THE FUTURE OF GLOBALIZATION

EXPLORATIONS IN LIGHT OF RECENT TURBULENCE

ERNESTO ZEDILLO

The Future of Globalization

Contemporary globalization has been severely jeopardized by recent turmoil. The end of the economic expansion of the 1990s, the 9/11 tragedy, and the war in Iraq have shocked the international system to an extent not seen in years. Not only have the fairness and adequacy of globalization been doubted by various parties for some time now, but lately its very irreversibility has been called into question by the sheer force of geopolitical and economic turbulence. This book considers the forces that propel globalization and the forces that resist it. Local and regional experiences from Bangladesh, China, India, Latin America, and the Middle East are analyzed, as well as some of globalization's most potent risks.

Giving voice to sophisticated and illustrative reasoning, *The Future of Globalization* offers useful insights into the extraordinary human achievement brought about by increasing international economic integration, interdependence, and interconnectedness – and shows how this has been a powerful force for the progress of humankind. The contributors take stock of the debate on globalization and explore ways to make globalization more beneficial for individuals, communities, and countries, as well as to reduce its insufficiencies and mitigate the risks it faces.

This book will benefit all students of economics, political science, and international relations, among others, and is useful for courses that focus on globalization and its impacts. The contributors include two former national heads of state – the editor, Ernesto Zedillo, and Mary Robinson – as well as a host of leading academics, including Nobel Prize winner Joseph Stiglitz, Philippe Aghion, and Jagdish Bhagwati.

Ernesto Zedillo is the Director of the Yale Center for the Study of Globalization; Professor in the Field of Economics and Politics; and Professor Adjunct of Forestry and Environmental Studies at Yale University. He was President of Mexico from 1994 to 2000.

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Edited by Ernesto Zedillo

Routledge
Taylor & Francis Group
LONDON AND NEW YORK

First published 2008 by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

Simultaneously published in the USA and Canada
by Routledge
270 Madison Ave, New York, NY 10016

This edition published in the Taylor & Francis e-Library, 2007.

"To purchase your own copy of this or any of Taylor & Francis or Routledge's collection of thousands of eBooks please go to www.eBookstore.tandf.co.uk."

Routledge is an imprint of the Taylor & Francis Group, an informa business

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloging in Publication Data
The future of globalization : explorations in light of recent turbulence /
[edited by] Ernesto Zedillo.

p. cm.

Includes bibliographical references and index.

ISBN 978-0–415–77184–9 (hardcover) — ISBN 978–0–415–77185–6 (softcover)
1. Globalization—Economic aspects. 2. International economic relations.
I. Zedillo Ponce de León, Ernesto.

HF1359.F874 2007

337—dc22

2006101853

ISBN 0-203-94652-9 Master e-book ISBN

ISBN 10: 0–415–77184–6 (hbk)
ISBN 10: 0–415–77185–4 (pbk)
ISBN 10: 0–203–94652–9 (ebk)

ISBN 13: 978–0–415–77184–9 (hbk)
ISBN 13: 978–0–415–77185–6 (pbk)
ISBN 13: 978–0–203–94652–7 (ebk)

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Preface

Globalization has been a powerful force for the prosperity of many countries throughout the world. Developed countries' present standards of living could hardly be explained without their participation in the international economy. Trade and investment and, in not just a few cases, migration have been essential parts of their success stories. More recently, a group of developing countries has made great strides in overcoming poverty by, among other policies, inserting vigorously into the global economy. As of the last decade, contemporary globalization has not only been providing greater economic opportunities but has also brought about a remarkable resilience to economic and geopolitical shocks that in the past would have proven highly disruptive of the international economy.

Globalization, however, is not an inexhaustible force. Just as with any other economic and social phenomenon, it faces risks—like major geopolitical, economic, or public health disruptions—that could challenge its growth or, worse, cause its reversal. Even if sudden disruptions do not occur, globalization can be slowed down by a failure to tackle its rough edges, such as the losses inflicted upon some people as a result of the intense competition inherent to open markets. The backlash against globalization can also become a serious problem if billions of people continue to be left on the fringes of the interdependent world.

Given its importance, globalization must be constantly studied and monitored. With this purpose, the Yale Center for the Study of Globalization periodically convenes experts to discuss various aspects of the phenomenon's evolution and challenges. One such effort was the conference *The Future of Globalization: Explorations in Light of Recent Turbulence* held at Yale University in October of 2003. This volume contains the revised papers presented at that conference.

Ernesto Zedillo

Acknowledgements

This volume is the product of a conference hosted by the Yale Center for the Study of Globalization with the goal to take stock of the debate on globalization. The conference organizers wanted not only to understand where we are in the debate, but also to explore ideas that could make globalization more beneficial for individuals, communities, and countries, as well as to reduce its insufficiencies and mitigate the risks it faces.

As the list of contributors will attest, the scholars and practitioners who accepted our invitation to participate represent some of the most thoughtful, skilful, and effective voices commenting today on globalization and topics directly relating to the process. I wish to express my thanks to all of them for the time and effort they have contributed to this volume. I especially want to thank them for undertaking this task twice, once for the original submission immediately following the conference, which was held in October of 2003, then for updating their papers to reflect recent developments as we prepare the volume in 2006 for publication. I extend thanks as well to our Yale University colleagues, Gustav Ranis, Susan Rose-Ackerman, and Christopher Udry, who served as moderators and provided valuable comments.

We were given notable encouragement and support by the World Bank, especially from David Dollar who represented the Bank in this effort. James Wolfensohn kindly agreed to my original proposal that our two organizations cooperate on this project, and Nicholas Stern, the World Bank's Chief Economist at the time, provided valuable support and guidance.

The William and Flora Hewlett Foundation and the John D. and Catherine T. MacArthur Foundation provided major funding for the conference, and for that we extend our most sincere appreciation. The Center owes special thanks also to the WEM Foundation and the Sunrise Foundation.

The volume benefited immensely from the editorial skills of Rachel Weaving, from the Center's research assistant in 2006, Aniket Shah, and from the Center's research assistants at the time of the conference, Stephen Kaplan and Poppy Alexander. We also extend our thanks to Heidi Kleedtke, who took care of all the various administrative details before, during, and after the conference.

Finally, special thanks are due to Haynie Wheeler for directing and managing the production of this volume.

Abbreviations

AFL-CIO	American Federation of Labor-Congress of Industrial Organizations
AGOA	Africa Growth and Opportunity Act
ANR	Annual Respondents' Database
APEC	Asia Pacific Economic Cooperation
ATC	Agreement on Textiles and Clothing
CEDAW	Convention for the Elimination of All Forms of Discrimination against Women
CFC	Chlorofluorocarbon
CFF	Compensatory Financing Facility
CNY	Chinese yuan
CPT	Compañía Peruana de Teléfonos
CRTA	Committee on Regional Trade Agreements
ECOSOC	United Nations Economic and Social Council
EMBIG	Global emerging bond index
EPZ	Export Processing Zone
FDI	Foreign Direct Investment
G-7	Group of Seven (Canada, France, Germany, Italy, Japan, United Kingdom, United States)
G-8	Group of Eight (Canada, France, Germany, Italy, Japan, Russia, United Kingdom, United States)
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GEF	Global Environment Facility
GSP	Generalized System of Preferences
ICT	Information and Communications Technology
IFI	International Financial Institutions
IMF	International Monetary Fund
ITO	International Trade Organization
MDGs	Millennium Development Goals
MEAs	Multilateral Environmental Agreements
MENA	Middle East and North Africa region
MFA	Multifiber Arrangement

MFN	Most Favored Nation
MTN	Multilateral Trade Negotiations
NAFTA	North American Free Trade Agreement
NAMA	Non-Agricultural Market Access
NEPAD	New Economic Partnership for African Development
NGO	non-governmental organization
OECD	Organisation for Economic Co-operation and Development
RTAs	Regional Trade Agreements
RUF	Revolutionary United Front
SDT	Special and Differential Treatment
SME	small and medium enterprises
SOE	state-owned enterprises
TBT	Agreement on Technical Barriers to Trade
TFP	total factor productivity
TNC	Trade Negotiations Committee
TRIMs	Trade-Related Investment Measures
TRIPs	Trade-Related Aspects of Intellectual Property Rights
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNITA	National Union for the Total Independence of Angola
WTO	World Trade Organization

Introduction

Ernesto Zedillo

Whether a believer or a skeptic of its benefits, many would agree that globalization is a phenomenon to be seriously studied and debated. The ways in which globalization advances, stalls, or even retrogresses in the years to come not only will decisively influence international geopolitical relations, but will also determine whether or not the process of economic convergence among all countries will be firmly set in motion in the twenty-first century.

Not long ago the emerging conventional wisdom among opinion leaders was that contemporary globalization is an irreversible process. This belief was based on the notion that globalization in our time has been driven essentially by technological progress in communications and transport—which conceivably cannot be undone by government intervention—as well as on confidence that pertinent national and multilateral institutions were sufficiently mature to manage the social and political stresses caused by the integration of global markets. If globalization was inexorable, then for individual countries and societies the only remaining question was whether to embrace it or be left out of it.

Over the last few years, a more careful look at history and the occurrence of certain events have called this view into question. Even the leading technological determinists now concede that much more than instantaneous, versatile, and low-cost communications as well as highly efficient transportation and logistics have been at play in causing the rapid pace of globalization in recent decades.[1] More credit has gone to the idea that, if certainly accelerated by technological change, globalization is crucially the result of deliberate political decisions to remove national barriers to trade and investment. If those political decisions can be reversed, it follows that globalization can be slowed down, and itself reversed, to some extent, at the discretion of political leaders.

Leaders' discretion can, in turn, be influenced by a host of factors, ranging from leaders' own particular ideologies to their pragmatic accommodation to pressures from influential interest groups and from public opinion in general. Concerns about economic and social trends, both long term and cyclical—such as unemployment, current account imbalances, and international migration—are among the other factors affecting policy makers' and societies' attitudes towards globalization. It is these factors, along with the erosion of confidence in national and international institutions to handle the strains arising from the process of economic integration, that give rise to important questions about the real strength of the globalization process.

Thus, a proper assessment of the prospects of globalization must take into account economic, social, and political trends and the tensions stemming from those trends. Some forces will propel globalization while others will resist it. Identifying and discussing a set of circumstances which may critically influence the pace of global interdependence in the foreseeable future was the purpose of a conference convened by the Yale Center for the Study of Globalization in the fall of 2003. The event brought together people from academia and the policy world to address some of the challenges, opportunities, and risks faced or posed by globalization. Admittedly, our agenda was not comprehensive. Important issues, such as those related to peace and security, were deliberately left out in order to avoid treating them too superficially at the meeting and with a view to dealing with them as standalone topics at other undertakings.[2] I take the liberty of addressing briefly in this introduction some of the issues that, if not central subjects of the papers contributed to our 2003 conference, have become increasingly critical to the question of how globalization might evolve in the future.

Main themes

The conference convened both critics and backers of globalization. Joseph Stiglitz's contribution stresses the unevenness of globalization's results. Without denying its successes, Stiglitz frankly blames globalization for the disappointing performance of regions such as Latin America and sub-Saharan Africa. As the reasons, he points to asymmetries and other weaknesses in the rules and *modus operandi* of some key instruments. He highlights the trade regime and the international financial institutions as clear examples of instruments that have contributed to the negative experiences of many developing countries with globalization, and calls for their revamping if globalization is to work better for both developed and developing countries.

Mary Robinson does not blame globalization for what she describes as a world of unspeakable poverty, repression, and injustice, but suggests a need for new thinking about almost every aspect of globalization. She advises that local, national, and international systems of governance should put respect for human rights at the top of their commitments. By doing that, Robinson submits, it will be easier to tackle thorny issues such as government accountability, HIV/AIDS, development assistance, migration, and international trade.

Citing the large number of countries that became poorer during the 1990s and the sheer number of people still living in extreme poverty in the world, Mark Malloch Brown believes that globalization as currently constituted has clearly been failing the poor. He urges the adoption of an international agenda to make globalization a friend of the poor and alleges that the way to go for this is to rally international cooperation to achieve the UN Millennium Development Goals and the WTO Doha Development agenda.

Paul Collier admits that globalization has helped to raise the income of developing countries, home to five billion people, but he argues that the world's poorest one billion people, who live in sub-Saharan Africa and a few land-locked countries elsewhere, have suffered the worst from globalization while missing the best. He asserts that Africa has globalized in a very dysfunctional way: exporting capital rather than attracting it, exporting great volumes of natural resources but little else, and becoming a base for international crime. Collier urges the international community to help Africa participate beneficially in the global economy and believes that this can be done by providing assistance for improving governance and for coping with external shocks. He maintains that to be effective such assistance should not be limited to traditional trade policy and aid programs, and does not hesitate to recommend unconventional interventions, including the use of military force, by the international community in the poorest countries if these countries are affected by conflict, insecurity, and dismal governance.

Jagdish Bhagwati deplores the opinions that ascribe social ills to globalization. For him, globalization, far from inhibiting social agendas, has advanced them in both rich and poor countries. To make his case, he takes up three of the problems—gender discrimination, poverty, and child labor—that are frequently cited as proof of globalization's drawbacks and argues that trade, via its positive effect on economic growth, has had a generally beneficial impact on each. As he expresses here and in other writings on the same subject, Bhagwati is convinced that the relevant challenge for policy basically consists of how to preserve the good effects of globalization while tackling its occasional downsides. He makes specific reference to the need to adopt adjustment assistance programs and supplementary policies to advance social agendas speedily.

The idea that enhancing international trade and investment and opening up once-protected economies are necessary but not sufficient reforms is strongly conveyed by Hernando de Soto as he explores why so many countries have failed to integrate beneficially into the global economy. De Soto's thesis is that countries fail to benefit from the global market economy because they lack the proper institutional conditions to have robust market economies at all. In other words, you cannot be a player in global capitalism if you are not, to begin with, a real capitalist. De Soto claims that in many developing countries the legal system simply does not allow most citizens to convert their work and savings into capital. The lack of formal representation and enforceable contracts impedes people from finding legal jobs, or entering into formal businesses, or even acquiring legal housing. All of this, among other consequences, confines potential entrepreneurs to very local markets that have no chance of achieving economies of scale. Large masses of people are condemned to remain in the so-called informal economy without any opportunity to be part of the more efficient and productive expanded markets. De Soto warns forcibly that unless this failure is corrected—by putting in place the institutions necessary to give title to and enforce property rights—globalization will not work for most people in the developing world.

David Dollar and co-authors also inquire how trade liberalization needs to be complemented if developing countries are to achieve faster growth. They present the results of an ambitious empirical study that shows a clear relationship between a country's investment climate and its successful integration into the international economy. A sound investment climate—measured in this study by customs clearance times, infrastructure, and financial services—does attract foreign investment and make it more likely that a country's domestic firms will export and expand their scale and scope. The importance of institutions in determining the impact of globalization on productivity and growth is also studied in the contribution by Philippe Aghion and Robin Burgess. From Indian and UK data they provide evidence that a country's domestic institutional and policy choices, such as labor regulations, strongly influence the ability of its firms and industries to benefit from trade liberalization. They also find that this ability is greater the closer a firm is to the technological frontier, and that liberalization may in fact damage the performance of those firms and industries that are initially far from the frontier, by reducing their expected payoff from investment and innovation.

