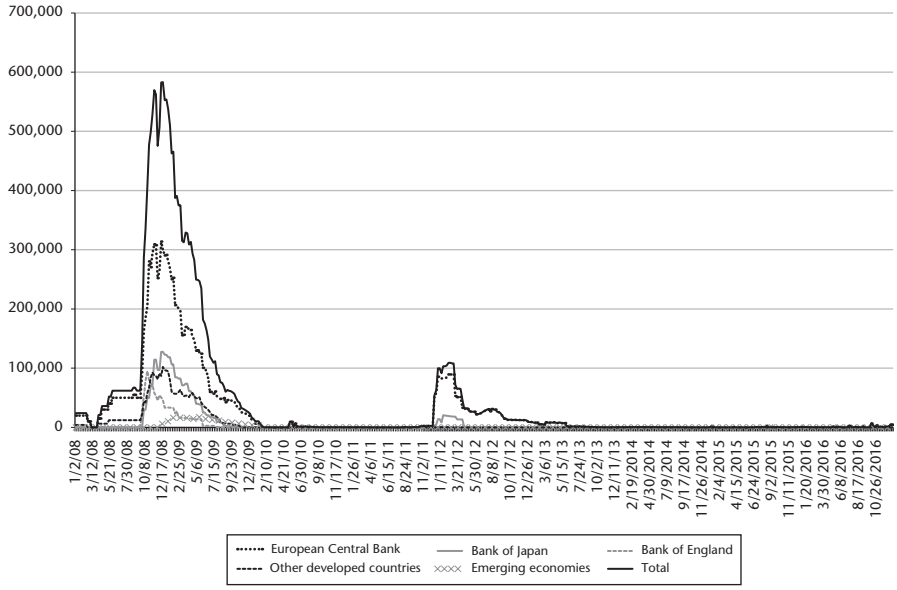


Figure 5.3 Weekly use of US Fed swap facilities (million dollars), 2008–16
Source: Author's elaboration based on data from the US Federal Reserve.

As Figure 5.3 indicates, the major users of these facilities were the European Central Bank (ECB) and the Bank of Japan. The Bank of England and the central banks of several other developed countries—Switzerland, Australia, Sweden, Denmark, and Norway, in that order—were also important users. As indicated in the previous paragraph, the Republic of Korea and Mexico also made use of the Fed swap line but with a lag and in relatively smaller amounts.[9] The swap lines had started to be used before the Lehman Brothers collapse, but it was the bankruptcy of this investment bank that led to a massive use of these facilities: over half a trillion dollars over the next two months, which is about *four* times the increase in IMF lending over a longer time period (2007 to 2013). The facilities declined rapidly during the first semester of 2009 and ceased to be used by the end of that year. The second episode of large use came in late 2011 as a result of the worsening of the eurozone crisis. It was less intense than the previous episode and essentially concentrated in the ECB.

At the regional level, emergency lending was reinforced by old and new mechanisms in Europe and by the Chiang Mai Initiative of ASEAN+3 (China, the Republic of Korea, and Japan). In the first case, it involved both financing

[9] The Republic of Korea started using it in the week of 12 December 2009, with a peak at US $16,350 million between the weeks of 18 January 2009 and 28 March 2009; it then gradually reduced its use until the week of 16 December 2009. In turn, Mexico borrowed US$3,221 million from the week of 29 April 2009 to that of 6 January 2010.

mechanisms for all European Union members (the Balance of Payments Assistance Facility, a pre-existing mechanism, and the new European Financial Stabilization Mechanism) and also mechanisms specifically for euro members (the temporary European Financial Stability Facility put in place in 2010, and the permanent European Stability Mechanism inaugurated in October 2012). In turn, the Chiang Mai mechanism was expanded (to US$240 billion to date) and multilateralized, and a monitoring unit to support it was put in place in Singapore. Other initiatives of a smaller scale have been adopted in other parts of the world (IMF 2013b). I shall return to the role of regional arrangements in Chapter 6.

In relation to MDBs, the crisis placed their counter-cyclical role at the centre of the global agenda, an issue that most had not previously recognized as one of their essential roles, together with the long-term objectives of poverty reduction and the provision of international public goods. Of course, increased lending by the MDBs when private funds dry up is not liquidity financing, but rather long-term financing to the public and, secondarily, the private sectors; but their disbursement facilitates the adoption of domestic counter-cyclical policies and increases the foreign exchange available to countries. The basic advantage of these facilities is that many more countries are willing to use them—i.e. their use carries no stigma—and their basic disadvantage that they involve smaller magnitudes of funds and a longer disbursement period. Interestingly, the recognition of the counter-cyclical functions of MDBs has also been highlighted in recent years in relation to the European Investment Bank and to national development banks.

As Table 5.3 indicates, the MDBs serving emerging and developing countries increased their commitments by 118 per cent in 2009–10 compared to their average level of lending in 2004–7. Disbursements came with a lag, increasing by 82 per cent. The lag between commitments and disbursements took place despite the use or creation of fast-track facilities in all cases. All the major institutions played an important role, and remarkably so the World Bank/IBRD (International Bank for Reconstruction and Development). Regional development banks also expanded their lending rapidly, notably the Asian and the African development banks. The least dynamic was the World Bank/IDA (International Development Authority). Among regional development banks, the least dynamic was the European Bank for Reconstruction and Development, which serves the transition economies.

An additional response of MDBs to the crisis was the rapid way in which they addressed the paralysis of trade financing. The resources that they committed for that purpose were US$9.1 billion, on top of the US$3.2 billion that they were already providing. Due to the high rotation of trade credits, these resources provided a much larger amount of financing. An evaluation by the International Chamber of Commerce at the time indicated that 55 per cent of

Table 5.3 Lending by multilateral development banks, 2004–16 (million dollars)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
COMMITMENTS													
World Bank/IBRD	11,045	13,611	14,135	12,829	13,468	32,911	44,197	26,737	20,582	15,249	18,604	23,528	29,729
World Bank/IDA	9,035	8,696	9,506	11,867	11,235	13,995	14,550	16,269	14,753	16,298	22,239	18,966	16,171
International Finance Corporation (IFC)	4,753	5,373	6,703	8,220	11,399	10,547	12,664	12,186	15,462	18,349	17,261	10,539	11,117
Subtotal World Bank Group	24,833	27,680	30,344	32,915	36,101	57,453	71,411	55,192	50,797	49,896	58,104	53,033	57,017
African Development Bank	4,328	3,278	3,907	4,895	5,435	12,643	6,314	8,782	6,538	6,754	7,316	8,742	
Asian Development Bank	5,039	5,761	7,264	9,516	10,124	13,230	17,936	20,374	20,925	20,991	22,925	27,171	
European Bank for Reconstruction and Development	5,093	5,346	6,149	7,664	7,464	10,987	11,924	12,659	11,437	11,287	10,712	10,175	
Inter-American Development Bank	5,468	6,738	5,774	8,812	11,085	15,278	12,136	10,400	10,799	13,290	12,652	11,264	
Subtotal regional banks	19,928	21,123	23,094	30,887	34,108	52,137	48,310	52,215	49,699	52,322	53,606	57,352	
TOTAL	**44,761**	**48,803**	**53,438**	**63,802**	**70,209**	**109,590**	**119,721**	**107,407**	**100,496**	**102,218**	**111,710**	**110,385**	
DISBURSEMENTS													
World Bank/IBRD	10,109	9,722	11,833	11,055	10,490	18,565	28,855	21,879	19,777	16,030	18,761	19,012	22,532
World Bank/IDA	6,936	8,950	8,910	8,579	9,160	9,219	11,460	10,282	11,061	11,228	13,432	12,905	13,191
International Finance Corporation (IFC)	3,152	3,456	4,428	5,841	7,539	5,640	6,793	6,715	7,981	9,971	8,904	9,264	9,953
Subtotal World Bank Group	20,197	22,128	25,171	25,475	27,189	33,424	47,108	38,876	38,819	37,229	41,097	41,181	45,676
African Development Bank	2,043	1,843	1,864	2,553	2,866	6,402	3,867	4,873	5,194	4,826	4,574	4,175	
Asian Development Bank	3,563	4,745	5,758	6,852	8,515	10,581	7,976	8,266	8,592	8,542	10,009	12,225	
European Bank for Reconstruction and Development	4,596	2,859	4,768	5,611	7,317	7,649	7,950	9,320	7,711	7,836	7,865	7,053	
Inter-American Development Bank	3,768	4,899	6,088	6,725	7,149	11,424	10,341	7,898	6,883	10,558	9,423	10,398	
Subtotal regional banks	13,970	14,347	18,478	21,741	25,848	36,056	30,133	30,357	28,380	31,762	31,871	33,850	
TOTAL	**34,167**	**36,475**	**43,649**	**47,216**	**53,037**	**69,480**	**77,241**	**69,233**	**67,199**	**68,991**	**72,968**	**75,031**	

Source: Author's elaboration based on the reports of the different banks. IBRD, IDA, and IFC data refers to the fiscal years ending in June.

the banks analysed were using the resources of MDBs in the summer of 2009 (ICC 2009).

Increased lending required, in turn, the capitalization of all major institutions. The G20 agreed in April 2009 to support the capitalization of MDBs. The Asian and African development banks agreed in 2009 to a 200 per cent increase in their capital. Although the expectations of the Latin American and Caribbean countries were not fulfilled, the Inter-American Development Bank also agreed a capitalization of US$70 billion in March 2010, which represented close to a 70 per cent rise in callable capital. This was followed by a 50 per cent increase in capital for the European Bank for Reconstruction and Development, agreed in May 2010. The President of the World Bank initially argued that, due to the capital cushions that the institution had, the IBRD did not require additional capital. However, in April 2010, it agreed on a capital increase of US$86.2 billion, which included a general increase of US$58.4 billion and a selective increase of US$27.5 billion to allow emerging and developing countries to enlarge their share in the capital of the institution. This capitalization was clearly insufficient and implied that the World Bank would be unable to respond to a new sudden stop in external financing for developing countries in the future the way it had during the North Atlantic financial crisis. In fact, as Table 5.3 indicates, IBRD financing has declined sharply from its peak, though it has remained above pre-crisis levels. This is not true of the IDA and IFC, which have been more resilient and, in fact, the latter has continued to expand. Regional development banks have also been resilient, with the Inter-American Development Bank being the one that has reduced financing most sharply in recent years.

In any case, the amount of financing provided by the MDBs was much smaller than the contraction of private external financing, and this was also true of that provided by the IMF.[10] Since private capital markets recovered relatively quickly (starting in mid-2009), this implies that their role in mitigating the sudden stop in external financing was modest at best. This also implies that official financing can only moderately smooth out boom–bust cycles in private financing and that the main instrument to reduce the volatility of external financing is that of capital account regulations, particularly regulation on inflows during the boom phase of the cycle (see, in this regard, Chapter 4). Also, notoriously, the weakest response was that of official

[10] Based on World Bank data, it can be estimated that the contraction of private external financial flows (i.e. excluding foreign direct investment) towards emerging and developing countries was US$534 billion between 2007 and 2008, or US$249 billion if we compare with 2006, to avoid the peak 2007 levels. This compares to a peak increase in disbursements of MDBs of about US$30 billion. IMF financing increased by SDR 90 billion or close to US$140 billion, but a large amount was directed towards peripheral Europe.

development assistance, which only modestly increased during the early phase of the crisis and declined after peaking in 2010 (United Nations 2013), a victim of austerity programmes in place in developed countries. The net result of this is that the counter-cyclical response to the North Atlantic financial crisis benefited high- and middle-income countries to a larger extent than low-income countries (Griffith-Jones and Ocampo 2012).

5.3 The Need for an International Debt Workout Mechanism

5.3.1 *The Historical and Conceptual Demand for a Debt Workout Mechanism*

As is widely accepted, beyond the traditional trade-off between financing and adjustment in the face of balance-of-payments crises, the global financial architecture cannot rely exclusively on emergency lending (or 'bailouts', as they are generally called) for two major reasons, which can be seen as two sides of the same coin. The first is that additional financing may contribute to the generation of unsustainable levels of foreign indebtedness, which had generally increased during the preceding boom. The second is that it may generate moral hazard for creditors, as official resources are very often used to effectively bail out the private sector. Furthermore, the absence of an effective debt workout forces debtors to adopt excessively contractionary adjustment policies during crises, and may have negative long-term effects in terms of access to and costs of financing, as well as credibility and attractiveness to FDI. For all these reasons, a well-designed international financial architecture must mix official instruments of liquidity financing during crises with debt workout mechanisms to manage problems of over-indebtedness. The latter fulfils the role that bankruptcy procedures play at the national level. The dividing line between when to use one or the other has been traditionally set as that between 'liquidity' and 'solvency' but, as we well know, this line is not easy to draw, as in many cases the lack of liquidity financing may lead into insolvency. In fact, one of the major arguments in favour of emergency financing is to prevent problems of access to liquidity during crises from turning into insolvency.

However, advances made in improving emergency financing during recent crises have not been matched by the development of an institutional framework to manage countries' debt overhangs. The only regular mechanism of this type in place is the Paris Club, which is officially an informal arrangement serviced by the French Treasury and deals exclusively with official creditors. The system has otherwise relied on ad hoc arrangements as well as those with voluntary renegotiations, relying on the 'comparability principle' in the agreements of debtors with banks and bondholders—i.e. comparable restructuring terms—under the so-called 'contractual approach'. The debtors, in turn, have

to rely on moral suasion, as there is no legal basis for the comparability principle, often leading to lengthy negotiations, non-participation by some creditors ('holdouts') and costly litigation. The principle relies on informal and imperfect coordination of debtors and creditors and on complementary bilateral and multilateral financing, all usually under IMF guidance. However, the problem with this patchy 'non-system' is that debt restructurings generally (or even always) come too late, after over-indebtedness has had devastating effects on countries and thus on their capacity to service debts. This is also an inefficient outcome from the point of view of creditors. It is horizontally inequitable too, as it does not treat all debtors or all bona fide creditors with uniform rules.

Debt defaults and renegotiations have, of course, an old history, which matches the sequence of boom–bust cycles of international finance. Before the Second World War, the typical mechanism was voluntary negotiations between creditors and sovereign states, followed (if they failed) by intergovernmental arbitration. Under this practice, sovereign states unilaterally defaulted. Creditors, generally bondholders, then organized themselves into creditor committees. If they failed in their efforts to negotiate a successful agreement with the defaulting sovereign states, they sought assistance from their own governments. Representatives of the creditors' governments then negotiated and pressured the debtor, leading on more than a few occasions to a military intervention in the territory of the country that had defaulted.[11] Interestingly, when the latter did not happen, this regime tended to grant greater degrees of relief from private creditors than the current system, but only after lengthy and in some cases repetitive negotiations, which allowed arrears to accumulate to the point where they even exceeded the original principal (Suter and Stamm 1992). Furthermore, the mix of default and debt renegotiations produced a much better result for debtor countries than the current system. This comes across clearly in a comparison of Latin America in the 1930s vs. the 1980s: default was one of the mechanisms that supported recovery during the 1930s, whereas debt service was a major drag in the 1980s; in turn, the debt renegotiations after the 1930s default were more generous than those that took place under the Brady Plan in the early 1990s (Ocampo 2014a).[12]

The destruction of international finance during the Great Depression also led to the absence of significant private financing for several decades, and thus

[11] This was a practice typical in the nineteenth century, which was corrected by the 'Convention Respecting the Limitation of the Employment of Force for the Recovery of Contract Debts', adopted as part of a set of laws of war at The Hague in 1907. In any case, there were subsequent occasions in which the old practice of military intervention continued (e.g. the Dominican Republic in 1916).

[12] See an analysis of the magnitude of the relief for Latin America in the debt restructurings after the 1930s default in Jorgensen and Sachs (1989).

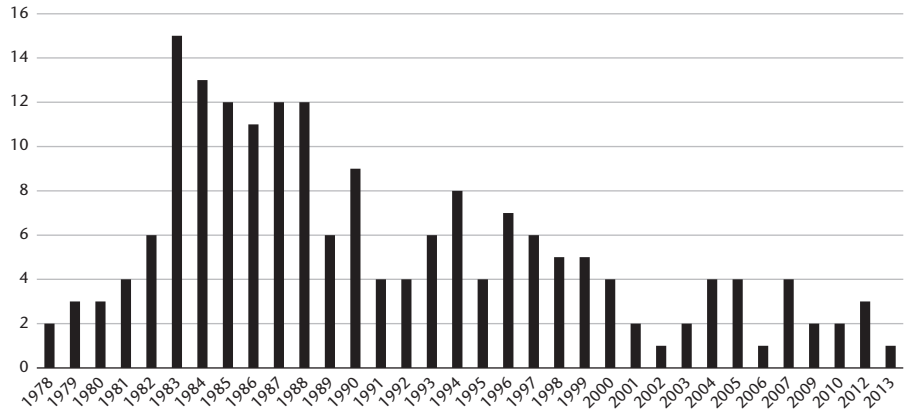


Figure 5.4 Number of debt restructurings 1978–2013
Source: Cruces and Trebesch (2014).

of demands for sovereign debt workouts. Since official financing became the dominant form of financing, renegotiations with official creditors took centre stage. The mechanism created was the Paris Club, which emerged out of Argentina's traumatic renegotiations with creditors in 1956 but became a regular institution thereafter, although its agreements have never had a clear legal status. With the reconstruction of an international private financing mechanism in the 1960s, in the form of the so-called 'eurodollar market', boom–bust cycles of financing came back and with them, defaults and debt renegotiations. The boom in financing to developing countries became very strong in the 1970s, and particularly so from the mid-1970s, when the recycling of petrodollars was matched by an oligopolistic setting in which large international banks sought to place loans in a way that would allow them to expand or at least maintain their market share (Devlin 1989). As Figure 5.4 shows, this was followed by the first contemporary phase of debt renegotiations, which started in the late 1970s and peaked in the 1980s (see also Panizza, Sturzenegger, and Zettlemeyer 2009, Figure 1). The largest number of renegotiations took place with Latin American countries, but these were accompanied by a few Central and Eastern European countries (particularly Bulgaria, Poland, and Yugoslavia), African countries (notably Nigeria and South Africa), and a few Asian countries (Philippines) (Cruces and Trebesch 2013).

The 'London Clubs' were also set up in the late 1970s to renegotiate bank debts, but these are not a formal set-up but a generic name for a mechanism of voluntary debt renegotiations, which have similarities to the way they were done prior to the Second World War. However, negotiations with private creditors in the 1980s were mainly done under the leadership of the United States government, and with support from the IMF, which followed at the time a policy of not lending to countries that were in arrears with private

creditors. Although creditor committees played a central role in coordinating banks, the positive view held by their architects of these committees as a central mechanism to facilitate the return of market access and growth (see, for example, Rhodes 2011) contrasts with the perception of them as a mechanism that tilted the negotiation in favour of creditors and, in any case, did not produce either growth or a rapid return to markets (Garay 2010; Ocampo 2014a). Rather, an alternative perception of the way the Latin American debt crisis was managed in the 1980s is that it was successful in avoiding a banking crisis in the US but only by displacing its effects to debtor countries.

Indeed, the failure of the early waves of reschedulings (Devlin 1989) finally led US authorities to promote complementary mechanisms: additional financing through the 1985 Baker Plan and an ad hoc debt relief initiative, the Brady Plan, in 1989. The latter became one of the sources of the new wave of renegotiations in the first half of the 1990s (see again Figure 5.4). It provided limited relief, particularly if compared with the renegotiations of defaults from the 1930s in the 1940s/1950s, but it helped create a bond market for emerging-country debt, which became the framework for renewed financing in the 1990s. It also led to a change in IMF policy in favour of the principle of 'lending into arrears', which was also adopted in 1989, accepting the principle that the Fund could finance countries in arrears so long as they continued to negotiate with creditors in 'good faith'; it was modified in 1998–9 to include bonds and a less stringent interpretation of what 'negotiating in good faith' means (IMF 2002a). However, neither the Brady Plan nor the related policy of lending into arrears served, as could have been possible, as a framework to develop a debt workout mechanism, a proposal that was at the centre of recommendations by some institutions, notably the United Nations Conference on Trade and Development (UNCTAD).

A new wave of defaults and renegotiations would soon come as the result of the sequence of crises in the emerging economies that took off in East Asia in 1997. Many took the form of voluntary reschedulings, specifically debt exchanges in which 'bumps' in the debt service schedule were smoothed out, with maturities effectively extended. Since these reschedulings were voluntary, the terms of the new bonds had to be attractive enough to induce creditors to participate. So, as Spiegel (2010) has shown, even in cases when some investors experienced losses in the short term, returns to investors were quite good over the long term. A few, more traumatic renegotiations did provide larger relief, particularly those with Russia in 1998 and Argentina in 2005 and 2010. The latter took centre stage in recent debates as a result of successful demands by holdouts in US courts in 2012–13 (see Section 5.3.2).

Overall, in the case of emerging economies, the evidence of the effects of the mechanism in place in recent decades is that it helps renew economic growth and effectively reduce debt ratios in the countries that participate, but the first

of these effects only takes place when they involve debt write-offs, whereas softer forms of relief (maturity extensions and reductions in interest rates) do not have a similar effect (Reinhart and Trebesch 2015).

In the case of low-income countries, public sector financing continued to play the major role. The problems of their indebtedness led to years of serial rescheduling at the Paris Club, accompanied by new borrowing leading to debt overhangs. Under strong pressure from civil society (particularly the Jubilee Coalition), these countries became the focus of another ad hoc initiative: the Heavily Indebted Poor Countries Initiative (better known by its acronym HIPC), launched in 1996 and strengthened in 1999, and the subsequent Multilateral Debt Relief Initiative (MDRI) of 2005. The major differences between these initiatives and the Baker Plan were their focus on low-income countries and the inclusion of relief and later write-off of multilateral debts.

Therefore, the existing framework mixes the Paris Club and voluntary renegotiations with private creditors and occasional ad hoc debt-relief initiatives (the Brady Plan and HIPC/MDRI). This framework has two fundamental deficiencies.

First, as the IMF (2013a: 15) has recognized, 'debt restructurings have often been too little and too late', a view that is shared by many other analysts.[13] In fact, on several occasions, renegotiations (including those in the Paris Club) have been a way to postpone, not to solve the problem. Furthermore, due to limited relief offered at each stage (with the notable exception of the 2005 MDRI), renegotiations have frequently been sequential, effectively postponing their potential benefits. The debt overhang that persists for several years has devastating effects on countries but also has adverse effects on creditors, given the limited capacity of debtors to pay. In short, the current system does not guarantee a 'fresh start' or a 'clean slate', the conditions that are generally identified as the basic characteristic of good bankruptcy procedures at the national level.

The second deficiency is that existing mechanisms do not guarantee equitable treatment, either of different debtors or of different creditors. Indeed, a repeated criticism of the member countries of the Paris Club is that the private creditors do not accept the restructuring conditions agreed by the members of the Club, while still benefiting from the reduction of the burden on debtor countries, an issue that was particularly important in the HIPC Initiative. In turn, private creditors argue that they are forced to take larger haircuts in other cases in which the Paris Club agrees only to reschedule payments, and that they are negatively affected by the limited capacity that countries have to pay private debts due to limited growth, the lack of debt reductions in Paris Club

[13] See, for example, Buchheit et al. (2013).

negotiations (the typical situation in the case of middle-income countries), *and* the 'preferred creditor status' of multilateral financial institutions.

The case for an orderly debt workout mechanism can thus be constructed on both efficiency and equity grounds (Stiglitz 2010). From the point of view of efficiency in debt markets, it should guarantee appropriate incentives for creditors and debtors to negotiate an acceptable contract, allowing both to properly assess the risks which they are incurring and recoveries in case of default, and thus to estimate the adequate risk spreads of the particular loan or bond issue. Creditors should also feel sufficient confidence that their property rights are adequately protected in case of default. At the same time, the rules should avoid incentives for the borrower, if s/he runs into trouble, to unduly postpone the decision to renegotiate or default, as that would also undermine the asset values of creditors. If that happens, an efficient regime should minimize the loss associated with debt restructuring and facilitate growth in the economy involved, again protecting in this way creditors' asset values.

In turn, equity considerations require that all debtors and creditors be treated with similar rules, which should include seniority principles for different obligations—including, in particular, seniority for financing that is made available during the period of restructuring. In turn, this requires that the system avoid free riders, and particularly eliminate the capacity of holdouts to initiate legal disputes that affect the interests of creditors who participate in well-structured collective action. Equity conditions also require that a debtor does not offer exceptional prerogatives to creditors who provide financing when s/he starts to face payment difficulties, as those prerogatives would undermine the asset value of existing creditors.

Obviously, well-structured contracts are an essential element of capital markets. However, it is impossible to include all possible contingencies in contracts. It is also costly or outright impossible for individual creditors to monitor all other debt contracts which a debtor has incurred or is negotiating and which might impinge on their own. Furthermore, different contracts are not necessarily consistent among themselves, and also vary according to different legal traditions. For all these reasons, renegotiations have to be considered a normal way to handle unforeseen events and, if they happen, to aggregate claims under rules that are fair and respected by all parties. In short, a well-functioning debt workout regime can actually reduce risks and transaction costs, even in the case of unexpected events that may lead to default.

A major issue is whether a potential debt workout mechanism could generate moral hazard for either debtors or creditors. Given the view of many debtors that the negotiations with creditor committees are unbalanced and, particularly, that IMF support comes with strong conditionality, it is quite unlikely that the expectation of debt restructuring would generate incentives to over-borrow. Indeed, as already noted, experience indicates that borrowing

countries tend rather to postpone the use of any restructuring mechanism, largely to maintain good relations and avoid confrontation with private creditors. In the words of Buchheit et al. (2013: v), 'incentives are stacked against timely recognition and restructuring of unsustainable debts'. There might be more moral hazard concerns for lenders, particularly for those who consciously incur risks because they perceive that they can sell their assets before an eventual default. But even these concerns are unlikely to be important relative to the really important fact: the 'contagion of optimism' that characterizes booms followed by the opposite 'contagion of pessimism' that characterizes busts, with herding behaviour generating the associated boom–bust cycles. In short, the way in which over-borrowing is monitored during booms should, of course, be a major concern of macroeconomic policy and of international cooperation, and it is unlikely that a properly designed workout mechanism would worsen the problem. Indeed, over-borrowing has been present in a system that lacks such a mechanism.

However, creditors' moral hazard issues can become a major problem when a crisis erupts and there are expectations that official resources will be supplied. Under these circumstances, a delay in debt restructuring does represent a bailout of private creditors, with the flight of private capital forcing in turn a larger amount of official financing. If the debt is in fact unsustainable, official financing will in fact have 'socialized' private obligations. Furthermore, this situation will force creditors who have not jumped ship to incur larger debt losses in the case of a restructuring, thus generating major inter-creditor equity issues. Herein lies the importance of timely actions to manage unsustainable debt burdens. The management of the 2010–12 Greek crisis can be considered as one of the best examples in history of a situation in which delay in debt restructuring led to a major socialization of debts by eurozone institutions and governments, under conditions which, moreover, left the country with debt ratios that most analysts considered unsustainable—and continue to be so.

5.3.2 *Incomplete Reform Efforts and Proposals*

The lack of a multilateral framework for dealing with international debt crises involving private creditors has been a major concern of many analysts in recent decades. There have been thus numerous proposals since the 1970s to create international debt/bankruptcy courts or forums for mediation or eventual arbitration of problems of over-indebtedness. These initiatives proliferated after the 1994 Mexican crisis, and especially after the 1997 East Asian crisis. The corresponding proposals came from both the political right, for whom the elimination of 'moral hazard' associated with public guarantees to private credits is an essential prerequisite for the good functioning of financial

markets, as well as from the left, who saw excess debt levels as a strong obstacle to development.

The major initiative after the Mexican crisis was the decision of the G10 central bank deputies to launch in February 1995 a G10 working party under the leadership of Belgium's Jean-Jacques Rey, whose report proposing new provisions in bond contracts—collective action clauses (CACs), though they were not named as such in the report—to facilitate consultations and cooperation in the event of a crisis came out in May 1996 (G10 1996). It was based, in turn, on proposals by Eichengreen and Portes (1995). In the late 1990s, this view was aided by the frustration of Paris Club members with the unwillingness of private creditors to go ahead with their relief efforts. Although this initiative stayed in the background, particularly because of European support, these proposals never received at the time the explicit endorsement of the US Treasury (Gelpern and Gulati 2010). The inability to agree on the generalization of CACs was paradoxical given the fact that there was already a tradition of using such provisions in London bond issues where, by the terms of bond contracts, creditor coordination in bond issues is handled by a trustee, who is given the prerogative to negotiate or initiate legal proceedings. Most sovereign bonds, however, were issued under New York law and required unanimous consent to change their financial terms; moreover, the fiscal agents who distributed payments from the debtor in New York bonds did not have the powers of the trustees under British law. It could be added that creditors felt well protected by New York law, where conditions in bond contracts were very difficult to change, at least until they increasingly began to face actual defaults.

In turn, the major attempt to negotiate a statutory approach to sovereign debt crises—a Sovereign Debt Restructuring Mechanism (SDRM)—was led by the IMF in 2001–3, with initial encouragement from the US Treasury Secretary Paul O'Neill. The objective, in the terms of Krueger (2001, 2002), then IMF Deputy Managing Director, was to create a catalyst that would encourage debtors and creditors to come together to restructure unsustainable debts by facilitating an orderly, predictable, and rapid restructuring while protecting asset values and creditors' rights. A major issue behind this proposal was also the sense that in a financial landscape in which bond financing, rather than banks, was playing a more prominent role, the growing heterogeneity of creditors had worsened the collective action problems associated with managing debt overhangs, and speculators who had bought bonds at distressed prices were interested in litigation rather than participating in restructuring[14] (i.e. they preferred to remain as 'holdouts').

[14] The expectation of high gains when bonds have been bought at very low prices is precisely why they are called 'vulture funds' in popular discourse.

The terms of the proposal varied through the period when it was considered, particularly in relation to the role of the Fund in the process, reflecting the debates that the initial proposals raised, particularly the opposition of many agents to the Fund having a very active role in debt negotiations or in the approval of the final agreements. According to the proposal, the mechanism would be triggered by the debtor country, leading to a renegotiation process with some core features: (i) qualified majority voting, with the possibility of aggregating debts within broad categories (e.g. votes by bank lenders and bondholders would not be aggregated); (ii) a stay on credit enforcement (which was dropped by the time of the final proposal); (iii) protecting collective creditor interests by adopting policies that protected asset values, which could include controls on capital outflows to prevent capital flight (an independent decision that governments could in any case take on their own); and (iv) establishing a process for private creditors to potentially agree to give seniority to new private lending during a crisis (similar to lender-in-possession financing in corporate bankruptcy); short-term trade financing (involving banks) and inter-bank claims were understood to be exempt from restructuring as their disruption would impose a severe economic burden and lessen the likely recovery of value by bondholders. Given the strong opposition to the inclusion of domestic debts in these restructuring processes, it was in the end accepted that the proposal would generally involve only external debts—although in cases in which governments had substantial domestic bond issues outstanding, it was presumed that a parallel process under domestic law would restructure those bonds and the external creditors would not approve the restructuring of their claims unless satisfied that the burden-sharing with holders of domestic bonds was fair in some sense.[15] The mechanism required, in turn, independent arrangements for verification of creditors' claims, resolution of disputes, and supervision of voting. In the final versions of the proposal, although the mechanism would be put in place by an amendment of the IMF Articles of Agreement, it would create a new judicial organ with safeguards to guarantee that it operated independently of the Executive Board and the Board of Governors, and provisions that the members of the organ would not be subject to interference from the staff, directors, or IMF members.

This proposal was rejected by both the United States, under clear pressure from its financial sector and the internal opposition within the Treasury from the Under-Secretary for International Affairs, John B. Taylor, as well as by various developing countries (notably Brazil and Mexico) who feared that a mechanism of this nature would end up limiting, or increasing their costs of, access to international capital markets at a time when it was quite limited.

[15] See Hagen (2005). This is the most authoritative account, as the author was at the centre of the negotiations.

There was also a clear opposition from the private sector to the IMF being at the centre of the mechanism, given the conflict of interest (since it is also a creditor), whereas civil society opposed Fund involvement due to the conflict of interest from being both a creditor and a decision-maker, and because of the conditionality associated with its financial programmes. This is why ad hoc voluntary renegotiations continued to be the norm. In the early twenty-first century, the most important examples have been the Argentine debt renegotiations of 2005 and 2010—and its settlement with holdouts in 2016—and the Greek renegotiation of 2012.

One of the major problems with this voluntary approach had been that those parties that do not accept the terms of the agreements (the holdouts) were able to go to the courts in the countries whose laws govern the contracts to claim full payment. These demands have been successful in several cases in the past, a fact which obviously discourages participation—a problem that affects in particular the so-called 'pre-emptive negotiations', i.e. those that take place before default—and generates severe equity issues, particularly when holdouts have bought the debts at distressed prices. The alternative solution to this problem was the spread, since 2003, of the use of collective action clauses (CACs) for international bonds issued in the United States; as previously noted, this mechanism was already used in other markets, especially in London. This mechanism defines in the debt contract the majorities necessary to restructure a sovereign bond issue, nullifying the legal standing of non-participating holders of the bond issue (but not nullifying the right of other creditors to sue). As we saw, this alternative had been increasingly favoured in conceptual terms since the 1994 Mexican crisis, but only received its final impetus as a result of the search by the US government and financial sector for alternatives to the SDRM initiative (Gelpern and Gulati 2010).

The use of CACs in New York contracts became widespread after the decision by one of the major debtors opposed to the SDRM, Mexico, to include those clauses in a bond issue in March 2003; they then found that the premium paid for CACs was, if anything, negligible. The corroboration of this fact in later issues by other countries dispelled the fear that CACs would raise the cost of borrowing, and led to their generalization. This was later reinforced by the decision of the eurozone countries to include CACs in all bond issues starting in 2013. This trend was combined with agreements on 'codes of conduct'. The one that stands out is the 'Principles for stable capital flows and fair debt restructuring in emergency markets' adopted in 2005 by the Institute of International Finance, a private organization composed of large international banks (IIF 2005). The code was slightly amended after the Greek restructuring.

The IMF (2013a) has underscored several deficiencies of this market-orientated approach. The first is that incentives remain for both debtor countries and

creditors to delay restructurings, which implies that they tend to come too little and too late, leading both to the negative effects of overhangs and to recurrent renegotiations. Furthermore, the unsuccessful Argentinean litigation in US courts in 2013–14 on the interpretation of the *pari passu* clause[16] has exacerbated the collective action problems by increasing the leverage of holdouts, as it has prohibited Argentina from making payments on its restructured debts if it did not pay in full its unrestructured debt. The incentives to participate in any restructuring would thus be significantly reduced. On the other hand, the need to aggregate different claims by including aggregation clauses in debt contracts is now broadly accepted and essential to guarantee inter-creditor equity among bondholders, but until recently only four countries (Argentina, Dominican Republic, Greece, and Uruguay) had included these clauses in their issues, with Uruguay leading the way in 2003. Aggregation has been required in eurozone bonds since 2013, with 75 per cent of bondholders summed across all relevant issues required to approve a proposed restructuring, plus 66.66 per cent of the holders of each individual bond issue.