The effect of globalization on people, rather than on firms, is the subject of the respective contributions by Mark Rosenzweig and Paul Schultz. Rosenzweig uses evidence from a series of household surveys from India to investigate how poverty has responded to the forces unleashed by economic openness. He focuses on the impact of openness on the wages of the poor, the incentives of the poor to upgrade their skills through formal schooling, and their ability to undertake formal schooling. Without downplaying the fact that opening an economy has conflicting effects on short-run and long-run poverty reduction, Rosenzweig's research concludes that in India such opening has led on balance to higher incomes, along with changes in the patterns of schooling investment among the poor.

Taking a different approach that uses cross-country evidence, Schultz tackles the question of trade openness and its effect on the gender gap in welfare between men and women. He finds that trade liberalization is associated with large gains in women's status, which narrow the gender gaps in life expectancy, schooling, and earnings.

The work by Juan Carlos Hallak and James Levinsohn underscores the pertinence of having other authors in this volume analyze the effects of trade openness within a microeconomic rather than a macroeconomic framework. Levinsohn and Hallak review several studies that have found a macro-empirical relationship between openness and growth, and they join other skeptics in questioning the validity of those studies based on what they consider serious econometric problems. They suggest that because the effect of trade on growth is the combined result of many policy instruments operating through various channels in particular economic environments, the typical linear-regression macro framework cannot provide any robust conclusion. Instead, these authors recommend the use of microeconomic models and evidence to inquire into the effects of trade policy, even if the answers thus provided are fundamentally conditional.

Bhagwati is also skeptical of cross-country regressions that analyze the aggregate relationship between trade and growth, but instead of microeconomic models he recommends the use of country studies. This volume includes three such studies. Heba Handoussa and Heba Abou Shnief look at the experience of the Middle East and North Africa (MENA), a region which by most measures has failed to globalize. MENA has high import protection, high export concentration in a few primary commodities, and relatively small inflows of foreign direct investment. Countries of the region also suffer from cumbersome regulatory systems, weak legal systems, and still-heavy state intervention in the economy. Handoussa and Abou Shnief believe that MENA's isolation from the global economy helps to explain its poor overall GDP growth, although they also relate this fact to the armed and political conflicts that affect the region. Moreover, they see a serious problem in the low female participation in the labor force that prevails throughout the region.

Bangladesh is still a very poor country but one that has achieved significant GDP growth and consistent improvement in its human development indicators, including poverty reduction, since the 1990s. Wahiduddin Mahmud explains this as a result not only of domestic macroeconomic reform but also of the opening of the economy to trade and foreign investment. Bangladesh's economy is still highly protected, compared with those of other dynamic developing countries, but it is much more open than it was twenty years ago. The country's integration into the global economy as a successful garment exporter has clearly helped to alleviate poverty, considering that this industry is not only labor-intensive but also employs mostly women.

The most successful case of recent globalization, China, is the subject of Fan Gang's contribution. Fan puts great emphasis on the proper sequence and coherence of reforms. He argues that without internal institutional reforms, to transform China's from a planned to a market economy, opening the economy alone would have had very adverse consequences. He also emphasizes that policies to aid the transformation into a market economy must be local and country-specific. He clearly shows, however, that liberalization of foreign trade and direct investment has been an indissoluble part of China's strategy for rapid growth. Fan warns that China's slowness in reforming its financial system and its political system may result in bottlenecks in future stages of its development. Nevertheless, he is convinced that the reason why China has thus far avoided serious financial trouble, even in the midst of the Asian crisis of 1997–98, is its decision to keep capital controls—certainly an anti-globalizing policy stance.

Padma Desai takes a similar position as a result of her analysis of the financial crises endured by East Asia (1997–98) and Latin America (2001) and the role played by the IMF in confronting those crises. Thinking about the next time the system is challenged by an episode of excessive, destabilizing, short-term capital flows from the developed to the emerging markets and then their massive reversal, Desai believes that the IMF will have two choices: one, to maintain the present arrangement of free capital flows and be destined to continue imposing fiscal austerity and intrusive conditionality, to be greeted by spectacular failures, as in Russia and Argentina; or, two, to be cast in a more cooperative and pragmatic role, allowing countries to maintain selective and market-based capital account controls. Having such selective controls, along with floating exchange-rate regimes, would provide for monetary policy autonomy and thus presumably lessen the recessionary consequences of the necessary macroeconomic adjustment.

The key question about the latter proposal is whether, in the medium and long term, having capital controls would make it harder for developing countries to access global capital markets in order to smooth their investment and consumption. The extent of developing countries' engagement in international capital markets is a central issue for the evolution of financial globalization in the years to come. Barry Eichengreen explores why developing countries have been unable to rely on international financial markets as much as would be predicted by the standard neoclassical model. He cautiously concludes that this difficulty of access is likely to continue as long as the emerging market countries lack the capacity to place bonds denominated in their own currencies in international markets—even if other circumstances play favorably to enhance those countries' access to global capital markets.

Jeffry Frieden believes that developing countries' globalization will also be critically influenced by their exchange-rate policies. The more globalized economies become, the more contentious their exchange-rate policies could come to be—a trend that is reflected in the discussion about China's exchange-rate policy that has been taking place since 2003. Frieden suggests that existing analyses of currency policy are faulty because they do not take proper account of political economy aspects. In deciding an exchange-rate regime, policy-makers confront choices and tradeoffs with various implications for different constituencies. Inevitably, politics influences these decisions, which in turn affect the pace and modalities of integration into the world economy. Frieden thus highlights another way in which politics drives globalization.

Lant Pritchett also stresses the influence of politics on the pace of globalization in his piece on international migration. He shows how, despite the mounting economic incentives for migration—the gaps between rich and poor countries in incomes and wages are larger than ever before—international migration is inhibited by opinions in the industrialized countries, which determine these countries' restrictive policies in this critical area. Pritchett suggests there is hope that these ideas will change, so as to allow what he calls irresistible economic forces to engender much-increased international migration, labor mobility, and prosperity. Migration, he suggests, could even become the fallback option, rather than aid and trade, to achieve the Millennium Development Goals.

Thinking about alternative forces that may sustain the impetus of globalization if global trade liberalization stalls is a pertinent exercise in light of T. N. Srinivasan's assessment of the Doha Round of World Trade Organization talks. Although Srinivasan claims that the difficulties encountered by the present Round are not unprecedented, and points to ways in which a solution could eventually be found, he does not shy away from considering a scenario in which the negotiations clearly collapse.

Globalization as a powerful force for progress

The Doha Round is the only concrete policy initiative that has been produced in many years to foster global integration. The substantial possibility of its failure seems somewhat paradoxical if proper consideration is given to the benefits that the integration process has brought about thus far.

Consider, for example, the performance of the world economy since the beginning of this century. If economic forecasters had been told in the middle of 2000 that the following six years would bring a resounding bust of the dot-com bubble, the 9/11 tragedy, three major regional wars, the biggest sovereign default in history (Argentina), skyrocketing prices for oil and other commodities, and huge global macroeconomic imbalances—all of which have actually happened—they would probably have forecast that by 2006 the world economy would be suffering very slow growth, or even recession, with serious inflationary pressures, much higher interest rates, and extreme volatility in financial markets, if not an outright systemic crisis.

Yet despite these shocks the general performance of the world economy has been far from dismal. After a modest slowdown in 2001–2, world GDP has been growing quite rapidly by historical standards. If the forecasts for the close of 2006 and 2007, released by the IMF in the fall of 2006, prove right, during the five-year period 2003–7 the world economy will have grown on average by 4.8 percent a year. Further, after a slight contraction in 2001, world trade has been growing on average at twice the rate of world output. And remarkably, given the price hikes of recent years in oil and other commodities, world inflation has not increased alarmingly.

Since 2003, though certainly with variance across countries, economic growth has been noticeably broad-based. Even typically underperforming regions, such as Latin America and sub-Saharan Africa, are clearly doing much better now than in most of the 1980s and 1990s.

On balance, the global economy is doing well despite the bad policies being followed by several countries, including some key ones. This is thanks to international economic integration and interdependence: in other words, globalization.

The capacity of the market economy to fulfill human needs is being enhanced to an unprecedented extent by international trade and investment. The increasing interdependence of national economies has added scale, flexibility, and productivity to the global economy. Facilitated by modern transport and communications and the elimination of trade barriers, specialization—that crucial vehicle of the market economy—has become more and more sophisticated. This is shown by the complexity and efficiency of contemporary supply chains. In today's global economy, firms and countries no longer specialize in the production of goods alone but increasingly in the finer tasks that make up the manufacturing, commercial, and financial processes, thus lowering costs, improving quality, and expanding consumers' choice.

In short, globalization is not only providing the world with greater economic opportunities but also has created a remarkable resilience to events that in the past would have proven highly disruptive.

For developed countries, of course, the story of economic integration rendering prosperity is not new. Their present standards of living could hardly be explained without their participation in, or indeed construction of, the international economy. Not even the biggest economy, that of the United States, could have been built under conditions of self-reliance. Trade and investment both inward and outward, as well as migration, have been key to its success, as they have been for the economies of other rich countries.

What is new is the role now being played by the emerging or developing economies. Practically nothing of what we have witnessed about the world economy in recent years—the good and the not so good—could be happening without the intensified integration of those countries into the global flows of trade and investment.

As a group, the emerging countries are growing three times faster than the developed countries. They produce more than half of world output, if this is measured at purchasing-power exchange rates; contribute more than 40 percent of world exports; and hold more than 70 percent of the world's foreign exchange reserves.[3]

These indicators of growth have been driven most significantly by precisely those countries that have globalized the most. Over the last two decades or so, a group of developing countries—now home to three billion people—have become significantly more open, doubling their ratio of trade to income. They have raised their per capita GDP at twice the rate of rich countries and, despite substantial increases in their populations, they have reduced both the number and the proportion of their people living in extreme poverty (World Bank 2002). Exactly how much economic integration stimulates growth is still a matter for debate. But it is a fact that in the most successful developing countries, increasing openness, economic growth, and poverty alleviation have occurred together.

Far from diminishing the rich countries' economic strength, the globalization of the developing world has provided rich countries with new markets for their products, as well as new production locations that they can use to enhance their own competitiveness in third markets through off-shoring. Advanced countries' trade with emerging countries is growing twice as fast as their trade with one another. The dynamism of emerging economies has helped to offset the dampening effect on global demand caused by the sluggishness in some of the large economies, such as those of Japan and Europe.

It is true that the explosive growth in demand triggered by the eruption of China, India, and other developing countries into the global economy has pushed up the price of oil and other commodities; 80 percent of the increase in world oil demand since 2001 has come from developing countries. Yet, lower prices of labor-intensive exports from these countries, along with the rise in productivity caused by the intensification of global competition, have helped to offset the inflationary pressures brought about by commodity price increases.

The vigorous globalization of China, India, and other developing countries has not only made world trade more dynamic but also enlarged the pool of world savings available to finance the substantial current account deficits incurred by the US. These deficits are of questionable sustainability in the medium and long term, but they have nevertheless helped to support overall demand and growth in the short term without, as yet, shaking international financial stability.

The risks to globalization

For all of these reasons, and notwithstanding its downsides and uneven results, we should recognize contemporary globalization as a powerful force that can still do much for the progress of humanity.

Unfortunately this force is not inexhaustible. Though modern globalization has so far proved stronger than the forces and events arrayed against it, there is no guarantee it will always be so. Globalization faces risks that could challenge its growth or, worse, cause its reversal. This has happened before, most dramatically in 1914 with the outbreak of World War I, which marked the beginning of the end of the extraordinary expansion in international trade, investment, and migration that took place during most of the nineteenth and early twentieth centuries (Frieden 2006). At the root of the terrible destruction of life, capital, trade, and prosperity that was suffered by the pre-baby-boom generations of the twentieth century was the inability to prevent violent conflict, added to faulty policies maintained in the face of economic adversity.

To avoid an unfortunate repetition of history, we must start by recognizing that many things could go so wrong as to break the resilience shown by globalization so far. A thorough analysis of the potential risks faced by global integration is beyond the reach of this introduction. But to make the point, a few examples should suffice.

Consider the consequences if the world were to adjust in a disruptive way to the persistent global imbalances—that is, the sizeable current account deficit in the US, matched by surpluses elsewhere, so that foreigners have accumulated an increasing share of US assets. A benign adjustment is possible, but so is a sudden interruption of the foreign demand for US assets. If that happens, a strong depreciation of the US dollar, a sharp increase in interest rates, and both faster inflation and a global recession would probably occur. If all these were to happen, a protectionist chain reaction with a serious reversal of globalization would become likely.

A global public health crisis would be another source of serious damage to international integration. A flu pandemic could have dramatic human and economic consequences with devastating effects on international trade and travel. A recent World Bank publication provides a set of scenarios on the effects of such a crisis. In one of them, a severe pandemic could cause the deaths of more than 70 million people the world over and reduce world GDP by 4.8 percent in a single year.[4]

Other imaginable catastrophes could have even worse consequences than a severe pandemic. The worst by far would be the materialization of the so-called nuclear threat. We all ought to be aware of what would follow the detonation of a nuclear weapon in any of the world's major cities. Depending on the potency of the device, the loss of life could be in the millions of people, the destruction of property in the trillions of dollars, the escalation in conflicts and violence uncontrollable, the erosion of authority and government unstoppable, and the disruption of global trade and finance unprecedented (Allison 2004).

In a long-term perspective, the risk of severe climate change should also be recognized as a threat to global stability and prosperity. As Robert Mendelsohn explains in his contribution to this volume, globalization has the potential to provide the resources for addressing the environmental problems stemming from economic growth, provided that the right policies and institutions are put in place at the pertinent local, national, and international levels. The problem is, however, that these policies and institutions have yet to be agreed and effectively adopted. This is certainly the case for controlling greenhouse emissions. As is increasingly pointed out by serious analysts (Stern 2006), the risk of environmental problems of catastrophic proportions could become significant and truly threatening to the global process of economic growth.

Even if major disruptions do not occur, globalization can still be reversed by a failure to tackle its rough edges. As various authors in this volume explain, globalization does give rise to economic and social tensions. Intense competition is inherent in markets that work properly to allocate scarce resources. It creates wealth and generates income, yielding substantial economic benefits for societies, but it can also inflict losses upon some people and some sectors. Market outcomes do cause distress in both rich and developing countries. That distress must be mitigated through efficient policy interventions, whenever socially justifiable.

Perhaps an even bigger challenge is that of inclusion. Masses and masses of people are living in abject conditions on the fringes of the interdependent world. Two billion people, including a high proportion of the world's poor, live in countries that have scant involvement in globalization (World Bank 2002). These countries, many of them in Africa, have minimal participation in world markets, exporting a few commodities and buying negligible quantities of imports. Within other developing countries, extreme poverty is found precisely in those regions and communities that contemporary globalization has left largely untouched. For example, the problem for subsistence peasants in any developing country is not that globalization has reached them, but rather the opposite; that they remain outside the market economy and marginalized from globalization.