Based on the problems raised by Argentina's litigation, the International Capital Market Association (ICMA 2014a, 2014b) and the IMF (2014b) proposed the inclusion of aggregation clauses in debt contracts as well as a revision of the *pari passu* clause.[17] Mexico again led the way, by including the new clauses in a November 2014 debt issue in New York—Kazakhstan had done so for a new issue in London in October—with no effects on the cost of the issue. It also changed from a fiscal agent to a trustee to represent the bondholders in negotiation with debtors (the London system). Following the 2003 experience, when Mexico led the way in introducing CACs in New York issues, these conditions are likely to spread. In any case, aggregation does not exclude the possibility of blocking majorities on individual issues[18] and fails to guarantee the coherence between bond and other debt contracts, particularly with syndicated bank lending. Also, according to the IMF (2013a), the impact of credit default swaps has not been fully tested, and certainly reduces the incentive to participate in debt renegotiations and introduces a whole new set of actors into the process, some of whom may be simple speculators with no debt on their hands.

To these considerations we could add that, although the revised CACs could solve future problems, they would not solve the legacy of existing debt for

[16] This clause has been generally interpreted as equal ranking but it was interpreted by New York courts in the case of Argentina as equal 'ratable payments', which increases the negotiating power of holdouts, affects third parties, and may even undermine the doctrine of sovereign immunity.

[17] The change of language was introduced to eliminate any interpretation requiring ratable payments (see note 16).

[18] This is what happened with some London issues in the Greek renegotiations of 2012; at the time there were, in any case, no aggregation clauses.

some time, which would be made worse by the aggregation problems that would continue in place so long as aggregation clauses are not included in debt contracts. The traditional division between external and internal debt is also being blurred by the increasing participation of international funds in the domestic debt markets of emerging economies. Furthermore, the traditional separation between official and private creditors, and those of their restructuring mechanisms, has been made more complex by the rise of official lenders who are not members of the Paris Club (notably China), the now traditional institutional setting in which bilateral debts with bilateral public creditors are renegotiated. The inequities that could be generated between the two realms of restructuring have been noted by both sides, with different views about the associated issues. This may imply that, in the future, 'aggregation' should refer not only to liabilities with private creditors but to *all* obligations, including multilateral lending, with proper seniority rules, favouring in particular creditors who provide funding during crises.

In a parallel way, the United Nations has been part of this debate, reflecting the call in the 2002 Monterrey Consensus on Financing for Development for financial crisis management mechanisms 'that provide for fair burden-sharing between public and private sectors and between debtors, creditors and investors' (United Nations 2002, point 51). This has led to numerous consultations in the context of the UN's Financing for Development process (Schneider 2014), to UNCTAD's proposals of some 'Principles on Sovereign Lending and Borrowing' (Espósito, Li, and Bohoslavsky 2013), to the adoption of some principles on sovereign debt restructuring by the United Nations General Assembly in 2015 (United Nations 2015), and, perhaps most importantly, to the proposals by the United Nations Commission of Experts on Reforms of the International Monetary and Financial System, better known as the Stiglitz Commission (United Nations 2009).

The need to have a better framework for debt resolution remains, therefore, one of the major gaps of the international financial architecture. It has led to extensive debate, which referred in the past to emerging economies but now also to the European periphery,[19] and to numerous proposals on how to reform the system.[20] Following Schneider (2014), there are three basic ways forward. The first one would be to improve the 'contractual technology'. This would require the need to generalize the use of aggregation clauses in bond

[19] See, for example, the essays collected in Herman, Ocampo, and Spiegel (2010a), Paulus (2014), and Guzmán, Ocampo, and Stiglitz (2016).

[20] See an inventory of proposals in IMF (2013a) and Das, Papaioannou, and Trebesch (2012), as well as proposals by the Stiglitz Commission (United Nations 2009), the Brookings Institution's Committee on International Economic Policy and Reform (Buchheit et al. 2013), and civil society, particularly those of Kaiser (2013), among others. See also the excellent survey by Panizza, Sturzenegger, and Zettlemeyer (2009) of the economic and legal issues involved.

contracts. This is the approach taken by the eurozone since 2013, and more recently by the International Capital Market Association and the IMF. The basic problem is how to manage creditors who may still obtain a blocking position for a particular bond issue. It would also require the new *pari passu* clause and the generalization of the system of trustees to represent bondholders in negotiations, and perhaps some formal standstill provision. In any case, even the best of all solutions in this area would face the problems previously mentioned: the long transition that has been associated with the fact that CACs only started to be used in New York in 2003, that aggregation clauses are only starting to spread, and the additional problems associated with the management of debts with the private vs. the official sectors, external vs. domestic liabilities, and credit default swaps.

The second route is the negotiation of a statutory regime, which would create an International Debt Court, with clear rules on priority of claims and inter-creditor equity that would be legally enforceable in the main financial markets. According to the foregoing analysis, the Court would ensure that the agreed international principles of a fresh start, equitable sharing of haircuts, and priority of claims against the debtor government be followed. It would thus correct the two main flaws in the ad hoc structure which has arisen over time: it would lead to restructurings that benefit both creditors and debtors (the essence of a good arrangement in this field) and it would give equitable treatment to different debtors and creditors according to principles that could be agreed internationally. The Stiglitz Commission has put on the table the most interesting proposals in this field (United Nations 2009: ch. 5). The mechanism could also work on the basis of case-by-case arbitration panels convened by the relevant parties under internationally agreed arbitration rules (Kaiser 2013). There are also other academic proposals as well as a few on specifically European mechanisms of this type.

The best alternative would be, however, to mix the voluntary and statutory solutions, by creating a mechanism similar to the World Trade Organization's dispute settlement mechanism,[21] in which there is a sequence of voluntary negotiations, mediation, and eventual arbitration that takes place with pre-established deadlines, thus generating strong incentives to reach agreement under the 'shadow of the court'; the existence of the mechanism could also encourage its timely use, but this is not guaranteed. The process would start with the declaration of a moratorium by the debtor country, which would unleash the negotiations. As in national bankruptcy regimes, the first step would be the attempt by the defaulting country to reach a voluntary

[21] My own early ideas on the subject were included in Herman, Ocampo, and Spiegel (2010b). Of course, in contrast to the WTO mechanism, which involves controversies among countries, the mechanism would involve a negotiation between a debtor country and private creditors.

agreement with creditors. The process should also serve as a framework to coordinate the positions of creditors within and across different classes of lenders (including eventually official creditors, both Paris Club members and non-members). If this first stage fails within the agreed deadline, the institution in charge would move to mediating in the dispute as an 'honest broker'. Again, if the deadline for this second stage ends without an agreement—or if requested by both parties before the deadline—this broker would arbitrate the dispute, leading to a decision which is legally binding for all parties. As in national 'debtor-in-possession financing', it would also have the authority to ask creditors to provide new financing to the country undergoing debt restructuring. These new debts, as well as all financing provided when the country is in default (e.g. IMF 'lending into arrears', loans by multilateral development banks and official bilateral creditors, and private trade financing) would have seniority over defaulted debts.

The mechanism could be created as an independent body under the UN system. This would require negotiating a new international treaty, which would be time-consuming both in terms of negotiations and ratifications, with the possibility that countries that host major financial centres would not ratify it. So a better alternative could be that which was tried in 2001–3: an amendment to the IMF Articles of Agreement, so long as it could function through a system of *independent* panels of experts and a body with final judicial decision-making capacity, similar to those used under the WTO's dispute settlement procedure. This is implicit in Krueger's (2002) proposal that the debt resolution organ would operate independently of the Executive Board and the Board of Governors, and with strong provisions to avoid interference from the IMF staff, directors, or member states.

As Herman, Ocampo, and Spiegel (2010b) have argued, it would be desirable for this mechanism to operate as a single relief system. Although the poorest countries may require special treatment to support their recovery after crises, this task should be left to the aid regime—i.e. to official development assistance. A complementary but major task of multilateral development cooperation is to support countries that have undergone debt restructuring to have a smooth and hopefully speedy return to markets. Multilateral Development Banks (MDBs) can play a crucial role in this regard, through co-financing or the issue of guarantees to new debt issues by countries. A Sovereign Debt Restructuring Facility within the IMF, combining IMF lending and debt restructuring, could also play that role (Buchheit et al. 2013) but is less desirable, as many more countries are willing to use MDBs rather than IMF facilities (see Section 5.2).

The workout mechanism designed should deal primarily with sovereign debts, but there are two other individual cases that should be taken into account. They are private-sector debts that are 'nationalized' during crises as

part of bailouts, particularly of financial sectors, and cases where private-sector debts cannot be serviced because they would generate balance-of-payments problems. In the first case, the external liabilities should be treated as corporate debts that should be renegotiated as such, as part of the cleaning of the balance sheet of the institution involved, and may therefore involve larger amounts of haircuts. This procedure would help reduce the pressure exercised by foreign creditors to take over private-sector debts during crises, which has been a practice in many emerging and developing countries in the past and has added substantial amounts of previously private-sector debt to the sovereign state's obligations. In the case of balance-of-payments crises, an agreement should be reached as to how domestic private debtors can convert their payments in local currency into foreign exchange.

Finally, three complementary mechanisms would be required. The first is an international registry of debt, which would be best managed by the institution in charge of debt restructuring. The second is the creation of effective mechanisms for creditor coordination for individual renegotiations, a problem that has become more complex given the diversity of creditors. This should be part of the rules that establishes the eventual mechanism. The third is a Sovereign Debt Forum, which could be a multi-stakeholder process that could be organized under the umbrella of the UN Financing for Development process, thus providing for the participation not only of governments and international institutions but also of the private sector and civil society.

6

The Governance of the International Monetary System

6.1 Introduction

The governance of international financial institutions has been subject to a heated debate for decades. The major issues in this regard have been the legacy of control of existing institutions by the major developed countries, the exclusion of developing countries from some of them (notably from the financial regulatory bodies), and the tendency of major decisions to be taken in ad hoc groupings of major developed countries—the 'Gs' and particularly the G7—outside the framework of treaty-based organizations that they, in any case, control. The strongest statement in this regard was made by the United Nations Conference on Financing for Development that took place in Monterrey in 2002, which underscored 'the need to broaden and strengthen the participation of developing countries and countries with economies in transition in international economic decision-making and norm-setting' (United Nations 2002: paragraph 62).[1] This has also led to the decisions of emerging powers, particularly the BRICS countries, to create parallel institutions that they, in turn, control.

Good but incomplete steps have been taken in this area since the 2007–9 North Atlantic financial crisis, in some cases as a follow-up to steps taken after the sequence of crises in emerging economies that started in East Asia in 1997. They include the stronger participation of emerging and developing countries in the Bretton Woods institutions—a process that had started on a small scale before the crisis. The 2010 quota reform should be taken only as a first step in the desired direction, though it only became effective in January 2016, due to the significant lag in approval by the major shareholder (the United States). The G20, an ad hoc institution created after the crises in emerging economies

[1] See also paragraphs 53, 57, and 63 of the Monterrey Consensus (United Nations 2002).

in the late twentieth century as a forum for ministers of finance and central bank governors of major developed and emerging countries, was transformed into a leaders' forum and designated itself in its September 2009 summit in Pittsburgh as 'the premier forum for our international economic cooperation' (G20 2009b: paragraphs 19 and 50). As steps forward we should also include the decision to extend membership of global financial regulatory institutions to major emerging economies and the strengthening of the regional financial safety nets, notably in Western Europe and East Asia, in the latter case through the expansion of the Chiang Mai Initiative launched after the 1997 East Asia crisis.

More substantive reforms should involve action in three different areas—the three pillars of a reformed architecture. The first one is the design of a representative apex organization. Given the existing institutional framework, this could take place as a transformation of the G20 into a representative international institution. The second is the continuous reform of 'voice and participation' of developing countries in the Bretton Woods institutions and global regulatory bodies. The third pillar is the design of a 'dense', multi-layered architecture, with the active contribution of regional, sub-regional, and inter-regional institutions; as we shall see, this is an area where the international monetary architecture should copy the denser architecture in place in the system of multilateral development banks.

6.2 The Apex Organization

The broadest issues on global financial governance relate to the apex organization, now the G20. The creation of this 'G' at a leaders' level was, of course, a step forward compared to the G7, in terms of representation of developing countries. But this 'elite multilateralism', to use the term I have proposed to characterize it (Ocampo 2011), has also created problems, as ad hoc self-appointed bodies cannot replace representative institutions in a well-structured international institutional architecture. The problems are also associated with the ad hoc way in which the membership was defined, which implies the exclusion of some large countries (Nigeria being the most prominent case), the lack of representation of small- and medium-sized countries, and (once again) the over-representation of Western Europe. This preference for 'Gs' over representative international institutions has deep historical roots in the case of major industrial countries, and reflects a revealed predilection of these countries for mechanisms over which they can exercise large and direct influence.

The G20 can and has been evaluated in different ways. One way is to analyse the evolution and consistency of its agenda and compliance with the commitments made in different fora. In this regard, the G20 Research Group organized by the University of Toronto's Munk School of Global Affairs

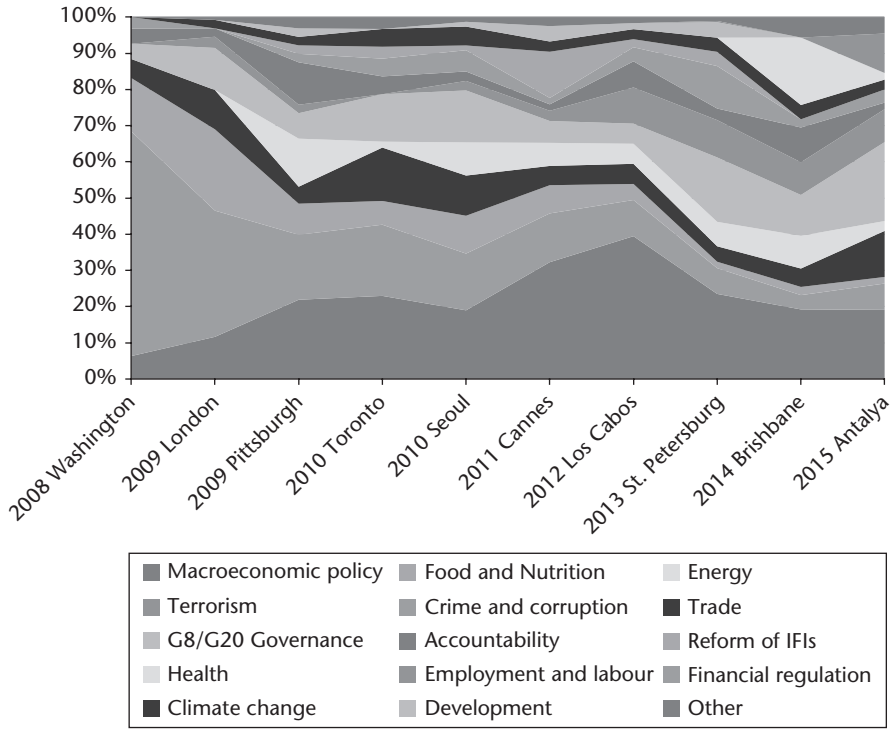


Figure 6.1 Composition of commitments made in G20 Summits, 2008–15, by area

Source: Author's elaboration based on data from the G20 Information Centre (Available at: http://www.g20.utoronto.ca/analysis).

provides the most useful independent follow-up process.[2] Figure 6.1 shows the evolution of commitments in the G20 summits, according to this group, and mapped by issues of concern. It could be said that there were four core issues addressed in its character of a 'crisis committee' in the early phase of the North Atlantic financial crisis: macroeconomic policy cooperation, financial sector regulation, reform of the international financial institutions, and trade. These issues concentrated most of the commitments during the first two summits (Washington 2008 and London 2009) and continued to dominate the agenda until Los Cabos (2012). Development has also been an important and relatively stable issue since the second summit. However, since at least the third summit (Pittsburgh 2009), new issues have come onto the agenda in a very unstable manner, reflecting mainly the priorities of the host nation (a typical problem of 'Gs') but also mission creep without a clear direction. This

[2] See G20 Research Group (several years). The G20 Research Group defines itself as 'a global network of scholars, students and professionals in the academic, research, business, non-governmental and other communities who follow the work of the G20 leaders, finance ministers and central bank governors, and other G20 institutions'.

has been particularly noticeable since the 2013 St. Petersburg summit. If we take those issues that represent more than a tenth of commitments at individual summits, these were: energy and accountability (Pittsburgh 2009), food, agriculture, and nutrition (Cannes 2011), employment and labour (Los Cabos 2012 and St. Petersburg 2013), crime and corruption (St. Petersburg 2013), health and infrastructure (Brisbane 2014), and terrorism (Antalya 2015). But the list is much longer, as Figure 6.1 indicates.

According to these evaluations, compliance has been relatively good in several areas. Among the core 'crisis issues', it has been highest in macroeconomic policy (81 per cent) and lowest in trade (63 per cent). In other issues evaluated by the group, compliance is highest in employment and labour (86 per cent), intermediate in development (67 per cent), and lowest in crime and corruption (57 per cent). In turn, compliance has varied significantly across countries: highest for the United Kingdom (88 per cent) and Australia and Germany (83 per cent), and lowest for Argentina (52 per cent) and Saudi Arabia (53 per cent). In general, developed countries have performed at or above the average, whereas emerging economies have performed under the average (with the exception of the Republic of Korea). Some of the positive evaluations look, in any case, surprising, given the poor record of the developed economies in terms of economic growth and employment.

An alternative way to evaluate the G20 is to analyse in a substantive way its ability to meet the major commitments it set for itself after the eruption of the crisis. The four core emergency issues are a good starting point for this analysis. The most important commitment was, no doubt, to 'act together to generate strong, sustainable and balanced global growth' (G20 2009a: paragraph 13). In this regard, G20 macroeconomic cooperation worked relatively well in the early stages of the crisis, when it assumed the form of a 'Keynesian consensus'. The peak level of cooperation was reached at the London April 2009 meeting and continued in the September 2009 Pittsburgh meeting. Informal coordination among leading developed countries' central banks had already been in place since 2007, but was enhanced by G20 decisions. Pittsburgh also marked the launch of the Mutual Assessment Process (MAP) as the instrument of macroeconomic cooperation among major economies. However, the June 2010 G20 summit in Toronto represented the end of the 'Keynesian consensus', because several developed countries decided to prioritize public sector debt sustainability over their support for recovery; this also reflected deep ideological differences among G20 members. The main result of this was not only a new recession in Europe but, even more important from the point of view of global cooperation, the fact that the eurozone became the major source of global payments imbalances. In contrast to weakening fiscal policy coordination, a related area that has been strengthened by the G20 in recent years is international tax cooperation, through the Base Erosion and

Profits Shifting initiative, giving the leadership in this field to the OECD (http://www.oecd.org/tax/beps/).

In another major area, financial regulation, performance has been very good. Coordination in this area was given to the Financial Stability Board (FSB),[3] which was created at the April 2009 London summit. Banking regulation was strengthened under what came to be known as Basel III (Basel Committee 2010; Caruana 2010). The 'regulatory perimeter' was expanded to include some agents and transactions that were inadequately regulated before the crisis. The principle of counter-cyclical prudential regulations—and, more broadly, of 'macroprudential regulations'—was introduced, following proposals that had been made before the crisis (Griffith-Jones and Ocampo 2010). The regular evaluations of the state of implementation indicate that rule-making has generally gone faster than implementation at the national level, and that major gaps remain.[4] Some norms have also weakened under pressure from large private financial institutions.[5]

A third major area of initiatives in the early period was the reform of the major international financial institutions. This sped up the approval of the 2010 IMF and World Bank quota reforms but, as already indicated, that for the IMF reform only became effective with a significant lag. As we shall see, the commitment to a more open system of selection for these two organizations has had questionable results. Furthermore, the major initiatives on international monetary reform announced by France for Cannes 2011 were swamped by the eurozone crisis, which became the focus of attention during that summit. So, the major advance was possibly the approval, in 2009, of the largest issue of IMF's Special Drawing Rights in history.

In the area of trade, a major commitment was to 'promote global trade and investment and reject protectionism, to underpin prosperity' (G20 2009b: paragraph 4; see also paragraph 22). This decision had been at the centre of the initial Washington summit in November 2008, where members committed to restraining from imposing new trade barriers or creating export incentives inconsistent with World Trade Organization norms (G20 2008: paragraph 13). Although there have been, no doubt, violations of these commitments, as reflected in the low compliance ratio in this area estimated by

[3] This was a transformation of the former Financial Stability Forum, which had been created by the Ministerial G7, which was launched after the East Asian crisis.

[4] See the different reports to the leaders and the ministerial meetings in http://www.financialstabilityboard.org/, or for example FSB (2016). According to these evaluations, the major challenges that persist include: resolution mechanisms for 'too-big-to-fail' institutions, still inadequate regulation of shadow banking, the insufficient expansion of derivatives exchanges, how to reduce dependence on credit rating agencies, the limited advance of supervisory colleges, and the lack of agreement on unique accounting standards.

[5] For example, liquidity requirements were significantly reduced in early 2013 and their implementation delayed.

the G20 Research Group, it can be argued in broad terms that the world economy avoided until 2016 the spectre of renewed protectionism, which most analysts regard as a major cause of the severity of the Great Depression of the 1930s; however, there are significant doubts regarding this area in 2017 due to the views of the new US administration. The launching of trade credit facilities by multilateral development banks to support trade in the midst of the crisis was also a success in this regard (Griffith-Jones and Ocampo 2012). An element of this commitment, the conclusion of the Doha Development Round, has proved more slippery, except for the agreements on trade facilitation and the elimination of agricultural export subsidies reached at the WTO ministerial meetings in 2013 and 2015, respectively.

In broader terms, Ocampo and Stiglitz (2011) have suggested that the G20 should be evaluated as a mechanism of global economic governance on the basis of five criteria. On leadership, it has shown a positive record, notably, as we have seen, in terms of steering change in financial regulation, putting in place a new mechanism of macroeconomic cooperation (the Mutual Assessment Progress), and avoiding (so far) a new wave of protectionism. On effectiveness, after a good start, it deteriorated, as we have seen. In particular, in the light of the outcomes of the global economy in recent years, it is clear that macroeconomic cooperation within the G20 was unable to generate a strong recovery and to avoid the generation of new global imbalances (see, in this regard, Chapter 3 in this volume). On a third criterion, the contribution to the coherence of the global system of governance, it was able to coordinate institutional reforms and actions (see also in this regard, Woods 2013), but some of these reforms were left unfulfilled.

According to two other criteria, representation and lack of an effective independent secretariat, performance has been rather poor. Representation will be subject to more discussion later in this section. Independent secretariats play a fundamental role in the international system by providing neutral technical support detached from the interests of the most powerful countries, as well as independent monitoring of decisions, advancing initiatives, helping mediate disputes, and identifying common ground for agreements. The rotating secretariats of ad hoc groupings are incapable of fulfilling these tasks and may generate mission creep or, even more so, a lack of clear orientation, which is reflected in the agenda that has characterized recent summits. So the expectation that it could shift from a 'crisis committee' to a 'steering committee' of the global economy (Derviş and Drysdale 2014) has remained, so far, an unfulfilled promise.

An additional and fundamental element in the analysis is understanding that the interactions between formal and informal processes do play an important role in global governance (Derviş 2011; Woods 2013). This is also true, of course, in national politics and in regional agreements. However,

agreements must then be brought to the formal governance structures. In this sense, informal interactions should be conceived as elements of the consensus-building efforts that lead to decisions within formal international institutions. The 'Gs' do have a further advantage in this regard: the capacity to cross boundaries created by the mandates of different organizations.

To achieve desirable results, it is critical, however, that the informal process should avoid delegitimizing the governance structures of treaty-based organizations. In relation to the international monetary system, a major risk is that G20 decisions may at the end be eroding the IMF's governance structures. We must recall, in this regard, that the Fund's governance is based on a system of constituencies. Most Executive Directors represent constituencies on the Executive Board. However, in the case of those decisions taken by the G20, the Board has become merely a mechanism to rubber-stamp those prior resolutions. The other side of the coin is that the Board has ended up legitimizing the decisions of powerful members (including now large emerging economies) while escaping the institutional constraints of having to take into account the views of less powerful Fund members. As a result, there is also an obvious tension between interests of individual nations which are members of the G20 and their role as representatives of groups of countries on the Executive Board, with the first overriding the second.

In this sense, a better mechanism could be to incorporate smaller groupings of countries within the formal structure of treaty-based organizations. The advantage of such a mechanism is that the interactions of those countries would be embedded and accountable to the full membership. One such attempt in this regard was the 2006 IMF initiative, supported by the International Monetary and Financial Committee, to hold a series of discussions about global macroeconomic imbalances among systemically important members. The advantage of this mechanism was that it engaged a smaller set of countries—indeed, in this regard, it was better than the G20's MAP, which involves many countries that are not systemically important. However, this initiative utterly failed because several members of the G20 (which was already functioning at the ministerial level) were not fully committed to it and it thus became an irrelevant exercise. It has now been replaced by the MAP, which the IMF supports, but the process is not fully accountable to the full Fund membership.

In broader terms, it can be argued that the basic challenge that any international arrangement faces to guarantee its adequate functioning is overcoming the tension between representativeness and the legitimacy associated with it, on the one hand, and power structures, on the other. This has been expressed by Bradford and Lim (2011) as a 'trade-off between legitimacy as a representative body and as an effective body'. However, posing it as a pure

tension between inclusiveness and effectiveness is clearly wrong, as national democracies have shown that representative institutions can be effective. It is, of course, true that some decision-making processes may require small bodies, but this is not inconsistent with the principle of representation, as those small bodies can be embedded in larger representative institutions that elect their members according to agreed criteria. In the words of Manuel's report on IMF governance, to which I refer more extensively in Section 6.3, preference for informal groupings implies 'a de facto delegation of core financial sector work to a range of narrower and specialized agency, networks and working groups—all of which can claim expertise on selected issues, but no recognized responsibility for the overall stability of the global system' (IMF 2009b: 5).

Therefore, although 'Gs', including now notably the G20, can play an important role in placing new issues on the agenda and facilitating consensus among major powers, and in general in steering changes that generate a consensus among the most influential countries, no structure of governance can generate legitimacy as long as decision-making processes are not inclusive.

In this regard, the best proposal on the table is that to create a Global Economic Coordination Council (GECC) proposed by the UN Commission of Experts on Reforms of the International Monetary and Financial System, best known as the Stiglitz Commission (United Nations 2009: ch. 4). This idea belongs, of course, to the long history of proposals to create an Economic Security Council and similar institutions, such as an L-27 that could evolve out of the current UN Economic and Social Council (ECOSOC) (Rosenthal 2007; Derviş 2005: ch. 3). But it has three essential differences: (i) its central focus would be to coordinate the UN *system* (broadly understood to include all specialized agencies, among them the IMF and the World Bank Group, as well as the WTO, which should formally become part of the UN system); (ii) it would be based on representation based on constituencies; and (iii) it would be a new Council at the leaders' level.

The first of these features is, in a sense, the most obvious and essential to guarantee the coherence of the system of global economic cooperation, which should be understood as encompassing the economic, social, and environmental areas. It would also help to identify the interactions in the mandates of different organizations (for instance, environmental effects of trade policies, or social effects of budgetary policies) and propose ways by which they might be addressed, as well as to identify gaps in the current system of cooperation. It would, in any case, leave to the more specialized bodies the specific decisions in their area of work, but it could convene ministerial meetings of its own.

The second feature, weighted vote, would mix three ingredients: basic votes, economic weight, and, eventually, population. It would be difficult to be accepted by those countries that defend the UN principle of 'one country,

one vote'. However, this recognizes the fact that the system of global economic government cannot operate without the voice of the most important actors being given strong consideration and, furthermore, without their being seated at the table. Otherwise, they would tend to simply ignore the decisions of that body. Of course, the specific weighting mechanism would have to overcome the problems of representation that those institutions using constituencies (the Bretton Woods institutions) currently face.

The last feature makes this proposal different from those aimed at simply transforming ECOSOC into such a global cooperation organ. ECOSOC could continue to function as the coordinator of the UN *organization* (the UN Secretariat, Funds, and Programmes), though not the UN *system*, a function that it has never really exercised (Ocampo 2015a).

It is interesting to underscore that the Palais Royal Initiative has made some proposals which are similar to those of the Stiglitz Commission in some ways. This Initiative was convened by former IMF Managing Director Michel Camdessus together with Alexandre Lamfalussy, and Tommaso Padoa-Schioppa, and presented its reform proposals in February 2011 (Boorman and Icard 2011). Those proposals include a three-level governance structure for the global economy—though, in this case, centred on the international monetary system, and thus with less reach than the proposed GECC—which would have at its top a reformed G20 based on a constituency system (Palais Royal Initiative 2011: 24).

The UN organization can, of course, continue to play an important role in global economic governance. The UN General Assembly, the summits it convenes, and ECOSOC have proved to be effective mechanisms for consensus-building. In the realm of global finance, this includes the Monterrey Consensus, one of the best documents of its kind in global financial cooperation. The UN organization has also been central to the generation of new ideas and frameworks for international cooperation—notably the Millennium Development Goals, and now the Sustainable Development Goals. Furthermore, in retrospect it should be underscored that some of the analytical contributions of the UN Secretariat on global economic and financial issues[6] have been, if anything, as or more sound than those of the Bretton Woods institutions, despite the much more limited amount of resources that these institutions manage. The UN organization has also made important contributions to these debates through the convening of high-level technical groups, such as, in the area of global finance, the Zedillo and Stiglitz Commissions (United Nations 2001 and 2009, respectively).

[6] I refer, in particular, to analyses made by the UN Department of Economic and Social Affairs (UN-DESA), the UN Commission on Trade and Development (UNCTAD), and the UN Economic Commission for Latin America and the Caribbean (ECLAC).

6.3 Reforming the Governance of the IMF and Other International Financial Institutions

Despite their growing importance, due to the high integration of financial markets, international financial institutions have been and continue to be perceived as undemocratic. A central issue in this regard has been the inadequate representation of emerging and developing countries. The representation of different members in the governance of an institution is translated, of course, into decision-making. That has been extremely well discussed in relation to the IMF, in which voting rights in the Board have significantly influenced the decisions of the institution—on top of the more direct influence that powerful members have over these institutions.[7] There have also been other debates about the governance of the IMF that relate to the relations between the IMF Board, the Board of Governors, and the major ministerial body that meets twice a year, the IMFC,[8] as well as about how decisions are made and the accountability mechanisms in place.

As pointed out in the introduction to this chapter, the reforms of 'voice and representation' of developing countries in the Bretton Woods institutions were launched at the UN Conference on Financing for Development that took place in Monterrey in 2002 (United Nations 2002). They pre-date, therefore, the creation of the G20 at the leaders' level, but the endorsement of the G20 was critical for the reforms adopted in 2010.

In 2006 and 2008 modest agreements were adopted on reforming quotas and votes in the IMF Board, which entailed a redistribution of the quotas and a tripling of the basic votes—the element of 'one country, one vote' in the governance of the Fund—the first such increase since the Fund's inception. In the 2010 spring meetings of the Bretton Woods institutions, the ministers from the developing countries demanded a more ambitious additional realignment of the quotas, which would have increased those of developing countries by 7 percentage points. The proposed reforms required giving greater weight in the quota allocation to purchasing power parity GDPs, and introducing more precise measures to determine the borrowing needs of countries through an adequate assessment of the macroeconomic volatility that different countries face.

In October 2010, the ministers of the G20 agreed to a more ambitious reform, which was endorsed by the heads of state meeting in Seoul in November, and

[7] Among many contributions made before the North Atlantic financial crisis, see Rustomjee (2004) and Woods and Lombardi (2006).

[8] The IMFC is the successor, after 1999, of the Interim Committee. As the name of this old Committee suggests, it was an ad hoc advisory body with no formal powers, which in turn succeeded the Committee of 20 that had been created in 1972 to undertake a major reform of the international monetary system, and which proposed the creation of a formal ministerial Council. The Interim Committee was its transitional form, which lasted for over a quarter of a century. For an analysis of the role of the IMFC, see Shakow (2009).

approved by the IMF Board soon after. It included: doubling the quotas; revising the allocation of quotas and voting power of developing countries while protecting those of the poorest countries through the weight given to basic votes; reducing by two the number of European representatives on the IMF Board; and electing all of its members. Relative to the pre-2006 situation (i.e. prior to the Singapore 2006 annual meeting), the increase in the quotas (3.9 percentage points) and voting power (5.3 points) of developing and transition economies was less than expected by these countries (see Figure 6.2). Furthermore, the large gains by some of them (China, Republic of Korea, Brazil, India, Mexico, and Turkey, in that order), which added up as a group to 7.3 and 6.7 percentage points in terms of quota and voting power, respectively, came partly

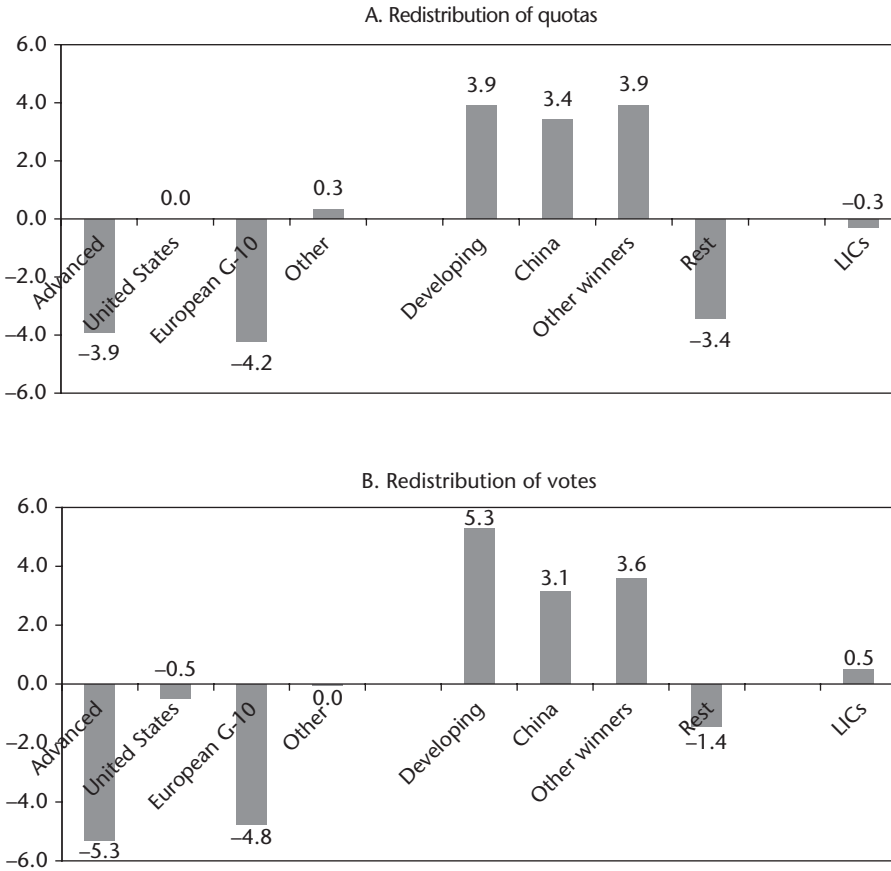


Figure 6.2 Redistribution of quotas and votes in the IMF (versus pre-2006 situation)

Note: European G10: Belgium, France, Germany, Italy, Netherlands, Sweden, Switzerland, and UK. Other developing countries winners: Brazil, India, Mexico, Turkey, and Republic of Korea. LICs: low-income countries.