Actions needed

So what is to be done if the globalization process is not to be exhausted, but rather is to have its benefits enhanced, sustained, and fairly spread?

The pursuit of progress and security at the global level starts with each country's individual effort. In developing countries, the primary responsibility for achieving growth and beneficial integration into the global economy lies within: these countries' leaders must have the vision and will to put in place the institutions and policies conducive to equitable development—including those that are indispensable for the evolution of the market economy. In this endeavor, the actions needed to empower the disadvantaged to participate and succeed in the market economy should be put at the top of the reform agenda. Time and again it has been shown that when people lack education; adequate training; good health; basic human, political, and property rights; security; and elementary infrastructure, they cannot take full advantage of the tremendous opportunities that the market economy presents.

For the sake of a healthy global economy from which they are the main beneficiaries, the developed countries too must keep their houses in order, not only with sound macroeconomic policies but also by helping their own people to adapt to the rigors inherent in free and open markets.

To ensure that globalization remains a positive force requires not only that countries pursue good domestic policies individually, but that they also take part in rules-based international cooperation.

The poorest countries need international cooperation to support their own efforts to achieve equitable development. As stated before, the primary responsibility is their own, but the international community—in particular its richer members, in their own interest—should help its poorest members more decisively to overcome the economic and institutional constraints that so far have frustrated their development and left them on the fringes of the global economy. Despite the rhetoric and the many formal commitments subscribed to over the years, effective international cooperation for development is still pending.

International cooperation is also indispensable to provide the global public goods that are needed to manage or dispel risks that could prove catastrophic to globalization: risks such as war and other forms of violence, nuclear proliferation, the spread of infectious disease, highly disruptive financial crises, trade protection, and severe climate change.[5] Global public goods are in short supply, and this insufficiency not only distorts and threatens the process of global integration but also undermines each country's individual efforts to procure the well-being of its citizens.

Collective action is needed to put in place solutions to global problems. The question is how to initiate, organize, and sustain this action. For good reasons, there is no such thing as a world government, and consequently voluntary action by individual countries is the only way to begin the provision of global public goods. But countries resist taking this voluntary action, because they do not want to limit their sovereignty through international agreements and also because there is always the temptation to free-ride on other countries' initiatives and efforts. In some instances, adopting coordinated schemes has been possible only through small incremental steps; in others, it has taken major human tragedies before countries have been willing to cooperate. In most cases, however, an enlightened vision and a clear sense of responsibility and leadership by one or several key players have been indispensable components in getting countries to work together for a common endeavor. It was that vision and sense of responsibility that created the multilateral system which since 1945, put simply, has supported mankind's greatest period of wealth creation.

Unfortunately, the present seems to be a time of crisis for the multilateral system. The international community has failed to prevent regional wars and other violent conflicts; the nuclear non-proliferation arrangements are at risk of collapsing; a serious attempt to reform the United Nations failed at the World Summit of 2005; the Doha Round has been close to total failure; the international financial architecture has not really been reformed; sufficient preparation for pandemic disease is lacking; and the disagreements on whether and how to tackle climate change continue to be enormous.

The reality is that the multilateral institutions have not been adapted to deal with the economic and geopolitical challenges that the international community faces in the first decade of the twenty-first century. Intergovernmental institutions suffer from lack of support and often outright animosity among their members—more conspicuously from the major powers—as well as from the general public's skepticism about their ability to perform adequately. They seem to be trapped in a vicious cycle: lack of support leads to underperformance, which in turn causes a further erosion of support. The end result is a system with little, if any, capacity to confront effectively the most significant global problems.

The cycle can only be broken if the countries that are relatively bigger and richer, and that have benefited the most from the rules-based multilateral system, recognize their responsibility to catalyze action for improving international cooperation. These countries must be the ones to move first, putting forward initiatives for enhancing cooperation and committing the necessary funding to achieve results. In this way, international leadership is likely to emerge, not as imposition or domination, but as a natural result of the assumption of responsibility. Such legitimate leadership would then serve to catalyze other states' commitment to engage in the required collective action.

This kind of process, essential for the construction of the multilateral system that prevailed during the second half of the twentieth century, has been clearly absent in the various attempts launched in recent years to revamp the structures of international cooperation. Under these conditions, the failure to reform the UN or to achieve success at the Doha Round should come as no surprise. These disappointments are a logical consequence of the lack of responsible, catalytic, and legitimate leadership by the major powers.

In support of this claim, it is useful to consider both what has troubled and what could save the Doha Round. As explained in Srinivasan's chapter, the main reason for the Doha Round breakdown is to be found in the agriculture negotiations. The major powers have resisted effective liberalization in farm trade throughout the negotiations, despite the formal commitments they made when the Round was launched. Using as an excuse the mercantilist logic of lack of reciprocal concessions—from each other and from other WTO members—rich countries have failed to agree on formulas that would effectively open their farm markets to imports and significantly reduce their most distorting farm subsidies. Up to the suspension of the talks in summer 2006, not even the sum of their best offers to broaden market access and reduce subsidies would have made agricultural markets appreciably freer. Of course, to finish the Doha Round successfully requires more than real farm reform in rich countries. Most countries, developed and developing, have adopted highly defensive positions and thus contributed to the Round's breakdown.

However, it is clear that the biggest responsibility for this failure lies within the biggest beneficiaries from the multilateral trading system: the richer countries that are now resisting serious agricultural reform. These countries should know by now that it is in their best long-term interest to complete the construction of a multilateral trading system based on the principles of reciprocity and non-discrimination, and that this construction requires a good outcome of the Doha Round.

The cost of failure is not only the income opportunities that both developed and developing countries would forgo, but more importantly the enormous losses that all will incur if the collapse leads the multilateral trading system to deteriorate so far that countries regress into a protectionist spiral. The system remains structurally vulnerable to serious erosion. It also has only a limited capacity to support the integration into the world economy of many countries that are still practically absent from global trade, despite their formal membership in the WTO.

It should be clear by now that, given the bigger and more diverse country composition of the WTO as compared to its precursor, the General Agreement on Tariffs and Trade, the pure logic of mercantilist negotiations cannot be the fundamental driver of the Doha Round. In a WTO with 150 members with diverse priorities and interests, the approach of negotiating reciprocal concessions can hardly do the job. The challenge of deepening global trade liberalization has become much less of a traditional mercantilist undertaking and much more a task of supplying a global public good—a rules-based multilateral trading system that prevents or reduces protectionism, potentially to the benefit of all of its members.

Consequently, the Doha Round will not succeed unless a few key players act to generate the kind of responsible, catalytic, and legitimate leadership described above. Such a process entails first and foremost a transparent agreement between the US and the EU to commit at last to real agricultural reform: to an ambitious reduction in trade barriers and sharp abatement of trade-distorting subsidies, without the loopholes that they have systematically pursued. Next, the US and EU should persuade Japan and the non-EU European countries to come on board with the same farm trade deal. Rich countries should also take serious steps to constitute an "aid for trade" fund to compensate the poorest countries for the trade preferences these countries would lose under a good Doha outcome, and to support those countries to improve their infrastructure and develop their export capacity. Rich countries would not need to grant farm reform and aid-for-trade unilaterally. They could make their offers conditional upon satisfactory completion of the other key issues included in the Doha Agenda. Large developing countries, for which the rich countries' farm protection has provided a perfect excuse for intransigence in the negotiations, would then find compromise inescapable.

Were the US and the EU to provide this kind of leadership, they would help bring to fruition other countries' willingness to achieve and contribute to a strong, liberal, and non-discriminatory open multilateral trading system. The consolidation of this system would give a clear signal of the commitment of the world's largest economies to globalization, not only as an instrument for economic prosperity but also for the pursuit of peace and security.

It is now well established that trade increases the prospects for peace, and that economic interdependence significantly reduces the likelihood that two states will be in conflict. It is not only bilateral trade that makes conflict less probable—openness in general has a substantial pacifying effect. The more autarkic countries have usually been the ones to pose the biggest threats to peace, and if economic interdependence declines, the prospects for conflict rise (O'Neal and Russett 2001).

The economic rationale behind these findings is straightforward: trade, by being mutually beneficial, gives each party a stake in the well-being of the other. But the rationale is not only economic. Contacts generated by trade, investment, and migration may serve to sensitize a country's people to the values, cultures, and customs of other countries. Where people believe that economic interdependence serves their own self-interest by giving them better opportunities to improve their well-being, these contacts encourage a convergence of values that reduces the risk of violent conflict. If only for this reason, globalization must be underpinned by better national policies and better global governance, so it can become a tool for the development of all, not just a portion of, humanity.

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Notes

1 Thomas Friedman, the leading technological determinist, on page 375 of his admirable book *The World is Flat*, admits that the world can get "unflattened by war, economic disruption or politics."

2 The Yale Center for the Study of Globalization held a workshop in February of 2005 on UN Reform, and its proceedings, *Reforming the United Nations for Peace and Security*, published in March, can be found at *http://www.ycsg.yale.edu/core/forms/Reforming_un.pdf*. Another important issue, climate change, was addressed in October of 2005 when the Center organized a conference, *Global Warming: Looking Beyond Kyoto*, whose presentations can be found at *http://www.ycsg.yale.edu/climate/conference_presentations.html*

3 See the excellent survey on the new role of the emerging economies in the global economy in "The New Titans: A Survey of the World Economy," *The Economist*, September 16–22, 2006.
4 In World Bank 2006, *Global Development Finance* (Table 1.7), mild, moderate, and severe scenarios of possible impacts of flu pandemic are provided.
5 This topic of global public goods is developed in the report of the International Task Force on Global Public Goods (2006), to which I contributed.

Part I

Forces that propel, forces that resist

1 Missing ingredients of globalization

Hernando de Soto

Capitalism's hour of greatest triumph is its hour of crisis. The fall of the Berlin Wall ended more than a century of political competition between capitalism and communism. Capitalism virtually stands alone as the only feasible way to rationally organize a modern economy. At this moment in history, no responsible nation has a choice. As a result, with varying degrees of enthusiasm, third world and former Soviet nations have balanced their budgets, cut subsidies, welcomed foreign investment, and dropped their tariff barriers. Unfortunately, however, their efforts have been repaid with bitter disappointment. From Russia to Venezuela, the past half-decade has been a time of economic suffering, tumbling incomes, anxiety, and resentment.

Three major obstacles keep the third world and former communist nations from benefiting from capitalism: 1) an inefficient division of labor in the local informal market; 2) an accompanying insufficient level of specialization in the expanded market; and, most notably, 3) a lack of an effective legal framework to protect property rights. Two-thirds of the world's population continues to live with these shortcomings, leaving many emerging market countries without the mechanisms needed to produce capital and enhance productivity.

The key to overcoming these inefficiencies is to address the third obstacle: the lack of a coherent, standardized property system. As I will show, an integrated formal property system, accessible to all, allows for broad specialization and division of labor throughout the economy, enabling the creation of an expanded market network and surplus capital.

Contrary to some misconceptions, the difficulties some newly capitalist countries have faced have nothing to do with so-called deficiencies in cultural or genetic heritage. Would anyone suggest "cultural" commonalities between Latin Americans and Russians, who in the last decade have shared the same political, social, and economic problems? Rather, successful capital formation depends upon developing strong domestic institutions—principally a sound legal framework and a comprehensive property right system—to create economic value. Developing and former Soviet countries possess enormous economic resources—which my colleagues and I at the Institute for Liberty and Democracy estimate at US$9.3 trillion of dead capital—but they lack the institutional development needed to unlock the invisible potential of these assets. Until the mechanisms to tap these substantial resources are in place, globalization will remain inequitable and the economic reforms underway will open doors only for small and globalized elites, leaving out most of humanity.

This state of affairs is relatively easy to correct, provided that governments are willing to legally integrate the informal sector into the broader economy and to allow the majority of developing countries' citizens to convert their work and savings into capital. Ultimately, the key to addressing the three obstacles rests upon the creation of formal representation through standardized property arrangements and enforceable contracts. This process allows people to lose their anonymity and specialize in the broader economic system—which, in turn, boosts productivity. Similarly, formal representation of property rights fosters the creation of capital and allows the developing world to tap its vast hidden resources. In this regard, an integrated property system would provide the mechanisms needed for actors in the extralegal system to legally fix the economic potential of their assets so that these can be used to produce, secure, or guarantee greater value in the expanded market.

The extralegal sector

The extralegal sector is omnipresent in developing and former Soviet countries. Walk down most streets and you are bound to bump into extralegal shops, currency exchange, transport, and other services. Even many books for sale have been printed extralegally. Entire neighborhoods have been acquired, developed, and built on the fringes of, or in direct contravention of, government regulations. Throughout Latin America, my colleagues at the Institute for Liberty and Democracy have found that at least six out of eight buildings are in the informal, undercapitalized sector and that 80 percent of all real estate is held outside the law. According to most estimates, the extralegal sectors in the developing world account for 50 to 75 percent of all working people and are responsible for between one-fifth and two-thirds of the total economic output. By 2015, more than fifty cities in developing countries will have five million or more people, with most living and working extralegally.

Extralegality is rarely antisocial in intent. The "crimes" extralegals commit are designed to achieve such ordinary goals as building a house, providing a service, or developing a business. Far from being the cause of disarray, living outside the law is the only way settlers have to regulate their lives and transactions. Informal sectors throughout the third world and in former Soviet countries buzz with hard work and ingenuity. Street-side cottage industries have sprung up everywhere, manufacturing anything from clothing and footwear to watches and handbags. There are workshops that build and rebuild machinery, cars, even buses. The new urban poor have created entire industries and neighborhoods that have to operate on clandestine connections to electricity and water. There are even dentists who fill cavities without a license.

Above all, contrary to their lawless image, people who engage in extralegal activity share the desire of members of civil society to lead peaceful, productive lives. Unfortunately, a number of obstacles prevent them from leading such lives.

The first obstacle: an inefficient division of labor locally

Economic specialization—the division of labor and the subsequent exchange of products in the market—is the source of increasing productivity and therefore "the wealth of nations," according to the great classical economist Adam Smith. Smith employed his well-known pin factory example to highlight the productivity benefits of the division of labor. In this example, under normal circumstances, a single pin-maker cannot hope to make more than twenty pins in one day. However, when labor in the pin factory is distributed appropriately among a team of specialized laborers (one person buys the wire, another straightens it, and yet another hammers a head on each wire) those workers can make upwards of 48,000 pins in a day.

Aristotle earlier put forth a similar point. For Athens, he observed that the key source of production was the division of labor, enabling industry to succeed in the city relative to the surrounding provinces. For instance, when making sandals in the city, workers would specialize in the various stages of production: one would cut the leather, another would stitch it, and yet another would sew the pieces together into their final form. In contrast, there was no division of labor in the provinces. The same worker who built a window was the one who built your chair; the same person who built your door was the one who supplied your shoes. The lack of division of labor in the provinces impeded productivity relative to the more specialized Athens.