Source: Author's estimates based on IMF data.

at the expense of other emerging and developing countries. This was less so in the case of voting power thanks to the significant increase in the basic votes that had been agreed in 2008 and that represent today 5.5 per cent of the total voting power. Furthermore, although the quotas and voting power of European countries were reduced, their over-representation continued to be a fundamental problem, as was the under-representation of some emerging economies relative to their actual share in the world economy, notably that of the Asian economies. Given recent and expected dynamics, this problem has already worsened and will continue to do so over time if there are no further reforms.

For this reform to be effective, it needed to be approved by 112 members representing at least 85 per cent of total votes. While the first of these thresholds was rapidly reached, the second was not until the very lagged approval by the US Congress of the additional capital contribution in December 2015. This delay blocked the next steps in the process, which were the review of the quota formula by January 2013 to better reflect the economic weights of countries in the world economy, and a new general review of quotas, which was supposed to be completed by January 2015.

After the previous reforms, the quota formula is a weighted average of GDP (weight of 50 per cent), of indicators of openness and economic variability (30 per cent and 15 per cent, respectively), and international reserves (5 per cent). The GDP in the formula is, in turn, a blend of estimates of that indicator at market exchange rates and purchasing power parities (PPP) (with a weight of 60 per cent and 40 per cent, respectively). The formula also includes a 'compression factor' that reduces the dispersion in calculated quota shares across members.

Although the inclusion of the PPP GDPs in the formula was a victory for emerging and developing countries, the current formula is still a long way from capturing the relative economic weight of countries, leading in particular to an over-representation of Europe, and particularly of some of its small countries. Indeed, as Table 6.1 indicates, if we just used PPP GDPs or even blended GDPs as the basic indicator of the weight of countries in the global economy, the share of emerging and developing countries would significantly increase and that of the European Union would significantly decrease.

The major controversies[9] relate, however, to the use of economic variability and openness,[10] both of which are supposed to reflect the potential need for

[9] For these controversies, see IMF (2012d and 2014a) and the website of the New Rules for Global Finance, http://www.new-rules.org/what-we-do/imf-governance-reform/imf-quota-reform. A very useful analysis of the quota formula prior to the adoption of the current one, which is critical of the openness index, is Cooper and Truman (2007).

[10] Openness is defined as the annual average of current receipts and payments (goods, services, income, and transfers) during the previous five years, and variability of current receipts and net capital flows over a thirteen-year period (IMF 2008).

Table 6.1 Distribution of quota according to different criteria (% of total quota)

	14th Review	GDP blend	GDP PPP	Openness	Variability	Reserves quota[1]	Calculated change	Projected
Advanced economies	57.6	53.0	41.9	59.2	56.8	24.3	52.6	–5.0
United States	17.4	20.5	17.2	12.9	14.8	1.5	14.9	–2.5
Japan	6.5	7.0	4.9	4.3	5.7	11.9	6.0	–0.5
European G10	22.4	16.5	13.0	28.3	22.1	6.9	20.2	–2.2
Germany	5.6	4.5	3.7	7.8	5.9	0.7	5.3	–0.3
France	4.2	3.3	2.6	4.4	2.4	0.5	3.3	–0.9
United Kingdom	4.2	3.1	2.4	4.7	4.2	0.8	3.5	–0.7
Italy	3.2	2.7	2.2	3.1	3.0	0.5	2.7	–0.5
Smaller G10[2]	5.2	2.9	2.1	8.3	6.6	4.4	5.4	0.2
Canada	2.3	2.1	1.6	2.5	2.0	0.6	2.2	–0.1
Other	9.0	6.9	5.2	11.2	12.2	3.4	9.3	0.3
Emerging and Developing	42.4	47.0	58.1	40.8	43.2	75.7	47.4	5.0
China	6.4	12.6	15.2	8.7	5.8	31.5	10.5	4.1
India	2.7	4.2	6.5	2.0	1.6	2.6	3.0	0.3
Korea, Republic of	1.8	1.6	1.6	2.5	1.1	3.0	1.9	0.1
Saudi Arabia	2.1	1.2	1.5	1.2	2.7	5.8	1.7	–0.4
Turkey	1.0	1.2	1.4	0.9	1.2	0.8	1.1	0.1
Russia	2.7	3.0	3.5	2.2	2.7	4.5	2.8	0.1
Brazil	2.3	3.2	3.1	1.2	1.6	3.5	2.4	0.1
Mexico	1.9	1.8	2.1	1.6	1.7	1.5	1.7	–0.2
Other	21.5	18.2	23.2	20.5	24.8	22.5	22.3	0.8
Memo								
EU	30.4	22.1	18.5	38.2	33.8	7.4	28.4	–2.0
LICs	4.1	2.5	3.5	2.3	3.1	1.9	3.0	–1.1

Note: [1] Based on existing quota and 2011 PPP GDPs. [2] Belgium, Netherlands, Switzerland, and Sweden.
Source: IMF (2014a).

IMF resources. These two indicators favour, indeed, the smaller European economies (see also Table 6.1), and a few of them in particular.[11] In this regard, there seems to be a broad agreement, including among IMF staff, that the measure of economic variability is flawed and should be dropped. There continue to be controversies on the potential deficiencies of the openness indicators, including the use of gross measures of trade and finance that overestimate the relative openness of economies. The growing trade in intermediate goods would favour the use of export value added rather than gross trade. In turn, the indicators of financial openness tend to favour a few international financial centres and even tax and regulatory havens. For these reasons, there are disagreements on increasing the weight of the openness variable. Controversies also rage about the possible inclusion of other variables, particularly lending by countries to the Fund, which would also favour developed countries and would even amount 'to putting up quotas for sale' (Nogueira Batista 2012).

[11] Notably four G10 members included in the table (Belgium, Netherlands, Switzerland, and Sweden), but also Austria and some other Scandinavian countries.

In any case, even with the current formula, emerging and developing countries would continue to gain shares in IMF quotas, due both to their much faster economic growth since the North Atlantic financial crisis, as well as the 2011 revision of the International Comparison Programme, which increased the share of emerging and developing countries in world GDP at PPP from 52.8 per cent to 58.1 per cent—the former figure being that used in the 2010 quota review. Indeed, as Table 6.1 shows, most estimates indicate an additional quota gain of 5 percentage points for emerging and developing countries, with them getting much closer to those using just blended GDP. They would, of course, further gain if the variability indicator were dropped and the weight of PPP estimates in the blended GDP further increased. However, most gains would go to a few emerging economies, notably China, whereas many other developing countries, including the low-income countries, would actually lose. This underscores the importance of maintaining and, even better, increasing the share of basic votes in the next review. In turn, the US would fall slightly below the 15 per cent threshold it needs to exercise a veto, a fact that by itself would complicate the negotiations.

The World Bank reforms that took place simultaneously had similar features but also some important differences. These reforms came in two steps (World Bank 2010). If we concentrate on the International Bank for Reconstruction and Development (IBRD), there was a 1.46 percentage point increase in the share of voting power for developing and transition countries in 2008, thanks to an increase in basic votes. During that reform, a new Executive Director from sub-Saharan Africa was also added to the Board. During the 2010 spring meetings a further 3.13 percentage points were added, for a total increase of 4.59 percentage points. This was the result of an ad hoc (rather than a formula-based) increase in capital but also of several adjustments to avoid individual developing countries losing voting power in the reform process. As a result of these reforms, the voting power of developing and transition countries increased to 47.19 per cent (with a lower proportion in the International Development Association and International Finance Corporation). As in the IMF, the greatest increase went to a few emerging economies, in particular China, which gained 1.65 percentage points to become the Bank's third largest shareholder, and five other emerging economies (Republic of Korea, Turkey, Mexico, Brazil, and India, in that order) which, as a group, gained 1.92 percentage points. However, in contrast to the IMF, the rest of the developing and transition economies also gained 1.02 percentage points of voting power. In the case of the developed countries, the European Union and Japan saw their voting power reduced but not the United States.

Equally interestingly, there was a decision to adopt IBRD shareholding principles, which are now explicitly different from those that rule IMF quotas

and voting power.[12] They include economic weight (somewhat different to the formula used in the IMF), financial contributions to IDA (both historical and pledged), and a small recognition of the development contributions of clients (the developing and transition economies). The latter two are considered as 'development contributions' to the World Bank mission. The Board also approved the principle that IBRD should move towards equitable voting parity in the near future, which should include the adoption of a formula to estimate capital shares. There was agreement that these steps would be taken in the new shareholding review that started to be discussed in 2015.

Both reforms should be considered as part of an ongoing process that must continue in the near future. In particular, these changes only go part of the way to reducing the quota and voting power of European countries, which are over-represented in both institutions relative to their current economic weight in the world economy, and to correct the under-representation of some emerging economies, particularly of Asia.

Another crucial issue in both cases is the selection of the heads and senior management of these organizations on the basis of transparent and open processes, based on the merit of the candidates, and regardless of nationality. This is, of course, part of all proposals for governance reforms of the Bretton Woods institutions (e.g. the two major proposals on IMF reform mentioned later in this section). Although these principles were formally endorsed by the G20 at the leaders' level, the election of the IMF Managing Director in 2011 and the World Bank President in 2012 represented at best a marginal change relative to the past and ended up with the traditional election of a Western European to the first institution and a US citizen to the second. In turn, the re-election of both of them in 2016 was not a competitive process. It would also be useful for the staff of these institutions to be more diverse, not just in terms of nationality but also in terms of educational background and professional experience, as well as gender.

In relation to other international financial institutions, while the Bank for International Settlements has selectively increased its members, the Financial Stability Forum and the Basel Committee continued to exclude developing countries prior to the North Atlantic financial crisis. An exception to this rule was the International Organization of Securities Commissions (IOSCO), the organization of stock exchange regulators, which had a wide representation from developing countries. The lack of representation of emerging and developing countries from the Basel Committee had been the target of most criticism, as it had doubtlessly distorted the policies designed, which proved

[12] Differences had already been created over the past two decades by recognition in the World Bank of special contributions from countries to World Bank resources, particularly to IDA.

ineffective in guaranteeing financial stability in major developed countries, but were also biased against the interests of the developing world (Griffith-Jones and Persaud 2008).

The decisions of the G20 in its first two summits were critical for increasing the participation of major emerging economies in these institutions. The FSF was transformed into the FSB, to reflect the additional powers given to it as the coordinator of global financial regulation, and its membership was increased to include all the members of the G20 and thus the largest developing countries. In turn, in March and June 2009, membership of the Basel Committee was broadened to include all G20 countries, as well as Hong Kong and Singapore. As a result of this process, the representativeness of these institutions was significantly increased, as reflected in the share of world foreign exchange reserves in the hands of FSB members, as well as the countries that are members of the Basel Committee that supervises the fifty largest banks in the world (Griffith-Jones and Ocampo 2012). However, small- and medium-sized countries are still excluded from decision-making in the regulatory bodies. This contrasts, of course, with the fact that they are forced to adopt the regulatory standards that FSB and Basel Committee members agree on, as a result of a mix of pressure from both international financial institutions and markets. This may also bias those standards against their interests and needs.[13] Accountability is also an issue in all international regulatory institutions, in open contrast to national bodies which are accountable to parliaments. This means that regulatory institutions should evolve into universal treaty-based organizations and that they should be accountable to multilateral representative institutions (United Nations 2009).

There are, of course, many other issues of governance that have been on the table, in particular those proposed by the two major reports on IMF governance: the study undertaken by the IMF's Independent Evaluation Office (IEO) just prior to the North Atlantic financial crisis (IMF-IEO 2008)[14] and the Commission for IMF Governance Reform headed by Trevor Manuel that presented its report at the peak of the crisis (IMF 2009b).

One issue underscored in Manuel's report relates to the broadening of the Fund's surveillance mandate to cover macroeconomic policies, prudential issues, and financial spillovers. This is an area where it can be said that there has been significant advance since the North Atlantic financial crisis,

[13] As Griffith-Jones and Ocampo (2012) argue, this means that their concerns may not be taken into account—for instance, the preference for simpler regulation, which may be more appropriate for smaller nationally-focused banks—and enhances the power of small- and medium-sized countries to regulate the large international banks active in their countries (see also Warwick Commission 2009, in this regard).

[14] See the more detailed studies for this report in Lamdany and Martinez-Diaz (2009).

including through the development of new instruments of multilateral surveillance, stronger and more 'candid' assessments of systemically important economies, and the renewed recognition of the positive role that macroprudential policies, affecting cross-border capital flows, can play in ensuring financial stability.

On the issues of governance, the IEO's report indicated that the Fund had a good record in terms of effectiveness, particularly as a 'fire fighter' during crises, an area in which the Managing Director's access to high policy officials was essential. Nonetheless, it pointed out that most of this takes place through informal channels of communication with powerful countries that lack transparency and accountability. According to this evaluation, the major problems of the Fund lie in improper accountability and the weak voice of many countries as well as non-governmental actors.

To strengthen voice, the Manuel report endorsed quota reform (an issue not dealt with in the IEO report) and both proposed that all chairs on the Board should be elected. The latter has already been agreed, but its meaning is still unclear, as a significant number of the most powerful countries can, in any case, elect themselves. Both also proposed putting in place the Council of Ministers envisaged in the Articles of Agreement (Article XII, section 1 and Schedule D), with effective powers to coordinate policies, adopt the most important strategic decisions, and exercise full supervision of the Fund activities, including those of the Board. This would replace the IMFC, which has only advisory capacities, though it is generally agreed that it has exercised its functions relatively well and the Board has implicitly understood that it is mandated by this Committee.

According to both proposals, the Board would advise the Council on strategic decisions, exercise full supervision of management, thus strengthening accountability, but leave aside the day-to-day operations to management. The additional functions, according to Manuel's report, would be to take decisions on the use of Fund resources, including approving the credit facilities, and other decisions with financial implication, such as medium-term budget and staff compensation. Day-to-day decisions, as well as surveillance functions over most members through Article IV consultations, would be in the hands of management.

In terms of decision-making, Manuel's report also proposed reducing the threshold of votes needed to approve important IMF reforms from the current 85 per cent to 70–75 per cent, which would mean that the US could no longer exercise a veto in the IMF on important policy decisions. Curiously, if this is agreed, some powerful groups of emerging countries—notably the BRICS, which with the fourteenth review of quotas would have close to the 15 per cent threshold—would also lose their effective veto power and would be forced to generate broader coalitions.

A major issue that none of these reports analyses is the representation of small- and medium-sized countries, including how well the constituency system works. Woods and Lombardi (2006) and Martinez-Diaz (2009), who have looked at this issue, underscore the fact that constituencies vary in size, shared interest, and voting power balance. They indicate that, with some exceptions (e.g. the Canadian constituency with several Caribbean countries), Directors from constituencies that are characterized by strong voting power imbalances tend to consult other members of the constituencies much less and, in contrast, that constituencies with better power balance and the advantages of geographical proximity work much better (with the European Nordic–Baltic constituency as the best example). In turn, in the case of those constituencies that mix countries that use Fund resources and those that do not, there is a high risk that the interests of the former may not be adequately represented. Countries can and have moved across constituencies, a fact that gives them some leverage. The IEO report also underscores the fact that there are no job descriptions or transparent merit-based processes for selecting Executive Directors and their staff.

Beyond that, however, it is important to think of special mechanisms to support small- and medium-sized countries. This could include double majority voting for certain purposes—e.g. for the conditions that characterize credit lines for low-income countries. It could also include special ways to make their voices heard, particularly an institutional mechanism that would allow weak IMF members to express what they perceive are abuses by Fund staff in programmes or in Article IV consultations.

It should finally be said that one of the clear advances of the IMF has been in the area of transparency and the adequate functioning of its IEO. In the first case, transparency has been facilitated by the access to official IMF documents over the past two decades. It includes also the publication of staff views on certain topics that may in some ways express differences or caveats vis-à-vis the official position. This also allows external analysts to get to know internal controversies among staff members, and participate in those debates. This was an advantage that external analysts had in relation to the World Bank and other multilateral development banks, but the very hierarchical structure of the Fund blocked this in the past.

The IEO was created in 2001 to respond to the criticism of the Fund by some members and outside analysts over the way it dealt with the emerging countries' crisis of the late twentieth century. Its success has been due to the generally good topic selection and the quality of its reports, which have mainly dealt with long-term cross-cutting issues. The most recent institutional evaluation of its activities (Ocampo, Pickford, and Rustomjee 2013) indicates that it is widely considered to be the most independent of offices of its kind among international financial institutions, and that it has

played an important role in improving the accountability and transparency of the IMF and in helping develop a learning culture within the organization. Through all of this, it has strengthened the institution's external credibility. It has also had full access to internal information, overcoming in this regard an issue raised by the previous 2006 evaluation (Lissakers, Husain, and Woods 2006). Both evaluations indicate, however, that Board-endorsed IEO recommendations have lacked an adequate follow-up process and even strong ownership by the Board. Its engagement with the IMFC was also much better in the early years of operation, and should therefore be strengthened.

6.4 Regional Arrangements

The third pillar of reform of international financial cooperation is the development of a multi-layered global architecture that relies more broadly on regional, sub-regional, and even inter-regional institutions. Indeed, in a heterogeneous international community, the creation of *networks* of global, regional, and national institutions can provide a better system of governance than arrangements based on single global organizations. This reflects the basic fact that the globalization process that the world has experienced in recent decades is also a process of open regionalism. But this concept is also based on old federalist principles, which when applied to the international system imply that regional and sub-regional institutions give stronger voice to smaller countries, and therefore these countries develop a stronger sense of ownership of them. Furthermore, given the incomplete nature of the existing global financial architecture, regional and inter-regional institutions can also contribute in many ways to fill the gaps of the existing architecture. So, what can be called a 'dense' international financial architecture can contribute not only to improving the structure of the global economy and the international political power balances, but can also be more effective than an architecture based on single world organizations.

The best argument in favour of regional and sub-regional institutions is thus of a political economy character: the strong sense of ownership of these institutions by member countries, and especially by small- and medium-sized ones. This creates a special relationship with countries, which is expressed in the harmony between the financing facilities and the demands by its members, and in the strong preferred creditor status that these institutions enjoy.

These arrangements also face, nonetheless, major challenges. The most important ones relate to the limited capacity of developing countries to handle certain financial risks, the institutional challenges that they face, and

the need to distribute their benefits equitably.[15] In the first case, possibly the main challenge—particularly in terms of monetary arrangements—is the difficulty in exercising a large-scale counter-cyclical role, due to the pro-cyclical access that emerging and developing countries have to private capital markets and the contagion effects generated by the sudden interruption in the access to external financing during crises. In institutional terms, the key challenge is to build solid technical institutions, characterized, therefore, by the lack of political interference in their everyday operation. In relation to the equitable distribution of benefits, due to the inability to fully respond to the demands of the large-sized member countries, these institutions should necessarily have regional or sub-regional redistributive objectives. However, they must prevent their governance structure from being characterized by the excessive power of large countries, as this would defeat the basic political economy argument in favour of these institutions: the greater voice that is granted to small- and medium-sized countries.

The best example of a dense architecture is the system of MDBs, where the World Bank coexists with several regional and sub-regional banks and one inter-regional bank (two if we now add the New Development Bank created by the BRICS countries). In contrast, the international monetary architecture is particularly hollow. What this means is that the IMF of the future should be conceived of as the apex of a *network* of regional reserve funds rather than a mere global fund (Ocampo 2002, 2006b). This would make it look closer in design to the European Central Bank and the Federal Reserve System than to the current IMF. Aside from its benefits in terms of fuller participation by all countries, this design would be much better for promoting macroeconomic policy dialogue and crisis prevention and management at the world level or, in the terminology in fashion, a stronger global financial safety net. A similar structure should be adopted for global financial regulation and supervision.

The system of MDBs was born with IBRD but has been enriched with the creation of the regional development banks, a series of sub-regional banks, and an inter-regional one (the Islamic Development Bank) since the late 1950s. Regional integration and the call to reduce regional inequalities were behind the early creation of the largest regional development bank (and, indeed, largest MDB)—the European Investment Bank. In turn, political motivations were behind the creation of many of the MDBs that serve emerging and developing countries. The Inter-American and Asian development banks were the result of Cold War politics, the African Development Bank the daughter of decolonization, and the later European Bank for Reconstruction and Development the result of the West's interest in the success of market

[15] On these constraints, see in particular Culpeper (2006).

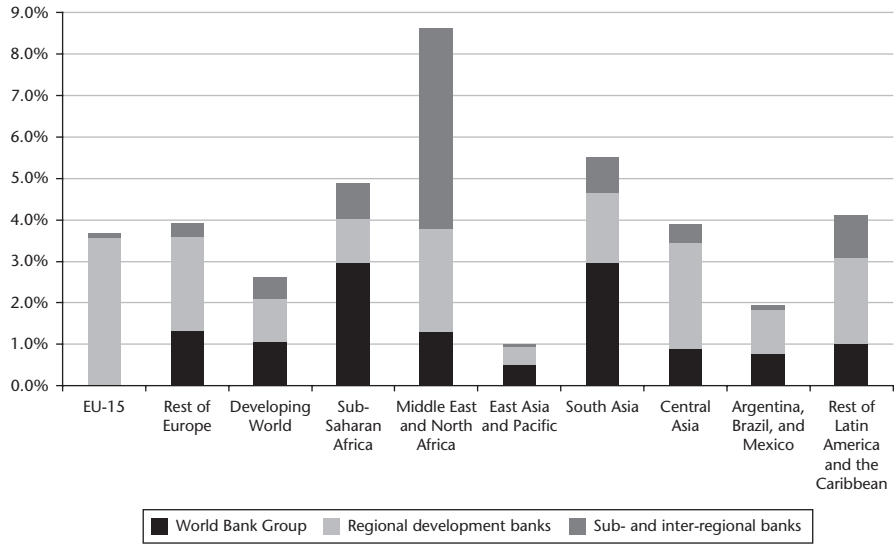


Figure 6.3 Multilateral development banks, assets by region, 2010 (% of GDP in each region)

Source: Author estimates based on information from each bank and GDP data from the World Bank.

reforms in transition economies after the fall of the Berlin Wall. In turn, the origin of the Arab and Islamic institutions lies in the regional solidarity generated by the Arab–Israeli war of 1967. This process has not ceased and now includes the creation in 2015 of a new inter-regional bank, the New Development Bank, and a new regional bank, the Asian Infrastructure Investment Bank. Both of these new institutions will largely focus on financing infrastructure. National development banks are also involved to some extent in international development functions, including now some from emerging economies (China being the most remarkable case).

As Figure 6.3 makes clear, this network of institutions provides quite a useful supply of services to most parts of the world, including Western Europe. However, the coverage of services by MDBs varies across regions, mixing in variable ways its different layers.[16] The Middle East and North Africa is the region best covered by the services of MDBs, with a strong share by regional institutions and the Islamic Development Bank, followed by South Asia and sub-Saharan Africa, where, in contrast, the World Bank group is the major player. They are followed by Latin America and the Caribbean (excluding its three largest economies), Central Asia, and, interestingly, Western Europe. The three largest economies of Latin America and East Asia are the two regions where coverage of the services of MDBs is more limited.

[16] See, in this regard, the contributions to Ocampo (2006a).

With the exception of the European Investment Bank, which is made up entirely of industrial countries, all of which can borrow from the institution—and is thus a 'cooperative'—most regional development banks include a division between developing country borrowers and non-borrowing industrialized country members. This structure was adopted late (in 1982) by the African Development Bank, which was initially a strictly African institution but was forced to converge towards this structure because of its financial difficulties. This capital structure allows developing countries to benefit from the excellent credit rating of the industrialized country members. It is amplified by the practice of maintaining a large ratio of subscribed to paid-in capital, which may be understood as a guarantee to the lending operations of these institutions.

The most elaborate system of MDBs owned by regional members is that of the Arab and Islamic world, which essentially operates as a mechanism for transferring resources from the oil-rich countries of the region to poorer regional members, as well as to other countries in the Islamic world and Africa. In other regions of the world, the best example of a sub-regional bank is the Development Bank of Latin America, the new name recently adopted by the Andean Development Corporation (CAF according to its Spanish acronym), a transformation that reflects the fact that its gradual expansion has made it a truly regional development bank, and one that is owned by developing countries. (Spain and Portugal joined in recent years, but they are also potential borrowers.) This dynamic institution is, indeed, the best example of an international financial 'cooperative' in the developing world, as all members can borrow from the institution.

In contrast to the dense architecture that characterizes the system of MDBs, that of the international monetary system is fragmented and rather hollow.[17] Regional arrangements in this area have taken different forms—common central banks, payment agreements, reserve pools, and swap credit lines—and different degrees of multilateralization.

The architecture includes, first of all, a small group of monetary unions (the European Central Bank, two additional ones in West and Central Africa, and that of the small islands of the Eastern Caribbean, in particular). Among the projects to create new monetary unions, the Gulf Cooperation Council is worth highlighting, but it has been delayed several times and will come into operation only with part of its members. In turn, the idea to create a central bank among members of the Caribbean Community (CARICOM) has been essentially abandoned.

[17] See, in this regard, the contributions to Volz and Caliari (2010) and the evaluation of the IMF (2013b) of its relations with regional financial arrangements.

A second group includes reciprocal payments mechanisms created in the context of regional trade integration processes. Europe provided an early and very successful model with the European Payments Union, which was created shortly after the Second World War (see Chapter 1). These mechanisms imply savings in the use of foreign exchange in commercial transactions and may therefore be particularly useful in periods of foreign exchange scarcity. In the developing world, the Agreement for Reciprocal Payments and Credits of the Latin American Integration Association (LAIA or ALADI according to its Spanish acronym) is worth highlighting, but after its peak utilization during the Latin American debt crisis of the 1980s, its use has significantly declined. Payment mechanisms in national currencies can be added, as well as a few experiments with a limited use of notional regional currencies.[18]

A third set includes an equally small balance of payments financing agreements, either in the form of reserve pools or swap arrangements.[19] The oldest are the Latin American Reserve Fund (FLAR, according to its Spanish acronym), currently made up of the Andean countries, Costa Rica, Uruguay, and Paraguay, and the swap currency agreement between the central banks of the Association of Southeast Asian Nations (ASEAN). The Arab Monetary Fund, which has been in operation since 1977, can be added to the list, though it has essentially financed trade, and therefore could be said to belong more to the family of development banks than to monetary agreements. The North American Framework Agreement, established in 1994 as part of the North American Free Trade Agreement, is another small arrangement. The epicentre of the emerging economies of the late twentieth century, East Asia, also gave birth to the most ambitious proposals in this area at the time: the Chiang Mai Initiative, created in 2000 as a system of bilateral swap arrangements among the central banks of the ASEAN countries, China, Japan, and the Republic of Korea (ASEAN+3), which engulfed the former ASEAN swap arrangement.

There have been significant advances in this area since the North Atlantic financial crisis. Indeed, a significant difference between this crisis and that faced by emerging economies in the late twentieth century has been the recognition of the role of these regional arrangements in the global financial safety net. At that time, the Japanese initiative to create an Asian Monetary Fund faced the opposition of the United States, and the Managing Director of

[18] There was also a payments mechanism among Central American countries that collapsed during the debt crisis of the 1980s. A notional regional currency was created by the Andean Community in the 1980s, the Andean peso, but soon ceased to be actively used. For a full inventory of Latin American initiatives in this area, including recent ones mentioned later in this section, see Ocampo (2013a: section III).

[19] I exclude from this list the swap arrangements among developed countries' central banks, which has the US Federal Reserve at its centre. Four emerging economies (Brazil, Republic of Korea, Mexico, and Singapore) were given temporary access to Fed swap facilities at the beginning of the North Atlantic financial crisis. See the analysis of these arrangements in Chapter 5.

the IMF, Michel Camdessus, thought it led to the launching of the Chiang Mai Initiative in 2000.

Actions in recent years have been particularly striking in the region that became the epicentre of the North Atlantic financial crisis in 2010–13: the European Union and, in particular, the euro area. They included the creation of two stability funds: first the temporary European Financial Stability Facility set up in 2010, and later the permanent European Stability Mechanism that began to operate in 2012. They also included the interventions of the European Central Bank to ensure the functioning of the regional payment system (through the TARGET2 arrangement), provide liquidity to the commercial banks, and in a more sporadic (or, one might say, even inconsistent) manner, prevent disorders in the functioning of public debt markets.[20] The European Financial Stabilization Mechanism was also set up in 2010 and is available to all European Union members, but it is a smaller mechanism relative to the eurozone facilities.[21]

In relation to emerging and developing economies, the most important actions have been the expansion and multilateralization of the Chiang Mai Initiative in 2009, its expansion to US$240 billion in 2012, and the creation in 2011 of its surveillance unit in Singapore (the ASEAN+3 Macroeconomic Research Office, AMRO). Other initiatives include the creation of the Economic Stimulus Fund of the Eurasian Economic Community, the 40 per cent expansion of FLAR agreed in 2012, and some initiatives in the field of payments in Latin America. The most recent is the launch, in 2014, of a US $100 billion BRICS Contingency Reserve Arrangement (CRA).[22]

As Figure 6.4 indicates, the relative size of these different arrangements relative to the regions' GDPs is quite diverse. The European Stability Mechanism is by far the largest, followed by the Chiang Mai Initiative and the BRICS's CRA. The other arrangements are smaller in magnitude. However, size may not be a good guide to the effectiveness of these institutions, particularly when they focus on the smaller countries. Notably, despite its modest size, FLAR has disbursed throughout its history (since 1978) the equivalent of 70 per cent of the funds disbursed by the IMF to member countries, and indeed more funds than the IMF if we exclude Venezuela (Ocampo 2014b).

[20] The literature on this topic is extensive. See, among many others, Wyplosz (2013). The roots of balance of payments facilities for EU countries go back to 1971.

[21] There is also an older but small mechanism of balance of payments support to non-euro area countries but provided by the European Union, the Balance of Payments Assistance Facility, created in 2002, that has in a sense been superseded by later arrangements.

[22] See Grabel (2012) for a detailed review of the initiatives that have been adopted in the developing world and IMF (2013b) for an inventory of regional initiatives and an analysis of the relationship of the IMF with the various agreements. The recent Latin American initiatives include the payments in national currencies between Argentina and Brazil, and the SUCRE (Spanish acronym for Unified System for Regional Compensation) among ALBA members (Spanish acronym for Bolivarian Alliance of the Peoples of Our America).

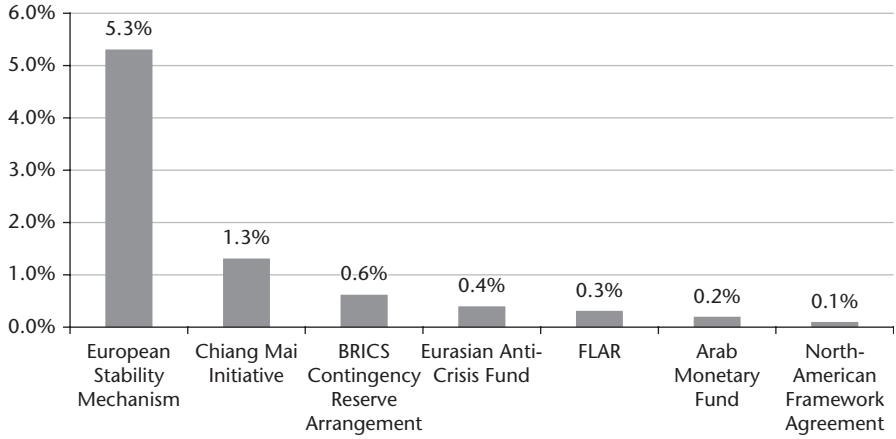


Figure 6.4 Size of regional balance of payments facilities (% of regions' GDPs in 2013)

Source: International Monetary Fund. The data for the Eurasian Anti-Crisis Fund and the North-American Framework Agreement refers to 2011 and is taken from IMF (2013b). That for FLAR includes the 40% increase in the reserve pool agreed in 2012.

One way to understand how regional monetary arrangements function is to differentiate three basic functions: (i) the dialogue on macroeconomic policies and the possible monitoring and coordination of these policies; (ii) balance of payments support; and (iii) coordination and eventual exchange rate unification (Ocampo 2006b). Given the frequency and rigour of the disturbances coming from the capital account, the third of these objectives has been generally absent in monetary arrangements among emerging and developing countries. In contrast, it has been central in the history of European monetary cooperation, even before the creation of the European Central Bank (Wyplosz 2006).

A particular issue in the case of developing countries is the limited effectiveness that regional monetary arrangements can have in protecting against systemic events due to likely contagion effects among its members. However, as the experience of FLAR indicates, even in a narrowly defined region, contagion does not eliminate the fact that demands for liquidity by members have different intensities and variable lags, making a reserve fund viable and desirable. This also reflects the fact that correlation among some relevant macroeconomic variables among Latin American countries (foreign exchange reserves and terms of trade) is not necessarily very high, and correlations in capital flows is high but not close to unity. Furthermore, lending at the onset of a crisis can actually serve as a preventive mechanism that reduces contagion, and thus, as a powerful mechanism of collective insurance. In narrower terms, reserve pooling is useful if the variability of the reserve pool is lower than that of each of the members' foreign exchange reserves (Machinea and Titelman 2007; Ocampo

and Titelman 2009). In any case, these constraints indicate that regional institutions cannot substitute the role that the IMF plays during systemic crises.

There are, in any case, different ways in which these arrangements can relate to the IMF. In this regard, during the recent crisis, Europeans chose rescue packages in which the IMF was a partner of the European institutions and involved programmes with heavy conditionality. In contrast, the strong 'stigma' associated with IMF programmes in East Asia explains why Chiang Mai has not been used, because beyond a certain limit (initially 10 per cent of the agreed swap lines, which was later raised to 20 per cent and most recently, in 2012, to 30 per cent), the use of its facilities requires an IMF programme. As a result, countries that may have used the initiative during the North Atlantic crisis (possibly Indonesia and the Republic of Korea) did not do so as they were unwilling to agree to any such programme. Eliminating the link with IMF programmes is thus essential in this case. Given this experience, it is surprising that the link to an IMF programme beyond 30 per cent of the credit lines was also the rule adopted by the BRICS's CRA. In contrast, the use of FLAR facilities has traditionally been delinked from any IMF programme, and in fact has no conditionality attached to it. The links between the IMF and regional arrangements will continue to be subject, therefore, to flexible designs and a 'variable geometry'.

Regional monetary arrangements should, therefore, be actively promoted as essential components of the global financial safety net. There are, in fact, many ways in which their creation could be encouraged. A major incentive would be the access of these arrangements to rediscount facilities that could be created in the IMF, or even that in the case of developing countries SDR allocations would be proportional, not only to IMF quotas, but also to the reserves that these countries have placed in common reserve funds—thus making pooled reserves equivalent to IMF quotas for this purpose[23] (United Nations 1999; Ocampo 2002)—and, perhaps with a discount, to swap credit lines that they extend among themselves. They can also be the building blocks to broader reforms. The Stiglitz Commission has proposed a bottom up process, through which the new global monetary system would be strengthened by a series of agreements among regional arrangements (United Nations 2009: ch. V).

[23] Indeed, it is essential that pooled reserves be counted as part of foreign exchange reserves of countries, a practice that the IMF has not yet adopted.

7

Reforming the (Non)System

7.1 The Major Issues

The recent North Atlantic financial crisis showed how dysfunctional the current international monetary and financial architecture is for managing today's global economy, and led to calls to reform it. Similar calls were made after the sequence of crises of emerging economies of the late twentieth century that started in East Asia in 1997,[1] but they led to at best marginal action. This time reforms of international financial regulation have been important but those of the international monetary system have been limited.

The need to strengthen financial regulation and supervision has indeed been a clear priority in recent years. Under the initiative of the G20 and with the transformation of the Financial Stability Forum into the Financial Stability Board, with a major responsibility of coordinating efforts among the G20 countries to re-regulate finance, this process has been going on at an unprecedented scale in the industrial world in recent years, despite being plagued by delays in implementation and political economy pressures to weaken reform efforts. The emerging economies had undergone similar processes after their own past financial crises during the last decades of the twentieth century.

Two remarkable weaknesses of (and thus absences from) the international financial reform agenda have been the links between domestic financial regulations and cross-border capital flows, and the limited initiatives to introduce better sovereign debt workout mechanisms. As discussed in chapters 4 and 5, and summarized in sections 7.3.3 and 7.4.2, both issues have been partly dealt with in recent years in the context of the IMF and, in that sense, as part of global monetary reform.

[1] This was accompanied by extensive academic debates. See, among others, Eatwell and Taylor (2000, 2002), Kenen (2001), and Ocampo, Kregel, and Griffith-Jones (2007).

The international monetary architecture, the centre of attention of this book, has not received similar attention in the reform efforts. As we have seen in previous chapters, such architecture includes the global reserve system (the way international liquidity is provided), the management of the macroeconomic linkages among different economies, and balance-of-payments crisis management. The second may be understood as involving at least three separate issues: the consistency in the way different national authorities (regional in the case of the monetary policy in the eurozone) run their macroeconomic policies, the exchange rate system, and rules on cross-border payments and capital flows—with regulations on capital flows also playing the role of a crisis prevention 'macroprudential' tool. The third includes, in turn, the availability of emergency balance-of-payments financing and debt workout mechanisms. Reform efforts in all of these areas should take into account the asymmetries that characterize the global economy, particularly the size of the economies and the way business cycles and capital account boom–bust cycles are transmitted to different economies. Last but not least, reforms should improve institutional governance, to generate a more inclusive system.

Prior to the North Atlantic financial crisis, rising global imbalances had led to the 2006 IMF initiative to launch a multilateral consultation on this issue, which did not yield any significant results. In turn, some voices were heard in the early phase of the crisis to reform the global monetary system. The most prominent were those of the Chinese central bank governor (Zhou 2009) and the Commission of Experts convened by the President of the UN General Assembly on Reform of the International Monetary and Financial System, better known as the Stiglitz Commission (United Nations 2009). These proposals have not been followed up. So, the most significant reforms since the crisis have been the largest issue of Special Drawing Rights (SDRs) in history in 2009, the Mutual Assessment Process (MAP) launched by the G20 also in 2009, the debates on capital account management that took place in the IMF Board in 2011 and 2012, and the debate on debt workouts that took place in the IMF Board in 2014 and in the United Nations in 2015.

Reforms of the international monetary system should obviously take into account the characteristics of the system that emerged at Bretton Woods and how it has evolved in the seven long decades since then. As we saw in Chapter 1, it can be argued that the original Bretton Woods system had four basic features:

- A global reserve system based on a dual gold–dollar standard.
- A system of fixed exchange rates, but adjustable under 'fundamental disequilibria'.
- Convertibility for current account transactions, which would be achieved in a gradual way for countries that lacked it, but the capacity of countries

to manage capital flows to insulate them from speculative capital movements and, therefore, the absence of any commitment to capital account convertibility (liberalization).

- Official balance-of-payments support, financed by quotas, but limited in size, as they were supposed to finance only current account deficits. No conditionality was initially associated with such support, but it was soon introduced, essentially of a macroeconomic character.

The system gradually evolved in several ways, particularly increasing the magnitude of financing to partly manage balance-of-payments crises associated with capital outflows, with additional resources being provided by a sequence of 'arrangements to borrow' agreements since 1962. However, the major reforms came with the unilateral decision by the United States to abandon the first of these rules in 1971, the failure to adopt a new stable system of exchange rate parities among major currencies, and the inability to agree on a new international monetary system in the Committee of Twenty negotiations that took place in 1972–4 (Williamson 1977). The ad hoc or de facto system that evolved, which several authors have characterized since the 1970s as a 'non-system', has the major following features:

- A global reserve system essentially based on a fiduciary currency, the US dollar—which I have called in this volume a 'fiduciary dollar standard'—but open in principle to competitive reserve currencies. This has been complemented by sporadic issues of SDRs, which were formally created in 1969, but which have played a very secondary role, in open contrast to the expectation then incorporated into the IMF Articles of Agreement of 'making the special drawing right the principle reserve asset in the international monetary system' (Article VIII, Section 7; Article XXII).
- Freedom for each country to choose the exchange rate regime it wants, as long as countries avoid 'manipulating' their exchange rates, a term that has never been clearly defined, thus making this the clearest case of a non-system.
- Effective convertibility of the current account for most countries, which came nonetheless late in many cases, together with a significant degree of capital account liberalization since the mid-1970s, although maintaining the capacity of countries to regulate capital flows, after a failed attempt to introduce capital account convertibility into the IMF Articles of Agreement in 1997.
- Step-by-step increase in the size of official balance-of-payments support, responding in particular to the rising demands generated by capital account crises. This was accompanied by increasing conditionality in the 1980s and 1990s, which moderated somewhat in the 2000s. The

additional resources to finance larger programmes have come from a mix of quota increases and 'arrangements to borrow' and, in recent years, a series of bilateral agreements between the IMF and individual countries, which now include some emerging economies.

- Surveillance of countries' macroeconomic policies, but limited policy coordination, which essentially takes place outside the IMF, in the G7 and now in the G20, although in the latter case with IMF support.

This chapter reviews how to reform this global monetary non-system in what could be characterized as a comprehensive yet evolutionary reform. Section 7.2 looks at the global reserve system. This is followed in Section 7.3 by an analysis of the interlinked issues of macroeconomic policy cooperation, the exchange rate system, and capital account regulations. Section 7.4 takes a look at the two major crisis resolution issues: balance-of-payments financing and debt workouts. The final section looks at the governance of the system. Throughout the analysis, the particular issues associated with emerging and developing countries are underscored. The chapter serves as a summary of the major issues raised and proposals made in this volume.

7.2 Reforming the Global Reserve System

As we saw in Chapter 2, the basic deficiencies of the current global reserve system are associated with three problems that were identified in a sequential way in the global policy debate. The first, underscored by Keynes (1942–3), is the *asymmetric-adjustment problem*, which generates a global recessionary bias.[2] The problem is generated by the asymmetric adjustment to payments imbalances between deficit and surplus countries: whereas the former must adjust, particularly when financing dries up during crises, surplus countries do not face a similar pressure to correct their imbalances.

The second problem is associated with the use of a *national* currency as the major *international* currency. It was formulated in the 1960s by Triffin (1961, 1968) and it is thus widely known as the *Triffin dilemma*. The essential problem is that the provision of international liquidity requires that the country supplying the reserve currency run balance-of-payments deficits, a fact that may erode the confidence in that currency. Its major manifestation since the collapse of the original Bretton Woods arrangement has been a tendency of the net investment position of the US to deteriorate, through the alternation of periods in which it runs increasing current account deficits with others in

[2] I prefer this term to 'deflationary', as this pressure is more likely to be reflected today in economic activity than in price deflation.

which such deficits tend to be corrected. This cycle is accompanied by significant variations in the real exchange rate of the US dollar, a fact that implies that the currency at the centre of the system has an unstable value.

Having a fiduciary currency at the centre of the system also implies that the world economy is hostage to the monetary policy of the main reserve-issuing country, which is generally adopted with no regard to its international spillovers. This has obvious global implications, as it can be argued that the stability of the system may be inconsistent with the monetary policy objectives of the major reserve-issuing country (Padoa-Schioppa 2011). In turn, the deterioration in the net US investment position may undermine the confidence in its currency, as underscored by Triffin and more recently Mateos y Lagos, Duttagupta, and Goyal (2011), among others. However, although this is a potential problem, the dollar has continued to be the dominant reserve currency.

The third flaw of the system is the *inequity bias* generated by the need of emerging and developing countries to 'self-insure' against strong boom–bust cycles of global finance through building up a large amount of foreign exchange reserves; this potentially increases the policy space they have to undertake counter-cyclical macroeconomic policies during 'sudden stops' in external financing. Since foreign exchange reserves are invested in safe industrial countries' assets, and particularly US government securities, reserve accumulation by these countries is nothing else than lending to rich countries at low interest rates. This is what generates the inequity of the system. Furthermore, beyond the rationale for self-insurance at the level of individual countries, reserve accumulation can generate 'fallacy of composition' effects, as it would strengthen the current accounts of emerging economies, thus contributing to the generation of global imbalances. So, this inequity potentially contributes to the instability of the system.

There are alternative ways to reform this system. The most ambitious would be to go to back to Keynes' proposal for an International Clearing Union or to create a global reserve bank that could issue a new supranational reserve currency. However, negotiating the creation of a new global institution or a supranational currency would be quite a difficult task. So there are essentially two possible reform paths. The first and, in a sense, inertial solution would be to let the system evolve into what it potentially already is: a multi-currency arrangement. The second would be to fully exploit the role of the SDRs, gradually approaching the aspirations of the 1969 reform of the IMF Articles of Agreement. In practice, these two alternatives can be mixed, and such a combination may be politically more acceptable for the issuers of reserve currencies, particularly for the United States.

As already indicated, under the current system other currencies can compete with the dollar as international means of payments and reserve assets.

However, this competition has been relatively weak. The US dollar has continued to be the dominant currency, followed by a large margin by the euro, and by an even larger margin by the British pound, the Japanese yen, and a few other currencies (the Swiss franc, the Australian and Canadian dollars, and more recently the Chinese renminbi). The recent crisis has thus clearly shown that the 'network externalities' have continued to favour the use of the US dollar as the major international currency, largely as a result of the fact that there is no alternative to the market for US Treasury securities in terms of liquidity and depth. In turn, the euro showed a remarkable resilience in its role as the secondary reserve currency during the eurozone crisis of 2011–12.

The basic advantage of a multi-currency arrangement is that it allows reserve holders to diversify the composition of their foreign exchange reserve assets, and thus to counteract the instability that characterizes all individual currencies under the current system. This also generates resilience of the system to the problems that fixed parities generate, as reflected in particular in the fixed gold–dollar parity that contributed to the collapse of the original Bretton Woods arrangement. However, exchange rate flexibility among alternative reserve currencies is also a potential risk: if central banks around the world actively substitute currencies to enjoy the benefits of diversification, this could increase exchange rate volatility among major currencies. This indicates that an IMF 'substitution account' should be created, allowing countries to exchange for SDRs the reserve currencies they do not want to hold. This proposal was suggested for the first time in the 1970s to manage the instability of the US dollar, but it was not adopted because of the lack of agreement on who would bear the potential losses that the substitution account could generate.

However, aside from diversification to manage the instability of the US dollar exchange rate, a multi-currency arrangement would not address any of the other deficiencies of the current system. The benefits from the reserve currency status would still be captured by industrial countries and gradually by China. It would not solve the recessionary bias associated with asymmetric adjustment of deficit versus surplus countries, nor would it reduce the demand of emerging and developing countries for self-insurance. Also, in the light of the growing demand for reserves, the dominance of the dollar could further worsen the net investment position of the United States.

The second reform route would be to enhance the role of the only truly global reserve asset that the world has created: the SDRs. The rationale for doing so today is quite different from that when this asset was created in the 1960s. The issue of potentially inadequate provision of international liquidity, which had been at the centre of post-war debates, is clearly not as important today, but the world still needs (to use the terminology of the 1960s) a less 'erratic' and 'capricious' system for providing global reserves, and particularly

one that is not hostage to the macroeconomic policies and the potential effects of the deterioration in the net investment position of the United States.

Under current rules, the IMF makes allocations of SDRs on the basis of a long-term need of a global character, and with the purpose of supplementing existing reserve assets. So far there have been three SDR allocations: in 1970–2, 1979–81, and 2009; the latter included an allocation that had been agreed in 1997 but had not been effective until the Fourth Amendment of the IMF Articles of Agreement of which it was a part was approved by the US Congress in 2009. Allocations are made according to IMF country quotas, and therefore they are much larger for high-income countries. The share of high-income countries has gradually declined over time, but was still over 60 per cent in the joint 2009 allocations (see Table 2.2).

SDRs are both an asset and a liability of IMF members. This is a legacy of the debates of the 1960s, when France, against the view of most countries, opposed the idea of creating a pure reserve asset (Solomon 1982: ch. 8). Since this implies that countries that use them make net interest payments to the IMF, they should perhaps be considered as a credit line that can be used unconditionally by the holder—that is, an unconditional overdraft facility. Use of SDR allocations is quite active, including by high-income countries, but developing countries make a more frequent use of them (see Chapter 2 and Erten and Ocampo 2013b).

A more active use of this instrument should preferably make SDR allocations in a counter-cyclical way (Camdessus 2000; Ocampo 2002; United Nations 1999) but simultaneously guarantee that the supply of SDRs reflects the additional global demand for reserves (United Nations 2009: ch. 5). Most estimates indicate that average allocations for the equivalent of US$200–300 billion a year would be reasonable, but even this size of allocation would only increase the share of SDRs in non-gold reserves to just over one-tenth in the 2020s, indicating that allocations would still largely complement other reserve assets.

Even a moderate move in this direction would go a long way to reduce the three major problems of the current system. First, the associated seignorage would accrue to all IMF members. Second, by issuing SDRs in a counter-cyclical way, it can contribute to reducing the recessionary bias associated with the asymmetric-adjustment problem. Third, SDR allocations could reduce the need for precautionary reserve accumulation by developing countries, and would represent a lower cost of building self-protection rather than accumulating international reserves through borrowing or building up current account surpluses.

The most important reform, in any case, would be to finance *all* IMF lending with SDRs, thus making global monetary creation similar to how central banks create domestic money. This would follow the proposals made by the IMF

economist Jacques Polak (1979) almost four decades ago. According to his proposal, IMF lending during crises would create new SDRs, but such SDRs would be automatically destroyed once such loans are paid for. The alternative I have suggested is to treat the SDRs not used by countries as deposits in (or lending to) the IMF that could then be used by the institution to lend to countries in need (Ocampo 2010a). Either of these proposals would involve eliminating the division in the IMF between what are called the general resources and the SDR accounts (Polak 2005: part II).

The use of SDRs to finance IMF programmes would help consolidate the reforms of the credit lines that have been introduced during the recent financial crisis, particularly the creation of contingency credit lines (especially the Flexible Credit Line, and the use for contingency purposes of other lines), the much larger levels of financing relative to quotas, and the reforms of facilities for low-income countries (see Chapter 5 and Section 7.4.1 below). It would eliminate the need for the IMF to get financing from its members in the form of 'arrangements to borrow' or bilateral credit lines. In fact, it would also eliminate the need to make additional contributions to the IMF through quota increases as well as the need for the IMF to manage multiple currencies, most of which are useless for its operations. Quotas would still have to be agreed to determine the size of access to IMF facilities as well as voting rights. In any case, for this reform to reduce the demand for self-insurance, it is essential that the size of IMF credit lines, their conditionality, and the 'stigma' associated with borrowing from the institution be corrected.

Following the discussions of the 1960s and early 1970s, there are also ways of including a 'development link' in SDR allocations and in the way they are used by the international community. The best rule would be to include the demand for reserves as a criterion in SDR allocation. A simple solution, suggested by Williamson (2010), would be to allocate a certain proportion to developing countries (say around 80 per cent), and then assign the shares of the allocation among developing and high-income countries, respectively, according to IMF quotas. Another would be to design mechanisms by which unutilized SDRs are used to provide or leverage financing for development, for example by allowing unused SDRs to be used to buy bonds from multilateral development banks or institutions that provide global public goods (such as climate mitigation and adaptation) (United Nations 2009).

Allocation rules could also be made to help correct the asymmetry between deficit and surplus countries. For example, countries with large surpluses and/or excessive reserves could be penalized by suspending their right to receive SDR allocations. Of course, the definition of 'excessive reserves' would have to take into account the high demand for reserves by developing countries.

Some analysts have suggested that any ambitious reform of the SDRs would require an increasing demand for this global currency, which can only come

from its transformation into an asset held by the private sector (Cooper 2010; Eichengreen 2007; Padoa-Schioppa 2011). However, such private use of SDRs could generate problems of its own, particularly speculative changes in the demand for this global reserve asset. Such reform could also face strong opposition by the United States. For these reasons, it may be better to think of a mixed system in which national or regional currencies continue to play the major role in private transactions, and the SDR performs the functions of reserve asset and medium of exchange in transactions among central banks. This would continue to require that SDRs be converted into other global currencies for central banks to intervene in the foreign exchange markets. Some private use could be partially allowed, for example by allowing deposits by financial institutions in central banks (either reserve requirements or excess reserves) to be held in SDRs.

As already pointed out, under a system that mixes SDRs with a multi-currency arrangement, a substitution account should be created, allowing central banks to substitute for SDRs other reserve assets they do not want to hold (or want to hold only in limited quantities). This alternative was suggested by Bergsten (2007) before the crisis, going back to proposals that have been made since the 1970s. This instrument could also be seen as a transition mechanism of an ambitious reform effort (Kenen 2010b). An essential issue is how to distribute the potential costs of this mechanism, the problem that blocked its adoption three decades ago.

The most important reform would involve, therefore, counter-cyclical *allocations* of SDRs that help fund counter-cyclical IMF *financing*. It would also involve designing criteria for SDR allocations that take into account the very different demand for reserves by industrial versus developing countries. The introduction of a substitution account would make this system complementary to a multi-currency system, which would make the reforms more attractive for the United States. This mix is probably the best practical option for moving forward.

7.3 Macroeconomic Cooperation

7.3.1 *Macroeconomic Cooperation to Correct Global Imbalances*

The main challenge of macroeconomic policy coordination is managing global imbalances. There were significant concerns with rising global imbalances prior to the North Atlantic financial crisis. Although some saw as important the implications for global financial stability, few saw a significant problem in the global monetary system as such; some even saw it turning into a stable 'Second Bretton Woods' (Dooley, Folkerts-Landau, and Garber 2003).

Global imbalances reflect both structural as well as short-term phenomena. The strong pressure for the United States to run persistent deficits under the current 'fiduciary dollar standard' is, of course, the main structural factor, and it is related to the Triffin dilemma. The surplus of oil-exporting countries is another structural feature, although it also has a strongly cyclical dimension. Other structural phenomena are the surpluses in East Asia, including Japan, which are associated, at least in part, to their high savings rates. One of its major sources, the undervaluation of the Chinese renminbi, had a policy origin but has been fully corrected.[3]

The asymmetric adjustments of deficit and surplus economies that characterize the global monetary system have been clearly at work and represent the most important phenomenon after the outbreak of the North Atlantic financial crisis, notably within the eurozone. On the other hand, non-oil emerging economies were flooded with capital, which generated strong appreciation and rising deficits in several of them. In due time, particularly with the downward correction in commodity prices, several economies started to experience capital outflows, exchange rate depreciation, and, in some cases, recession. This is, in short, a reflection of the pro-cyclical boom–bust cycles that emerging and developing countries experience under the current global financial order.

Overall, through the evolution of payment imbalances since the East Asian crisis of the late twentieth century, we see at work several features (deficiencies) of the international monetary system: the Triffin dilemma, the asymmetric pressures on deficit versus surplus countries to adjust, and pro-cyclical capital flows to emerging/developing countries. A fourth phenomenon is also at work: the cyclical demand for recycling of the surpluses in oil-exporting countries during periods of high oil prices.

To manage these complex issues, the world has at best a limited set of mechanisms of macroeconomic policy dialogue and cooperation. The IMF is the major instrument of a multilateral character, but most cooperation over decades has taken place outside the IMF, and has not been particularly effective. This preference for 'Gs' continued to prevail during the peak of the North Atlantic financial crisis, when the G20 decided in Pittsburgh in September 2009 to designate itself as 'the premier forum for our international economic cooperation' (G20 2009b). It is complemented by informal coordination among central banks of major developed countries, which has been critical since the outbreak of the subprime crisis in the United States in 2007.

[3] This is partly due to nominal appreciation but even more to relative wage movements, which are not captured in traditional estimations of real exchange rates. Indeed, in recent years, China has rather been making efforts to avoid a depreciation of the renminbi, sacrificing a large amount of reserves. This may imply that, if anything, this currency is now overvalued.

Macroeconomic cooperation has thus taken place predominantly through mechanisms of what I have called 'elite multilateralism' (Ocampo 2011a) rather than through the formal multilateral organization that the world has created for that purpose.

G20 cooperation was very successful in the initial phase of the crisis, when it assumed the form of a 'Keynesian consensus', avoiding in particular a new Great Depression. However, in relation to fiscal policies, the consensus broke down in the June 2010 G20 Toronto meeting, when it became clear that there was a deep division between countries that continued to defend expansionary policies to counteract the weakness of aggregate demand and those that placed the priority on public sector debt sustainability. The consensus on monetary policy has been more persistent, except for the temporary lapse of the European Central Bank, which partly reversed its monetary stimulus in 2011. The need for continued monetary stimulus in the advanced economies has generated a major disequilibrium vis-à-vis emerging economies, as reflected in a new financial boom, which in turn generated the strong exchange rate pressures faced by these economies—a 'currency war', to use the term coined by the then Brazilian Finance Minister Guido Mantega.

The MAP, launched in Pittsburgh in 2009, is the major instrument of G20 macroeconomic policy cooperation. In 2011, this led to an agreement by the G20 that 'the persistently large imbalances that require policy action' are: public sector deficits and debts, private savings and private debt, and external current account imbalances, taking into consideration the macroeconomic policies of different countries (G20 2011a). This was followed by the determination of the indicative guidelines against which each of the indicators would be assessed, which are explicitly 'not targets' but 'reference values' (G20 2011b).

In practice, the main technical support to the MAP is provided by the IMF, and involves analysing the reports of individual countries, assessing their mutual consistency, and making policy recommendations (IMF 2011e). This is combined with proper IMF activity: the strengthening of surveillance, both multilateral and bilateral. This includes the Consolidated Multilateral Surveillance Report, the Spillover Reports for the 'systemic five' (United States, United Kingdom, eurozone, Japan, and China), and the External Sector Reports assessing global imbalances. In turn, the major instrument of bilateral surveillance continues to be Article IV Consultations. Its major changes are the more in-depth consideration of financial issues, and theoretically more 'candid' assessments, particularly for major economies. The latter was a response to the views, held by the IMF's Independent Evaluation Office (IMF-IEO 2011), among others, that the Fund had lacked strong assessments of major developed countries in the run-up to the North Atlantic financial crisis (see also Obstfeld and Taylor 2017). In 2010 it was also decided that

twenty-five jurisdictions with systemically important financial sectors must be subject to Financial Sector Assessment Programs (FSAPs).

It is quite clear that the world had never developed an elaborate system of surveillance and macroeconomic policy dialogue such as the one put in place in recent years. It is also true that there has been an improvement in 'even-handedness' in the way different IMF members are treated, as the more systemic economies are now subject to particular attention. Whether there is 'traction' in this process (to use a typical IMF term), particularly in relation to major economies, continues to be, of course, the major question. The system that has been put in place continues to rely essentially on a mix of stronger surveillance and peer pressure. However, such forces are weak, as reflected in the limited effect that IMF views have had on the policies of individual countries or regions, for example the inability to moderate fiscal austerity and asymmetric adjustment in the eurozone, or the limited practical attention to the spillovers generated by the expansionary monetary policies of developed countries on emerging markets. So, at a future stage, it may be essential to move to specific targets for some macroeconomic indicators, particularly the current account and foreign exchange reserves levels.[4] This is what I also suggest in Section 7.3.2 in relation to the exchange rate.

7.3.2 *The Exchange Rate Non-System*

Exchange rate stability was an essential element of the Bretton Woods arrangement. This objective was explicitly incorporated into the IMF Articles of Agreement, as it was also seen as crucial for guaranteeing another purpose of the IMF, 'to facilitate the expansion and balanced growth of international trade'. The system of fixed but adjustable pegs worked well for more than a quarter of a century, with some flexibilities. The system included the principle that modifications of the exchange rate parities would have to be subject to consultation, a rule that only rarely had any implications.

The major problem after the breakdown of the original arrangement in the early 1970s is that it was followed by a clear non-system, as all countries are essentially free to choose any exchange rate regime they prefer. The only constraint, according to the revised Article IV of the Agreement agreed in 1976, is that countries should avoid manipulating their exchange rates, in particular to gain competitive advantages. This was also the focus of both the 1977 and 2007 decisions on bilateral surveillance of exchange rate

[4] The discussions of the early 1970s are illustrative in this regard. At the time, as indicated in Chapter 1, the United States backed a 'reserve indicator' system, under which each IMF member would have been assigned a target level of reserves and forced to adjust to keep reserves around that target.

policies. The basic problem is that there has never been a clear definition or criteria to determine whether a specific country is involved in exchange rate 'manipulation'.

As agreed at Bretton Woods, exchange rates are essential for their effects on international trade, and play a central role in correcting global payments imbalances. Of course, exchange rate movements may reflect divergence in other macroeconomic policies rather than in exchange rate policies as such. A major concern is that there is no mechanism linking world trade and exchange rate rules. The suggestion that this issue should be brought into the World Trade Organization's dispute settlement mechanism (Matoo and Subramanian 2008) is not a good one, as it could end up weakening one of the few successful mechanisms for enforcing international agreements, and would also leave aside the fact that exchange rates are largely determined in the contemporary world by financial flows and associated boom–bust cycles. This is the basic reason why they should be under IMF jurisdiction and be part of broader mechanisms of macroeconomic policy coordination. Indeed, one of the major issues in relation to exchange rates is their 'excess volatility' since the North Atlantic financial crisis, including that which characterizes the most important bilateral exchange rate, the euro/dollar rate. It is unclear what purpose this high level of volatility between the world's two most important currencies serves.

The system could therefore be improved by introducing elements that enhance the capacity of exchange rates to contribute to correcting global imbalances and to provide a reasonable level of stability, which is of course crucial for international trade. Given that returning to fixed exchange rates among major currencies is not a viable option, given the magnitude of capital flows, the best system would be one of reference rates among major currencies, which was initially suggested by Ethier and Bloomfield (1975), and later on by Williamson (1983c, 2007), among others. This implies that currencies, and particularly major currencies, would be subject to some form of managed floating around multilaterally agreed parities or bands. Interventions in foreign exchange markets and other macroeconomic policies would reinforce depreciation if the currency is perceived to be overvalued and appreciation if it is undervalued. Furthermore, such intervention rules would provide an implicit definition of what 'manipulating' the exchange rate means—i.e. encouraging exchange rate moves in the opposite direction to the agreed rate or band. An essential advantage of such a system is that it would also give some guidance to markets, which may help avoid extended periods of deviation from the agreed parities or bands.

This should, of course, take into account all macroeconomic determinants of the exchange rate and payments imbalances. Even better, the framework should take into consideration not only payments imbalances among countries

but also global output (employment) gaps and inflationary or deflationary pressures. Furthermore, it could include the broader set of indicators chosen by the G20 for its MAP. In any case, to avoid complexity, a simple set of indicators should be used, mixing reference exchange rates with information about current account deficits, reserve levels, and global output gaps.

7.3.3 *Capital Account Regulations*

The central role that capital flows play in determining exchange rates and exchange rate volatility brings into focus an additional leg of international monetary reform: the management of the capital account. This issue links with broader concerns of financial stability, which the recent crisis placed at the centre of global cooperation. Paradoxically, however, as indicated in the introduction to this chapter, *cross-border* finance was entirely left out of the agenda. It was, nonetheless, taken up by the IMF as part of global monetary reform. The principle that regulating (or managing) cross-border capital flows is a useful instrument of macroeconomic adjustment under certain conditions was adopted as an IMF 'institutional view' in 2012 (IMF 2012e). Managing the capital account had, of course, been authorized all along by the IMF Articles of Agreement, and the 1997 initiative to introduce in the IMF Articles of Agreement a commitment of countries to capital account convertibility was defeated.

The essential problem is that capital flows, like finance in general, are highly volatile and pro-cyclical. Furthermore, capital account volatility tends to be stronger in emerging market economies than in advanced economies (with lower-income countries being largely rationed out from private capital markets). Cyclical swings in net flows, risk spreads, and availability of long-term financing are some of the major determinants (and, under certain conditions, *the* major determinants) of business cycles in emerging economies (Prasad et al. 2003; Ocampo, Spiegel, and Stiglitz 2008). A basic problem in this regard is that the domestic financial markets of these countries are significantly more 'incomplete' and plagued by variable mixes of currency and maturity mismatches in portfolios; also, their capital markets are shallower and small relative to the magnitude of the speculative pressures they face.

In turn, some of the major determinants of net flows to emerging economies are monetary conditions and risk perception in advanced economies—generally called 'push factors'. But portfolio decisions in industrial countries may be entirely de-linked from demand for capital by developing countries. Furthermore, given the dominant role of advanced economies in international finance, a small change in their portfolios can have major repercussions on emerging economies.

The 2011–12 debate on this issue recognized that there is no presumption that full liberalization of capital flows is an appropriate goal for all countries at all times, and that capital account regulations ('capital flow management measures', or CFMs in IMF terminology) may have an important role in supporting macroeconomic and financial stability, as part of the family of 'macroprudential' regulations, and as a complement and not a substitute for appropriate macroeconomic policy. This was incorporated into what came to be known as the IMF's *institutional view* on liberalization and management of capital flows (IMF 2012e). This view has a preference for regulation of inflows over outflows, for price-based over quantity-based regulations, and for those that do not discriminate according to the residency of the agents involved—something that may be impossible in practice, given the very different demands for domestic assets by domestic versus foreign agents. It has also tended to regard these regulations as a sort of 'intervention of last resort', once other macroeconomic options have been exhausted—a view that was, in any case, more nuanced in the 'institutional view' than in earlier documents.

The institutional view also recognized that push factors are important, and that the source countries should thus 'better internalize the spillovers from their monetary and prudential policies' (IMF 2012e: 36). However, it gave no guidelines as to actions that they should undertake to avoid inducing large capital outflows towards emerging economies, arguing only in broader terms that this view should 'foster a more consistent approach to the design of policy space for CFMs under bilateral and regional agreements' (IMF 2012e: 33). This is the principle that should apply to rules on the liberalization of capital flows of the OECD and investment rules in free trade agreements.

Going beyond the 2011–12 IMF debate, capital account regulations should be seen as part of the *normal* toolkit of macroeconomic interventions that should be used *simultaneously* with other macroeconomic policies to limit excessive capital inflows and avoid domestic overheating or exchange rate overvaluation.[5] Furthermore, capital account regulations should be seen as a continuum, which includes macroprudential regulations of a strictly domestic character (those that affect domestic assets and liabilities in the domestic currency), regulations that relate to the use of assets and liabilities denominated in foreign currencies in the domestic financial system, and those that regulate cross-border capital flows as such. The particular mix between these three forms of macroprudential regulation depends on the policy objectives of the authorities and the characteristics of the domestic financial system of the countries involved (Ocampo 2011a; Ostry et al. 2010, 2011). Furthermore, there should be no presumption on preference for regulation of inflows versus

[5] See, for example, the contributions to Gallagher, Griffith-Jones, and Ocampo (2012a) and the paper by Gallagher and Ocampo (2013).

outflows, or between price-based versus quantity-based mechanisms, and regulations should be used pragmatically and modified dynamically to avoid evasion. Interestingly, this more pragmatic view is implicit in the only framework on this issue adopted by the Group of Twenty (G20 2011c).

7.4 Crisis Resolution

7.4.1 *Balance-of-Payments Financing*

The emerging issue in the design of IMF credit facilities from the 1960s, which became the dominant one following the major crises in emerging economies of the last decades of the twentieth century, has been balance-of-payments support in the face of capital account crises. The two essential elements of this policy were the acceptance of a much larger scale of financing relative to quotas—'exceptional access' in IMF terminology—and, to a lesser extent, the search for preventive or precautionary financing instruments to mitigate and hopefully avoid the contagion effects of crises. These elements were present in the major reforms adopted after the North Atlantic financial crisis, notably the reforms adopted in 2009 that were possibly the most ambitious in the IMF's lending history (IMF 2009c). To this one should add the changing design of special facilities for low-income countries. The 2009 reforms have been adjusted subsequently to improve their novel features. The design of new credit facilities has been accompanied, in turn, with debates about IMF conditionality, which were particularly heated after the crises of emerging economies that started in East Asia in 1997.

Exceptional financing came with conditions, including stronger procedures for decision-making and programme evaluation, a rigorous analysis of debt sustainability, and the perception that the country has good prospects of regaining access to private capital markets (IMF 2003). A major concern of these principles on 'exceptional access' is that they create a bias towards larger members, which could not be reconciled with the principle of uniformity of treatment of member states. The lack of formal debt workouts that countries could use to manage unsustainable debt burdens has, of course, been a basic constraint to a proper application of these principles.

The creation of a successful precautionary facility in 2009, the Flexible Credit Line (FCL), came after several failed attempts—the 2003 Contingent Credit Line, the 2006 proposed Reserve Augmentation Line, and the 2008 Short-Term Liquidity Facility. The FCL lacks ex-ante conditionality and is aimed at countries with 'solid fundamentals' but a risk of facing capital account problems associated with contagion. Although its creation was positive in many respects, doubts have been raised about the prequalification process and the scale of resources. Although three countries rapidly used this

credit line, the fact that it was not used by others could indicate that it is not sufficiently attractive and has thus helped only in a limited way to overcome the stigma associated with borrowing from the IMF. Its terms were improved in August 2010, when the scale of resources was increased and the period for which it can be used was extended.

Because of the limitations of this facility, particularly in terms of potential beneficiaries, perhaps even more important were those reforms aimed at a broader set of members: the doubling of the size of other credit lines agreed in 2009, the wider use of traditional stand-by agreements for preventive purposes, and the creation in 2010 of the new Precautionary Credit Line, later transformed into the Precautionary and Liquidity Line, for countries that do not meet the criteria of the FCL.

For the poorest countries, the Poverty Reduction and Growth Facility created in 1999 was transformed into the Extended Credit Facility in 2009. Aside from this facility, which provides help to countries with prolonged balance-of-payments difficulties, other facilities were made available for shorter-term difficulties: the stand-by lines, which can now be used for dealing with external shocks, and a Rapid Credit Facility, for limited support during emergencies (such as a natural disaster or a temporary external shock). This was complemented by the decision adopted in December 2009 to change the design of the concessional loan lines from a single design to a menu of options (IMF 2009e), which recognizes the differences among low-income countries in terms of debt vulnerabilities and management capacity. This includes the possibility that those with stronger conditions can eventually access non-concessionary facilities.