Today, a key constraint on distributing labor effectively and increasing productivity in developing countries is the lack of formal representation and enforceable contracts in the sizeable informal sector, where the majority of new employment takes place. Since 1990, according to the International Labor Organization, more than 85 percent of the new jobs in Latin America and the Caribbean have been created in the extralegal sector.

Unfortunately, without established law, extralegal businesses in the developing world can deal only with people they know and trust, such as family members or people from the local community. Seventy to eighty percent of the population in developing countries and even the former Soviet Union actually work in small to medium-sized family-organized enterprises. Such businesses have some key shortcomings that hinder their opportunities to divide labor adequately and reap the rewards of specialization. First, their size is limited by the size of the local family or community. Second, the constraint of selecting workers from only the local community inhibits a firm's capacity to seek out workers with specialized skills. Accordingly, without the proper division of labor, businesses in the extralegal sector do not reach the productivity required to produce 48,000 pins, or for that matter, to compete with larger firms on either the national or the international level.

This contrasts sharply with firms in the developed world. These businesses are able to hire specialists from a market of anonymous people because the legal system adequately protects the interests of the firm, through limited liability and clear rules that safeguard assets and innovation. The legal system in developed countries thus promotes specialization across the broader economy. Indeed, as Adam Smith pointed out, the wider the market, the more minute the division of labor can be. And, as labor grows more specialized, the economy grows more efficient and productive, and wages and capital value rise. In many developing countries, by contrast, a legal failure that prevents enterprising people from negotiating with strangers defeats the division of labor and confines would-be entrepreneurs to small circles of specialization and low productivity.

The second obstacle: insufficient specialization in the broader market

The lack of division of labor locally thus inhibits specialization in the broader economy. Unfortunately, until citizens in the informal sector are able to participate in the broader national economy, overall developing country performance will remain lackluster, unable to gain from the productivity benefits of a large, specialized labor force. The key, as alluded to earlier, is to incorporate these extralegals into the national and global economy by giving them legal definition and formal representation. Here I will focus on how legal definition can overcome the second obstacle, the lack of broad market specialization.

Most of the developing world today lives outside the law because poorer countries lack the institutions to integrate extralegal citizens into the formal sector, fix their assets into fungible forms, make their owners accountable agents, and provide them with connecting and leveraging devices to allow them to interface productively and generate capital within a larger market.

Accordingly, people living in the informal sector develop a variety of extralegal arrangements to substitute for the laws and institutions they need to cooperate in an expanded market. These arrangements represent combinations of rules selectively borrowed from the official legal system, *ad hoc* improvisations, and locally devised customs, and they are held together by a social contract supported by the community as a whole and enforced by authorities the community has selected. While this allows extralegals to transact business with clarity in their local communities and villages, they lack the legal description, and thus identity, to transact more broadly in the national economy. Essentially, they are not in a position to specialize in a market of anonymous people.

For example, when I arrived in the United States from Peru this past month, the customs officer asked me to identify myself. I replied, "I am the son of Alberto Soto de la Jara who comes from Arequipa in southern Peru." The officer countered with a steely, aggressive stare. I then listed the people I know in the United States, including former President Bill Clinton and Governor Arnold Schwarzenegger, but the officer still glared at me coldly. Finally, he said "Your passport." I handed it to him and he suddenly smiled warmly since he now could identify me. Bertrand Russell, the British philosopher, described this phenomenon. He said there are two types of knowledge in the world: knowledge by acquaintance and knowledge by description. All truth, however, is in description. In this particular case, I only became connected with the broader world, outside of my community of acquaintances, once I presented the customs official with my legal description, or passport.

The problem I faced before I presented my passport to the customs official is the problem confronted by most of the developing world today: a lack of legal definition. Globalization will not work for the majority of people in the developing world until they are able to enter this broader, legal web of anonymous people. Without legal clarity, there is no possibility of exchange in the expanded market, and, therefore, there is no possibility of getting credit. Credit is derived from the Latin *credere*, which means "to believe". People are likely to believe, or have faith, in the good standing of their local acquaintances. But they are unlikely to have faith in the good standing of an anonymous person unless they are presented with some type of legal accountability.

The costs to remaining outside the law are therefore significant. Without formal institutions and laws, people lack incentives to seize economic and social opportunities to specialize within the broader marketplace. It is tremendously difficult for them to acquire legal housing, enter formal business, or find a legal job. Indeed, people who do not operate inside the law cannot hold property efficiently or enforce contracts through the courts, nor can they reduce uncertainty through limited liability systems and insurance policies or create stock companies to attract additional capital and share risk. Being unable to raise money for investment, they cannot achieve economies of scale or protect their innovations through royalties and patents.

Common standards in one body of law are thus necessary to create a modern market economy. Most of the world is a world without enforceable statements, and is based on localized beliefs, rather than facts. Localized beliefs work well if you are living and transacting business in a village where everyone else knows your identity, but not in the broader national and global context. Without enforceable statements, there is no liquidity and there is no possibility of separating family from business. Moreover, the lack of enforceable statements restricts interaction not only between the legal and extralegal sectors but also among the poor themselves. In this scenario, extralegal communities do interact with each other, but only with great difficulty. They are like flotillas of ships that remain in formation by navigating with reference to each other rather than to some common and objective standard, such as the stars or a magnetic compass.

Standard representations through enforceable statements can overcome these problems by enabling a web of connections between strangers. Legal representations allow people to lose their anonymity, trust one another, and transact and specialize in the broader economic system. This, in turn, boosts productivity and allows developing societies to overcome the first two obstacles to benefiting from capitalism: the lack of a division of labor locally and the ability to specialize in the broader economy. Additionally, formal representation of property rights fosters the creation of capital and allows the developing world to tap its vast hidden resources, as we will now explore.

The untapped resources in the developing world

Many people in developing countries hold resources in defective forms: houses built on land where ownership rights are not adequately recorded, unincorporated businesses with undefined liability, industries located where financiers and investors cannot see them. Because the rights to these possessions are not adequately documented, these assets cannot be readily transformed into capital, cannot be traded outside of narrow circles where people know and trust each other, cannot be used as collateral for a loan, and cannot be used as a share against an investment.

This defective or dead capital, virtual mountains of it, lines the streets of every developing and former Soviet country. In the Philippines, by our calculation, 57 percent of city dwellers and 67 percent of people in the countryside live in housing that is dead capital. In Peru, 53 percent of city dwellers and 81 percent of people in the countryside live in extralegal dwellings. These figures are even more dramatic in Haiti and Egypt. In Haiti, according to our surveys, 68 percent of city dwellers and 97 percent of people in the countryside live in housing to which nobody has clear legal title. In Egypt, dead-capital housing is home to 92 percent of city dwellers and 83 percent of people in the countryside.

To the outside observer, the extralegal settlements that people inhabit may look like slums, but they are quite different from the inner-city slums of advanced nations. The latter consist of once-decent buildings falling apart from neglect and poverty. In the developing world, the basic shelters of the poor are likely to be improved, built up, and progressively gentrified. Whereas the houses of the poor in advanced nations lose value over time, the buildings in the poor settlements of the developing world become more valuable, evolving within decades into the equivalent of working-class communities in the West.

Indeed, in every country that my colleagues and I examined, the entrepreneurial ingenuity of the poor has created wealth on a vast scale—wealth that, in aggregate, also constitutes by far the largest source of potential capital for development. According to the data that my research team and I collected, block by block and farm by farm in Asia, Africa, the Middle East, and Latin America, most of the poor already possess the assets they need to make a success of capitalism.

By our calculations, the total value of the real estate held but not legally owned by the poor of the third world and former Soviet nations is at least US$9.3 trillion. This is a number worth pondering. It is about twice as much as the total circulating US money supply. It is very nearly as much as the total value of all companies listed on the stock exchanges of the world's twenty most developed countries. It is more than twenty times the total foreign direct investment into all third world and former Soviet countries in the decade of the 1990s, forty-six times as much as all the World Bank loans of the past three decades, and ninety-three times as much as all development assistance from all advanced countries to the third world in the same period.

In the years after the American Civil War, a lecturer named Russell Conwell crisscrossed the United States delivering a message that stirred millions of people. He told the story of an Indian merchant who had been promised by a prophet that he would surely become rich beyond all imagining if only he would seek his treasure. The merchant traveled the world only to return home old, sad, and defeated. As he re-entered his abandoned house, he needed a drink of water. But the well on his property had silted up. Wearily, he took out his spade and dug a new one—and instantly struck the Golconda, the world's greatest diamond mine.

Conwell's message is a useful one. Leaders of the third world and former Soviet nations need not wander the world's foreign ministries and international financial institutions seeking their fortune. In the midst of the poorest neighborhoods and shantytowns, there are—if not acres of diamonds—trillions of dollars, all ready to be put to use if only the mystery can be unraveled of how assets can be transformed into live capital.

The major obstacle to capital creation: the lack of a property rights system

What is it that fixes the potential of an asset so that it can put additional production into motion? What detaches value from a simple house and fixes it in a way that allows it to realize capital?

We can begin to find an answer by using an energy analogy. Consider a mountain lake. We can think about this lake in its immediate physical context and see some primary uses for it, such as canoeing and fishing. But when we think about the lake as an engineer would, by focusing on its capacity to generate electrical energy by means of a hydroelectric plant (as an additional value beyond the lake's natural state as a body of water), we suddenly see the potential created by the lake's elevated position. The challenge for the engineer is to convert and fix this potential into a form that can be used to do additional work.

Capital, like energy, is a dormant value. Bringing it to life requires us to go beyond looking at our assets as they are and think actively about them as they could be. It requires a process of fixing an asset's economic potential into a form that can be used to initiate additional production. Although the process that converts potential energy in the water into electricity is well known, the one that gives assets the form required to engender more production is not known. This is so because the key process was not deliberately set up to create capital but for the more mundane purpose of protecting property ownership. As the property systems of Western nations grew, they developed, imperceptibly, a variety of mechanisms that gradually combined into a process that churned out capital as never before.

In the West, this formal property system processes assets into capital by describing and organizing the most economically and socially useful aspects about assets, preserving this information in a recording system—as insertions in a written ledger or a blip on a computer disk—and embodying it in a title of ownership. A set of detailed and precise legal rules governs the entire process. The rules capture and organize the relevant information required to conceptualize the potential value of an asset and, accordingly, allow the holder of the asset to release the asset's potential.

Consequently, any asset whose economic and social aspects are not fixed in a formal property system is extremely hard to move to market. How can the huge amounts of assets changing hands in a modern market economy be controlled, if not through a formal property process? Without such a system, any trade of an asset, say a piece of real estate, requires an enormous effort just to determine the basics of the transaction. Does the seller own the real estate and have the right to transfer it? Can he pledge it? Will the new owner be accepted as such by those who enforce property rights? What are the effective means to exclude other claimants?

In developing and former communist nations, such questions are difficult to answer. For most goods, there is no place where the answers are reliably fixed. That is why the sale or lease of a house may involve lengthy and cumbersome procedures of approval involving all the neighbors, since this is often the only way to verify that the owner actually owns the house and there are no other claims on it. It is also why the exchange of most assets outside the West is restricted to local circles of trading partners.

Developing and former Soviet countries' principal problem is clearly not the lack of entrepreneurship: the poor have accumulated trillions of dollars of real estate during the past forty years. What the poor lack is easy access to the property mechanisms that could legally fix the economic potential of their assets so the assets can be used to produce, secure, or guarantee greater value in the expanded market.

Without an integrated formal property system, a modern market economy is inconceivable. Had the advanced nations of the West not integrated all legal representations into one standardized property system and made it accessible to all, they could not have specialized and divided labor to create the expanded market network and capital that produced their present wealth. The inefficiencies of non-Western markets have a lot to do with the fragmentation of their property arrangements and the unavailability of legal representations.

The secret to overcoming the three obstacles: legal incorporation

The lack of a formal property system inhibits the poor and lower middle class in the third world from using their assets in the same way as wealthier citizens. One of the biggest political challenges is to bring those assets from the "extra-legal" sector into a more inclusive property system in which they can become more productive and generate capital for their owners. With titles, shares, and property laws, people could suddenly go beyond looking at their assets in their physical state (such as houses used for shelter) to thinking about what these assets can become when they transcend their physical state (such as security to start a business).

Capital is born by representing in writing—in an ownership title, a security, a contract, and other such records—the most economically and socially useful qualities about the asset as opposed to its visually more striking aspects. This is where potential value is first described and registered. The moment you focus your attention on the title to a house, for example, and not on the house itself, you have automatically stepped from the material world into the conceptual world where capital lives. You are reading a representation that focuses your attention on the economic potential of the house by filtering out all of the confusing lights and shadows of its physical aspects and its local surroundings. Formal property rights force you to think about the house as an economic and social concept. This invites you to go beyond viewing the house as mere shelter—and thus as a dead asset—and to see it as live capital.

In advanced nations, formal property arrangements function as the means to secure the interests of other parties and create accountability by providing all the required information, references, rules, and enforcement mechanisms. In the West, for example, most formal property can be easily used as collateral for a loan; as equity exchanged for investment; as an address for collecting debts, rates, and taxes; as a locus for identifying individuals for commercial, judicial, or civic purposes; and as a terminal for receiving public services such as energy, water, sewerage, telephone, or cable services. While houses in advanced nations are acting as shelters or workplaces, their representations lead a parallel life, carrying out a variety of additional functions to secure the interests of other parties. Legal property thus gave the West the tools to produce surplus value over and above its physical assets.

Third world governments have already proved that they can reform bad property arrangements, at least for the rich. In 1990, for example, the Compañía Peruana de Teléfonos (CPT) was valued on the Lima stock exchange at US$53 million. The Peruvian government, however, could not sell CPT to foreign investors because of problems with the company's title to many of its assets. The Peruvians put together a hotshot legal team to create a legal title that would meet the standardized property norms required by the global economy. Documents were rewritten to secure the interests of third parties and create the confidence that would allow for credit and investment.

The legal team also created enforceable rules for settling property disputes, bypassing the dilatory and corruption-prone Peruvian courts. Three years later, CPT entered the world of liquid capital and was sold for US$2 billion—thirty-seven times its previous market valuation.

The Peruvians did not repair the broken windows, put a new coat of paint on the building, or even mow the lawn. They simply created a legal title for the company. Suddenly, potential buyers knew that the company could not only make telephone calls but also possessed the rights to satellites and future inventions regarding telecommunications. The company could also now be used to guarantee the issue of bonds and be sold as shares. Creating clear property rights raised the company's price thirty-seven times. A good property system provides the mechanism for capital formation by overcoming the third obstacle to creating a more equitable capitalist system—a deficiency in property rights.

The creation of a standardized property system also allows people to overcome the first two obstacles: the lack of a division of labor and the ability to specialize in the broader economy. An integrated property system replaces extralegal arrangements, which cover only local communities, with a broader, integrated legal system. This system, in turn, transfers the ability to enforce obligations from extralegal groups to the government, thereby providing incentives for people to seize economic and social opportunities and specialize within the broader marketplace.