Fund lending has clearly met its counter-cyclical objective through history and certainly since the North Atlantic financial crisis, indicating that the decisions on new credit lines adopted at the onset of the crisis were steps in the right direction. A novelty was the fact that, for the first time since the 1970s, the IMF included among its borrowers high-income countries, but this has been accompanied by the demand by several middle-income countries for IMF facilities, including the preventive credit lines, and the steady demand by low-income countries that absorbs a more limited amount of resources.

However, these reforms have been insufficient in two ways. The first is that the resources available for IMF lending have lagged behind other global aggregates over the past three decades. This is true relative to world gross domestic product, but particularly to world trade and remarkably so vis-à-vis any financial aggregate. This is despite the international financial system demanding the IMF be more active as a source of emergency financing, particularly to manage capital account shocks. Hence the importance of quota increases, but even more, as argued in Section 7.2, of using the creation of SDRs as a source of resources for IMF lending. The second is the need to

continue making progress in designing financing facilities that are either automatic or have simpler prequalification processes. These conditions are particularly important to overcome the stigma associated with borrowing from the IMF, which is associated, both historically and currently, with conditionality.

Debates on IMF conditionality are as old as the Fund, but their focus has changed over time. It may be argued that some macroeconomic conditionality is necessary to guarantee that countries could return to sustainable balance-of-payments positions and repay their loans to the IMF. However, the extension of conditionality beyond the strict macroeconomic realm to include structural adjustment, which became a typical pattern in the 1980s and 1990s, should be rejected. The fact that policies would generally involve adjustment—'austerity', the typical term used in recent debates—is, in a sense, unavoidable. Nevertheless, it has been argued through time that it should certainly be less severe or its nature should be different when crises originate in adverse external shocks rather than in expansionary domestic policies and, even more, when deficits are expected to be temporary and self-reversing. The low-conditionality compensatory financing facility created in the 1960s as well as the oil facilities of the 1970s were designed to address the case of external shocks, but the low-conditionality features of the compensatory facility were gradually dismantled and it ceased to be used after the turn of the century; it was eliminated in 2009.

Criticisms of the structural adjustment features of IMF programmes were already common in the 1980s but came to the fore after the East Asian crisis.[6] The primary criticism was that the features were rigid and uniform, and reflected orthodox views on economic reforms, the effects of which—particularly in their capacity to accelerate growth—are highly controversial. They were also seen as excessively intrusive on domestic decision-making processes, and therefore as violating the principle of 'ownership' of policies by countries that became widely recognized as a precondition for policies to be effective. Furthermore, some critics have also underscored the fact that some conditions often reflected pressures exerted by influential countries regarding what they wanted specific borrowing countries to do.

The reforms adopted in 2002 and 2009 in this realm were steps in the right direction. The new guidelines on conditionality approved in 2002 (IMF 2002b) introduced three basic principles: (i) member countries' *ownership* of policies; (ii) the requirement that structural conditions should be *macro-relevant* and focus on the core competencies of the IMF (monetary, fiscal, and exchange rate policies, as well as financial system issues); and (iii) the

[6] For early criticism of the high costs of structural adjustment, see Cornia, Jolly, and Stewart (1987). The best-known criticism after the East Asian crisis is that of Stiglitz (2002).

need to streamline conditions to those that are *critical* to achieve programme goals. The additional reforms introduced in March 2009 were to eliminate structural performance criteria for all programmes, and thus the relationship between IMF disbursements and structural conditionality, and to eliminate ex-ante conditionality for the FCL.

Overall, as the summary of the evaluations of the effects of these reforms in Chapter 5 indicates, there have been advances since the mid-2000s in reducing the volume of structural conditionality and focusing on the macro-relevant areas that are within the competence of the IMF. Eliminating structural benchmarks and the creation of a preventive credit with no ex-ante conditionality were major steps forward. However, as already indicated, much more has to be done in designing automatic credit facilities with no conditionality and making them available to a larger set of countries. There has probably been some advance in moderating the pro-cyclical effects of adjustment policies, but the story in this regard is more mixed. It has certainly not been true of some of the European programmes, but it can be argued that this is because of the reduced degrees of freedom that countries have because of their membership in the eurozone or their decision to maintain currency boards (e.g. as in the case of Latvia).

The counter-cyclical role of IMF lending should be complemented by other mechanisms, as part of what has come to be called a 'global financial safety net'. Notable among them, because of their broad-based coverage in the emerging and developing world, is counter-cyclical lending by multilateral development banks. Swap facilities are also essential and play a major role in the case of Federal Reserve facilities for other industrial countries, and notably between the Federal Reserve and the European Central Bank. They should also be used more broadly for emerging countries, as was the case shortly after the North Atlantic financial crisis when the Federal Reserve extended temporary swap facilities to a few of them (Brazil, Mexico, Republic of Korea, and Singapore). There is also a growing use of swap facilities between China and other emerging and developing countries, which will undoubtedly grow in the future. The new BRICS Contingency Reserve Arrangement, formally launched in 2015 by Brazil, Russia, India, China, and South Africa, is a new addition to the safety net.

Regional mechanisms also have an important role to play. An old, small, but well-functioning one is the Latin American Reserve Fund (FLAR), in which eight countries participate, and which should be expanded to achieve a broader regional coverage. The Chiang Mai Initiative of ASEAN plus China, Japan, and the Republic of Korea, and the European Union mechanisms, notably the European Stability Mechanism for eurozone members inaugurated in October 2012, are the largest regional mechanisms in place. The association with IMF programmes and their conditionality beyond a certain

level of lending has been a basic constraint to the use of the Chiang Mai Initiative, and this rule has (paradoxically) been adopted by the BRICS Contingency Arrangement. Therefore, mechanisms without a tie to an IMF programme, which include the swap mechanisms and FLAR lending, are better in this regard.

7.4.2 *Sovereign Debt Workout Mechanisms*

The second element of a well-structured crisis response architecture is a system to manage debt overhangs. The absence of an effective mechanism of this sort forces debtors to adopt excessively contractionary adjustment policies during crises, and may have negative long-term effects in terms of access to and cost of financing. For all these reasons, the availability of facilities to deal with problems of illiquidity must be complemented by mechanisms to manage insolvencies—the role that bankruptcy procedures play at the national level. The dividing line between 'liquidity' and 'solvency' is not easy to draw, in any case, as the lack of liquidity financing may lead to insolvency. In fact, a major argument in favour of effective instruments to manage illiquidity is precisely to avoid building up problems of insolvency.

However, advances made in improving emergency financing during recent crises have not been matched by the development of an institutional framework to manage the debt overhangs of countries. The only regular mechanism of this type in place is the Paris Club, which deals exclusively with official creditors. This is mixed with voluntary renegotiations with private creditors and ad hoc debt relief initiatives (the Brady Plan, the Highly Indebted Poor Countries Initiative, and its successor, the Multilateral Debt Relief Initiative). The problem with this patchy non-system is that debt restructuring generally (or even always) comes 'too little and too late', according to the IMF's own evaluation (IMF 2013a), after over-indebtedness has had devastating effects on countries, including on their capacity to service debts. This is also an inefficient outcome from the point of view of both debtors and creditors, as it does not treat all of them with uniform rules.

The lack of a multilateral framework for dealing with international debt crises involving private creditors has been a major concern of many analysts for decades. Initiatives to manage these problems proliferated after the 1994 Mexican crisis and, particularly, after the crises of the emerging economies in the late-twentieth century, following two different approaches, which have been referred to in the literature as 'contractual' and 'statutory'. The most important attempt to introduce a statutory regime was the 2001–3 IMF proposals for a Sovereign Debt Restructuring Mechanism, which failed. One important outcome of the discussion at the time was that it led to changes in the contractual approach, in particular to the rapid spread of collective

action clauses in debt contracts issued in the US market (they were already in place in the United Kingdom). In recent years, particularly after the difficulties faced by Argentina in US courts in 2013 with its restructurings of 2005 and 2010, several new initiatives were put in place. The first was an additional reform along the statutory approach: the agreement in 2014, backed by the International Capital Market Association (ICMA 2014a, 2014b) and the IMF (2014b), to include clauses that facilitate the aggregation of debt contracts and a new *pari passu* clause that avoids the problems of interpretation of old clauses that were subject to judicial decisions against Argentina in US courts in favour of the 'holdouts'. eurozone bonds have also required aggregation clauses since 2013. The United Nations also adopted in 2015 basic principles on sovereign debt restructuring (United Nations 2015). Therefore, the basic framework continued to consist of voluntary negotiations with private creditors of individual countries that have debt overhangs.

What this implies is that the contractual approach has dominated actions in this field. It is unlikely, however, that this decentralized and market-orientated route will produce the desired effects. A first problem is that incentives remain for both debtor countries and creditors to delay restructurings, which may negatively affect debtors and their long-term capacity to pay, and may result in recurrent renegotiations. A second problem is that its effects will only appear gradually, as a significant part of the debt stock lacks collective action clauses and only a small part has aggregation clauses. In any case, aggregation does not exclude the possibility of blocking majorities in individual issues, and may not include other creditors aside from bondholders, particularly syndicated bank lending. A third problem is that credit default swaps may reduce the incentive to participate in debt renegotiations, and introduce a whole new set of actors into the process.

Additional complications are associated with the reduced importance of the traditional division between external and internal debt generated by the increasing participation of international funds in the domestic debt markets of emerging economies. Furthermore, the traditional separation between official and private creditors has been made more complex by the rise of official lenders that are not members of the Paris Club (notably China). This may imply that, in the future, aggregation may have to truly include *all* obligations, including even multilateral lending, with proper seniority rules, favouring in particular creditors that provide funding during crises.

The statutory approach would involve the creation of an international debt court of some form, with clear rules on priority of claims and inter-creditor equity principles that would be legally enforceable in the main financial markets. It would have to adopt the principles of a fresh start and equitable sharing of haircuts. Nonetheless, intermediate solutions can be adopted, such as case-by-case mediation or eventually arbitration panels convened by the

parties under internationally agreed arbitration rules (Kaiser 2013). Any mechanism in place would have to follow two basic principles: comprehensiveness of debt restructurings, and impartiality of the mediation and arbitration processes.

The best alternative would be to mix the voluntary and statutory solutions, by creating a mechanism similar to the WTO dispute settlement,[7] in which there is a sequence of voluntary negotiations, mediation, and eventual arbitration with pre-established deadlines, thus generating strong incentives to reach agreement. The process should start with the declaration of a moratorium by the debtor country, which would unleash the negotiations. The process could involve, aside from bondholders, other creditors, including official ones. The mechanism could be created as an independent body under the UN system, but also as a system of *independent* mediation and arbitration within the IMF, similar again to the WTO dispute settlement mechanism. This implies that the debt resolution organ would operate independently of the Executive Board and the Board of Governors, and with strong provisions to avoid interference from IMF staff, directors, and member states.[8]

Under any system, three complementary mechanisms are desirable. The first is an international debt registry. The second is the creation of effective mechanisms for creditor coordination for individual renegotiations, which is essential given the diversity of creditors. The third is a sovereign debt forum, which can be a multi-stakeholder process organized under the umbrella of the UN Financing for Development programme, with broad participation from governments, international institutions, the private sector, and civil society.

7.5 Governance of the System

Substantive reforms along the lines analysed in previous sections must be matched by the design of appropriate governance structures. There are, in this regard, three interrelated issues. The first one is the design of the apex organization. The second is the reform of 'voice and participation' of developing countries in the Bretton Woods institutions—in the case of the international monetary system, in the IMF. The third is the design of a multilayered architecture, with active participation of regional, sub-regional, and inter-regional institutions.

In the first area, the major step, as already pointed out, has been the decision of the G20 to designate itself as the premier forum for international economic

[7] My early ideas on the subject were included in Herman, Ocampo, and Spiegel (2010b).

[8] This is what is implicit in Krueger's (2002) late proposal during negotiations regarding the Sovereign Debt Restructuring Mechanism.

cooperation. The creation of this G20 at a leaders' level was, of course, a step forward in terms of representation of developing countries compared to the G7. But this 'elite multilateralism' also created problems, as ad hoc self-appointed bodies cannot replace representative institutions in a well-structured international institutional architecture.

This preference for 'Gs' over representative international institutions has deep historical roots, and reflects the revealed preference of major industrial countries for institutional mechanisms over which they can exercise direct influence. It is possible that this may have also become the view of some emerging economies that are G20 members. The basic issue of 'Gs' is the tension between representativeness and the legitimacy associated with it, on the one hand, and power structures, on the other. This issue is sometimes expressed as the tension between inclusiveness and effectiveness, but this is clearly a wrong way to pose it, as representative institutions can be effective. This is, after all, a basic defence of democratic systems. It is true that effective decision-making may require small bodies, but this is not inconsistent with representation, as those small bodies can be embedded in larger representative institutions that elect their members according to agreed criteria.

In terms of leadership, the G20 has played an important role in several areas: cooperation at the onset of the crisis to adopt expansionary policies and avoid the strong recession from turning into another Great Depression; putting in place a new mechanism of macroeconomic cooperation, the MAP; steering change in financial regulation; avoiding the competitive protectionist responses that characterized the Great Depression; and putting in place a mechanism of international tax cooperation, the Base Erosion and Profits Shifting process, led by the OECD. On effectiveness, the record is more mixed: quite good in the early phases of the crisis but weaker since then. Performance is rather poor in three other dimensions: representation (ad hoc representation is, as already pointed out, sub-optimal relative to that which can be achieved in representative treaty-based organizations), contribution to the coherence of the global system of governance, and lack of an effective secretariat that can support continuity in governance and support even-handedness in the treatment of members with different degrees of power.[9]

For all these reasons, the G20 should be transformed into a more representative and thereby legitimate mechanism of international economic cooperation. In this regard, the best proposal on the table is that of the UN Commission of Experts on Reforms of the International Monetary and Financial System to create the Global Economic Co-ordination Council (United Nations 2009: ch. 4). According to this proposal, the Co-ordination Council

[9] On these issues, see Ocampo and Stiglitz (2011) and Woods (2011), and the several contributions to Derviş and Drysdale (2014).

would be set within the framework of the UN *system*, to which the Bretton Woods institutions belong, and formed on the basis of constituencies elected through weighted votes. So, although designed within the framework of the UN system, its voting structure will be made along the lines of the Bretton Woods institutions, correcting of course for the problems of representation that these organizations face today. The proposals by the Palais Royal Initiative (Boorman and Icard 2011) have elements in common with those of the UN Commission, but centre on designing an apex organization for the international monetary system, which would thus have less reach than the proposed Global Economic Co-ordination Council.

The reforms of voice and representation of developing countries in the Bretton Woods institutions should continue. This includes, first of all, advancing beyond the 2010 IMF reform, which doubled the quotas, revised the allocation of quotas and voting power of developing countries, reduced by two the European representatives in the IMF Board, and decided that all of its members should be elected. The approval by the US Congress in December 2015 of the additional contribution of the United States that was essential to conclude the 2010 reforms indicates that the capacity of the US Congress to block international reforms—in this case for five years—should be a major concern of the international community. In any case, this reform was still short of what is required. In particular, although the quota and voting power of European countries was reduced, its over-representation continued to be a fundamental problem, as is the under-representation of some emerging (particularly Asian) economies relative to their actual share in the world economy. So, additional reforms would be necessary to guarantee that IMF resources are adequate for the demand for balance-of-payments financing, and that the quota distribution is regularly adjusted to reflect changes in the shares of countries in the global economy. The reform has to also include revised rules on allocation and use of SDRs, according to the proposals previously made. Indeed, as already indicated, if SDRs are more actively used, there will be no need to increase traditional member quotas.

There are other issues of governance that have to be addressed, including those proposed by the 2009 Commission for IMF Governance Reform (IMF 2009b) and by the IMF's Independent Evaluation Office (IMF-IEO 2008). They include the creation of a Council of Ministers envisioned by the Articles of Agreement, with effective powers to adopt the most important political decisions, thus replacing the International Monetary and Financial Committee; a clear re-definition of the relations between this Council, the Board, and management, including re-orienting the Board towards formulating strategy and monitoring policy implementation rather than the executive day-to-day functions it now oversees; and reducing the threshold of votes needed to approve important IMF reforms from the current 85 per cent to, for example,

70–75 per cent. A crucial, additional reform, is guaranteeing a transparent and open process to select the IMF managing director, based on the merit of the candidates and regardless of nationality.

Finally, a dense multi-layered architecture that relies more broadly on regional institutions offers interesting opportunities. Indeed, in a heterogeneous international community, the creation of *networks* of global, regional, and national institutions can provide a better system of governance than arrangements based on single global organizations. What this means is that the IMF of the future should be conceived as the apex of a network of regional and inter-regional reserve funds (Ocampo 2002, 2006b). A system such as this would be closer in design to that of the multilateral development banks, where the World Bank co-exists with several regional development banks and, in some parts of the world, with several sub-regional institutions, and some inter-regional banks (e.g. the Islamic Development Bank and now the New Development Bank).[10] Interestingly, the structure of such a network would also be closer in design to the European Central Bank and the Federal Reserve System than to the current IMF.

Regional arrangements can take different forms—payments agreements, swap lines, reserve pools, common central banks—and exhibit different degrees of multilateralization. FLAR, the Chiang Mai Initiative, and the European Stability Mechanism are three frameworks already in place, the last case complementing the role of the European Central Bank. The new BRICS Contingency Reserve Arrangement is an additional mechanism of an inter-regional character.

Careful consideration should be given to the links between global and regional arrangements. In this regard, during the recent crisis, Europeans chose rescue packages that mixed resources from the IMF and the European Financial Facility (the predecessor of the European Stability Mechanism). In contrast, as access to Chiang Mai swap lines beyond a certain limit (30 per cent) requires an IMF programme, this rule may block the use of this mechanism, as countries may be unwilling to agree on any such programme. As indicated, the BRICS Contingency Reserve Arrangement adopted a similar rule. In contrast, the use of FLAR facilities has traditionally been de-linked from any programme with the global institution. Therefore, although links between the IMF and regional arrangements would continue to be subject to flexible designs—a 'variable geometry' to use a term common in the trade literature—de-linking them may be the best way forward.

[10] See, in this regard, the contributions to Ocampo (2006b), and the evaluation of the contribution of different regional mechanisms to international monetary stability by McKay et al. (2011).

References

Abdildina, Z., and J. Jaramillo-Vallejo (2005). 'Streamlining Conditionality in World Bank and International Monetary Fund-supported Programs'. In S. Koeberle, H. Bedoya, P. Silarszky, and G. Verheyen (eds), *Conditionality Revisited*. Washington, DC: World Bank, pp. 85–91.

ActionAid (2010). 'Using Special Drawing Rights for Climate Finance'. Discussion Paper, February. Available at: http://www.usclimatenetwork.org/resource-database/using-special-drawing-rights-for-climate-finance (accessed 22 February 2017).

Agosin, M., and F. Huaita (2012). 'Overreaction in Capital Flows to Emerging Markets: Booms and Sudden Stops'. *Journal of International Money and Finance*, 31: 1140–55.

Aizenman, J., Y-W. Cheung, and H. Ito (2015). 'International Reserves Before and After the Global Financial Crisis: Is There No End to Hoarding?' *Journal of International Money and Finance*, 52: 102–26.

Aizenman, J., and J. Lee (2007). 'International Reserves: Mercantilist vs. Precautionary View: Theory and Evidence'. *Open Economies Review*, 18(2): 191–214.

Akyüz, Y. (2005). 'Reforming the IMF: Back to the Drawing Board'. G-24 Discussion Paper Series 38. New York and Geneva: United Nations. [Reproduced in Y. Akyüz, *Liberalization, Financial Instability and Economic Development*. London: Anthem Press, 2014, chapter V.]

Ariyoshi, A., K. Habermeier, B. Laurens, I. Ötker-Robe, J.I. Canales-Kriljenko, and A. Kirilenko (2000). 'Capital Controls: Country Experiences with Their Use and Liberalization'. Occasional Paper 190. Washington, DC: International Monetary Fund.

Barbosa-Filho, N.H., C. Rada von Arnim, L. Taylor, and L. Zamparelli (2008). 'Cycles and Trends in US Net Borrowing Flows'. *Journal of Post-Keynesian Economics*, 30(4): 623–48.

Basel Committee (2010). 'The Basel Committee Response to the Financial Crisis'. Report to the G-20. Available at: http://www.bis.org/publ/bcbs179.pdf (accessed 22 February 2017).

Bergsten, F. (2007). 'How to Solve the Problem of the Dollar'. *Financial Times*, 10 December. Available at: https://www.ft.com/content/75cb5f2e-a729-11dc-a25a-0000779fd2ac (accessed 22 February 2017).

Bértola, L., and J.A. Ocampo (2012). *The Economic Development of Latin America since Independence*. New York: Oxford University Press.

BIS (2009). *Capital Flows and Emerging Markets*. Report of the Committee on the Global Financial System. CGFS Papers No. 33, January.

BIS (2016). *Triennial Central Bank Survey: Foreign Exchange Turnover in April 2016*. Available at: http://www.bis.org/publ/rpfx16fx.pdf (accessed 22 February 2017).

Boorman, J.T., and A. Icard (eds) (2011). *Reform of the International Monetary System: The Palais Royal Initiative*. New Delhi: SAGE Publications.

Borio, C. (2016). 'More Pluralism, More Stability?' Presentation at the Seventh High-Level SNB-IMF Conference on the International Monetary System. Zurich, 10 May. Available at: http://www.bis.org/speeches/sp160510.pdf (accessed 22 February 2017).

Borio, C., and G. Toniolo (2006). 'One Hundred and Thirty Years of Central Bank Cooperation: A BIS Perspective'. BIS Working Papers, No. 197, February.

Bradford, C.I., and W. Lim (2011). 'Introduction: Toward the Consolidation of the G20: From Crisis Committee to Global Steering Committee'. In C.I. Bradford and W. Lim (eds), *Global Leadership in Transition: Making the G20 More Effective and Responsive*. Seoul and Washington: Korea Development Institute and Brookings Institution Press, pp.1–10.

Bradford, C.I., and W. Lim (2014). 'Global Rebalancing and Systemic Risk Assessment: The G-20 and the International Monetary Fund'. In K. Derviş and P. Drysdale (eds), *The G-20 Summit at Five: Time for Strategic Leadership*. Washington, DC: Brookings Institution, pp. 119–43.

Bredenkamp, H., and C. Pattillo (2010). 'Financing the Response to Climate Change'. IMF Staff Position Note SPN10/06. Washington, DC: Strategy, Policy, and Review Department, International Monetary Fund. Available at: https://www.imf.org/external/pubs/ft/spn/2010/spn1006.pdf (accessed 22 February 2017).

Buchheit, L.C., A. Gelpern, M. Gulati, U. Panizza, B. Weder di Mauro, and J. Zettlemeyer (2013). 'Revising Sovereign Bankruptcy', Report of the Committee on International Economic Policy and Reform. Washington, DC: Brookings Institution.

Buiter, W. (2008). 'Lessons from the North Atlantic Financial Crisis'. Paper prepared for the conference of the Columbia Business School and the Federal Reserve Bank of New York. Available at: http://willembuiter.com/NAcrisis.pdf (accessed 22 February 2017).

Calvo, G.A. (1998). 'Capital Flows and Capital-Market Crises: The Simple Economics of Sudden Stops'. *Journal of Applied Economics*, 1(1): 35–54.

Calvo, G.A., and C.M. Reinhart (2002). 'Fear of Floating'. *Quarterly Journal of Economics*, 117(2): 379–408.

Camdessus, M. (2000). 'An Agenda for the IMF at the Start of the 21st Century'. Remarks of the Managing Director of the IMF at the Council on Foreign Relations, 1 February. New York: IMF External Relations Department. Available at: https://www.imf.org/external/np/speeches/2000/020100.htm (accessed 22 February 2017).

Caruana, J. (2010). 'Basel III: Towards a Safer Financial System'. Speech at the 3rd Santander International Banking Conference, Madrid, 15 September. Available at: http://www.bis.org/speeches/sp100921.htm (accessed 22 February 2017).

Carvalho, F.C. de (2010). 'The Accumulation of International Reserves as a Defensive Strategy: Reasons and Limitations of Self-Insurance'. In S. Griffith-Jones, J. A. Ocampo, and J.E. Stiglitz (eds), *Time for a Visible Hand: Lessons from the 2008 World Financial Crisis*. New York: Oxford University Press, chapter 15.

Charlton, A. (2008). 'Capital Market Liberalization and Poverty'. In J.A. Ocampo and J. E. Stiglitz (eds), *Capital Markets Liberalization and Development*. New York: Oxford University Press, chapter 5.

Chinn, M.D., and H. Ito (2006). 'What Matters for Financial Development? Capital Controls, Institutions, and Interactions'. *Journal of Development Economics,* 81(1): 163–92.

Chinn, M.D., and H. Ito (2008). 'A New Measure of Financial Openness'. *Journal of Comparative Policy Analysis*, 10(3): 309–33.

Chinn, M.D., and S.-J. Wei (2013). 'A Faith-Based Initiative Meets the Evidence: Does a Flexible Exchange Rate Regime Really Facilitate Current Account Adjustment?' *Review of Economics and Statistics*, 95(1): 168–84.

Clark, P.B., and J.J. Polak (2004). 'International Liquidity and the Role of the SDR in the International Monetary System'. *IMF Staff Papers*, 51(1): 49–71. [Reproduced in Polak (2005: chapter 9).]

Conway, E. (2015). *The Summit, Bretton Woods, 1944: J.M. Keynes and the Reshaping of the Global Economy*. New York: Pegasus Books.

Cooper, R. (1987). *The International Monetary System: Essays in World Economics*. Cambridge, MA: MIT Press.

Cooper, R. (2010). 'Does the SDR Have a Future'. Available at: http://scholar.harvard.edu/cooper/publications/does-sdr-have-future (accessed 22 February 2017).

Cooper, R., and E.M. Truman (2007). 'The IMF Quota Formula: Linchpin of Fund Reform'. Policy Briefs in International Economics, Policy Brief PB07-1, February. Washington, DC: Peterson Institute for International Economics.

Cornia, G.A., R. Jolly, and F. Stewart (1987). *Adjustment with a Human Face: Protecting the Vulnerable and Promoting Growth*. Oxford: Clarendon Press.

Cruces, J., and C. Trebesch (2013). 'Sovereign Defaults: The Price of Haircuts'. *American Economic Review: Macroeconomics*, 5(15): 85–117.

Cruces, J., and C. Trebesch (2014). 'New 2014 Update of Haircut Dataset'. Available at: https://sites.google.com/site/christophtrebesch/data (accessed 22 February 2017).

Culpeper, R. (2006). 'Reforming the Global Financial Architecture: The Potential of Regional Institutions'. In J.A. Ocampo (ed.), *Regional Financial Cooperation*. Washington, DC: Brookings Institution Press and ECLAC, chapter 2.

D'Arista, J. (1999). 'Reforming the Privatized International Monetary and Financial Architecture'. *Financial Markets and Society*, November: 1–22.

Das, U.S., M.G. Papaioannou, and C. Trebesch (2012). 'Sovereign Debt Restructuring, 1950–2010: Literature Survey, Data and Stylized Facts'. IMF Working Paper WP12/203. Washington, DC: IMF.

Derviş, K. (2005). *A Better Globalization: Legitimacy, Governance and Reform*. Washington, DC: Brookings Institution Press for the Center for Global Development.

Derviş, K. (2008). 'Fairness for Emerging Markets'. *The Washington Post*, 3 November 2008 (accessed 22 February 2017).

Derviş, K. (2010). 'The G-20 and Macroeconomic Policy Co-ordination at the Crossroads: A Macroeconomic Agenda for the G-20'. In C. Bradford, M. Cárdenas, K. Derviş, R. Desai, K. Foda, A. Ghosh, H. Kharas, M. Kimyeni, E. Levy-Yeyati, J. Linn, D. Lombardi, E. Prasad, E. Sayre, and E. Suruma (eds), *The G-20 Seoul 2010 Summit: Strengthening the Global Economy*. Washington, DC: Brookings Institution Press, pp. 3–8.

Derviş, K. (2011). 'Towards Strengthened Global Economic Governance'. In N. Birdsall and F. Fukuyama (eds), *New Ideas on Development after the Financial Crisis*. Baltimore, MD: Johns Hopkins University Press, chapter 8.

Derviş, K., and P. Drysdale (2014). 'The G-20 Summit at Five: Time for Strategic Leadership'. In K. Derviş and P. Drysdale (eds), *The G-20 Summit at Five: Time for Strategic Leadership*. Washington, DC: Brookings Institution, pp. 3–17.

Devlin, R. (1989). *Debt and Crisis in Latin America: The Supply Side of the Story*. Princeton, NJ: Princeton University Press.

de Vries, M.G. (1976). *The International Monetary Fund, 1965–1971: The System Under Stress, Volume I: Narrative*. Washington, DC: International Monetary Fund.

de Vries, M.G. (1985). *The International Monetary Fund, 1962–1978: Cooperation on Trial, Volume I: Narrative and Analysis*. Washington, DC: International Monetary Fund.

de Vries, M.G. (1987). *Balance of Payments Adjustment, 1945 to 1986: The IMF Experience*. Washington, DC: International Monetary Fund.

Dodd, R. (2008). 'Consequences of Liberalizating Derivative Markets'. In J.A. Ocampo and J.E. Stiglitz (eds), *Capital Markets Liberalization and Development*. New York: Oxford University Press, chapter 11.

Dooley, M.P., D. Folkerts-Landau, and P. Garber (2003). 'An Essay on the Revived Bretton Woods System'. NBER Working Paper 9971, September. Cambridge, MA: National Bureau of Economic Research. Available at: http://www.nber.org/papers/w9971 (accessed 22 February 2017).

Dooley, M.P., D. Folkerts-Landau, and P. Garber (2009). 'Bretton Woods II Still Defines the International Monetary System'. NBER Working Paper 14731, February. Cambridge, MA: National Bureau of Economic Research. Available at: http://www.nber.org/papers/w14731 (accessed 22 February 2017).

Dornbusch, R., and A. Werner (1994). 'Mexico: Stabilization, Reform and No Growth'. *Brookings Papers on Economic Activity*, 1: 253–316.

Eatwell, J., and L. Taylor (2000). *Global Finance at Risk: The Case for International Regulation*. New York: New York Press.

Eatwell, J., and L. Taylor (eds) (2002). *International Capital Markets: Systems in Transition*. New York: Oxford University Press.

Eichengreen, B. (2007). *Global Imbalances and the Lessons of Bretton Woods* [Cairoli Lectures Series]. Cambridge, MA: MIT Press.

Eichengreen, B. (2008). *Globalizing Capital: A History of the International Monetary System*, 2nd edition. Princeton, NJ: Princeton University Press.

Eichengreen, B. (2011). *Exorbitant Privilege: The Rise and Fall of the Dollar and the Future of the International Monetary System*. New York: Oxford University Press.

Eichengreen, B., and R. Portes (1995). *Crisis? What Crisis? Orderly Workouts for Sovereign Debtors*. London: Centre for Economic Policy Research.

Epstein, G., I. Grabel, and K.S. Jomo (2003). 'Capital Management Techniques in Developing Countries'. In A. Buira (ed.), *Challenges to the World Bank and the IMF: Developing Country Perspectives*. London: Anthem Press.

Erten, B., and J.A. Ocampo (2013a). 'Super Cycles of Commodity Prices since the Mid-Nineteenth Century'. *World Development*, 44: 14–30.

Erten, B., and J.A. Ocampo (2013b). 'Building a Stable and Equitable Global Monetary System'. In J.A. Alonso, G.A. Cornia, and R. Vos (eds), *Alternative Development Strategies for the Post-2015 Era*. New York: Bloomsbury, chapter 9.

Erten, B., and J.A. Ocampo (2017). 'Macroeconomic Effects of Capital Account Regulations'. *IMF Economic Review*, 65(2): 193–240.

Espósito, C., Y. Li, and J.P. Bohoslavsky (eds) (2013). *Sovereign Financing and International Law: The UNCTAD Principles on Responsible Sovereign Lending and Borrowing*. Oxford: Oxford University Press.

Ethier, W., and A.I. Bloomfield (1975). 'Managing the Managed Float'. Princeton Essays in International Finance 112, October. Princeton, NJ: International Finance Section, Department of Economics, Princeton University.

Fellner, W., F. Machlup, and R. Triffin (eds) (1966). *Maintaining and Restoring Balance in International Payments*. Princeton, NJ: Princeton University Press.

Ffrench-Davis, R. (2007). 'SDRs for a Globalization with Development'. Paper presented at the meeting of Technical Group of the Initiative for Action against Hunger and Poverty, January, Santiago, Chile.

Ffrench-Davis, R. (2009). 'The Global Crisis, Speculative Capital and Innovative Financing for Development'. *CEPAL Review*, 97: 57–74.

Fischer, S. (2001). 'Exchange Rate Regimes: Is the Bipolar View Correct?'. *Journal of Economic Perspectives*, 15(2): 3–24. [Reproduced in S. Fischer, *IMF Essays from a Time of Crisis: The International Financial System, Stabilization, and Development*. Cambridge, MA: MIT Press, 2004, pp. 227–54.]

Fischer, S. (2008). 'Mundell–Fleming Lecture: Exchange Rate Systems, Surveillance, and Advice'. *IMF Staff Papers*, 55(3): 367–83.

Fleming, M. (1962). 'Domestic Financial Policies under Fixed and under Flexible Exchange Rates'. *IMF Staff Papers*, 9(3): 369–80.

Forbes, K., M. Fratzscher, T. Kostka, and R. Straub (2012). 'Bubble Thy Neighbor: Portfolio Effects and Externalities from Capital Controls'. NBER Working Paper 18052. Cambridge, MA: National Bureau of Economic Research. Available at: https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1456.pdf?d1a52dad6e2340fab4d7e71fd5c9fbcd (accessed 22 February 2017).

Frankel, J.A. (2004). 'Lessons from Exchange Rate Regimes in Emerging Economies'. In Asian Development Bank (eds), *Monetary and Financial Integration in East Asia. The Way Ahead: Volume 2*. New York: Palgrave Macmillan, pp. 91–138.

Frenkel, R. (2008). 'From the Boom in Capital Inflows to Financial Traps'. In J. A. Ocampo and J.E. Stiglitz (eds), *Capital Market Liberalization and Development*. New York: Oxford University Press, chapter 4.

Frenkel, R., and M. Rapetti (2010). 'Economic Development and the International Financial System'. In S. Griffith-Jones, J.A. Ocampo, and J.E. Stiglitz (eds), *Time for a Visible Hand: Lessons from the 2008 World Financial Crisis*. New York: Oxford University Press, chapter 14.

Frenkel, R., and L. Taylor (2007). 'Real Exchange Rate, Monetary Policies and Employment'. In J.A. Ocampo, Jomo K.S., and S. Khan (eds), *Policy Matters: Economic and Social Policies to Sustain Equitable Development*. Hyderabad/London/Penang: Orient Longman/Zed Books/Third World Network, chapter 11.

Frieden, J., M. Pettis, D. Rodrik, and E. Zedillo (2012). 'After the Fall: The Future of Global Cooperation'. Geneva Reports on the World Economy 14, July. Geneva: International Center for Monetary and Banking Studies and Centre for Economic Policy Research. Available at: http://ycsg.yale.edu/sites/default/files/files/geneva_report.pdf (accessed 22 February 2017).

Friedman, M. (1953). 'The Case for Flexible Exchange Rates'. In M. Friedman, *Essays in Positive Economics*. Chicago: University of Chicago Press, pp. 157–203.

FSB (2016). 'Implementation and Effects of the G20 Financial Regulatory Reforms'. 2nd Annual Report, August 31. Available at: http://www.fsb.org/2016/08/implementation-and-effects-of-the-g20-financial-regulatory-reforms-2/ (accessed 22 February 2017).

Furcile, D., and P. Lougani (2013). 'Who Let the Gini Out?'. *Finance and Development*, 50(4): 25–7.

G10 (1965). *Report of the Study Group on the Creation of Reserve Assets*, 31 May. Washington, DC. Available at: http://www.bis.org/publ/gten_b.pdf (accessed 22 February 2017).

G10 (1996). *The Resolution of Sovereign Liquidity Crises: A Report to the Ministers and Governors prepared under the auspices of the Deputies*, May. Available at: http://www.bis.org/publ/gten03.pdf (accessed 22 February 2017).

G20 (2008). 'Declaration, Summit on Financial Markets and the World Economy'. Washington Summit, 15 November. Washington, DC: G-20. Available at: http://www.un.org/ga/president/63/commission/declarationG20.pdf (accessed 22 February 2017).

G20 (2009a). 'G20 Leaders Statement: The Pittsburgh Summit, 24–25 September'. Available at: http://www.g20.utoronto.ca/2009/2009communique0925.html (accessed 22 February 2017).

G20 (2009b). 'G20 Global Plan for Recovery and Reform, April 2009'. London: G20. Available at: http://www.cfr.org/financial-crises/g20-global-plan-recovery-reform-april-2009/p19017 (accessed 22 February 2017).

G20 (2011a). 'Communiqué, Meeting of G-20 Finance Ministers and Central Bank Governors', Paris, 18–19 February. Available at: http://www.g20.utoronto.ca/2011/2011-finance-110219-en.html (accessed 22 February 2017).

G20 (2011b). 'Final Communiqué, Meeting of G-20 Finance Ministers and Central Bank Governors', Washington, DC, 14–15 April. Available at: http://www.g20.utoronto.ca/2011/2011-finance-110415-en.html (accessed 22 February 2017).

G20 (2011c). 'G-20 Coherent Conclusions for the Management of Capital Flows Drawing on Country Experiences', 3–4 November. Available at: http://www.g20.org/ (accessed 22 February 2017).

G20 (2016). 'Communiqué, G20 Finance Ministers and Central Bank Governors Meeting', 27 February. Shanghai: Group of Twenty (G20). Available at: http://www.g20.utoronto.ca/2016/160227-finance-en.html (accessed 22 February 2017).

G20 Research Group (several years). G-20 Information Center, Munk School of Global Affairs at the University of Toronto. Available at: http://www.g20.utoronto.ca/ (accessed 22 February 2017).

G24 (2011). 'Intergovernmental Group of Twenty-Four on International Monetary Affairs and Development Communiqué', April 11. Washington, DC. Available at:

https://www.imf.org/en/News/Articles/2015/09/28/04/51/cm041411 (accessed 22 February 2017).

Gallagher, K. (2014). *Ruling Capital: Emerging Markets and the Reregulation of Cross-Border Finance*. Ithaca, NY: Cornell University Press.

Gallagher, K., S. Griffith-Jones, and J.A. Ocampo (eds) (2012a). *Regulating Global Capital Flows for Long-Run Development*. Boston, MA: Boston University, Pardee Center for the Study of the Longer Range Future.

Gallagher, K., S. Griffith-Jones, and J.A. Ocampo (2012b). 'Capital Account Regulations for Stability and Development: A New Approach'. In K. Gallagher, S. Griffith-Jones, and J.A. Ocampo (eds), *Regulating Global Capital Flows for Long-Run Development*. Boston, MA: Boston University, Pardee Center for the Study of the Longer Range Future, pp. 1–12.

Gallagher, K., and J.A. Ocampo (2013). 'IMF's New View on Capital Controls'. *Economic and Political Weekly*, 48(12): 10–13.

Gallagher, K., and L. Stanley (2012). *Global Financial Reform and Trade Rules: The Need for Reconciliation*. Boston University, Pardee Task Force on Regulating Capital Flows.

Garay, L.J. (2010). 'The 1980s Crisis in Syndicated Bank Lending to Sovereigns and the Sequence of Mechanisms to Fix It'. In B. Herman, J.A. Ocampo, and S. Spiegel (eds), *Overcoming Developing Country Debt Crises*. New York: Oxford University Press, chapter 5.

Gardner, R. (1969). *Sterling–Dollar Diplomacy: The Origins and the Prospects of Our International Economic Order*. New York: McGraw Hill.

Gelpern, A., and M. Gulati (2010). 'How CACs Became Boilerplate: Governments in "Market-Based" Change'. In B. Herman, J.A. Ocampo, and S. Spiegel (eds), *Overcoming Developing Country Debt Crises*. New York: Oxford University Press, chapter 13.

Ghosh, A. R., J. Ostry, and M. Qureshi (2015). 'Exchange Rate Management and Crisis Susceptibility: A Reassessment'. *IMF Economic Review*, 63(1): 238–76.

Ghosh, A.R., M. Qureshi, and C.G. Tsangarides (2013). 'Is the Exchange Rate Regime Really Irrelevant for External Adjustment?'. *Economics Letters*, 118: 104–9.

Gourinchas, P.-O., and O. Jeanne (2007). 'Capital Flows to Developing Countries: The Allocation Puzzle'. NBER Working Paper 13602. Cambridge, MA: National Bureau of Economic Research. Available at: http://socrates.berkeley.edu/~pog/academic/2013_RESTUD_published.pdf (accessed 22 February 2017).

Grabel, I. (2012). 'Financial Architectures and Development: Resilience, Space Policy, and Human Development in the Global South'. In K. Malik and M. Kugler (eds), *Human Progress and the Rising South*. New York: Human Development Report Office of the United Nations Development Programme, chapter 7.

Greenspan, A. (1996). 'The Challenge of the Central Banking System in a Democratic Society'. *Remarks at the Annual Dinner and Francis Boyer Lecture of the American Enterprise Institute for Public Policy Research*. Washington, DC. Available at: http://www.federalreserve.gov/boarddocs/speeches/1996/19961205.htm (accessed 22 February 2017).

Griffith-Jones, S., and J.A. Ocampo (2010). 'Building on the Counter-Cyclical Consensus: A Policy Agenda'. Paper prepared for the Group of 24. Available at: https://www.g24.org/wp-content/uploads/2016/01/Building-on-the-counter-cyclical-consensus.pdf (accessed 22 February 2017).

Griffith-Jones, S., and J.A. Ocampo (2012). 'The International Financial Architecture Seen through the Lens of the Crisis: Some Achievements and Numerous Challenges'. In J.A. Alonso and J.A. Ocampo (eds), *Development Cooperation in Times of Crisis*. New York: Columbia University Press, chapter 3.

Griffith-Jones, S., and A. Persaud (2008). 'The Pro-cyclical Impact of Basel II on Emerging Markets and its Political Economy'. In J.A. Ocampo and J. Stiglitz (eds), *Capital Market Liberalization and Development*. New York: Oxford University Press, chapter 10.

Griffiths, J., and K. Todoulos (2014). 'Conditionally Yours: An Analysis of the Policy Conditions Attached to IMF Loans', April. Brussels: European Network on Debt and Development. Available at: http://eurodad.org/files/pdf/533bd19646b20.pdf (accessed 22 February 2017).

Guzmán, M., J.A. Ocampo, and J.E. Stiglitz (eds) (2016). *Too Little, Too Late: The Quest to Resolve Sovereign Debt Crises*. New York: Columbia University Press.

Hagen, S. (2005). 'Designing a Legal Framework to Restructure Sovereign Debt'. *Georgetown Journal of International Law*, 36(2): 299–402.

Helleiner, E. (1994). *States and the Reemergence of Global Finance: From Bretton Woods to the 1990s*. Ithaca, NY: Cornell University Press.

Helleiner, E. (2014). *Forgotten Foundations of Bretton Woods: International Development and the Making of the Postwar Order*. Ithaca, NY: Cornell University Press.

Herman, B., J.A. Ocampo, and S. Spiegel (eds) (2010a). *Overcoming Developing Country Debt Crises*. New York: Oxford University Press.

Herman, B., J.A. Ocampo, and S. Spiegel (2010b). 'Conclusions: Towards a Comprehensive Sovereign Bankruptcy Regime'. In B. Herman, J.A. Ocampo, and S. Spiegel (eds), *Overcoming Developing Country Debt Crises*. New York: Oxford University Press, pp. 489–96.

Horsefield, J.K. (1969). *The International Monetary Fund, 1945–1965: Twenty Years of International Monetary Cooperation, Volume I: Chronicle*. Washington, DC: International Monetary Fund.

ICC (2009). 'ICC Trade Finance Survey: An Interim Report – Summer 2009', Paris: International Chamber of Commerce. Available at: http://www.icc-portugal.com/images/documentos/comissao_bancaria/2009_ICC_Global_Report_on_TF_Interim_Report_(1).pdf (accessed 22 February 2017).

ICMA (2014a). 'International Aggregated Collective Action Clauses (CACs) for the Terms and Conditions of Sovereign Notes', August. Zurich: International Capital Market Association. Available at: http://www.icmagroup.org/resources/Sovereign-Debt-Information/ (accessed 22 February 2017).

ICMA (2014b). 'Standard Pari Passu Provision for the Terms and Conditions of Sovereign Notes', August. Zurich: International Capital Market Association. Available at: http://www.icmagroup.org/resources/Sovereign-Debt-Information/ (accessed 22 February 2017).

IIF (2005). 'Principles for Stable Capital Flows and Fair Debt Restructuring in Emerging Markets'. Available at: https://www.iif.com/topics/principles-stable-capital-flows-and-fair-debt-restructuring (accessed 22 February 2017).

Ilzetzki, E.O., C.M. Reinhart, and K.S. Rogoff (2008). 'Exchange Rate Arrangements Entering the 21st Century: Which Anchor Will Hold?' [with updated data until

2010]. University of Maryland and Harvard University. Available at: http://www.carmenreinhart.com/data/browse-by-topic/topics/11/ (accessed 22 February 2017).
IMF (1974). *Annual Report.* Washington, DC: International Monetary Fund [All IMF documents quoted are available at www.imf.org]
IMF (2001). 'Review of Access Policy in the Credit Tranches under the Extended Fund Facility: Background Paper'. Washington, DC: International Monetary Fund, Policy Development and Review Department and Treasurer's Department.
IMF (2002a). 'Fund Policy on Lending into Arrears to Private Creditors—Further Considerations of the Good-Faith Criterion', July 30. Washington, DC: International Monetary Fund, International Capital Markets, Policy Development and Review and Legal Departments.
IMF (2002b). 'Guidelines on Conditionality', 25 September. Washington, DC: International Monetary Fund.
IMF (2003). 'IMF Concludes Discussion on Access Policy in the Context of Capital Account Crises; and Review of Access Policies in the Credit Tranches and the Extended Fund Facility'. Public Information Notice (PIN) No. 03/37, March 21. Washington, DC: International Monetary Fund.
IMF (2006). 'Article IV of the Fund's Articles of Agreement: An Overview of the Legal Framework', June 28. Washington, DC: International Monetary Fund.
IMF (2007a). 'The Multilateral Consultations on Global Imbalances'. IMF Issues Brief, 07/03, April. Washington, DC: International Monetary Fund.
IMF (2007b). 'Review of the 1977 Decision–Proposal for a New Decision, Companion Paper, Supplement, and Companion Information Notice' [on bilateral surveillance], 21 June. Washington, DC: International Monetary Fund.
IMF (2008). 'Reform of Quota and Voice in the International Monetary Fund'. Report of the Executive Board to the Board of Governors, 28 March. Washington, DC: International Monetary Fund.
IMF (2009a). 'Review of the Adequacy of and Options for Supplementing Fund Resources', 12 January. Washington, DC: Finance, Legal, and the Strategy, Policy, and Review Departments, International Monetary Fund.
IMF (2009b). 'Committee on IMF Governance Reform. Final Report', 24 March. Washington, DC: International Monetary Fund.
IMF (2009c). 'IMF Implements Major Lending Policy Improvements', 24 March. Washington, DC: International Monetary Fund.
IMF (2009d). 'Proposal for a General Allocation of SDRs', 9 June. Washington, DC: Finance, Legal, and Strategy, Policy, and Review Departments, International Monetary Fund.
IMF (2009e). 'IMF Reforms Financial Facilities for Low-Income Countries'. Public Information Notice No. 09/94, 29 July. Washington, DC: International Monetary Fund.
IMF (2009f). 'Concessionality and the Design of Debt Limits in IMF-Supported Programs in Low-Income Countries', December. Washington, DC: International Monetary Fund.
IMF (2010a). 'Reserve Accumulation and International Monetary Stability', April 13. Washington, DC: Strategy, Policy, and Review Department, International Monetary Fund.

IMF (2010b). 'The IMF-FSB Early Warning Exercise: Design and Methodological Toolkit', September. Washington, DC: International Monetary Fund.
IMF (2011a). 'Enhancing International Monetary Stability – A Role for the SDR?', January 7. Washington, DC: Strategy, Policy, and Review Department, International Monetary Fund.
IMF (2011b). 'Recent Experiences in Managing Capital Inflows: Cross-Cutting Themes and Possible Policy Framework'. IMF Policy Paper, 14 February. Washington, DC: Strategy, Policy, and Review Department, International Monetary Fund.
IMF (2011c). 'Strengthening the International Monetary System: Taking Stock and Looking Ahead', 23 March. Washington, DC: International Monetary Fund.
IMF (2011d). *World Economic Outlook (WEO). Tensions from the Two-Speed Recovery: Unemployment, Commodities, and Capital Flows*. Washington, DC: International Monetary Fund.
IMF (2011e). 'Review of the Fund's Involvement in the G-20 Mutual Assessment Process', 13 May. Washington, DC: International Monetary Fund.
IMF (2011f). 'The Case for a General Allocation of SDRs During the Tenth Basic Period', 10 June. Washington, DC: Finance, Legal, and Strategy, Policy, and Review Departments, International Monetary Fund.
IMF (2011g). 'Consolidated Spillover Report: Implications of the Analysis from the Systemic-5', 11 July. Washington, DC: International Monetary Fund.
IMF (2012a). 'Liberalizing Capital Flows and Managing Outflows – Background Paper', 16 March. Washington, DC: International Monetary Fund.
IMF (2012b). 'Pilot External Sector Report', 2 July. Washington, DC: International Monetary Fund.
IMF (2012c). '2011 Review of Conditionality. Background Paper 1: Content and Application of Conditionality', 18 June. Washington, DC: Strategy, Policy, and Review Department, International Monetary Fund.
IMF (2012d). 'Quota Formula Review: Additional Considerations'. Working Document, 4 September. Washington, DC: International Monetary Fund.
IMF (2012e). 'The Liberalization and Management of Capital Flows: An Institutional View', 14 November. Washington, DC: International Monetary Fund.
IMF (2013a). 'Sovereign Debt Restructuring: Recent Developments and Implications for the Fund's Legal and Policy Framework', 26 April. Washington, DC: International Monetary Fund.
IMF (2013b). 'Stocktaking the Fund's Engagement with Regional Financing Arrangements', 11 April. Washington, DC: International Monetary Fund.
IMF (2014a). 'Quota Formula: Data Update and Further Considerations'. IMF Policy Paper, August. Washington, DC: International Monetary Fund.
IMF (2014b). 'Strengthening of the Contractual Framework to Address Collective Action Problems in Sovereign Debt Restructurings', 2 September. Washington, DC: International Monetary Fund.
IMF (2014c). *World Economic Outlook (WEO). Legacies, Clouds, Uncertainties*. Washington, DC: International Monetary Fund.
IMF (2015a). *World Economic Outlook (WEO). Adjusting to Lower Commodity Prices*. Washington, DC: International Monetary Fund.

IMF (2015b). 'Imbalances and Growth: Update of Staff Sustainability Assessment for G-20 Mutual Assessment Process', October. Washington, DC: International Monetary Fund.

IMF (2015c). 'Review of the Method of Valuation of the SDR'. IMF Policy Paper, 13 November. Washington, DC: International Monetary Fund.

IMF (2016). *World Economic Outlook (WEO). Too Slow for Too Long*. Washington, DC: International Monetary Fund.

IMF-IEO (2007). 'An IEO Evaluation of Structural Conditionality in IMF-Supported Programmes'. Evaluation Report. Washington, DC: Independent Evaluation Office of the International Monetary Fund.

IMF-IEO (2008). 'Governance of the IMF: An Evaluation'. Evaluation Report. Washington, DC: Independent Evaluation Office of the International Monetary Fund.

IMF-IEO (2011). 'IMF Performance in the Run-Up to the Financial and Economic Crisis: IMF Surveillance in 2004–07'. Evaluation Report. Washington, DC: Independent Evaluation Office of the International Monetary Fund.

James, H. (1996). *International Monetary Cooperation since Bretton Woods*. New York/Washington, DC: Oxford University Press/International Monetary Fund.

Jeanne, O., A. Subramanian, and J. Williamson (2012). *Who Needs to Open the Capital Account?* Washington, DC: Peterson Institute for International Economics.

Johnson, H.G. (1970). 'The Case for Flexible Exchange Rates, 1969'. In G.H. Halm (ed.), C.F. Bergsten, G.H. Halm, F. Machlup, and R.V. Roose (arrangers), *Approaches to Greater Flexibility of Exchange Rates: The Bürgenstock Papers*. Princeton, NJ: Princeton University Press, pp. 91–111.

Jorgensen, E., and J. Sachs (1989). 'Default and Renegotiation of Latin American Foreign Bonds in the Interwar Period'. In B. Eichengreen and P.H. Lindert (eds), *The International Debt Crisis in Historical Perspective*. Cambridge, MA: MIT Press, chapter 3.

Kaiser, J. (2013). *Resolving Sovereign Debt Crises: Towards a Fair and Transparent International Insolvency Framework*, 2nd revised edition. Berlin: Friedrich Ebert Stiftung, Dialogue on Globalization Series.

Kaminsky, G.L., C.M. Reinhart, and C.A. Végh (2004). 'When It Rains, It Pours: Procyclical Capital Flows and Macroeconomic Policies'. NBER Working Paper 10780, September. Cambridge, MA: National Bureau of Economic Research. Available at: http://www.nber.org/chapters/c6668.pdf (accessed 22 February 2017).

Kaplan, E., and D. Rodrik (2002). 'Did the Malaysian Capital Controls Work?'. In S. Edwards and J.A. Frankel (eds), *Preventing Currency Crises in Emerging Markets*. Chicago: University of Chicago Press, chapter 8.

Kawai, M., and M.B. Lamberte (eds) (2010). *Managing Capital Flows: The Search for a Framework*. Cheltenham: Edward Elgar and Asian Development Bank Institute.

Kenen, P.B. (1983). 'Use of SDR to Supplement or Substitute for Other Means of Finance'. In G.M. von Furstenberg (ed.), *International Money and Credit: The Policy Roles*. Washington, DC: International Monetary Fund, chapter 7.

Kenen, P. (2001). *The International Financial Architecture: What's New? What's Missing?* Washington, DC: Institute for International Economics.

Kenen, P. (2009). 'Revisiting the Substitution Account'. Policy Dialogue Draft, October. Available at: http://policydialogue.org/files/events/Kenen_Revisiting_the_Substitution_Account.pdf (accessed 22 February 2017).

Kenen, P. (2010a). 'Renovation of the Global Reserve Regime: Concepts and Proposals'. CEPS Working Paper 208, June. Princeton, NJ: Princeton University. Available at: http://www.princeton.edu/ceps/workingpapers/208kenen.pdf (accessed 22 February 2017).

Kenen, P. (2010b). 'Reforming the Global Reserve Regime: The Role of a Substitution Account'. *International Finance*, 13(1): 1–23.

Kenen, P. (2010c). 'An SDR-based Reserve System'. *Journal of Globalization and Development*, 1(2): Article 13.

Keynes, J.M. (1942–3). 'The Keynes Plan'. Reproduced in J.K. Horsefield (ed.) (1969), *The International Monetary Fund, 1945–1965: Twenty Years of International Monetary Cooperation. Volume III: Documents*. Washington, DC: International Monetary Fund, pp. 3–36.

Killick, T. (2005). 'Did Conditionality Streamlining Succeed?'. In S. Koeberle, H. Bedoya, P. Silarszky, and G. Verheyen (eds), *Conditionality Revisited*. Washington, DC: World Bank, chapter 7.

Kindleberger, C.P. (1970). 'The Case for Fixed Exchange Rates, 1969'. In *The International Adjustment Mechanism, Conference Series 2 Proceedings*. Boston: Federal Reserve Bank of Boston, pp. 93–108.

Kindleberger, C.P. (1972). 'The Benefits of International Money'. *Journal of International Economics*, 2: 425–42.

Kindleberger, C.P. and R. Aliber (2011). *Manias, Panics, and Crashes: A History of Financial Crises*, 6th edition. Houndmills: Palgrave Macmillan.

Klein, M.W. (2012). 'Capital Controls: Gates and Walls'. *Brookings Papers on Economic Activity*, 45(2): 317–67.

Korinek, A. (2011). 'The New Economics of Prudential Capital Controls: A Research Agenda'. *IMF Economic Review*, 59: 523–61.

Kose, M.A., E. Prasad, K. Rogoff, and S.-J. Wei (2009). 'Financial Globalization: A Reappraisal'. *IMF Staff Papers*, 56(1): 8–62.

Kregel, J. (2009). 'Some Simple Observations on the Reform of the International Monetary System'. Policy Note 2009/8. New York: Levy Economics Institute of Bard College. Available at: http://www.levyinstitute.org/publications/some-simple-observations-on-the-reform-of-the-international-monetary-system (accessed 22 February 2017).

Krueger, A.O. (2001). 'International Financial Architecture for 2002: A New Approach to Sovereign Debt Restructuring'. Address at the American Enterprise Institute, Washington, DC. Available at: http://www.imf.org/external/np/speeches/2001/112601.htm (accessed 22 February 2017).

Krueger, A.O. (2002). *A New Approach to Sovereign Debt Restructuring*. Washington, DC: International Monetary Fund.

Lamdany, R., and L. Martinez-Diaz (eds) (2009). *Studies of IMF Governance: A Compendium*. Washington, DC: International Monetary Fund.

Lissakers, K., I. Husain, and N. Woods (2006). 'Report of the External Evaluation of the Independent Evaluation Office', 29 March. Available at: http://www.imf.org/external/np/pp/eng/2006/032906.pdf (accessed 22 February 2017).

McCauley, R.N., and C. Schenk (2014). 'Reforming the International Monetary System in the 1970s and 2000s: Would an SDR Substitution Account Have Worked?' BIS Working Papers, No. 444, March.

Machinea, J.L., and D. Titelman Daniel (2007). 'Less Volatile Growth? The Role of Regional Financial Institutions'. *CEPAL Review*, 91: 7–28.

Machlup, F., and B.G. Markiel (eds) (1964). *International Monetary Arrangements: The Problem of Choice, Report on the Deliberations of an International Study Group of 32 Economists*. Princeton, NJ: International Finance Section, Department of Economics, Princeton University.

McKay, J., U. Volz, and R. Wölfinger (2011). 'Regional Financing Arrangements and the Stability of the International Monetary System'. *Journal of Globalization and Development*, 2(1): Article 5.

McKinnon, R. (1973). *Money and Capital in Economic Development*. Washington, DC: Brookings Institution.

McKinsey Global Institute (2009). 'An Exorbitant Privilege? Implications of Reserve Currencies for Competitiveness', December.

McKinsey Global Institute (2013). 'Financial Globalization: Retreat or Reset? Global Capital Markets 2013', March.

Magud, N.E., and C.M. Reinhart (2007). 'Capital Controls: An Evaluation'. In S. Edwards (ed.), *Capital Controls and Capital Flows in Emerging Economies: Policies, Practices and Consequences*. Chicago: University of Chicago Press, chapter 14.

Magud, N.E., C.M. Reinhart, and K.S. Rogoff (2011). 'Capital Controls: Myth and Reality—A Portfolio Balance Approach'. NBER Working Paper 16805. Cambridge, MA: National Bureau of Economic Research. Available at: http://www.frbsf.org/economic-research/files/wp07-31bk.pdf (accessed 22 February 2017).

Martinez-Diaz, L. (2009). 'Executive Boards in International Organizations'. In R. Lamdany and L. Martinez-Diaz (eds), *Studies of IMF Governance: A Compendium*. Washington, DC: International Monetary Fund, chapter 5.

Mateos y Lagos, I., R. Duttagupta, and R. Goyal (2011). 'The Debate on the International Monetary System'. In J.T. Boorman and A. Icard (eds), *Reform of the International Monetary System: The Palais Royal Initiative*. New Delhi: SAGE Publications, chapter 9.

Matoo, A., and A. Subramanian (2008). 'Currency Undervaluation and Sovereign Wealth Funds: A New Role for the World Trade Organization'. Working Paper Series 08-2, January. Washington, DC: Peter G. Peterson Institute for International Economics.

Minsky, H.P. (1982). *Can 'It' Happen Again?: Essays on Instability and Finance*. Armonk, NY: M.E. Sharpe.

Mishkin, F. (2006). 'Globalization: A Force for Good?: A speech at the Weissman Center Distinguished Lecture Series, October 17, 2006'. Speech 237, Board of Governors of the Federal Reserve System (U.S.). New York: Baruch College. Available at: https://www.federalreserve.gov/newsevents/speech/mishkin20061012a.htm (accessed 22 February 2017).

Mohan, R., and M. Kapur (2014). 'Monetary Policy Coordination: The Role of Central Banks'. In K. Derviş and P. Drysdale (eds), *The G-20 Summit at Five: Time for Strategic Leadership*. Washington, DC: Brookings Institution, pp. 93–118.

Mundell, R. (1963). 'Capital Mobility and Stabilization Policy under Fixed and Flexible Exchange Rates'. *Canadian Journal of Economics and Political Science*, 29(4): 475–85.

Nogueira Batista, P. (2012). 'Note on Quota Formula Review: Initial Considerations', March. Available at: http://www.new-rules.org/new-rules-blog/385-note-on-quota-formula-review-initial-considerations (accessed 22 February 2017).

Obstfeld, M. (2012). 'Does the Current Account Still Matter?', Richard T. Eli Lecture. *American Economic Review*, 102(3): 1–23.

Obstfeld, M., J.C. Shambaugh, and A.M. Taylor (2005). 'The Trilemma in History: Tradeoffs Among Exchange Rates, Monetary Policies, and Capital Mobility'. *The Review of Economics and Statistics*, 87(3): 423–38.

Obstfeld, M., J.C. Shambaugh, and A.M. Taylor (2008). 'Financial Stability, the Trilemma, and International Reserves'. NBER Working Paper 14217, August. Cambridge, MA: National Bureau of Economic Research. Available at: http://www.nber.org/papers/w14217.pdf (accessed 22 February 2017).

Obstfeld, M., and A.M. Taylor (2004). *Global Capital Markets: Integration, Crisis, and Growth*. New York: Cambridge University Press.

Obstfeld, M., and A.M. Taylor (2017). 'International Monetary and Financial Relations in the 21st Century'. *Journal of Economic Perspectives*, forthcoming.

Ocampo, J.A. (2002). 'Recasting the International Financial Agenda'. In J. Eatwell and L. Taylor (eds), *International Capital Markets: Systems in Transition*. New York: Oxford University Press, chapter 3.

Ocampo, J.A. (2003a). 'Capital Account and Counter-Cyclical Prudential Regulation in Developing Countries'. In R. Ffrench-Davis and S. Griffith-Jones (eds), *From Capital Surges to Drought: Seeking Stability for Emerging Markets*. London: Palgrave Macmillan, chapter 12.

Ocampo, J.A. (2003b). 'Developing Countries' Anti-Cyclical Policies in a Globalized World'. In A. Dutt and J. Ros (eds), *Development Economics and Structuralist Macroeconomics: Essays in Honour of Lance Taylor*. Aldershot: Edward Elgar, pp. 374–405.

Ocampo, J.A. (ed.) (2006a). *Regional Financial Cooperation*. Washington, DC: Brookings Institution Press and ECLAC.

Ocampo, J.A. (2006b). 'Regional Financial Cooperation: Experiences and Challenges'. In J.A. Ocampo (ed.), *Regional Financial Cooperation*. Washington, DC: Brookings Institution Press and ECLAC, chapter 1.

Ocampo, J.A. (2008). 'A Broad View of Macroeconomic Stability'. In N. Serra and J. E. Stiglitz (eds), *The Washington Consensus Reconsidered: Towards a New Global Governance*. New York: Oxford University Press, chapter 6.

Ocampo, J.A. (2010a). 'Reforming the Global Reserve System'. In S. Griffith-Jones, J. A. Ocampo, and J.E. Stiglitz (eds), *Time for a Visible Hand: Lessons from the 2008 World Financial Crisis*. New York: Oxford University Press, chapter 16.

Ocampo, J.A. (2010b). 'Special Drawing Rights and the Reform of the Global Reserve System'. In K.S. Jomo (ed.), *Reforming the International Financial System for Development*. New York: Columbia University Press, chapter 13.

Ocampo, J.A. (2011a). 'Reforming the International Monetary System'. 14th WIDER Annual Lecture. Helsinki: United Nations University World Institute for Development Economics Research (UNU-WIDER).

Ocampo, J.A. (2011b). 'Reforming the International Monetary and Financial Architecture'. In J.-P. Fitoussi, J.E. Stiglitz, and the Paris Group, *The G20 and Recovery and Beyond: An Agenda for Global Governance for the Twenty-First Century*. Paris: Columbia University, LUISS and OFCE, February 2011, pp. 83–92.

Ocampo, J.A. (2013a). 'La arquitectura financiera mundial y regional a la luz de la crisis', Serie Macroeconomía para el Desarrollo, No. 131. Santiago: ECLAC, March.

Ocampo, J.A. (2013b). 'Reforming the Global Reserve System'. In *Bretton Woods@70: Regaining Control of the International Monetary System*. Vienna: Oesterreichische Nationalbank (Central Bank of Austria), Workshop Series No. 18, pp. 108–21.

Ocampo, J.A. (2014a). 'The Latin American Debt Crisis in Historical Perspective'. In J. E. Stiglitz and D. Heymann (eds), *Life After Debt: The Origins and Resolutions of Debt Crises*. London: Palgrave Macmillan, chapter 2.1.

Ocampo, J.A. (2014b). 'El FLAR y su papel en la arquitectura financiera regional e internacional'. In G. Perry (ed.), *Construyendo un Fondo Latinoamericano de Reservas: Los 35 años del FLAR*. Bogotá: FLAR, pp. 153–72.

Ocampo, J.A. (2015a). 'Global Economic and Social Governance and the United Nations System'. In J.A. Ocampo (ed.), *Global Governance and Development*. New York: Oxford University Press, chapter 1.

Ocampo, J.A. (2015b). 'Emerging Economies and the Reform of the Global Monetary System'. In J.M. Fanelli (ed.), *Asymmetric Demography and the Global Economy: Growth Opportunities and Macroeconomic Challenges in an Ageing World*. New York: Palgrave Macmillan, pp. 127–50.

Ocampo, J.A. (2016). 'A Brief History of Sovereign Debt Resolution and a Proposal for a Multilateral Instrument'. In M. Guzmán, J.A. Ocampo, and J.E. Stiglitz (eds), *Too Little, Too Late: The Quest to Resolve Sovereign Debt Crises*. New York: Columbia University Press, chapter 10.

Ocampo, J.A. (2017). 'Reforming the Global Reserve System'. In A.R. Ghosh and M. S. Qureshi (eds), *From Great Depression to Great Recession: The Elusive Quest for International Policy Cooperation*. Washington, DC: International Monetary Fund, chapter 14.

Ocampo, J.A., and B. Erten (2014). 'Capital Account Regulations: Role, Effectiveness and the IMF's Institutional View'. In L.C. Bresser-Pereira, J. Kregel, and L. Burlamaqui (eds), *Financial Stability and Growth: Perspectives on Financial Regulation and New Developmentalism*. Milton Park: Routledge, chapter 2.

Ocampo, J.A., J. Kregel, and S. Griffith-Jones (2007). *International Finance and Development*. London: Zed Books.

Ocampo, J.A., and J.G. Palma (2008). 'The Role of Preventive Capital Account Regulations'. In J.A. Ocampo and J.E. Stiglitz (eds), *Capital Account Liberalization and Development*. New York: Oxford University Press, chapter 7.

Ocampo, J.A., S. Pickford, and C. Rustomjee (2013). 'External Evaluation of the Independent Evaluation Office'. Report of the Panel Convened by the IMF Executive Board, January. Available at: http://www.ieo-imf.org/ieo/files/evaluationofieo/IEO_Second_External_Evaluation.pdf (accessed 22 February 2017).

Ocampo, J.A., C. Rada, and L. Taylor (2009). *Developing Country Policy and Growth: A Structuralist Approach*. New York: Columbia University Press.

Ocampo, J.A., S. Spiegel, and J.E. Stiglitz (2008). 'Capital Market Liberalization and Development'. In J.A. Ocampo and J.E. Stiglitz (eds), *Capital Account Liberalization and Development*. New York: Oxford University Press, chapter 1.

Ocampo, J.A., and J.E. Stiglitz (eds) (2008). *Capital Account Liberalization and Development*. New York: Oxford University Press.

Ocampo, J.A., and J. Stiglitz (2011). 'From the G-20 to a Global Economic Coordination Council'. *Journal of Globalization and Development*, 2(2), Article 9.

Ocampo, J.A., and D. Titelman (2009). 'Subregional Financial Cooperation: The South American Experience'. *Journal of Post-Keynesian Economics*, 32(2): 249–68.

Ocampo, J.A., and R. Vos (2008). *Uneven Economic Development*. Hyderabad/London/Penang: Orient Longman/Zed Books/Third World Network.

Ortiz, I., M. Cummings, J. Capaldo, and K. Karunanethy (2015). 'The Decade of Adjustment: A Review of Austerity Trends 2010–2020 in 187 Countries'. ESS Working Paper, No. 53, International Labour Organization, in association with the South Centre and the Initiative for Policy Dialogue, Columbia University. Available at: http://www.social-protection.org/gimi/gess/RessourcePDF.action?ressource.ressourceId=53192 (accessed 22 February 2017).

Ostry, J.D., and A.R. Ghosh (2013). 'Obstacles to International Policy Coordination, and How to Overcome Them'. IMF Staff Discussion Note, SDN/13/11. Washington, DC: International Monetary Fund.