Indeed, a broad integrated legal system creates a web of connections between strangers by giving people legal definition and enabling them to conduct business outside of their local communities. People no longer need to rely on neighborhood relationships or make local arrangements to protect their rights. With broad legal representation, people lose their anonymity, and are able to trust and transact with people who would otherwise be strangers. Under such a system, it is significantly easier for people to enter formal business, find a legal job, or get credit or insurance. The reason for this is that along with the loss of anonymity comes accountability. By becoming inextricably linked to real estate and businesses that can easily be identified and located, people surrender their ability to lose themselves in the masses. Additionally, because citizens now have formal property, which can be forfeited should they fail to act honorably, they are taken seriously as contracting partners outside of their immediate families and neighbors.

The creation of a formal property system: follow the US road map

The first major challenge that developing country governments and former communist nations face in creating formal property arrangements is to determine what the poor really own so that their assets can be legally titled and the potential capital trapped inside can be released. Nine years ago, I was invited by the Indonesian Cabinet to offer advice on identifying the assets of the

90 percent of Indonesians living in the extralegal sector. I was no expert on Indonesia, but as I strolled through the rice fields of Bali, a different dog would bark as I entered a different property. The dogs did not have to graduate from law school to know which assets their masters controlled. To determine who owned what, I advised the Cabinet to begin by "listening to the barking dogs." One of the ministers responded, "Ah, *jukum adat*—the people's law."

The history of capitalism in the West is a story of how governments adapted the "people's law" into uniform rules and codes. Ownership represented by dogs, fences, and armed guards is now represented by records, titles, and shares. Indeed, Western history provides a great example of how to make the transition from dispersed, informal arrangements to an integrated legal property system.

The crucial feature of the transition to a formal property system in the West was the adaptation of the law to the social and economic needs of the majority of the population. Gradually, Western nations became able to acknowledge that social contracts born in the extralegal sector were a legitimate source of law, and found ways to absorb these contracts into law. Law was thus made to serve popular capital formation and economic growth. This is what gives the present property institutions in the West their vitality. The various histories of property in Western Europe, Japan, and the United States all have something useful to say about the present concerns of developing and former Soviet countries. In each country, apparent lawlessness was not really about crime but a collision between rule-making at the grassroots level and rule-making at the top. The revolution in each case involved the gradual merging of both systems.

Detailed histories of all these countries would be too much for this chapter. I therefore focus on the United States because, more than 150 years ago, it too was a third world country. The governments and judiciary of the young states, not yet completely legally united, were trying to cope with the law and disorder of the migrants, squatters, gold diggers, armed gangs, illegal entrepreneurs, and the rest of the colorful characters who made the settling of the American West so wild and, if only in hindsight, so romantic. To a third worlder like me, this picture of the gringo past is astonishingly familiar.

Like third world authorities today, American governments tried to stem the exponential increase of squatters and extralegal arrangements; but unlike third world authorities, they eventually conceded that, in the words of one US congressman, "the land system is virtually broken down . . . and instead of legislating for them, we are to legislate after them in full pursuit to the Rocky Mountains or the Pacific Ocean." In other words, what US politicians eventually learned, as Francis Philbrick put it, was that the "forces that change the law in other than trivial ways lie outside it."

For example, even the celebrated Homestead Act of 1862, which entitled settlers to 160 acres of free land simply for agreeing to live on and develop it, was less an official act of generosity than the recognition of a *fait accompli*: Americans had been settling—and improving—the land extralegally right from the start. Their politicians gradually modified the law to integrate this reality into the official legal system, and won some political points in the bargain. By accommodating the existing extralegal arrangements of the settlers, formal law legitimized itself, becoming the rule for most people in the United States rather than the exception. By formalizing property rights, US officials also left the assets of American settlers and miners primed to be converted into capital.

Incorporating local reality into the broader legal framework was a trend that began early in US history, as demonstrated by colonial pre-emption laws. Although early migrants were mainly British subjects and obeyed English law, once they moved to America—a different reality—the way they related to each other began to change. In England, occupying a plot of land for a long period without title—"squatting"—was against the law. Even if someone mistakenly squatted on another person's land and made improvements, he could not recover the value of his contributions. In contrast, in the United States, with no initial resistance and many opportunities, squatting on available land quickly became a common practice. And given the lack of effective government and reliable records and surveys, authorities had to accept that improvements made on land, taxes paid, and local arrangements among neighbors were also acceptable sources of property rights. As early as 1642, the Colony of Virginia allowed a wrongful possessor to recover the value of any improvements from the true owner. Moreover, if the rightful owner was unwilling to reimburse the squatter for these improvements, the squatter could purchase the land at a price set by a local jury. This statute was soon copied by other colonies. This legal innovation of allowing a settler to buy the land he had improved before it was offered for public sale was known as "pre-emption"—a principle that would be key to the integration of extralegal property arrangements in American law over the next 200 years.

The lesson: structure a property system on existing social contracts

As in these two examples from United States history, the challenge of capitalizing the poor in the third world and former Soviet countries is at bottom a political challenge that has to be addressed using legal tools. The recognition of extralegal property rights was a key element in the process of the United States becoming the most important market economy and producer of capital in the world. The Americans, not always eagerly or consciously, gradually legitimized extralegal property right norms and arrangements created by the poorest Americans and integrated them into the law of the land. From colonial times to the early nineteenth century, information about property and the rules that governed it was dispersed, atomized, and unconnected. It was available in rudimentary ledgers, personal notes, informal constitutions, district regulations, or oral testimony in every farm, urban settlement, or mine. As in developing and former Soviet countries today, most of the information related only to the local community and was not available within any network of systematized representations. Though American officials probably did not intend or realize this, when they constructed national laws such as pre-emption and the Homestead Act they were creating representational forms that integrated all this loose and isolated property data into a new formal property system.

Throughout the nineteenth and the beginning of the twentieth century, the US government continued to create mechanisms that recognized the role of pioneers in staking out land claims, even though the country initially had no legal framework for these claims. Instead of keeping to the British tradition, which accepted that the king and judges made law, the US government accepted that people at the grassroots had their own ways of settling many property issues and had effectively built local social contracts. As a result, an effective working nationwide property system was set up, with its roots in the extralegal arrangements created by grassroots Americans.

The obstacle for developing and former Soviet countries, as we learned earlier, is that they lack mechanisms similar to the US pre-emption acts. Rather than recognizing existing local conventions among common people regarding land and assets, these countries have imported legal systems from the Western world that are rooted in Western historical realities and contexts. For laws on property to be successful, they must reflect what people believe; they must be based on existing social contracts so that people obey them, and they thus become enforceable. Otherwise, the laws simply strengthen the paper rights of those people who have political power or privileged access to the judicial system versus the rights of the people who actually own the land and whose ownership is generally respected.

This is not to say that developing and former Soviet nations should slavishly imitate the US transition; the US experience had plenty of negative consequences that they should be careful to avoid. But there is much to learn. The primary lesson is that pretending extralegal arrangements do not exist, or trying to stamp them out, without a strategy to channel them into the legal sector, is a fool's errand.

Efforts to create a property revolution in the third world and former Soviet countries will face their own unique requirements, obstacles, and opportunities. They must contend with other ongoing revolutions in communications, information technology, and rapid urbanization. But the basic situation is the same. Today, in many developing and former Soviet nations, property law is no longer relevant to how the majority of people lives and works. How can a legal system aspire to legitimacy if it cuts out 80 percent of the people? The challenge is to correct this legal failure. The American experience shows that this is a threefold task: we must find the real social contracts on property, integrate them into the official law, and craft a political strategy that makes reform possible. Ultimately, the creation of such a comprehensive legal property framework will serve as a key mechanism for converting people's physical assets into capital.

Conclusion

Capitalism is in crisis outside the West because developing and former Soviet nations have been unable to "globalize" capital within their countries. Most people in these nations view capitalism as a private club, a discriminatory system that benefits only the West and the elites of poor countries. We may now all be benefiting from the communications revolution, and some may see progress in the fact that the Egyptian Sphinx now stares directly at the neon sign of a Kentucky Fried Chicken franchise. Nevertheless, only 25 of the world's 200 countries produce enough capital to benefit fully from the division of labor in expanded global markets. The lifeblood of capitalism is not the Internet or fast-food franchises. It is capital. Only capital provides the means to support specialization and the production and exchange of assets in the expanded market. It is capital that is the source of increasing productivity and thus the wealth of nations.

Only the Western nations and small enclaves of wealthy people in developing countries have the capacity to represent assets and their potential, and therefore the ability to produce and use capital efficiently. The major obstacle confronting the developing world is that most of its citizens lack the legal representation provided by a formal property system. Eighty percent of the population in these countries cannot inject life into their assets and make them generate capital because the law keeps them out of the formal property system. So long as the assets of the majority are not properly documented and tracked, they will remain stuck in the extralegal sector and be invisible in the broader marketplace.

This obstacle can be overcome, provided that governments are willing to legally integrate the informal sector into the broader economy through a formal property rights system. This would allow the majority of developing countries' citizens to convert their work and vast hidden resources into capital. It would also provide extralegal citizens with legal representation, enabling them to overcome the first two obstacles to capital development: the lack of a division of labor and the lack of ability to specialize in the broader economy. By transferring the ability to enforce obligations from extralegal groups to the government, it would provide incentives for people to seize economic and social opportunities outside of their immediate local community, and specialize instead within the broader marketplace.

Unfortunately, many of the current promoters of capitalism fail to realize that their macroeconomic reforms are not enough. Drafting regulatory frameworks, enhancing international trade and investment, and opening up once-protected economies are necessary reforms, but they are not sufficient. Many macroeconomic reform programs wrongly assume that populations are already integrated into the legal system and have the same ability to use their resources in the open market as do populations in the West. Economic reformers have left the issue of property for the poor in the hands of conservative legal establishments uninterested in changing the status quo. As a result, the assets of the majority have remained dead capital stuck in the extralegal sector.

Many economic reform programs may be falling into the same trap that Karl Marx foresaw, but on a global scale: the great contradiction of the capitalism system is that if too much capital is concentrated in one sector, the rest of the system is at risk of collapse. By not giving the majority access to expanded markets, these reforms are leaving a fertile field for class confrontation—a capitalist and free market economy for the privileged few who can concretize their property rights, and relative poverty for a large undercapitalized sector incapable of leveraging its own assets.

The problem remains of how we settle the disparities that come with the benefits of capitalism and globalization. Ultimately, the missing ingredient and the key to overcoming the shortcomings and inequities of capitalism is to give everybody access to the same legal instruments that allow for the creation of surplus economic value.

2 Globalization with a human face

Jagdish Bhagwati

Given the noise made by vast numbers of anti-globalizers, most politicians can be forgiven for thinking that globalization imperils our economic well-being and—what is far more troubling—the social agendas that we value.[1] Thus, Prime Minister Tony Blair, former President Bill Clinton, and Chancellor Gerhard Schroeder, the social-democratic proponents of the "Third Way," lament economic globalization, even as they pursue it, as a phenomenon that "needs a human face." Of course, if it needs one, it lacks one. And the former President of Ireland, Mrs Mary Robinson, having finished her term as UN Commissioner for Human Rights, seeks an "ethical globalization," implying that globalization is not ethical.

Indeed, in anti-globalization circles, there is a general tendency to blame economic globalization for all shortfalls in social agendas. Many reports from international agencies observe that globalization has increased, that social ills such as poverty exist or have increased, and that therefore the former is the cause of the latter. But, like Tina Turner's famous song, "What's love got to do with it?," we must ask: What has globalization got to do with it?

The contrary view, which I develop and defend in my book *In Defense of Globalization* (Bhagwati 2004, 2007),[2] is that economic globalization *has* a human face. It advances, instead of inhibiting, the achievement of social agendas as wide-ranging as the promotion of gender equality worldwide, increased prosperity in poor countries and not just in rich, reduction of poverty in poor countries, and shifting of children out of work into school in the poor countries. Besides, the fears expressed in rich countries about economic globalization—especially that it reduces the real wages of workers and reduces labor standards because of a "race to the bottom"—are seriously exaggerated, if they are valid at all.

The choice between these two assessments of economic globalization is a matter of the utmost importance, because it has immediate implications for what I call "appropriate governance." If you believe that globalization lacks a human face, then appropriate governance will encourage policy interventions to restrain globalization. Witness the last presidential campaign in the United States, when fears over the allegedly adverse effects on American workers from the outsourcing of services (clearly a "social" issue) led the

Democratic presidential aspirants to embrace protectionist policies to tax or prohibit the outsourcing of services by firms that Senator Kerry of Massachusetts characterized as traitors.[3] But if you believe, as I now do, that globalization has a human face, then you will want very different policy interventions: ones that preserve and celebrate the good effects that globalization generally brings and that supplement the good outcomes but address the occasional downsides of this phenomenon.

This contrast is best seen in relation to child labor in poor countries. If globalization raises the incomes of parents, will parents then send their children to work more? Or will they send them to work less, because they can now afford to send them to school instead? If the former, then clearly globalization creates a tradeoff between increased prosperity and the reduction of child labor, and policies that inhibit globalization become sensible. But if the latter, then we are likely to ask: what can we do to *accelerate* the pace at which globalization will reduce child labor?

Globalization's human face: examples

Many areas of concern could be addressed under this heading, and are dealt with in my just-cited book. Here, I draw on three issues that are in the public eye.

Gender issues

Feminist groups have often argued that economic globalization harms women's interests. But the reality is far more complex and often benign. Consider just a few examples.[4]

First, on the subject of gender pay equality, the economists Black and Brainerd (2002) use Becker's argument that prejudice exacts a price. They hypothesize that, if men are rewarded with higher pay than equally qualified and productive women, men's employers will be crowded out by competition. Hence, in industries that trade internationally, where competition has become particularly fierce, you would expect pay inequality to shrink faster than in other industries. They find that the US experience over two recent decades supports this hypothesis. So, globalization in the form of trade advances women's cause, instead of hurting it.

Second, Japanese women have traditionally faced a very low glass ceiling. So, when the Japanese multinationals spread out over the globe in the 1980s and early 1990s, they took men in executive positions to New York, London, or Paris. But wives went with their husbands, and saw how women were treated by husbands in the West. So they became forces for change on their return, as did their children.

Third, the argument advanced by some feminists that the conditionality imposed by the International Monetary Fund (IMF) is prejudicial to women is false, because it puts up the wrong counterfactual. Economies come to the

IMF when in distress; without IMF assistance, these countries would need to make yet more of the draconian adjustments that the feminist groups say are harmful to women. IMF assistance softens these adjustments.

Poverty in poor countries

Does economic globalization, in the form of trade and flows of multinational investment, harm the cause of ameliorating poverty in the poor countries? Postwar experience shows the answer is a firm "No". The argument that trade, in particular, helps reduce poverty proceeds in two steps: first, that trade leads to growth, and second, that growth reduces poverty. The evidence in favor of both steps is overwhelming.