Ostry, J.D., A.R. Ghosh, M. Chamon, and M.S. Qureshi (2012). 'Tools for Managing Financial-Stability Risks from Capital Inflows'. *Journal of International Economics*, 88(2): 407–21.

Ostry, J.D., A.R. Ghosh, K. Habermeier, M. Chamon, M.S. Qureshi, and D. B. S. Reinhardt (2010). 'Capital Inflows: The Role of Controls'. IMF Staff Position Note SPN/10/04. Washington, DC: International Monetary Fund.

Ostry, J.D., A.R. Ghosh, K. Habermeier, L. Laeven, M. Chamon, M.S. Qureshi, and A. Kokenyne (2011). 'Managing Capital Inflows: What Tools to Use?'. IMF Staff Discussion Note SDN/11/06. Washington, DC: International Monetary Fund.

Padoa-Schioppa, T. (2011). 'The Ghost of Bancor: The Economic Crisis and Global Monetary Disorder'. In J.T. Boorman and A. Icard (eds), *Reform of the International Monetary System: The Palais Royal Initiative*. New Delhi: SAGE Publications, chapter 6.

Palais Royal Initiative (2011). 'Reform of the International Monetary System: A Cooperative Approach for the 21st Century'. In J.T. Boorman and A. Icard (eds), *Reform of the International Monetary System*: *The Palais Royal Initiative*'. New Delhi: SAGE Publications, chapter 2.

Palma, J.G. (2002). 'The Three Routes to Financial Crises: The Need for Capital Controls'. In J. Eatwell and L. Taylor (eds), *International Capital Markets: Systems in Transition*. New York: Oxford University Press, chapter 12.

Panizza, U., F. Sturzenegger, and J. Zettlemeyer (2009). 'The Economics and Law of Sovereign Debt and Default'. *Journal of Economic Literature*, 47(3): 653–700.

Paulus, C.G. (ed.) (2014). *A Debt Restructuring Mechanism for Sovereigns: Do We Need a Legal Procedure?* Munich: Verlag C.H. Beck.

Persaud, A. (2000). *Sending the Herd off the Cliff Edge: The Disturbing Interaction between Herding and Market-sensitive Risk Management Practices*. London: State Street Bank. Available at: http://www.bis.org/publ/bppdf/bispap02l.pdf (accessed 22 February 2017).

Pettis, M. (2013). *The Great Rebalancing: Trade, Conflict, and the Perilous Road Ahead for the World Economy*. Princeton, NJ: Princeton University Press.

Polak, J.J. (1979). 'Thoughts on an International Monetary Fund Based Fully on SDR'. Pamphlet Series 28. Washington, DC: International Monetary Fund.

Polak, J.J. (2005). *Economic Theory and Financial Policy: Selected Essays of Jacques J. Polak, 1994–2004*, edited by J.M. Boughton. Armonk, NY: M.E. Sharpe.

Prasad, E.S. (2014). *The Dollar Trap: How the U.S. Dollar Tightened its Grip on Global Finance*. Princeton, NJ: Princeton University Press.

Prasad, E.S., R.R. Rajan, and A. Subramanian (2007). 'Foreign Capital and Economic Growth'. *Brooking Papers on Economic Activity*, 38(1)(Spring): 153–230.

Prasad, E.S., K. Rogoff, S.-J. Wei, and M. Ayhan Kose (2003). 'Effects of Financial Globalization on Developing Countries: Some Empirical Evidence'. Occasional Paper 220. Washington, DC: International Monetary Fund.

Reinhart, C.M., and K.S. Rogoff (2004). 'The Modern History of Exchange Rate Arrangements: A Reinterpretation'. *Quarterly Journal of Economics*, 119(1): 1–48.

Reinhart, C.M., and K.S. Rogoff (2009). *This Time is Different: Eight Centuries of Financial Folly*. Princeton, NJ: Princeton University Press.

Reinhart, C.M., and C. Trebesch (2015). 'Sovereign Debt Relief and Its Aftermath'. Harvard Kennedy School, Faculty Research Working Paper, RWP15-018, June.

Rey, H. (2015). 'Dilemma not Trilemma: The Global Financial Cycle and Monetary Policy Independence'. NBER Working Paper 21162, May. Cambridge, MA: National Bureau of Economic Research. Available at: http://www.nber.org/papers/w21162 (accessed 22 February 2017).

Rey, H. (2016). 'International Channels of Transmission of Monetary Policy and the Mundellian Trilemma'. *IMF Economic Review*, 64(1): 6–35.

Rhodes, W.R. (2011). *Banker to the World: Leadership Lessons from the Front Lines of Global Finance*. New York: McGraw Hill.

Rodrik, D. (1998). 'Who Needs Capital Account Convertibility?'. In S. Fischer et al. (eds), *Should the IMF Pursue Capital-Account Convertibility?* Essays in International Finance. Princeton, NJ: Princeton University Press, pp 55–65.

Rodrik, D. (2006). 'The Social Costs of Foreign Exchange Reserves'. *International Economic Journal*, 20(3): 253–66.

Rodrik, D. (2008). 'The Exchange Rate and Economic Growth'. *Brookings Papers on Economic Activity*, 39(2): 365–439.

Rodrik, D., and A. Velasco (2000). 'Short-Term Capital Flows'. In B. Pleskovic and J. E. Stiglitz (eds), *Annual World Bank Conference on Development Economics 1999*. Washington, DC: World Bank, chapter 5.

Roosa, R.V. (1965). *Monetary Reform for the World Economy*. New York: Harper & Row, for the Council on Foreign Relations.

Rosenthal, G. (2007). 'The Economic and Social Council of the United Nations'. In T. G. Weiss and S. Daws (eds), *The Oxford Handbook on the United Nations*. New York: Oxford University Press, chapter 7.

Ruggie, J. (1998). 'Embedded Liberalism and the Postwar Economic Regime'. In J. G. Ruggie, *Constructing the World Polity: Essays on International Institutionalization*. London: Routledge, chapter 2.

Rustomjee, C. (2004). 'Why Developing Countries Need a Stronger Voice', *Finance and Development*, September: 21–3.

Sakakibara, E. (2003). 'Asian Cooperation and the End of Pax Americana'. In J. J. Teunissen and M. Teunissen (eds), *Financial Stability and Growth in Emerging Economies*. The Hague: FONDAD, chapter 12.

Schenk, C. (2010). *The Decline of Sterling: Managing the Retreat of an International Currency, 1945–1992*. New York: Cambridge University Press.

Schindler, M. (2009). 'Measuring Financial Integration: A New Data Set'. *IMF Staff Papers* 56(1): 222–38.

Schlesinger, S.C. (2004). *Act of Creation: The Founding of the United Nations*. Cambridge: Westview Press.

Schmukler, S.L. (2008). 'The Benefits and Risks of Financial Globalization'. In J. A. Ocampo and J.E. Stiglitz (eds) (2008), *Capital Account Liberalization and Development*. New York: Oxford University Press, chapter 2.

Schneider, B. (2014). 'Sovereign Debt Restructuring: The Road Ahead', In J.E. Stiglitz and D. Heymann (eds), *Life After Debt: The Origins and Resolutions of Debt Crises*. London: Palgrave Macmillan, chapter 3.3.

Shakow, A. (2009). 'The Role of the International Monetary and Financial Committee in IMF Governance'. In R. Lamdany and L. Martinez-Diaz (eds), *Studies of IMF Governance: A Compendium*. Washington, DC: International Monetary Fund, chapter 4.

Shaw, E. (1973). *Financial Deepening in Economic Development*. New York: Oxford University Press.

Shiller, R.J. (2000). *Irrational Exuberance*. Princeton, NJ: Princeton University Press.

Skidelsky, R. (2000). *John Maynard Keynes: Fighting for Freedom, 1937–1946*, vol. 3. New York: Penguin/Viking.

Solomon, R. (1982). *The International Monetary System, 1945–1981*. New York: Harper and Row.

Soros, G. (2002). 'Special Drawing Rights for the Provision of Public Goods on a Global Scale'. Remarks at the Roundtable on 'New Proposals on Financing for Development', 20 February. Washington, DC: Institute of International Economics. Available at: https://piie.com/commentary/speeches-papers/special-drawing-rights-provision-public-goods-global-scale (accessed 22 February 2017).

Spiegel, S. (2010). 'Excess Returns on Emerging Market Bonds and the Framework for Sovereign Debt Restructuring'. In B. Herman, J.A. Ocampo, and S. Spiegel (eds), *Overcoming Developing Country Debt Crises*. New York: Oxford University Press, chapter 6.

Steil, B. (2013). *The Battle of Bretton Woods: John Maynard Keynes, Harry Dexter White and the Making of a New World Order*. Princeton, NJ: Princeton University Press.

Stiglitz, J.E. (2002). *Globalization and Its Discontents*. New York: W.W. Norton and Company.

Stiglitz, J.E. (2006). *Making Globalization Work*. New York: W.W. Norton and Company.

Stiglitz, J.E. (2008). 'Capital Market Liberalization, Globalization, and the IMF'. In J. A. Ocampo and J.E. Stiglitz (eds) (2008), *Capital Account Liberalization and Development*. New York: Oxford University Press, chapter 3.

Stiglitz, J.E. (2010). 'Sovereign Debt: Notes on Theoretical Frameworks and Policy Analyses'. In B. Herman, J.A. Ocampo, and S. Spiegel (eds), *Overcoming Developing Country Debt Crises*. New York: Oxford University Press, chapter 2.

Stiglitz, J.E., and A. Bhattacharya (2000). 'The Underpinnings of a Stable and Equitable Global Financial System: From Old Debates to a New Paradigm'. In *Proceedings of the Annual World Bank Conference on Development Economics 1999*. Washington, DC: World Bank, chapter 6.

Stiglitz, J.E., J.A. Ocampo, S. Griffith-Jones, J.-P. Fitoussi, H. Gao, Y. Huang, P. Kenen, L. Zhang, J. Li, Y.V. Reddy, U. Volz, R. Wade, B. Wei, J. Williamson, W. Thye Woo, G. Xiao, Y. Yu, and Z. Andong (2011). 'A Modest Proposal for the G-20'. Financial Markets Reform Working Paper. Available at: http://policydialogue.org/publications/working_papers/a_modest_proposal_for_the_g20/ (accessed 22 February 2017).

Stiglitz, J.E., J.A. Ocampo, S. Spiegel, R. Ffrench-Davis, and D. Nayyar (2006). *Stability with Growth: Macroeconomics, Liberalization, and Development*. New York: Oxford University Press.

Summers, L.H. (2004). 'The U.S. Current Account Deficit and the Global Economy'. The Per Jacobson Lecture, 3 October. Washington, DC: International Monetary Fund. Available at: http://www.perjacobsson.org/2004/100304.pdf (accessed 22 February 2017).

Suter, C., and H. Stamm (1992). 'Coping with Global Debt Crises: Debt Settlements, 1820 to 1986'. *Comparative Studies in Society and History*, 34(4): 645–78.

Toniolo, G., with the assistance of P. Clement (2005). *Central Bank Cooperation at the Bank for International Settlements, 1930–1973*. Cambridge: Cambridge University Press.

Triffin, R. (1957). *Europe and the Money Muddle: From Bilateralism to Near Convertibility*. New Haven, CT: Yale University Press.

Triffin, R. (1961). *Gold and the Dollar Crisis* (revised edition). New Haven, CT: Yale University Press.

Triffin, R. (1968). *Our International Monetary System: Yesterday, Today and Tomorrow*. New York: Random House.

Triffin International Foundation (2014). 'Using the SDR as a Lever to Reform the International Monetary System'. Report of an SDR Working Party, May. Available at: http://media.wix.com/ugd/b1cc9b_e4022497973e4a9095ea52e728806824.pdf (accessed 22 February 2017).

UNCTAD (1965). *International Monetary Issues and the Developing Countries: Report of the Group of Experts*. New York: United Nations.

UNCTAD (2009). *The Global Economic Crisis: Systemic Failures and Multilateral Remedies*. Geneva: United Nations.

United Nations (1948). *Economic Report: Salient Features of the World Economic Situation 1945–47*. New York: United Nations, Department of Economic Affairs.

United Nations (1951). *World Economic Report 1949–50*, New York: United Nations, Department of Economic Affairs.

United Nations (1955). *World Economic Report 1953–54*, New York: United Nations, Department of Economic and Social Affairs.

United Nations (1999). 'Towards a New International Financial Architecture'. Report of the Task Force of the Executive Committee on Economic and Social Affairs of the United Nations, 21 January. Geneva: United Nations. Available at: http://www.

un.org/esa/ffd/economicgovernance/EC-ESA_Financial%20Architecture_1999.pdf (accessed 22 February 2017).

United Nations (2001). 'Report of the High-level Panel on Financing for Development' (Zedillo Report). New York: United Nations. Available at: http://www.un.org/en/events/pastevents/financing_for_development_report.shtml (accessed 22 February 2017).

United Nations (2002). 'The Monterrey Consensus'. International Conference on Financing for Development, Monterrey, Mexico. Available at: http://www.un.org/esa/ffd/monterrey/MonterreyConsensus.pdf (accessed 22 February 2017).

United Nations (2005a). *World Economic Situation and Prospects 2005*. New York: Department of Economic and Social Affairs, United Nations.

United Nations (2005b). *World Economic and Social Survey 2005: Financing for Development*. New York: Department of Economic and Social Affairs, United Nations.

United Nations (2009). 'Report of the Commission of Experts Convened of the President of the UN General Assembly on Reforms of the International Monetary and Financial System' (Stiglitz Commission), 21 September. New York: United Nations. Available at: http://www.un.org/ga/econcrisissummit/docs/FinalReport_CoE.pdf (accessed 22 February 2017).

United Nations (2013). 'The Global Partnership for Development: The Challenge We Face'. MDG Gaps Task Force Report 2013. New York: United Nations. Available at: http://www.un.org/millenniumgoals/2013_Gap_Report/MDG%20GAP%20Task%20Force%20Report%202013_English.pdf (accessed 22 February 2017).

United Nations (2015). 'Basic Principles on Sovereign Debt Restructuring Processes'. Resolution adopted by the UN General Assembly, A/RES/69/319, 10 September. Available at: http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/69/319 (accessed 22 February 2017).

Volz, U., and A. Caliari (eds) (2010). *Regional and Global Liquidity Arrangements*. Bonn: German Development Institute and Centre of Concern.

Warwick Commission (2009). 'International Financial Reform: In Praise of Unlevel Playing Fields'. Report, November 2009. Available at: http://www.warwick.ac.uk/research/warwickcommission/ (accessed 22 February 2017).

Weisbrot, M., R. Ray, J. Johnston, J.A. Cordero, and J.A. Montecino (2009). 'IMF-Supported Macroeconomic Policies and the World Recession: A Look at Forty-One Borrowing Countries'. Washington, DC: Center for Economic and Policy Research. Available at: http://www.cepr.net/index.php/publications/reports/ (accessed 22 February 2017).

White, W.R. (2005). 'Procyclicality in the Financial System: Do We Need a New Macrofinancial Stabilization Framework?'. Kiel Economic Policy Papers, 2. Kiel: Kiel Institute for Economic Policy.

Williamson, J. (1977). *The Failure of World Monetary Reform, 1971–74*. New York: New York University Press.

Williamson, J. (ed.) (1983a). *IMF Conditionality*. Washington, DC: Institute for International Finance.

Williamson, J. (1983b). 'The Lending Policies of the International Monetary Fund'. In J. Williamson (ed.), *IMF Conditionality*. Washington, DC: Institute for International Finance, pp. 605–60.

Williamson, J. (1983c). 'The Exchange Rate System'. Policy Analyses of International Economics 5, September. Washington, DC: Institute of International Economics.

Williamson, J. (2004). 'The Future of the Global Financial System'. *Journal of Post-Keynesian Economics*, 26(4) (Summer): 607–11.

Williamson, J. (2007). 'Reference Rates and the International Monetary System'. Policy Analyses in International Economics 82, January. Washington, DC: Peter G. Peterson Institute for International Economics.

Williamson, J. (2009). 'Understanding Special Drawing Rights (SDRs)'. Policy Brief PB09-11, June. Washington, DC: Peter G. Peterson Institute for International Economics. Available at: http://www.iie.com/publications/pb/pb09-11.pdf (accessed 22 February 2017).

Williamson, J. (2010). 'The Future of the Reserve System'. *Journal of Globalization and Development*, 1(2): Article 15.

Woods, N. (2011). 'The Impact of the G20 on Global Governance: A History and Prospective'. In C.I. Bradford and W. Lin (eds), *Global Leadership in Transition: Making the G20 More Effective and Responsive*. Seoul/Washington, DC: Korea Development Institute/Brookings Institution Press, pp. 36–47.

Woods, N. (2013). 'The G20 and Global Governance'. In J.E. Stiglitz and M. Kaldor (eds), *The Quest for Security: Protection without Protectionism and the Challenge of Global Governance*. New York: Columbia University Press, chapter 14.

Woods, N., and D. Lombardi (2006). 'Uneven Patterns of Governance: How Developing Countries are Represented in the IMF'. *Review of International Political Economy*, 13(3): 480–515.

World Bank (2010). 'World Bank Group Reform: Enhancing Voice and Participation of Developing and Transition Economies in 2010 and Beyond'. Document presented to the Development Committee, 25 April. Washington, DC: World Bank. Available at http://siteresources.worldbank.org/DEVCOMMINT/Documentation/22553921/DC2010-006(E)Voice.pdf (accessed 22 February 2017).

Wyplosz, C. (2006). 'Regional Exchange Rate Arrangements: The European Experience'. In J.A. Ocampo (ed.), *Regional Financial Cooperation*. Washington, DC: Brookings Institution and Economic Commission for Latin America and the Caribbean, pp. 107–35.

Wyplosz, C. (2013). 'Financial Regionalism in Europe: Gaps Hurt'. Available at: http://graduateinstitute.ch/files/live/sites/iheid/files/sites/international_economics/shared/international_economics/prof_websites/wyplosz/Financial%20Regionalism%20in%20Europe.pdf (accessed 22 February 2017).

Yago, K., Y. Asai, and M. Itoh (eds) (2015). *History of the IMF: Organization, Policy, and Market*. Tokyo: Springer Japan.

Yu, Y. (2012). 'Revisiting the Internationalization of the Yuan'. ADBI Working Paper 336, July. Tokyo: Asian Development Bank Institute (ADBI). Available at: http://www.adb.org/sites/default/files/publication/156221/adbi-wp366.pdf (accessed 22 February 2017).

Zhou Xiaochuan (2009). 'Reform the International Monetary System'. Beijing: People's Bank of China. Available at: http://www.maxwell.syr.edu/uploadedFiles/exed/sites/pgppm/Program_Readings/11-10,%20Brown_Reform%20the%20International%20Monetary%20System.pdf (accessed 22 February 2017).

Zoellick, R. (2010). 'The G-20 Must Look Beyond Bretton Woods II'. *Financial Times*, 7 November. Available at: http://www.ft.com/intl/cms/s/0/5bb39488-ea99-11df-b28d-00144feab49a.html#axzz14dKEeR16 (accessed 22 February 2017).

Zucman, G. (2015). *The Hidden Wealth of Nations: The Scourge of Tax Havens*. Chicago: University of Chicago Press.

Index

Note: Tables and figures are indicated by an italic *t* and *f* following the page number.

Abdildina, Z. 158
ActionAid 72
African Development Bank 163, 165, 200, 202
Agosin, M. 115
Aizenman, J. 46, 56n, 58n
Akyüz, Y. 70, 142
ALBA 204n
Aliber, R. 119
AMRO (ASEAN+3 Macroeconomic Research Office) 204
Andean Community 203n
Andean Development Corporation 202
Arab Monetary Fund 203, 205*f*
Argentina
  and Brazil, payments between 204n
  debt workout mechanisms 42–3, 168, 169, 175, 176, 227
  financial crisis 35, 116
  G20 184
  IMF loans 144, 146*t*
  Paris Club 168
Ariyoshi, A. 131n, 133n
Asai, Y. 2
ASEAN (Association of Southeast Asian Nations) 37, 203
ASEAN+3 37, 115n, 162, 203, 225
  Macroeconomic Research Office (AMRO) 204
Asian Development Bank 163, 165, 200
Asian Infrastructure Investment Bank 201
Asian Monetary Fund 37, 203
Association of Southeast Asian Nations (ASEAN) 37, 203 *see also* ASEAN+3
asymmetric-adjustment problem, global reserve system 47–9, 72, 210, 213
Australia
  capital account 113
  exchange rate policy 24
  Federal Reserve swap arrangements 162
  G10 17
  G20 89, 184
  IMF loans 144, 145*t*
  special drawing rights 64
  sterling assets 11n
Austria 19, 61, 85, 193n

Baker Plans (1985, 1987) 37, 169, 170
balance of payments
  Bretton Woods system 3, 4, 7, 9
    collapse 15, 19, 29
  capital account 110, 113, 126, 128, 133
  crisis resolution 139–40, 208, 209–10
    debt workout mechanisms 166–80
    IMF emergency financing 140–66
  exchange rate system 25, 103, 105
  global imbalances 78
  global reserve system 46
    problems with current system 47, 48, 51, 53, 57, 58, 59
    reform 70, 71
    special drawing rights 61, 64, 70, 71
  gold pool 12
  gold reserves 42
  regional monetary arrangements 203, 204n, 205
  USA 78, 96
Balance of Payments Assistance Facility 163, 204n
balance of trade
  global imbalances 79–82, 85
  as percentage of world exports of GDP 81*f*
  as percentage of world GDP 80*f*
Baltic countries 85, 105
Bangladesh 148*t*
Bankhaus Herstatt 114n
Bank for International Settlements (BIS)
  Commission on Financial Stability 121
  gold pool 12
  IMF loans 154
  macroeconomic policy cooperation 88
  macroprudential perspective 129n
  members 195
  special drawing rights 61
  swap arrangements 11

Bank of England 12, 162*f*, 162
Bank of Japan 162*f*, 162
Barbosa-Filho, N. H. 51n
Base Erosion and Profits Shifting initiative 184–5, 229
Basel Committee on Banking Supervision 113, 185, 195–6
Basel III 185
Belgium 12, 21, 61, 64, 193n
Bellagio Group 12–14, 17n, 29
benchmarking indices 124
Bergsten, F. 73, 215
Bértola, L. 37n, 82
Bhattacharya, A. 131
Bloomfield, A. I. 106
Bohoslavsky, J. P. 177
Bolivarian Alliance of the Peoples of Our America (ALBA) 204n
bonds
  debt workout mechanisms 167, 169, 171, 173–8, 227, 228
  eurozone 227
  shares of issuers 117–19, 119*t*
  special drawing rights 214
  spreads and yields 117, 118*f*
Boorman, J. T. 46, 189, 230
Borio, C. 11, 88, 120
Bradford, C.I. 93, 187
Brady Plan (1989) 37, 167, 169, 170, 226
Brazil
  and Argentina, payments between 204n
  BRICS *see* Brazil, Russia, India, China, and South Africa
  debt workout mechanisms 38, 174
  Federal Reserve swap facilities 41, 115n, 150, 161, 203n, 225
  financial crisis (1998) 35, 116
  IMF loans 144, 146*t*
  IMF quotas and votes 191
  World Bank 194
Brazil, Russia, India, China, and South Africa (BRICS) 115n, 181, 197, 200
  Contingency Reserve Agreement (CRA) 41, 204, 205*f*, 206, 225, 226, 231
Bredenkamp, H. 72
Bretton Woods system 2–11
  asymmetric-adjustment problem 49
  automatic financing of deficits, Keynes' advocacy of 156
  balance-of-payments crises 139
  capital account 34, 109, 110, 111, 113, 114, 135, 136, 138
  collapse 1, 12–20, 45, 67, 100, 103, 114, 142, 212
  creation 1
  exchange rate system 76, 95, 96, 98, 99, 100, 103, 106, 218, 219
  features 208–9
  global imbalances 30, 78
  global liquidity 51
  global reserve system 210, 212
  governance 181, 182, 189, 190, 195, 228, 230
  IMF loans 153
  lack of coherence 29
  prevailing conditions 31
  reforms of international monetary system 190, 195, 208
  'regional' 25
  Second Bretton Woods 52, 56, 86, 215
Buchheit, L. C. 170n, 172, 177n, 179
Buiter, W. xiv, 2n
Bulgaria 85, 168

Caliari, A. 202n
Calvo, G. A. 35n, 106
Camdessus, Michel 46, 70, 110, 189, 204, 213
Canada
  Bretton Woods system, collapse of 19
  exchange rate system 8, 19, 24, 96, 99, 100
  Financial Stability Forum 37
  G7 33
  G10 17
  G20 37
  IMF governance 198
  IMF loans 145*t*
  Smithsonian Agreement 21
  special drawing rights 64
capital account 109–11
  Bretton Woods system 4–5, 7, 8, 11, 34, 109
    collapse 13, 14, 15–16, 29
  capital flows towards emerging and developing countries 116*f*
  Chinn–Ito index 114*f*, 114*t*
  deficiencies 43
  exchange rate system 34, 106
  global imbalances 78
  global reserve system 23, 45, 56, 57
    problems with current system 56–8
  IMF emergency financing 141–2, 148–55
  increasing capital mobility 31
  liberalization 120–1, 125–6, 128, 134, 209
    effects of 120–8
    return of 111–20
  regulations (CARs) 128–38, 207, 208, 220–2
    1995–2015 130*f*
    developing countries 131*t*
capital flow management measures (CFMs) 135, 137, 221
capital market liberalization (CML) *see* capital account: liberalization
Caribbean countries 115, 198, 201, 202
CARICOM 202
Caruana, J. 185

Carvalho, F. C. de 46
Central Africa 202
Central America 203n
Central Asia 201
Central Europe 59, 75, 85, 144, 152, 157, 168
Charlton, A. 125n
Cheung, Y.-W. 58n
Chiang Mai Initiative 37, 115n, 162, 203, 225, 231
  expansion 41, 163, 182
  launch 204
  reasons for non-use 206, 226
  size 204, 205*f*
Chile 132, 144, 146*t*, 148
China
  BRICS *see* Brazil, Russia, India, China, and South Africa
  capital account 117, 119
  Chiang Mai Initiative 37, 115n, 203
  debt workout mechanisms 177
  exchange rate system 103
  global imbalances 31, 76, 85, 86, 87, 216
  global reserve system 212
    problems with current system 53, 55
    reform 66–7
    special drawing rights 64
  gold reserves 42
  IMF membership 2
  IMF quotas and votes 191, 194
  IMF 'spillover reports' 93, 217
  macroeconomic policy cooperation 90, 91, 94
  national development bank 201
  Paris Club 177, 227
  swap arrangements 161, 225
  World Bank reforms 194
Chinn, M. D. 103, 113
Clark, P. B. 69n
climate change 72–3
collective action clauses (CACs) 38, 173, 175–8, 226–7
Colombia 131, 132, 144, 147*t*, 152
Commission for IMF Governance Reform 230
Committee of Twenty (C20) 190n
  macroeconomic policy cooperation 89
  negotiations 21, 22, 24
    exchange rate system 76, 89, 209
  outcomes 29
Compensatory Financing Facility 18, 28, 36, 41, 150, 156, 224
Congo, Democratic Republic of 148*t*
Consolidated Multilateral Surveillance Report 93, 217
contagion
  boom–bust cycles 35, 172
  capital account 35, 122, 123, 124, 200, 222
  East Asian financial crisis 144
  mitigation/avoidance 149, 222
  regional monetary arrangements 205
Contingent Credit Line 150, 222
Convention Respecting the Limitation of the Employment of Force for the Recovery of Contract Debts (1907) 167n
Conway, E. 2, 47n, 111
Cooper, R. 74, 192n, 215
Cornia, G. A. 157n, 224n
Costa Rica 203
Côte d'Ivoire 159
counter-cyclical policies
  Bretton Woods system 3
  capital account
    liberalization 126, 127
    regulation 128, 133, 134, 136
  exchange rate system 106
  global reserve system 56–8
    reform 69–70, 213, 215
    special drawing rights 60, 69–70, 213, 215
  governance of international financing system 185
  IMF emergency financing 142, 148, 153, 154, 223, 225
  multilateral development banks 163
  North Atlantic financial crisis 161, 166
  regional monetary arrangements 200
credit default swaps 176, 178, 227
creditor coordination problems 124
credit ratings 123–4
Cruces, J. 168
Culpeper, R. 200n
current account 209
  Bretton Woods system 5n, 6, 7, 8, 11, 109
    collapse 16, 29
  and capital account 22, 121, 128
  eurozone countries 48*f*
    North Atlantic financial crisis 48–9
  exchange rate system 103
  global imbalances 30, 76, 78, 82–5, 86, 218
  global reserve system 56, 57, 58, 59, 213
  IMF emergency financing 141, 142
  macroeconomic policy cooperation 88, 93
  as percentage of exports of goods and services 84*f*
  as percentage of world GDP 83*f*
  USA 31, 32*f*, 33, 50*f*, 50–2, 56, 210–11
    global imbalances 76, 78, 85
Cyprus 35, 159

D'Arista, J. 68
Das, U. S. 177n
debt workout mechanisms 140, 207, 208, 226–8
  Argentina 42–3, 168, 169, 175, 176, 227
  Brazil 38, 174
  China 177

debt workout mechanisms (*cont.*)
Greece 42, 149, 175, 176, 176n
incomplete reform efforts and proposals 172–80
Mexico 38, 172, 173, 174, 175, 226
need for an international mechanism 166–72
number (1978–2013) 168*f*
Russia 169
de Gaulle, Charles 14, 17
Denmark 21, 61, 145*t*, 162
derivatives 123
Derviş, K. 92, 94, 151n, 186, 188, 229n
d'Estaing, Valery Giscard 14
developing countries
balance-of-payments crises 140
bond spreads and yields 118*f*
Bretton Woods system 2, 3, 4, 8–9
collapse 15
capital account 110, 116*f*
liberalization 34, 35, 115–19, 125–8
regulation 130, 133, 134, 136, 220
Compensatory Financing Facility 18
current account convertibility 29
debt workout mechanisms 168, 169–70
Federal Reserve swap arrangements 90
G10 16–17
G20 37, 39, 181–2, 229
global monetary cooperation 75
exchange rate system 100, 106
global imbalances 85, 87–8, 217
macroeconomic policy 89, 91, 94
global reserve currency 18
global reserve system 45, 211
problems with current system 47, 51, 53–9
reforms 67, 68, 72, 212, 214
self-insurance 46, 47, 51, 56–9
gold 25–6
governance of international financial system 43, 181–2, 229, 230
reforms 190, 191–6, 198
regional arrangements 199–200, 201, 203, 205, 206
IMF conditionality 36–7, 38
IMF emergency financing 35–6, 144, 148–9, 151–4, 159
IMF quotas 42
IMF's focus 31, 35–7
Latin American debt crisis 39
multilateral development banks 163
North Atlantic financial crisis 39, 40, 53–5, 91, 94, 166, 194
oil facility 28
reforms following financial crises 207
shocks, vulnerability to 35
special drawing rights 23–4, 28, 64, 206, 213
swap facilities 161, 225
Development Bank of Latin America 202
Devlin, R. 37n, 82, 168, 169
de Vries, M. G. 2, 7, 29
Dodd, R. 123
Dominican Republic 147*t*, 167n, 176
Dooley, M. P. 52, 52n, 56, 86, 215
Dornbusch, R. 35n
Drysdale, P. 92, 186, 229n
Duttagupta, R. 52, 211

East Asia
capital account 130
Chiang Mai Initiative 203, 206
financial crisis
aftermath 125
capital account 35, 115, 116, 130
debt workout mechanisms 172
Financial Stability Forum 185n
G20 89
global imbalances 82, 85, 216
global reserve system 55
governance of international financial system 181, 182
IMF emergency financing 143, 144, 150, 157, 222, 224
reforms to international monetary system, calls for 207
structural adjustment, costs of 157
Supplemental Reserve Facility 35
US current account 51
foreign direct investment 37
global imbalances 82, 85, 87, 216
global reserve system 55, 56
governance of international financial system 181, 182
multilateral development banks 201
Eastern Europe
capital account 130
debt renegotiations 168
global imbalances 85, 86
IMF emergency financing 36, 144, 152, 157
North Atlantic financial crisis 59, 75
Eatwell, J. 34, 207n
Economic and Social Council (ECOSOC) 188, 189
Economic Commission for Latin America and the Caribbean (ECLAC) 33, 189n
economic growth, world 38–9, 39*f*
Egypt 144, 147*t*
Eichengreen, B. 2, 8, 12, 16, 20n, 68, 74, 88, 88n, 173, 215
emerging countries *see* developing countries
employment objective, Bretton Woods system 3
Epstein, G. 129
Erten, B. xiv, 8, 34, 53n, 64, 69n, 70, 129, 130, 131n, 132, 133, 133n, 213

Espósito, C. 177
Ethier, W. 106
Eurasian Anti-Crisis Fund 205*f*
Eurasian Economic Community, Economic Stimulus Fund 204
Eurocurrency market 23, 112, 114
Eurodollar market 15, 110, 112
European Bank for Reconstruction and Development 163, 165, 200–1
European Central Bank (ECB)
  capital account 113, 120
  Federal Reserve swap facilities 162, 225
  global imbalances 217
  global reserve system 74
  governance 200, 231
  macroeconomic policy cooperation 91
  North Atlantic financial crisis 40, 113
  regional monetary arrangements 202, 204, 205
  special drawing rights 61
European Currency Unit (ECU) 25
European Financial Facility 231
European Financial Stability Facility 41, 163, 204
European Financial Stabilization Mechanism 163, 204
European Investment Bank 163, 200, 202
European Monetary Cooperation Fund 25
European Monetary System (EMS) 25, 34, 99
European Payments Union (EPU) 5n, 8, 88, 112, 203
European Recovery Act *see* Marshall Plan
European Stability Mechanism 163, 204, 205*f*, 225, 231
European Union (EU)
  accession process 158
  Balance of Payments Assistance Facility 163, 204n
  balance-of-payments crises 163
  capital account 34
  exchange rate system 99
  G20 89
  global imbalances 85, 86, 87
  IMF reforms 192
  monetary union 25
  regional arrangements 204, 225
  World Bank 194
eurozone
  aggregation clauses 43
  crisis (2011–12) 66, 162, 185, 212
  debt workout mechanisms 172, 176, 178, 227
  exchange rate system 103, 105
  global imbalances 86, 184, 216, 218
  global reserve system 48–9, 59, 73
  IMF emergency financing 160, 225
  IMF 'spillover reports' 93, 217
  macroeconomic policy cooperation 76, 90, 94, 208
  North Atlantic financial crisis 59
  regional monetary arrangements 204, 225
exchange rate mechanism 61
exchange rate system 208, 209
  Bretton Woods system 3–4, 6–9, 109, 110
    collapse 14, 15, 16, 17, 18, 19–20, 21–2, 24–5, 29
  capital account
    liberalization 111, 126–7
    regulation 113, 128, 132–3, 220
  deficiencies 43
  global imbalances 78–9
  global monetary cooperation 76–7, 88, 89, 93, 95–107, 218–20
  global reserve system 45
    problems with current system 50–1, 56, 57–8
    reform 67, 212
  instability of four major exchange rates 104*f*
  nominal exchange rate (1948–80) 95*f*
  regimes
    1945–2010: 97*f*, 98*f*
    1980–2011: 101*f*, 102*f*
  regional monetary arrangements 205
  USA 21, 22, 24–5, 32, 50*f*, 50, 76, 77, 96, 99, 103, 105, 106
  volatility 30, 34
    of euro/US dollar exchange rate 104*f*
  see also foreign exchange
Extended Credit Facility (ECF) 41, 151–2, 223
External Sector Reports 217

Far East 11n
Federal Open Market Committee (FOMC) 161
Federal Reserve
  capital account 116, 117
  global imbalances 82
  global reserve system 74
  governance 200, 231
  interest rate policy 82
  North Atlantic financial crisis 40
  swap arrangements 21, 41, 90, 113, 115n, 150–1, 151n, 161–2, 203n
    weekly use of 162*f*
  Volcker's chairmanship 30
Fellner, W. 15, 82
Ffrench-Davis, R. 45, 70, 72, 115
fiduciary dollar standard 29–30, 31–3, 209
  exchange rate system 99
  global imbalances 216
  global reserve system 45, 46, 50–1, 69, 210–11
  reinforcement 38
Financial Sector Assessment Programme (FSAP) 93, 218

Financial Stability Board (FSB) 75, 185, 196, 207
creation 40, 90, 185, 196, 207
Early Warning Exercises 93
macroeconomic policy cooperation 90, 93
Financial Stability Forum (FSF) 37, 40, 89–90, 185n, 195, 196, 207
Finland 61
First World War 4
Fiscal Monitor 93
Fischer, S. 100, 106
Fleming, M. 106n
Flexible Credit Line (FCL) 40–1, 151, 152, 159, 214, 222–3, 225
Folkerts-Landau, D. 52, 52n, 56, 215
Fondo Latinoamericano de Reservas (FLAR, Latin American Reserve Fund) 203, 205, 225, 226, 231
expansion 204
size 204, 205*f*
use of 206
Forbes, K. 131n
foreign direct investment (FDI)
capital account 119–20, 123, 124, 134
debt workout mechanisms 166
East Asia 37
USA 31
foreign exchange 13*f*
accumulation of reserves 54*t*
Bretton Woods system 9–11
collapse 16, 20, 21, 22
capital account 127, 134
fiduciary dollar standard 32
global imbalances 218
global reserve system 22–3, 46
problems with current system 47, 53, 55, 56–8
reform 67, 212
gold prices 26
by level of development 55*f*
regional monetary arrangements 203
self-insurance 38, 47
share of major currencies 65–6, 66*f*
US current account deficits 33
see also exchange rate system
France
Bretton Woods system 7n, 16
collective reserve unit 17
exchange rate system 21, 24–5, 95–6
G5 33
global imbalances 85
global reserve system 23
gold pool 12
gold reserves 11, 12
gold standard 4
IMF loans 144, 145*t*
international monetary reform proposals 185
Paris Club 166
Smithsonian Agreement 21
special drawing rights 18, 59, 61, 213
Frankel, J. A. 106
Franklin National Bank of New York 114n
Frenkel, R. 45, 56, 115
Frieden, J. 88
Friedman, M. 15, 96, 99
Furcile, D. 125n

Gallagher, K. xiii, xiv, 135n, 136, 137, 138, 221n
Garay, L. J. 169
Garber, P. 52, 52n, 56, 215
Gardner, R. 2
Gelpern, A. 173, 175
General Agreement on Tariffs and Trade (GATT) 1
General Arrangements to Borrow 19, 28, 36, 141
General Resource Account (GRA) 158, 159
Germany
bilateral trade agreements 4
Bretton Woods system, collapse of 15, 16, 19
capital account 113, 114n
current account 49, 76, 77, 85
exchange rate system 16, 21, 22, 77, 95–6
G5 33
G20 184
global imbalances 31, 76, 77, 79, 82, 85, 86, 87
global reserve system 23
gold pool 12
gold reserves 9, 11
Smithsonian Agreement 21
special drawing rights 24, 61, 64
Ghosh, A. R. 88, 94, 100, 101, 103, 105
Global Economic Coordination Council (GECC) 188, 189, 229–30
global financial crisis *see* North Atlantic financial crisis
Global Financial Stability Report 93
global imbalances
global monetary cooperation 76, 77–87, 215–18
IMFC 187
reforms 208
global monetary cooperation 75–7
exchange rate system 95–107
global imbalances 77–87
macroeconomic policy 87–94
Global Reserve Bank 68
global reserve system 29, 45–6, 208, 209
Bretton Woods system 5, 6, 9, 11
collapse 12–14, 17–18, 19
G20 40
macroeconomic policy cooperation 76, 82

problems with current system 43, 47–59
proposals 22–4
reforms 65–74, 210–15
special drawing rights 59–64
gold
demonetization 26, 29, 141
global reserve system 68
IMF's quotas 140
prices 21, 26, 26*f*
North Atlantic financial crisis 42
reserves
Bretton Woods system 9, 11
composition 27*f*
developing countries' concerns 25
global 10*f*
North Atlantic financial crisis 42
special drawing rights 28
trends 26
revaluation 25
transactions 6, 7
gold pool 12, 19
gold standard 31
adjustment mechanisms 15
balance-of-payments crises 139
capital mobility 16, 34
collapse 4, 109
problems 3
proposed return to 17
'rules of the game' 156
Gourinchas, P.-O. 121
governance of international monetary system 181–2, 228–31
apex organization 182–9
deficiencies 43
reforms 190–9, 208
regional arrangements 199–206
Goyal, R. 52, 211
Grabel, I. 129, 204n
Great Depression
Bretton Woods system 3, 4
debt workouts 140
gold standard, abandonment of 109
international finance, destruction of 167
protectionism 40, 90, 186, 229
reconstruction following 45
Greece
current account convertibility 8
debt workout mechanisms 42, 149, 175, 176, 176n
financial crisis (2010–12) 35, 103, 172
global imbalances 85
IMF loans 144, 145*t*, 149, 152, 154, 159
Greenspan, A. 122n
Griffith-Jones, S. xii, xiii, xiv, 45, 57, 85n, 115, 136, 137, 159, 160, 166, 185, 186, 196, 196n, 207n, 221n
Group of Five (G5) 17, 30, 33, 89
Group of Seven (G7) 210
Financial Stability Forum 185n
governance 181, 182, 229
Louvre Accord 33, 89
resistance 17
rising importance 30
Group of Ten (G10) 88
Basel Committee 113
collective action clauses 38, 173
declining importance 30
exchange rate policy 21
General Arrangements to Borrow 19
global reserve currency 18
OECD Economic Policy Committee 16, 88
resistance to 16–17
Group of Twenty (G20) 39–40
capital account 135, 222
creation 37, 89
exchange rate system 220
global imbalances 216–17
global reserve system 46
governance 181–2, 207, 210, 228–9
apex organization 182–4, 186, 187, 188, 189
reforms 190, 195, 196
IMF quotas 42
macroeconomic policy cooperation 89, 90, 91–2, 93, 94
MAP *see* Mutual Assessment Process
multilateral development banks 165
North Atlantic financial crisis 39–40, 60, 77
Research Group 182–3, 186
special drawing rights 60
summit commitments 183–4, 183*f*
Group of Twenty-Four (G24) 136
Guidotti–Greenspan rule 57
Gulati, M. 173, 175
Gulf Cooperation Council 202
Guzmán, M. xiii, xiv, 177n

Hagen, S. 174n
Heavily Indebted Poor Countries Initiative (HIPC) 170, 226
Helleiner, E. 2, 3n, 111, 112
herding behaviour 123–4, 172
Herman, B. xiii, xiv, 177n, 178n, 179, 228n
Honduras 154
Hong Kong 11n, 53, 66, 196
Horsefield, J.K. 2, 7n
Huaita, F. 115
Hungary 85, 144, 147*t*, 152
Husain, I. 199

Icard, A. 46, 189, 230
Iceland 35, 144, 145*t*, 152
Ilzetzki, E. O. 97
income inequality and capital account openness 125

India 3n, 42, 143–4, 147*t*, 148, 191, 194
BRICS *see* Brazil, Russia, India, China, and South Africa
Indian subcontinent 11n
Indonesia 125, 144, 148*t*, 206
inequity bias, global reserve system 47, 53–9, 72, 211
Institute of International Finance (IIF) 175
Inter-American Development Bank 165, 200
interest rates 126, 132
International Bank for Reconstruction and Development (IBRD) *see* World Bank
International Capital Market Association (ICMA) 176, 178, 227
International Chamber of Commerce (ICC) 163, 165
International Clearing Union 5, 49, 68, 211
International Comparison Programme 194
International Debt Court 178
International Development Association 194, 195, 195n
International Development Authority (IDA) 163, 165
International Finance Corporation (IFC) 165, 194
International Monetary and Financial Committee (IMFC) 190n
creation 24
global imbalances 187
governance 190, 197, 199
macroeconomic policy cooperation 90, 93
reforms 197, 199, 230
International Monetary Fund (IMF)
aggregation clauses 43
Articles of Agreement
Article I 2–3, 87, 141
Article IV 4, 6, 25, 79, 93, 100, 106, 197, 198, 217
Article VI 4–5, 111–12
Article VII 5
Article VIII 7, 8, 27, 67, 209
Article XII 197
Article XXII 28, 67
capital account 34, 110, 111, 135, 136, 138, 209, 220
commitment to 8
Council of Ministers 197, 230
debt workout mechanisms 174, 179
emergency financing 141
exchange rate system 25, 89, 100, 102, 218
global imbalances 78–9
governance 197, 198
macroeconomic policy cooperation 87, 88, 89, 93
special drawing rights 18, 27, 41, 60, 67, 71, 209, 211, 213
Buffer Stock Facility 19
C20 *see* Committee of Twenty
capital account 34, 110, 207, 209
liberalization 111–12, 120, 121
regulation 119, 129, 133, 134, 135, 136–8, 220–1
Chiang Mai Initiative 41
collapse of Bretton Woods system 17
Compensatory Financing Facility 18, 28, 36, 41, 150, 156, 224
conditionality 36–7, 41, 58, 78, 148, 150, 154–60, 175, 222, 224–5
Contingent Credit Line 150, 222
Council 24
creation 1
debt workout mechanisms 167, 168–9, 170, 171, 173–6, 178, 179, 207, 208, 226, 227, 228
demand for resources 36
Development Committee 24
Early Warning Exercises 93
emergency financing 139–66, 210, 222–6
relative to world GDP and trade 153*f*
share of borrowing by development level 143*f*
share of top five borrowers in total IMF lending 143*f*
shifting geography of major borrowers 145–8*t*
exchange rate system 76, 77, 95, 100, 101, 103, 218–19
Executive Board 24
Extended Credit Facility (ECF) 41, 151–2, 223
Extended Fund Facility 24, 28, 141
Financial Sector Assessment Programme (FSAP) 93, 218
FLAR's fund disbursal relative to 204
Flexible Credit Line 40–1, 151, 152, 159, 214, 222–3, 225
G10 16, 17
G20 39
General Arrangements to Borrow 19, 28, 36, 141
General Resource Account (GRA) 158, 159
global imbalances 77–8, 86, 208, 216, 217–18
global monetary cooperation 75
global reserve system 17, 18, 24, 46
problems with current system 47, 55, 58
reforms 68, 69–72, 73, 74, 212, 213–14
gold 26, 140
governance 210, 228, 230–1
apex organization 185, 187, 188, 200
Manuel report 188, 196–7
reform 190–9, 230
regional arrangements 200, 206
history 2, 6–9, 11

Independent Evaluation Office (IMF-IEO) 92, 158–9, 196, 197, 198–9, 217, 230
Interim Committee 24, 190n
'lending into arrears' policy 38, 169, 179
loans as percentage of world GDP 9*f*, 28–9, 35–6
macroeconomic policy cooperation 87, 88–9, 90, 92–3
Marshall Plan 8
Mutual Assessment Process 40, 217
New Arrangements to Borrow 36, 42, 141
North Atlantic financial crisis 39, 40–1
as North–South institution 31, 35, 36–7
oil facility 28, 29, 156, 224
oil shocks 28, 35, 89, 141, 142, 153
Poverty and Growth Facility 150
Poverty Reduction and Growth Facility (PRGF) 35, 41, 152, 158, 159, 223
Precautionary and Liquidity Line 151, 223
Precautionary Credit Line (PCL) 41, 151, 152, 223
purposes 2–3, 87, 95, 141, 218
quotas 19, 19*f*, 42, 140, 214, 230
distribution 190–2, 191*f*, 193*t*
reforms 185
Rapid Credit Facility (RCF) 152, 223
Reserve Augmentation Line 150, 222
scarce currency clause 5
short-term liquidity facility (SLF) 150–1, 151n, 152, 161, 222
Sovereign Debt Restructuring Facility 179
Sovereign Debt Restructuring Mechanism 173, 175, 226, 228n
special drawing rights 18, 23, 28, 59–61, 69–72, 185, 209
reforms 213–14, 215
stigma of borrowing from 37, 152, 154, 160, 206, 214, 223, 224
Supplemental Reserve Facility 35, 150
Supplementary Financing Facility 28
votes 190–2, 191*f*, 214, 230
International Organization of Securities Commissions (IOSCO) 195
International Trade Organization 1
investor coordination problems 124
Iran 30, 64, 144, 147*t*
Ireland 35, 48, 85, 144, 145*t*, 152, 154
Islamic Development Bank 200, 201, 231
Italy
exchange rate policy 21, 95
global imbalances 85
global reserve system 23
gold pool 12
gold reserves 11
IMF loans 28, 144, 145*t*
Louvre Accord 33, 89
Smithsonian Agreement 21
stagflation 20
Ito, H. 58n, 113
Itoh, M. 2

James, H. 2, 16, 20n, 141
Japan
Asian Monetary Fund 37, 203
Bretton Woods system 6, 8, 16
capital account 112, 113
Chiang Mai Initiative 37, 115n, 203
dollar shortage 5
exchange rate system 21, 22, 77, 95–6, 99, 103
financial crisis (late 1980s) 34, 125
G5 33
G10 17
global imbalances 31, 76, 79, 82, 85, 86, 87, 216
global reserve system 24, 55
IMF loans 145*t*
IMF 'spillover reports' 93, 217
macroeconomic policy cooperation 90
reconstruction after Second World War 1, 8
Smithsonian Agreement 21
special drawing rights 61, 64
World Bank 194
Jaramillo-Vallego, J. 158
Jeanne, O. 121, 136, 138
Johnson, H. G. 96, 99
Jolly, R. 157n, 224n
Jomo, K. S. 129
Jorgensen, E. 167n
Jubilee Coalition 170

Kaiser, J. 178, 228
Kaminsky, G. L. 57, 127
Kaplan, E. 132
Kapur, M. xiv, 2n, 90
Kawai, M. 131n
Kazakhstan 176
Kenen, P. 71, 73, 74, 207n, 215
Keynes, John Maynard
asymmetric-adjustment problem 210
automatic financing of deficits 156
boom–bust cycles 122
Bretton Woods discussions 14, 22, 47–8, 78
capital account 111
fiduciary dollar standard 51
IMF 5
International Clearing Union 5, 49, 68, 211
Keynesianism 3, 90, 109, 139, 141, 184, 217
Killick, T. 158
Kindleberger, C. P. 96, 98, 99, 119
Klein, M. W. 133n

Korea, Republic of
  Chiang Mai Initiative 37, 115n, 203, 206
  Federal Reserve swap facilities 41, 115n, 150–1, 161–2, 203n, 225
  G20 184
  IMF loans 144, 146*t*, 154, 155*t*
  IMF quotas and votes 191
  World Bank 194
Korinek, A. 129, 136
Kose, M. A. 120n
Kregel, J. xii, 45, 49, 57, 85n, 115, 207n
Krueger, A. O. 173, 179, 228n

Lamberte, M. B. 131n
Lamdany, R. 196n
Lamfalussy, Alexandre 46, 189
Latin America
  capital account 34, 115, 130
  debt crisis (1980s) 20, 37
    aftermath 38, 124–5
    capital account 35, 115, 116
    developing countries 39
    foreign exchange reserves 32
    General Arrangements to Borrow 36
    global imbalances 82
    global reserve system 55
    IMF conditionality 36, 157
    IMF emergency financing 143
    special drawing rights 61
    US banking system 37, 169
    US current account deficits 33
  debt workout mechanisms 167, 168
  financial crisis (late 1990s) 55, 116
  IMF loans 144
  'lost decade' 33
  macroeconomic variables, low correlation between 205
  multilateral development banks 165, 201
  payment initiatives 204
Latin American Integration Association (LAIA), Agreement for Reciprocal Payments and Credits 203
Latvia 160, 225
Lee, J. 46, 56n
Lehman Brothers bankruptcy 65
  capital account 116, 117
  exchange rate system 103
  IMF loans, demand for 152, 154
  swap arrangements 90, 161, 162
Li, Y. 177
Libya 42
Lim, W. 93, 187
Lissakers, K. 199
Lombardi, D. 190n, 198
'London Clubs' 168
Lougani, P. 125n
Louvre Accord (1987) 33, 77, 82, 89, 103

McCauley, R. N. 73
Machinea, J. L. 205
Machlup, F. 13, 13n, 14, 15, 82
McKay, J. 231n
McKinnon, R. 120n
McKinsey Global Institute 52n, 120
macroeconomic policy 76–7, 208
  capital account regulations 220–2
  cooperation 87–94, 205
  exchange rate system 95–107, 218–20
  global imbalances 77–87, 215–18
macroprudential regulations 129, 185, 197, 208, 221
Magud, N. E. 131n
Malaysia 132
Mantega, Guido 91, 217
Manuel, Trevor 196–7
Markiel, B. G. 13, 13n, 14, 15
Marshall Plan 8, 16, 78, 88, 112
Martinez-Diaz, L. 196n, 198
Mateos y Lagos, I. 52, 211
Matoo, A. 101, 219
Mexico
  aggregation clauses 43
  collective action clauses 38
  debt workout mechanisms 38, 172, 173, 174, 175, 226
  Federal Reserve swap facilities 41, 115n, 150–1, 161–2, 203n, 225
  financial crisis (1994) 143, 148, 152
    aftermath 38
    capital account liberalization 35, 116
    debt workout mechanisms 172, 173, 175, 226
  IMF loans 143, 144, 146*t*, 148, 152, 154, 155*t*
  IMF quotas and votes 191
  World Bank 194
Middle East 11n, 115, 130, 201
Millennium Development Goals 189
Minsky, H. P. 122
Mishkin, F. 120
Mohan, Rakesh xiv, 2n, 90, 121
Monterrey Consensus on Financing for Development (2002) 177, 181, 189
moral hazard, debt workout mechanisms 171–2
Morocco 152
Multilateral Debt Relief Initiative (MDRI) 170, 226
multilateral development banks (MDBs) 61, 161, 163–5, 179, 200–2, 225, 231
  assets by region (2010) 201*f*
  lending (2004–16) 164*t*
Mundell, R. 106n
Mundell–Fleming model of open economy macroeconomics 106n
Mutual Assessment Process (MAP)

exchange rate system 220
global imbalances 217–18
governance 186, 187, 229
launch 40, 77, 91, 184, 217
macroeconomic policy cooperation 91–2, 93, 94, 217
significance 208
Myanmar 148*t*

Netherlands
Bretton Woods system, collapse of 19
current account 49, 85, 86
gold pool 12
IMF loans 145*t*, 193
Smithsonian Agreement 21
special drawing rights 61
New Arrangements to Borrow 36, 42, 141
New Development Bank 200, 201, 231
New Zealand 11n, 113, 145*t*
Nigeria 168, 182
Nogueira Batista, P. 193
North Africa 115, 130, 201
North American Framework Agreement 203, 205*f*
North American Free Trade Agreement 203
North Atlantic financial crisis 38–43
aftermath 125
balance-of-payments crises 140
complementary financing mechanisms 161
IMF emergency financing 141, 143, 144, 148–9, 150, 153, 154, 160, 222, 223
capital account
liberalization 35, 113, 115, 116–17, 121, 123
regulation 110, 115, 129, 130, 133, 138, 220
currency share of foreign exchange reserves 66
developing countries 39, 40, 53–5, 91, 94, 166, 194
G20 183, 184, 229
global monetary cooperation 75, 77
exchange rate system 104, 105, 219
global imbalances 76, 85, 86, 208, 215, 216, 217
macroeconomic policy 90–1, 92, 93, 94
global reserve system 214
problems with current system 48–9, 53–5, 58n, 59
reforms 46, 65, 68, 69, 70
gold 26
governance of international financial system 181, 229, 231
apex organization 183, 184
reforms 194, 195, 196
regional arrangements 203, 204, 206
official development assistance 166
reforms to international monetary system, calls for 207
special drawing rights 60, 61, 70
swap agreements 203n, 225
terminology 2
USA as safe financial haven 33, 52
World Bank 163
Norway 61, 162

Obstfeld, M. 16, 34, 56, 106, 106n, 120, 217
Ocampo, J. A. xii, xiii, xiv, 8, 34, 37n, 45, 46, 47, 47n, 53n, 56, 57, 58, 64, 69n, 70, 74, 82, 85n, 87, 109n, 115, 121n, 128, 129, 129n, 130, 131n, 132, 132n, 133, 133n, 134, 135n, 136, 137, 159, 166, 167, 169, 177n, 178n, 179, 182, 185, 186, 189, 196, 196n, 198, 200, 201n, 203n, 204, 205, 206, 207n, 213, 214, 217, 220, 221, 221n, 228n, 229n, 231, 231n
official development assistance 165–6, 179
offshore financial centres 16, 34
oil shocks 31
1973: 20, 22, 24, 28, 38, 141, 153
1979: 30
exchange rate system 77
global imbalances 76, 82
IMF response 28, 35, 89, 141, 142, 153
O'Neill, Paul 173
Organization for Economic Co-operation and Development (OECD)
Base Erosion and Profits Shifting initiative 185, 229
capital account 138, 221
Economic Policy Committee 16, 88
G20 40
global reserve system 53–5
special drawing rights 60, 64
Organization for European Economic Cooperation (OEEC) 16, 88
Ortiz, I. 160
Ossla, Rinaldo 17
Ostry, J. D. 88, 94, 101, 129, 131n, 133, 135, 221

Padoa-Schioppa, Tommasso 46, 53, 74, 189, 211, 215
Pakistan 144, 147*t*, 152
Palais Royal Initiative 46, 189, 230
Palma, J. G. 132, 132n
Panizza, U. 168, 177n
Papaioannou, M. G. 177n
Paraguay 203
Paris Club 140, 166, 168, 170, 226
collective action clauses 173
criticisms 170–1
members 177, 179, 227
origins 168

Pattillo, C. 72
Paulus, C. G. 177n
Persaud, A. 124, 196
Peru 131
Pettis, M. 87, 107n
Philippines 144, 147*t*, 148n, 155*t*, 168
Pickford, S. xii, 198
Pigouvian taxes 128–9
Plaza Accord (1985) 33, 77, 82, 89, 103
Polak, J. J. 69n, 71, 74, 141, 214
Poland 85, 86, 152, 168
Portes, R. 173
Portugal
  Development Bank of Latin America 202
  financial crisis 35, 48
  global imbalances 85
  IMF loans 144, 145*t*, 152, 154
Poverty and Growth Facility 150
Poverty Reduction and Growth Facility (PRGF) 35, 41, 152, 158, 159, 223
Prasad, E. S. 46, 52, 56, 115, 121, 220
Precautionary and Liquidity Line 151, 223
Precautionary Credit Line (PCL) 41, 151, 152, 223
primary asset holding limits (PAHLs) 22, 23

Qureshi, M. 101

Rada, C. 57
Rajan, R. R. 56, 121
Rapetti, M. 56
Rapid Credit Facility (RCF) 152, 223
Reagan, Ronald 33, 36, 82
regional monetary arrangements 199–206, 231
Reinhart, C. M. 8, 25, 57, 96, 97, 99, 106, 119, 127, 131n, 170
Reserve Augmentation Line 150, 222
Rey, H. 106
Rey, Jean-Jacques 173
Rhodes, W. R. 169
Rodrik, D. 56, 57, 123, 132
Rogoff, K. S. 8, 25, 96, 97, 99, 119, 131n
Romania 144, 147*t*, 152
Roosa, R. V. 82
Rosenthal, G. 188
Ruggie, J. 68
Russia
  BRICS *see* Brazil, Russia, India, China, and South Africa
  debt renegotiations 169
  financial crisis (1998) 35, 55, 82, 116, 117, 123, 143
  G20 89
  global imbalances 82
  gold reserves 42
  IMF loans 144, 147*t*
Rustomjee, C. xii, 190n, 198

Sachs, J. 167n
Sakakibara, E. 56
Saudi Arabia 28, 64, 90, 184
Scandinavian countries 125, 193n
Schenk, C. 6, 9, 11, 11n, 73
Schindler, M. 129
Schlesinger, S.C. 1
Schmukler, S. L. 125
Schneider, B. 177
Second Bretton Woods 52, 56, 86, 215
Second World War 3, 6, 9, 14, 16n
self-insurance 38
  capital account 116, 119, 127
  fiduciary dollar standard 32–3
  global reserve system 46
    problems with current system 47, 51, 56–9, 211
    reform 67, 212, 213
Shakow, A. 190n
Shambaugh, J. C. 56, 106n
Shaw, E. 120n
Shiller, R. J. 122n
short-term liquidity facility (SLF) 150–1, 151n, 152, 161, 222
Singapore
  AMRO 204
  Basel Committee 196
  Chiang Mai Initiative 163
  Federal Reserve swap facilities 41, 115n, 150, 161, 203n, 225
  global reserve system 53
Skidelsky, R. 5n, 47n
Smithsonian Agreement 21, 24, 89
snake 21, 22, 25, 99
Solomon, R. 2, 11, 17n, 18, 20, 20n, 29, 69n, 88, 89, 213
Soros, G. 72
South Africa 11n, 12, 24, 168
  BRICS *see* Brazil, Russia, India, China, and South Africa
South Asia 130, 201
sovereign bonds *see* bonds
Sovereign Debt Forum 180
Sovereign Debt Restructuring Mechanism (SDRM) 30, 38, 43, 173, 175, 226, 228n
Soviet bloc 2, 36
Soviet Union 12
Spain 28, 35, 48, 85, 144, 145*t*, 202
special drawing rights (SDRs)
  allocations 28, 41–2, 59–60, 60*t*, 64, 69–70, 161, 185, 213
  consensus 22
  creation 18
  developing countries 23–4, 28, 64, 206, 213
  global reserve system 18, 22, 23–4, 27, 59–64
    problems with current system 50

reform 67, 68, 69–72, 74, 211, 212–15, 223, 230
gold revaluation 25–6
IMF emergency financing 141
macroeconomic policy cooperation 89
net drawings 61, 62*f*
net holdings by development level 62–4, 63*t*
renminbi 67
secondary role 29
significance 208, 209
Spiegel, S. xiii, xiv, 121n, 169, 177n, 178n, 179, 220, 228n
Spillover Reports 217
Sri Lanka 144
Stanley, L. 138
Steil, B. 2, 6, 111, 112
Sterling Agreements (1968) 11
Stewart, F. 157n, 224n
Stiglitz, J. E. xiii, xiv, 52, 57, 68, 70, 72, 85n, 120, 121n, 131, 157n, 171, 177n, 186, 220, 224n, 229n
Stiglitz Commission 208
debt workout mechanisms 177, 178
Global Economic Coordination Council 188, 229–30
global reserve system 46, 70
governance 188, 189, 206, 229–30
regional monetary arrangements 206
Strauss-Kahn, Dominique 72
Sturzenegger, F. 168, 177n
Subramanian, A. 56, 101, 121, 136, 138, 219
sub-Saharan Africa 115, 201
substitution account 17, 23, 24
global reserve system 68, 73, 212, 215
SUCRE 204n
Sudan 148*t*
Summers, L. H. 52
Supplemental Reserve Facility 35, 150
Supplementary Financing Facility 28
Sustainable Development Goals 189
swap arrangements
balance-of-payments crises 225, 226
Bank for International Settlements 88
Bretton Woods system 7, 11
capital account 113
Chiang Mai Initiative 37
credit default swaps 176, 178, 227
Federal Reserve 21, 41, 90, 113, 115n, 150–1, 151n, 161–2, 203n
weekly use of 162*f*
Financial Stability Board 90
global reserve system 58n
North Atlantic financial crisis 161
regional agreements 203
Sweden 21, 61, 85, 162, 193n
Switzerland
Bretton Woods system, collapse of 19
exchange rate policy 21
Federal Reserve swap facilities 162
gold pool 12
gold reserves 9
IMF loans 193
offshore finance 16n
Smithsonian Agreement 21
special drawing rights 61

Taiwan 2
TARGET2 113, 204
Taylor, A. M. 16, 34, 56, 106, 106n, 217
Taylor, John B. 174
Taylor, L. 34, 56, 57, 207n
Thailand 116
Thatcher, Margaret 36
Titelman, D. 205, 206
Todoulos, K. 159, 160
Toniolo, G. 11, 12, 88
trade balance *see* balance of trade
Trebesch, C. 168, 170, 177n
Triffin, R. 8, 13, 14, 15, 47, 49, 50, 67, 69n, 82, 88, 210, 211
Triffin dilemma 32, 47, 49–53, 68, 210–11, 216
Triffin International Foundation 69n
Truman, E. M. 192n
Turkey
financial crisis (late 1990s) 55, 116, 143
gold reserves 42
IMF loans 143, 144, 146*t*, 154, 155*t*
IMF quotas and votes 191
World Bank 194

Ukraine 64, 144, 148*t*, 152, 159
Unified System for Regional Compensation (SUCRE) 204n
United Kingdom (UK)
Bretton Woods system 2, 6, 11, 14, 16
capital account 112, 113
collective action clauses 173, 175, 176, 227
exchange rate system 16, 21, 95–6
G5 33
G20 184
global imbalances 85, 86, 87
global reserve system 17, 23, 52, 66
gold pool 12
gold reserves 9
gold standard 4, 31
IMF loans 28, 144, 145*t*
IMF 'spillover reports' 93, 217
lend–lease arrangement 6, 112
market-reform agenda 36
North Atlantic financial crisis 92

United Kingdom (UK) (*cont.*)
Smithsonian Agreement 21
special drawing rights 61, 64
stagflation 20
US recession (1948–9), effects of 8
United Nations (UN)
Commission of Experts on Reforms of the International Monetary and Financial System *see* Stiglitz Commission
Conference on Financing for Development 47, 181, 190
Monterrey Consensus 177, 181, 189
creation 1
debt workout mechanisms 177, 179, 208, 228
Economic and Social Council (ECOSOC) 188, 189
Economic Commission for Latin America and the Caribbean (ECLAC) 33, 189n
Financing for Development process 177, 180, 228
General Assembly 172, 189
global imbalances 85n
governance 188–9, 230
United Nations Conference on Trade and Development (UNCTAD) 18, 24, 46, 72, 169, 177, 189n
United Nations Department of Economic and Social Affairs (UN-DESA) 189n
United States of America (USA)
Asian Monetary Fund 37, 203
balance of payments 78, 96
balance of trade 31, 32*f*, 79
bonds 119
Bretton Woods system 2, 5–6, 8, 11
collapse 12, 14, 17, 21, 209
capital account 109
liberalization 34, 110, 111, 112, 113, 116, 117, 125
regulation 113, 138
collective action clauses 227
as 'consumer of last resort' 33, 51
current account 31, 32*f*, 33, 50*f*, 50–2, 56, 210–11
global imbalances 76, 78, 85
debt workout mechanisms 168–9, 174, 175, 176, 227
exchange rate system 21, 22, 24–5, 32, 50, 50*f*, 76, 77, 96, 99, 103, 105, 106
fiduciary dollar standard *see* fiduciary dollar standard
Franklin National Bank of New York 114n
G5 33
G10 17
global imbalances 76, 78, 79, 82, 85, 86, 87, 216, 218n
global reserve system 17, 18, 22, 23, 24, 210–12
problems with current system 49–53, 56
reforms 65, 68, 73, 74
substitution account 73
gold pool 12
Gold Reserve Act (1934) 4
gold reserves 9, 11–12, 13
gold standard 4
governance of international financial system 181
apex organization 186
reforms 192, 194, 197, 230
regional arrangements 203
IMF conditionality 155–6
IMF quotas 39, 42
IMF 'spillover reports' 93, 217
inflation policy 30
International Clearing Union 5
International Trade Organization 1
Latin American debt crisis 37, 169
lend–lease arrangement 6, 112
macroeconomic policy cooperation 88, 89, 90, 91, 94
market-reform agenda 36
Marshall Plan 88
net investment 31, 32*f*, 86, 212, 213
North Atlantic financial crisis 40, 65, 90, 92, 113, 116, 117, 125
recessions
1948–9: 8
1954: 8
2001: 51
'reluctant dollar standard' 19–20, 30
September 11 terrorist attacks 113
Smithsonian Agreement 21
sovereign debt restructuring mechanism 38
special drawing rights 18, 24, 41, 59, 60, 61, 64, 74
reforms 213, 215
stock market crash (1987) 113
swap arrangements 161
Treasury 4, 52, 65, 173, 174, 212
Triffin dilemma 13, 32, 49–52, 210–11, 216
see also Federal Reserve
unremunerated reserve requirements (URRs) 129, 132, 133
Uruguay 147*t*, 176, 203

Végh, C. A. 57, 127
Velasco, A. 123
Venezuela 42, 61, 144, 146*t*, 204
Vietnam War 12
Volcker, Paul 30
Volz, U. 202n
Vos, R. 57

Warwick Commission 196n
Wei, S.-J. 103

Weisbrot, M. 160
Werner, A. 35n
West Africa 202
Western Europe
  capital account 109, 113
  dollar shortage 5, 8
  financial safety nets 182
  global imbalances 86
  gold reserves 9, 11
  IMF loans 144
  macroeconomic policy cooperation 88
  multilateral development banks 201
  oil shocks 20
  reconstruction after Second World War 1
White, Harry Dexter 5, 6, 111, 138
White, W. R. 122
Williamson, J. 12, 16, 19, 20n, 21, 29, 52, 69n, 72, 100, 102, 104, 106, 121, 136, 138, 156n, 209, 214, 219
Woods, N. 186, 190, 198, 199, 229n
World Bank
  conditionality 36
  coordination with the IMF 157
  creation 1
  governance 188
  reforms 185, 194–5
  regional arrangements 200, 201, 231
  loans 163, 165
  Marshall Plan 8
World Economic Outlook 92–3
World Trade Organization (WTO)
  capital account 138
  creation 1
  dispute settlement mechanism 101, 178, 179, 219, 228
  governance of international financial system 185–6, 188
World War I 4
World War II 3, 6, 9, 14, 16n
Wyplosz, C. 99n, 204n, 205

Yago, K. 2
Yu, Y. 67
Yugoslavia 168

Zedillo Commission 47, 189
Zettlemeyer, J. 168, 177n
Zhou Xiaochuan 46, 52, 68, 208
Zoellick, R. 68n
Zucman, G. 16n