First, does trade always lead to growth? Evidently not. The response to an opportunity may be limited because of domestic constraints, so that the elasticity of response and the possibility of gaining from the opportunity may be small. Sometimes—and nothing can necessarily be ruled out—trade may even reduce growth and (theoretically in cases I analyzed in the 1960s) one's own accumulation may be paradoxically immiserizing.[5]

Even though trade may not always lead to better outcomes, it is generally a source of opportunity that, when seized, will likely lead to greater growth. Critics who think that by citing some exceptions they have controverted the argument that trade leads to increased prosperity are wrong. Reviewing postwar experience, Arvind Panagariya shows rather dramatically that high growth rates of per capita income (those of so-called economic "miracle" countries) have been strongly associated with high growth rates of trade, and in many cases with trade liberalization as well, whereas stagnating or falling per capita incomes (those of economic "debacle" countries) have been associated with disappointing trade performance. If you analyze important country cases, such as India, China, and other Far Eastern countries—which you must, instead of relying on treacherous cross-country regressions, as critics like Dani Rodrik often do—it is possible to advance this argument further and to show compellingly that trade has driven growth, not the other way around.[6]

The historical evidence is also supposed to controvert the notion that freer trade promotes prosperity. But this "conventional wisdom" or, I should say "conventional fallacy," about the nineteenth century has been challenged successfully by Douglas Irwin in recent work of importance.[7]

Second, does growth in turn lead to the reduction of poverty? For India and China, the common-sense proposition that only a growing economy will "pull up" the poor into sustained employment, and hence out of poverty, has held true. I advanced this hypothesis in 1962/63, when working in the Indian Planning Commission on how to raise the bottom 30 percent of the population out of poverty into a "minimum" standard of living, and it has been borne out by the experience of the postwar period. Again, different types of growth will have different impacts on the "pull-up" process. And additional policy instruments can improve the impact on the poor. But the prime engine remains substantial growth, which directly pulls people out of poverty and indirectly provides the resources to improve health and education of the poor—which is good in itself, but also helps improve their ability to earn incomes.

Child labor in poor countries

Many activists working to reduce child labor write as if globalization augments demand for child labor, but the growing numbers of econometric studies show otherwise.

The reasons are simple. Given the high returns to education, which are surely sensed even by poor peasants, parents' ability to send children to school rather than to work reflects what economists call "credit market imperfections," which prevent poor parents from borrowing against future income prospects. When a poor family gets more income, their budget constraint eases and the effect should be that they switch some children from work to school. Many studies confirm precisely this benign effect.[8]

I would add another "macro" effect as well. If an economy is growing faster, creating more jobs, then even if there were no credit constraints, the margin would shift in favor of parents sending one more child to school rather than work. Because the prospect of finding a job would be greater in a growing economy than in a stagnant one, the return to education would improve, other things being equal.

"Appropriate" governance

Indeed, as one goes down the litany of complaints and fears of the anti-globalizers, the conclusion is inescapable that the effects of economic globalization in several social dimensions are benign, on balance, rather than malign. But then we must ask: what institutional and policy framework is necessary to improve on the benign outcomes that globalization achieves?

Evidently, three types of issues matter. First, even if the effect is benign, it is not always so. Therefore, we must devise institutions to deal with downsides as and when they arise. I have argued that developing countries often lack adjustment assistance programs of the kind that the developed countries have evolved over time. This necessity has long been recognized by the developed countries, which, contrary to Oxfam's ill-informed talk about "double standards" in trade, have liberalized trade far more than developing countries. The adjustment assistance programs in the United States go back to the time of the Kennedy Round in the early 1960s, when George Meany, President of the AFL-CIO (the federation of US labor unions), persuaded Kennedy of the importance of such assistance if the multilateral trade negotiations were to be politically acceptable. Virtually all US trade legislation since then has tinkered with adjustment assistance programs. The latest legislation renewing the fast-track authority for President Bush even introduced a "wage insurance" experimental plan, under which a worker who finds a new job after being fired due to effects of trade would have half the reduction in his salary covered by the government for a period of two years. And now that the US is in a furor over the "outsourcing" of service jobs to countries such as India, there are proposals to extend the assistance programs to cover jobs in the service sector.

Poor countries have neither the money nor the expertise to develop and finance such adjustment programs, even as they begin to liberalize their trade regimes. I have argued for some years now that the World Bank should fill this void. Finally, the Bank has announced that it will be doing just this.[9] Better late than never!

Second, we need to avoid repeating the mistake made by reformers in Russia, who tried shock therapy and failed. Maximal speed is not the optimal speed; both economics and politics require cautious adjustment. When the economist Jeffrey Sachs, now my distinguished colleague at Columbia University, insisted on shock therapy in Russia, he used the analogy: "You cannot cross a chasm in two leaps." The Soviet expert Padma Desai (who happens to be my wife, as I must admit in the interest of transparency) replied: "You cannot cross it in one leap either unless you are Indiana Jones; it is better to drop a bridge." Events proved her right.

Finally, we need to use supplementary policies to speed the advancement of social agendas. For instance, child labor will be reduced by the prosperity enhanced by globalization, but what can we do to reduce it faster? On the child labor question, unions in rich countries have taken the view that only trade sanctions have "teeth." This view is myopic and counterproductive. Today it is far better, as many intellectuals from the developing countries argue, to use moral suasion. With democratic regimes worldwide, with CNN, and with nongovernmental organizations, a good tongue-lashing is far more powerful than sanctions imposed by governments, whose own credentials often are not unblemished.

And so, while globalization has a human face, that face can be made to glow better with appropriate governance along these lines. Globalization works; but we can make it work better. That is the chief task before all of us today.

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Notes

1 I define globalization as the increasing integration of nation states into the international economy via trade, direct foreign investment by (chiefly) multinational firms, short-term capital flows, cross-border flows of humanity, and the diffusion and sale of technology.

2 While my 2004 book, *In Defense of Globalization*, was mainly addressed to the *social* implications of economic globalization, the new edition, Bhagwati (2007) addresses, through an *Afterword*, more fully the *economic* implications of economic globalization. It offers an analysis of *both* the social and economic objections of the anti-globalization crticis of today.

3 Never mind that Senator Kerry doubtless joined the company of these traitors when, as a man of excellent Yale education and considerable wealth, he probably supped that night on imported French wine and Brie instead of Kraft cheese and Milwaukee beer, and watched a BBC Masterpiece Theater play instead of watching an American sitcom!

4 For more details and coverage of a wider set of feminist concerns, see Bhagwati (2004), Chapter 7.

5 Thus, for example, we know that if we admit modern air transport, it will augment transport and thereby promote growth. So, if a plane takes us from Boston to New York, it will increase our commerce and our prosperity. But then if the 9/11 terrorists crash the plane into the World Trade Center towers, we will not get to New York, at least not alive and well, and all hell can break loose.

6 Panagariya's paper is available from him by e-mail, at *panagari@wam.umd.edu*. For further discussion, see Bhagwati (2004), Chapter 5. There is also work by Dollar and associates at the World Bank that reaches conclusions consonant with the position taken by myself, Panagariya, T. N. Srinivasan, and many others.

7 Cited in Bhagwati (2004), pp. 60–64.

8 Ranjan (2001), Dehejia and Gatti (2002), and Edmonds and Pavcnik (2004).

9 Horst Kohler and James D. Wolfensohn, "We Can Trade Up to a Better World," *Financial Times*, December 12, 2003.

3 Africa and globalization

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The third world has shrunk to Africa. By this I mean to dramatize a process of bifurcation that has taken place among developing countries. For the past forty years, our language and our concepts have divided the world into a rich minority and a poor majority: a world of roughly one billion rich versus five billion poor, or a world of 20 percent versus 80 percent, as it is sometimes expressed. Our growing penchant for benchmarking progress in development, through global poverty counts and through the Millennium Development Goals, focusing on the five billion, reflects this thinking.[1]

This division of the world is becoming seriously misleading. A better approximation to current reality is of a 1–4–1 world, in which the key bifurcation is within the group of developing countries. Most of the developing world, say countries that together have around four billion people, has either already achieved the middle-income level or is more or less on course to do so. Certainly I do not want to minimize the problems that face this vast part of the world. There are obviously many setbacks and potential pitfalls, such as the failure of the latest trade round; and the need for China to make an institutional transition. Development for this group has been and will continue to be a very bouncy ride. But it is happening, and as a group they are converging on the one billion rich. My concern is with countries at the bottom. Countries in this group have around one billion people and in aggregate for much of the past three decades they have been in absolute decline. Currently, some of these countries are benefiting from commodity booms and so are experiencing modest growth, but during the 1990s their per capita GDP shrank by about one percent a year. In this group, Africa is massively over-represented. The bottom billion and sub-Saharan Africa overlap, though they are obviously not coincidental; there are catastrophes outside Africa, and there are successes within Africa.

Nevertheless, to capture the attention of both policy-makers and the population at large, the approximation that the third world has shrunk to Africa is reasonable.

In this chapter I focus on the problems of those African countries that are in this bottom billion. My argument is essentially that Africa—by which I mean this dysfunctional subgroup of African countries—has suffered the worst of globalization while missing the best. Global integration has the potential for enormous good in Africa. Nevertheless, to date, Africa is actively suffering from some of its most important current global encounters. First, I discuss how globalization is currently damaging Africa. I then turn to why Africa has missed out on the huge potential of globalization for good, and what can be done about it. The next section outlines ways in which globalization processes could be harnessed to help Africa, before a conclusion is reached. A fuller statement of the argument and the evidence is set out in my book (Collier, 2007).

Laying the foundations: opportunities and syndromes

Africa is a geographic not an economic entity, and its economic opportunities cannot meaningfully be discussed at the level of the region as a whole. I think that the minimum viable disaggregation is into three groups: the natural resource economies, other economies that are coastal, and a residual of landlocked countries without natural resources.

Natural resource economies

The natural resource economies integrate into the global economy virtually regardless of their domestic politics or policies. They do this both through exports and through the foreign direct investment necessary to generate these exports. For example, the African country with the highest foreign direct investment is Angola—not a paragon of democracy or of economic policy, but a place where foreign oil companies can operate very profitably. Countries with natural resources have no difficulty in globalizing. But they have acute difficulties in harnessing globalization for development.

Landlocked economies

The other economies—those without significant natural resources—are not in a position where the world will beat a path to their door. Indeed, for those of them that are landlocked, the world *cannot* beat a path to their door. To date, these countries have had only small shares of trade in GDP even if their policies have been reasonably trade-friendly, as in Burkina Faso, Malawi, and Uganda. The landlocked countries have globalized mainly through factor outflows, the most important of which has been unskilled labor. For example, by 1970, there were more Malawians in wage employment in South Africa than in Malawi, and by 1980, the Burkinabe made up around 40 percent of the population of Burkina Faso's coastal neighbor, Côte d'Ivoire. All these landlocked economies have stayed poor, and it is hard to see how they could have benefited substantially from the globalization of the past four decades. Indeed, as global transport costs for manufactures have fallen, those landlocked economies that were initially regional hubs for manufacturing, notably

Zimbabwe and Burkina Faso, have found themselves in a cul-de-sac. Their industry cannot stay competitive against rising international competition.

These landlocked economies have to date posed the most difficult development challenges. For them, the theory of comparative advantage can lull us into a false sense of optimism. If the theory were correct, then the landlocked countries would always be able to export something competitively. Unfortunately, the theory depends upon there being no necessary traded inputs in the production process. Such an assumption is fine for giving undergraduates a basic understanding of trade, but it is hopeless when applied to landlocked economies: it is entirely possible, and indeed all too likely, that some landlocked parts of the world unavoidably have higher costs of production of *all* traded goods than have better located economies. Even were workers to work for free in Burkina Faso, the small resulting cost advantage would not compensate for the higher cost of the imported inputs used in labor-intensive manufactures.

Possibly, new trends in globalization may be creating new opportunities. In particular, the growth of the e-service economy enables landlocked countries to trade on a par with coastal countries because the products do not use tradable inputs that have to be transported. Further, since Africa's landlocked economies are all quite small, even small market shares in e-service activities could make a major difference to them. The twin pillars of the e-economy are telecommunications and education. Government policies in these areas are thus likely to be critical in diversifying Africa's poor landlocked economies.

Coastal economies without natural resources

Over the past forty years, coastal economies without natural resources have had the opportunity to follow the classic development route of labor-intensive manufactured exports. There are many such economies and they are well located for the two major markets of Europe and the United States. Yet only one African economy has taken this route. Mauritius has transformed itself from an impoverished sugar economy into a middle-income manufacturer. But though, politically, Mauritius is part of Africa—it is a member of the African Union—both culturally and geographically it is evidently different. As exemplars of failure we can take Côte d'Ivoire, Ghana, Kenya, Madagascar, Mozambique, and Senegal.

The reason why not more African countries succeeded in breaking into manufacturing is probably that no coastal economy sustained market-friendly policies over a prolonged period. All except Mauritius fell victim to one or other of the four "syndromes" that I will discuss below. A few did manage to maintain market-friendly policies over the critical prolonged period in which entry into labor-intensive manufactured exports was relatively easy, but in none did the experience compare to the thirty years of liberalization sustained in Mauritius. Côte d'Ivoire and Kenya had a semblance of such policies in the 1960s and 1970s, and Mozambique and Ghana did in the 1990s. During the 1970s, Côte d'Ivoire indeed began to develop an export-oriented garment industry, but this rapidly collapsed in the 1980s in the face of exchange-rate overvaluation. By the 1990s, the emergence of China and India had made the labor-intensive export route to development much harder. Why should a company set up in a small, politically unknown, and therefore uncertain, African environment, when it could operate profitably from China or India?

The most successful African industrialization of the late 1990s was probably the Export Processing Zone (EPZ) in Madagascar. This was greatly assisted by the Africa Growth and Opportunity Act (AGOA) that was passed by the United States in 2000, giving privileged access to the American market for African goods.[2] However, Madagascar's experience is revealing for two quirks. First, although Madagascar is supremely coastal, firms chose to locate in the interior of the country, imposing on themselves a very long route to the sea on bad roads. Their reason for this was that, reflecting the curious history of the island's settlement, the population in the interior is ethnically Indonesian, whereas that on the coast is ethnically African. Whether justified or not, firms consider the former better suited to the tedious and intricate manual work involved in garment production. If this perception is accurate, then the rest of Africa may face a cultural impediment to the manufactured exports route. Second, the EPZ promptly hit disaster because of the effect of a disputed presidential election. Reluctant to accept defeat, the outgoing Madagascan president organized a blockade of the interior of the country for eight months, in the process closing down the EPZ. Many firms chose not to return, presumably having revised their assessment of political risks.

In a globalized world, manufacturers will locate in a relatively limited number of cities, benefiting from economies of agglomeration. These scale economies are sufficiently powerful that even when such cities have high labor costs they remain competitive. It seems likely that for the next decade the newly industrializing cities of China and India will be as competitive as any African city can hope to be, and that thereafter the world will simply have enough industrial sites to satisfy global industrial demand. In this sense, the episodes of poor policy in Africa's coastal economies may have had permanent effects.

Africa's syndromes[3]

Africa has failed to grow. In the landlocked economies without significant natural resources, this is scarcely surprising. But the other economies, making up a large majority of the region, failed to grow not because opportunities were lacking but because opportunities were not taken. There is no single reason why African societies failed to harness opportunities. A few societies did so: Botswana, most notably, harnessed the opportunity of natural resource abundance and Mauritius harnessed coastal labor abundance. In a project that has reviewed the economic history of forty-two African countries over the period since 1960, we find that while no one account satisfactorily encompasses the diverse history of the region, four syndromes between them account for what went wrong. Some of these syndromes relate directly to globalization. Others would have happened irrespective of globalization but may still be correctable by international action.

One syndrome was the boom-bust cycle usually associated with primary commodity dependence. Waste during the booms was typically followed by catastrophic collapses in the ensuing slumps. There are many examples; important coastal countries that were derailed by this experience were Côte d'Ivoire and Kenya.

Many of the coastal economies also ran foul of the syndrome of excessive economic controls, including reserving many activities for the state sector. Some of these states were basically Marxist, such as Mozambique and Tanzania, while others were socialist, retaining a significant private sector such as Zambia, where the banking sector was left in private hands. All such states experienced economic decline, without being able to achieve the social outcomes reached by some Marxist states in other regions.

A third syndrome was redistribution. Often, the ethnic group in power chose to adopt policies that redistributed income in its favor at the expense of overall growth. For example, during the rule of President Moi in Kenya government policies actively favored a coalition of minor tribes while discriminating against the more entrepreneurial Kikuyu. President Moi used job creation in the post office to favor his own tribe. To keep the post office profitable he refused to hive off and privatize telecommunications, as became standard elsewhere. Instead, telecommunications were retained as a highly profitable monopoly, with the profits subsidizing employment in the post office. As a result, Kenyan telecommunications were among the most expensive in the world and became a significant impediment to national development.

The final syndrome was violent conflict. Civil wars have proliferated in Africa while declining in all other developing regions. I have argued that the provision of security is subject to scale economies so that because Africa is divided into many small countries the level of risk in the region is elevated. Further, most of these countries are characterized by three other big risk factors: low income, economic decline, and dependence on natural resources (Collier and Hoeffler 2004; Collier, Hoeffler and Rohner 2006). Countries with all these characteristics are very likely to succumb to conflict. Further, conflict has the properties of a trap: the typical civil war is highly persistent, lasting more than ten times as long as international wars. Even when wars end, there is a very high risk of reversion. Hence, the high incidence of conflict in Africa is a result of the other syndromes that produced a failure of the growth process and a lack of diversification.

How Africa has globalized

Africa has integrated into the global economy, but the way in which it has integrated has been distinctive and dysfunctional. It has integrated into global capital markets more heavily than any other region, but in an adverse direction. It has found a comparative advantage of sorts in the global marketplace, but this niche is crime. Its legitimate exports are heavily concentrated on natural resources. Finally, Africa has integrated through aid, receiving more aid per capita than any other region. I consider these in turn.

Capital flight

Africa integrated into global financial markets earlier and more fully than other developing regions. At first blush, this statement sounds like nonsense: financial capital has flowed, albeit erratically, from the OECD economies into a dozen or so middle-income economies, none of them in Africa, which has singularly failed to attract private international capital. Yet, unfortunately, the statement is entirely true: unlike most other developing regions, Africa integrated through a massive capital *outflow*. I estimate that by 1990 about 40 percent of African private wealth was held outside the continent. This is a far higher proportion of private wealth than for any other developing region (Collier, Hoeffler, and Pattillo 2001). Unambiguously, in an autarkic world, Africa would now have a larger capital stock, and especially a larger private capital stock. The most spectacular case is the big one: Nigeria. I estimate that by 1999, Nigeria had about US$107 billion of its private wealth held abroad. This is about three times as large as the private domestic capital stock. Global financial integration has enabled Nigeria to hemorrhage private savings.

What has caused such phenomenal amounts of capital flight? To an extent, we do not know. My own econometric analysis currently leaves a substantial and thoroughly unsatisfactory "Africa dummy." But what does seem clear is that the big drivers of capital flight were economic policy errors rather than just pure corruption. Indeed, there seems to be little or no connection between corruption and capital flight: in Indonesia, corrupt money was invested in the economy, and in Nigeria, even honestly acquired money was sent out of it. The big policy errors were partly macroeconomic—such as an overvalued exchange rate, which works as a subsidy on capital flight—and partly microeconomic—in the form of an investment climate in which risks have been high relative to returns. My point here is simply that the costs of these policy errors were considerably increased by global financial integration.

Whereas in the past two decades the main hemorrhage from Africa has been of financial capital, in the next two decades it is likely to switch to human capital (Collier, Hoeffler, and Pattillo 2004). There are very long lags in human capital movements, but the international emigration of skilled workers from low-income countries conforms much more closely to the migration of financial capital than to the migration of unskilled workers.

Crime

Historically, poverty has been an effective defense against crime. Some scholars even regard the perpetuation of poverty as a deliberate strategy in low-income, lawless societies. But with globalization, the rewards to crime become detached from local incomes. Africa has become a home to international crime in two important areas: drugs and financial scams. Some 95 percent of hard drug production comes from societies in the midst of civil war, and Africa has been beset by civil wars. Nigeria is the world center for financial scams. In both cases, international crime becomes an important part of the economy. In civil war settings, it is probably the only activity to flourish. In Nigeria, scams have, in all probability, been the most profitable and dynamic part of the non-oil economy.

In one sense, international crime earns income for the society in which it is based, and inflicts its costs on other societies. But this is to ignore the political impact of a high-profit crime sector within the society. International crime needs an environment in which it is safe from prosecution. For this, it must undermine legitimate authority within the country. Africa is by no means the only region to have suffered from this process. Colombia has been fighting a hugely costly war against international crime. But Africa is very prone to the problem because its countries are small and its governments weak and relatively easy to capture. In effect, the international criminal sector has created a good investment climate for its activities in Africa, but what constitutes a good climate for crime constitutes a bad climate for legitimate investment activities. Here is a vicious circle. The more that legitimate business activity is weakened, and people place their wealth abroad, the weaker is the lobby for the rule of law. Conversely, the more that international crime moves into a country, the stronger becomes the lobby for the absence of the rule of law.

Natural resource extraction

Africa's economic engagement with the rest of the world has taken place largely through the export of natural resources. Globally, such dependence on natural resources creates problems, and Africa has not managed to buck this trend. Natural resource dependence has exacerbated five problems—violent conflict, lack of government accountability, rent-seeking patronage systems, volatility, and Dutch disease—all of which would have been present to a lesser extent even without natural resources.

In Africa there have been evident links between natural resources and violent conflict. Partly, the natural resources act as a lure, as they did in the coup attempts in Sao Tome and Chad, and in the extortion rackets that are routine in the Delta region of Nigeria; partly, they encourage secessionist movements, as in Biafra and Katanga; and partly, they provide easy finance for rebel military expenditures, as with UNITA in Angola and the rebel army, RUF, in Sierra Leone. Unlike other regions, until very recently Africa has had a rising incidence of violent conflict, and its continued and even increasing dependence upon primary commodity extraction is part of the explanation for this trend.

The classic route whereby populations have made their governments accountable is by exploiting governments' need for tax revenues—complying with taxation only in return for scrutiny of public expenditures. By drastically reducing the need for household-level taxation, natural resource rents detach the government from the population. Again, Africa now differs radically from other regions except the Middle East, in having an insignificant non-primary commodity tax base. As in the Middle East, African governments have been able to get away with much less accountability to their populations.

The presence of large natural resource rents in poor economies changes the nature of politics. The leaders who control the resource rents are at the apex of a patronage system that becomes the dominant mode of politics in the society. Political contests are less about issues than about networks of personal alliances. This imposes all the costs of rent-seeking, but it also gouges out the proper heart of politics, leaving simply no room for policy. In the contest for power the ready availability of finance for patronage strengthens the hand of political crooks relative to honest politicians. The law of the political jungle becomes *the survival of the fattest*.

Among the effects of primary commodity dependence, the best understood are the two economic effects: volatility and Dutch disease. The prices of primary commodities are volatile, and this inflicts income shocks both on the economy in general and on the government budget in particular. Around the world, governments are not good at inter-temporal decisions, and African governments are no exception. Booms are not converted into sustained increases in output, and crashes produce prolonged periods of reduced growth. The interaction with global financial markets is noticeable here. For example, during the oil boom of 1974–85, Nigeria geared up the boom by borrowing very heavily, and the price crash of 1986 was then compounded by the switch from borrowing to repayment. This borrowing effect was roughly as large as the direct price effect. Nigeria is also an astonishing example of Dutch disease. Non-oil exports, notably cocoa, cotton, and groundnuts, simply disappeared. This compounded the political-economic effects of oil; in a three-region society, the oil was in the South West region, whereas cocoa, cotton, and groundnuts came from the other two regions.

Aid

Aid provides both resources and the scope for external influence on the recipient country. Africa has received much higher absolute and relative levels of aid than other regions, and some critics of aid ascribe much of Africa's failure to this distinctive pattern. I find these criticisms exaggerated (Collier 2006). However, sometimes aid does have all the effects of natural resource dependence discussed above. It creates a honey-pot to fight over, detaches the government from the population, causes Dutch disease, and is volatile. It even occasionally inadvertently finances rebel groups, as in the Sudan. Though the case against aid in Africa has been exaggerated, aid has been inefficiently allocated, leaving a legacy of unsustainable debt. In the process, aid and debt have diverted the attention of African leaders from a more fruitful domestic agenda. The inefficient allocation of aid within Africa reflects both sins of commission and sins of omission.

The chief sin of commission has been to provide large aid inflows in contexts in which governments were unlikely to use aid effectively. Here the classic case is surely that of Zaire. Irrespective of whether aid to Zaire was actively dysfunctional at the time—preserving a bad government in power—it clearly diverted resources from other African countries that could have used aid better, and it has left Zaire with an acute debt problem. Zaire was fortunate to be sufficiently politically salient that donors were willing to finance a debt write-off. Other countries with similar histories but lacking such political salience, such as the Central African Republic, have simply faced aid cut-offs triggered by debt arrears. Together with David Dollar, I developed an aid allocation formula that takes into account both the poverty and the likely absorptive capacity of a country (Collier and Dollar 2002). We found that, when judged by these criteria, aid even within Africa has been substantially misallocated.

Among the three main sins of omission, probably the most important has been the lack of a shock-absorbing aid facility. Indeed, in some contexts aid inadvertently amplified shocks. For example, during the mid-1970s Tanzania became a darling of the donors. This coincided with the biggest coffee boom of recent decades, so that the country enjoyed a trade-aid boom. As Tanzania's terms of trade collapsed at the beginning of the 1980s, donors became disillusioned. The government was lured into a disastrous industrial strategy during the boom, which was followed by an economic implosion.

More generally, aid provided during a crash in export prices, or a sharp increase in the price of imported oil, has been shown to be particularly effective in sustaining growth (Collier, Goderis and Hoeffer 2006). In principle, it should be straightforward to design aid facilities that respond rapidly to shocks. The most natural agency for such a facility is the IMF, given its more general ability and mandate to respond to crises. However, as I discuss below, both the World Bank and bilateral donors could surely do more here.

A second sin of omission is the failure of post-conflict reconstruction. Many African countries have been beset by conflict. In the period 2005, most of these conflicts were settled, thanks partly to substantial international pressure. Africa thus has many post-conflict situations. Analysis of aid absorption post-conflict (Collier and Hoeffler 2004a) suggests that aid has typically been insufficient during the first post-conflict decade taken as a whole, and badly timed. It has tended to flood in during the first two years of peace, when absorptive capacity is still very low, and then taper out, just as absorptive capacity is starting to rise.

A third sin of omission has been the failure to use technical assistance to buttress incipient policy reform. Reforms only get started if there is some political change, but once started they need a competent civil service in order to be implemented. Most African states do not have a competent civil service and so the skills needed to implement reform must be imported by way of technical assistance. The prompt supply of such assistance has been shown substantially to improve the chances of reform (Chauvet and Collier 2006). However, to date, technical assistance, although a quarter of total aid, has not been provided in a politically responsive manner. It has been supply-driven, and in most of the contexts in which it is supplied there is no political will for change.

Often, political windows for reform are driven by economic downturns. But during these periods foreign assistance for reform needs to be handled with considerable delicacy. The classic episode in which external involvement backfired is Nigeria in the late 1980s. Following the crash in world oil prices and the coincident switch from borrowing to repayment, the Nigerian government was persuaded by the World Bank to launch a reform program, known within the country as the Structural Adjustment Program. Since the reform program coincided with a period during which per capita expenditure was halved, it is unsurprising that it left many ordinary Nigerians with the persistent belief that reform causes poverty. Their misperception is, of course, shamelessly exploited by the vested interests that would lose from reform.

How globalization can help Africa

To date, Africa has been adversely affected by several aspects of globalization. Africa's current participation in the global economy accentuates its comparative advantage, just as is happening in East Asia. East Asian economies that export manufactures now have powerful lobbies for pro-export policies, and a massive accumulation of appropriate skills. Africa's environment of weak governance gives it a comparative advantage in criminality. As crime globalizes, the rich and powerful forces that are behind crime lobby for a weakening of law enforcement and African societies accumulate the skills of criminality and violence.

Africa's participation in the global economy need not have such adverse effects. The challenge, both for Africa and for the international community, is to harness the immense opportunities that are generated by globalization to assist the region. For low-income countries generally, the main opportunity that globalization has generated has been the export of labor-intensive manufactures. Between 1980 and 2000, developing countries as a group transformed their exports from primary commodities to manufactures, by which time around 80 percent of developing countries' exports were manufactures. Sadly, as I have argued above, I think it will be difficult for Africa to follow such a path. Some coastal African countries may well manage to break into global manufacturing markets, but this will not happen soon and it will not provide the explosive growth opportunities that have arisen elsewhere.

Nor will Africa receive massive private capital inflows in the way that a few developing countries are now doing. The region is seen as too risky, and opportunities for private capital are too abundant elsewhere.

The major opportunities for Africa to participate beneficially in the global economy, I will argue below, lie in external assistance for improving governance and for coping better with shocks. These are quite different from the global opportunities experienced elsewhere.

Governance

Africa has domestic forces that produce weak governance, and these are amplified by its participation in the global economy. Building good governance is primarily a domestic responsibility; important interest groups such as business leaders, together with the broad mass of the electorate, must at some stage curtail the abuse of power by political leaders and public officials. Often this is extremely difficult to achieve, but it can be assisted by international action in several respects.

It is best not to conceptualize assistance for better governance as part of an aid program, but rather to think of the wide variety of possible actions as falling under the rubric of policy coherence. The concept of policy coherence has been fruitfully employed in development to suggest that the non-aid relationships of donor countries are often more important for aid recipients than aid itself. To date, the key policy brought into focus by the discussion of policy coherence has been trade; it is simply incoherent of donor countries to support development with their aid budgets while retarding it with their trade policies. In Africa, however, trade is less important than elsewhere, for the reasons I have already suggested. There may be some scope to give Africa privileged access to OECD markets, in effect protecting Africa from competition with the Asian economies. The US's Africa Growth and Opportunities Act and the European Union's "Anything but Arms" initiative are current examples of this approach, and the former has had some substantial success. I fully support such efforts, although they would be far more effective if there was a common, OECD-wide scheme, with generous rules of origin that applied to the whole region (Collier 2006a). But for much of Africa the key aspect of policy coherence is the range of policies that can improve governance.

The most extreme instance of policy coherence is external military intervention. Africa unfortunately needs such intervention, most evidently in countries coming out of conflict. These countries face a very high risk of relapsing into conflict; indeed, about half of all civil wars are cases of post-conflict countries reverting to conflict. Such environments generate huge adverse externalities for the rest of the region and the rest of the world, and so, even from the perspective of self-interest, it is sensible to try to reduce the incidence of civil war. By far the most rewarding efforts to reduce the incidence of civil war are those that focus on improving post-conflict countries' policies.

International military interventions

To date, governments in post-conflict environments have tried to reduce the high risk of repeat conflict by spending large amounts on the military. Post-conflict societies typically spend almost as much on the military as do countries during conflict, and far in excess of normal peacetime spending. Such high spending turns out to be not just ineffectual but actually counterproductive (Collier and Hoeffler 2006). Properly controlling for problems of endogeneity, we find that high military spending increases post-conflict risks, the most likely reason being that it signals a malign intent of the government to rule by force rather than by inclusion. Even so, some military presence post-conflict is normally needed. Our study shows that it takes at least a decade of successful growth to substantially reduce the risk of a return to conflict through economic means.

Nor do political interventions seem to offer quick ways to reduce risks. The most commonly used political strategy has been post-conflict elections to try to establish legitimacy, but such elections actually appear to increase the risks of reversion to war. For many post-conflict situations, there seems little alternative but to maintain an external military presence for a prolonged period—ideally around a decade. Whereas elections tend to increase the risk of conflict reversion, an external military presence significantly and substantially reduces the risk (Collier, Hoeffler, and Soderbom 2006). In effect, external military forces keep the lid on internal conflict until the economy recovers sufficiently that the incentives to maintain peace are stronger.

Who should provide such a presence? The record of United Nations intervention in conflict is not particularly successful, for the simple reason that neither the rules of engagement of troops, nor the incentives facing countries that contribute troops, turn UN forces into effective conflict-deterrents. A classic example is the large UN force in Sierra Leone, which was worse than useless when confronted by the RUF. The RUF succeeded in kidnapping a group of 500 UN soldiers and confiscating their equipment. Eventually, the British army sent a force of a few hundred men with clear instructions to fight as necessary to destroy the power base of the RUF, which basically amounted to the control of the diamond fields. The British force achieved this with astonishing ease; the RUF simply fell apart. Somewhat similarly, the presence of around 2,000 French soldiers saved the government of Côte d'Ivoire from collapsing in the face of a rebel invasion. Recently, outside Africa, the Australians have played a similar role in the Solomon Islands.

Interventions such as these seem to hold most promise. An OECD country with an obvious interest in the African country concerned—whether that interest is humanitarian, cultural, or geopolitical—recognizes that without its intervention the country is likely to slide into conflict and deploys a few hundred or a few thousand troops. Such interventions can and surely should be sanctioned by the UN, but they are a different matter from traditional peacekeeping, in which no country has either the control or the interest to put significant numbers of its troops at risk. As such interventions become more common, they will reduce the incidence of rebellion. There is also clearly scope for regional powers within Africa to play the peacekeeping role; Nigeria already has experience of this in Liberia, and South Africa will have an obvious role in Southern Africa.

Such military interventions clearly suggest colonialism unless they are handled well. Iraq and Somalia in effect define the Scylla and Charybdis between which military interventions need to navigate. In Iraq the motivation and authorization for intervention is heavily contested, while in Somalia the execution was so ineffectual that external forces were humiliated. The 1990s were plagued by the legacy of the failed US intervention in Somalia, and it is important that experience in Iraq should not similarly deter needed interventions over the coming decade. However, there is plenty of space between these two dangers. Neither the French intervention in Côte d'Ivoire nor the British intervention in Sierra Leone has been strongly challenged on political grounds, and both have been organized on a sufficient scale to prevent the intervening forces from being humiliated. It is important to draw the lesson that such intervention can be highly successful and does not just depend upon good luck. The establishment of the UN Peace-Building Commission in September 2005 provides an important opportunity to rethink post-conflict military engagement, and to coordinate it with economic and political development. The Commission should not aim to be yet another implementing agency. Rather, by promulgating standards, it can facilitate intervention based on prior agreed international norms rather than *ad hoc* bilateral reactions to events.

Non-military forms of international intervention

Other options for international intervention to improve governance include external support for and supervision of elections, and external support for the judiciary, including external accreditation and external appeal procedures for cases. Here, however, I will focus upon the international governance of natural resources. The mismanagement of natural resource rents has been one of the core syndromes in failing states. It is therefore entirely appropriate that both international civil society—such as the NGO, Global Witness—and OECD governments through the Extractive Industries Transparency Initiative—should adopt this as a priority concern of their development assistance.[4]

The steps needed to improve the governance of natural resource rents include physically tracking the commodity—to ensure that rebel movements and criminals do not benefit from resource exploitation—and tracing the payments made to government, including by scrutinizing the accounts of national extraction companies. Transparency is itself an input into scrutiny, which is primarily a domestic matter. Domestic civil society is typically weak in natural resource-rich developing countries, and international involvement, whether by the private sector, international financial organizations, or governments, can strengthen its hand. An important example of such an attempt is the Chad-Cameroon pipeline arrangements, which empowered civil society in Chad through the combined pressure of oil companies, IFIs, and international NGOs. A College, which included representatives of local NGOs was established under Chad law to scrutinize government spending of the oil revenues. When the government of Chad attempted to divert money into the military budget, the College blocked the expenditure. This event revealed the intentions of the government, the scope for frustrating those intentions through international involvement, and the ultimate limitations of the approach. The government promptly overturned the agreement by repealing the law that had enshrined the arrangements.

Beyond the domestic scrutiny of spending, there is also a need for better international scrutiny of financial outflows from developing countries. Embezzlement has been greatly aided by the secrecy of the international banking system. As part of the "war" against international terrorism, international banking practices are now being revised. In principle, it is relatively straightforward to clean up the financial system since the safe havens—offshore banks and suchlike—all depend for their continued viability on transactions with the OECD banks. A system of blacklisting banks that do not demonstrate compliance with international standards would therefore be easy to enforce. As with the physical tracking of commodities, the basic principle is that firms should be presumed guilty unless able to prove innocence. Such a rule would rapidly force compliance. Considerable progress has been made in cleaning up the international banking system, but there remains a long way to go.[5]

A model for international progress in governance is the OECD convention against bribery.[6] Astonishingly, until recently not only was it entirely legal for companies to bribe the officials of developing countries, but such expenses were often tax deductible. Such tax expenditures were in effect an aid program to finance the weakening of governance. This state of affairs persisted because no one OECD government wished to put its firms at a disadvantage *vis-à-vis* firms from other OECD countries. Hence, it was necessary to achieve concerted action, with all countries agreeing to introduce legislation into their parliaments at roughly the same time.

A further arena for intervention is sanctions against corrupt or dictatorial political leaders. In the case of Charles Taylor, ex-president of Liberia, sanctions proved successful in combination with a powerful domestic military challenge. In the case of Zimbabwe, sanctions have been much less effective because it has been difficult to get major governments to agree on the same line. However, the limitations of smart sanctions should not discourage their use; in extreme cases, it is possible to get enough agreement for them to significantly weaken targeted elites.

Such OECD-level interventions can be supplemented by peer pressure from within Africa. Such peer pressure has had occasional short-term successes, but its main effect is likely to be felt in the longer term. The clearest example is the pressure periodically exerted by the EU on its members and especially on its prospective members. This is the model to which all other peer groups aspire. At the other end of the spectrum is the New Economic Partnership for African Development (NEPAD). Here too the idea is to harness peer pressure. But NEPAD in the short term faces structural problems that are much greater than those faced by the EU: notably a very much larger group of member countries and hence much greater difficulty in getting agreement, and also acute ill luck. No sooner had NEPAD been formed, with the goal of bringing peer pressure to bear on standards of governance, than President Mugabe set the government of Zimbabwe on a course of dismantling the rule of law. This problem was far too large for the fledgling institution to cope with, but it had the inevitable effect of immediately discrediting it. Nevertheless, the basic design of NEPAD, reflecting the attempt to benchmark standards and use peer scrutiny and pressure to enforce them, is likely gradually to prove a useful supplement to OECD-level action.

The mixed recent history of regime change in Africa illustrates the limits of effectiveness, but also suggests that peer pressure is not entirely impotent. Since 1999, governments in Côte d'Ivoire, the Central African Republic, Mauritania, and Sao Tome, Principe have been toppled by internal military interventions. The African Union now condemns such regime change but this usually has no effect. The exception was the coup in Sao Tome, Principe. There, African diplomatic pressure was sufficient to enable the ousted president rapidly to regain his position. The Sao Tome, Principe coup was indeed a very modest challenge; the national army, whence the coup came, had only 900 men. However, it is through setting such modest objectives and achieving them that institutions of peer pressure can gradually build enough credibility to be effective in more difficult situations.

Shocks

As discussed above, the inability to manage large external shocks has been one of the major reasons for Africa's decline. This is an area where the international community could rather easily make a major difference. Until recently there were two international instruments for smoothing shocks: the Stabex scheme of the European Union and the Compensatory Financing Facility (CFF) of the International Monetary Fund. The existence of these schemes testified to the need for some such arrangement, but unfortunately they were so poorly designed as to be useless. The Stabex scheme proved so slow to disburse aid to countries experiencing negative export shocks that its compensation ended up being pro-cyclical. The CFF invited governments to borrow on commercial terms at the onset of a negative export shock—a strategy that, given the uncertainties associated with commodity prices, was so unsound that virtually no government chose to adopt it. Both instruments are now in abeyance.

There are, however, many options for a viable scheme. Here I will sketch one possible arrangement for the IMF and one for the World Bank.

The IMF has very limited concessional funds available for low-income countries, but is able to respond quickly; its core mandate is to respond rapidly to crises. Potentially, its own funds could be concentrated into rapid compensation for export price shortfalls. Not only does the Fund have a comparative advantage in rapid response, but it could thereby play a leadership, or signaling, role *vis-à-vis* the bilateral donors. The latter simply are not staffed to enable large funding relocations based on their own short-term macroeconomic analysis. The Fund has the expertise here and should use it.

The World Bank has an entirely different opportunity to smooth shocks. Oil is by far the world's most important commodity, and the Bank is a substantial creditor to both oil exporters and oil importers. Debt service payments are approximately US$6 billion a year from oil exporters and US$12 billion a year from oil importers. There is thus scope to match the offsetting risks; oil exporters want to reduce their payments when oil prices are low and vice versa for oil importers. By converting these debt service obligations into amounts that are contingent upon the price of oil, the Bank could reduce the burden of repayments to both categories of borrower and in the process reduce its own risk of facing defaults.

Conclusion

Globalization has assisted development defined in conventional terms as raising the incomes of the five billion people who live in "developing" countries. The growth of China, India, and many other developing countries during the past decade has surely been facilitated by international trade, and notably by the breakthrough into manufactured exports. World poverty, as measured by the number of people below some threshold level of income, is already falling and will continue to fall, probably at an accelerating rate.

But such a measure will increasingly mischaracterize the development problem. Today the core development challenge is no longer posed by raising incomes among the five billion. The countries at the bottom of the international rankings, containing around a billion people, are not just falling behind, they are falling apart. They are not merely diverging from the majority of mankind, they are in absolute decline.

The processes of globalization can claim some credit for the success of the majority of developing countries, but equally they must take some responsibility for this marginalization of the poorest. In particular, globalization tends to accentuate a country's comparative advantage. For much of Africa, domestic policies and institutions have ruled out manufactured exports, leaving exports dependent upon natural resource extraction with its attendant problems. Worse, the internationalization of crime has made Africa's weak governance commercially valuable, creating powerful lobbies for the further erosion of the rule of law.

The marginalization of the bottom billion is already creating problems for the international community. Quite aside from the evident humanitarian disaster for the billion people themselves, as countries fall apart they generate externalities of crime, drugs, disease, and safe havens for terrorism for other parts of the world. Adopting polices to accelerate catch-up for the four billion people living in the converging developing countries would be a generous gesture on the part of the already rich. Reversing absolute decline in the bottom billion would not be so much a generous gesture as a matter of common prudence.

This is a serious priority and the problem is how to accomplish it. I have suggested that what is required goes way beyond expanded aid programs, and indeed that aid is unlikely to be the most potent instrument in these environments. Thus policy coherence in rich countries needs to be rethought to move beyond trade policy, taking in military interventions to improve security, and legislative interventions and public-private partnerships to improve governance, in the poorest countries. If globalization is to bring success to the bottom billion, it will come through increased willingness to build on actions such as the sending of British troops to Sierra Leone, the willingness of oil companies and the World Bank to strengthen the scrutiny by civil society of oil revenues in Chad, and the partnership between De Beers and NGOs that produced the impetus for the Kimberley process in the diamond trade. It will require the international financial institutions to refocus their financial resources to solve the problem of the extreme exposure of the poorest countries to destabilizing external shocks.

The fact that such initiatives are happening suggests that at some level the need for them is recognized. Unfortunately, the impetus to quantify the success of development efforts—exemplified by the Millennium Development Goals and the increasing sophistication of measures of the absolute numbers of people in poverty—risks entrenching at the heart of development policy an increasingly irrelevant conception of the core development problem. Globalization will indeed help to deliver prosperity for a majority of the five billion people in "developing" countries. But by 2015, ordinary people will be worrying about a completely different and far less tractable problem.

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Notes

1 For an expanded version of this critique of poverty reduction as the benchmark for development, see Collier and Dercon (2006).
2 AGOA eliminated quotas on textile and apparel exports from Africa.
3 This section is based on Ndulu, B. *et al.* (2007), Political Economy of Africa: Country Case Studies, Cambridge University Press.
4 The Extractive Industries Transparency Initiative approach is initially voluntary, analogous to what has already been achieved in the governance of diamonds through the Kimberley process, by which diamonds are tracked from their source and certified as legitimate, i.e. not "conflict diamonds." A similar initiative is in progress for timber; see the website of Global Witness at *http://www.globalwitness.org*
5 For example, the government of Nigeria has formally abandoned its efforts to get British banks to cooperate in the repatriation of the funds illegally deposited in them by the Abacha family.
6 OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions. See *http://www.osec.doc.gov/ogc/occic/oecdsum.html*

4 Building partnerships for an inclusive globalization

Mark Malloch Brown[1]

Global markets, global technology, and global ideas can enrich the lives of people everywhere. As we saw, the 1990s was a period of rapid progress for many countries, particularly in Asia, as integration into the global economy, good social policies, and economic power at home saw hundreds of millions of people lifted out of poverty. But, as the UNDP *Human Development Report 2003* makes clear, that is only half the picture. More than fifty countries actually got poorer during the 1990s. Today we face a development crisis where more than one billion people continue to languish in extreme poverty, most of them without clean water to drink or enough food to eat, beset by diseases from HIV/AIDS to tuberculosis, lacking access to schools and healthcare, and living in an environment that by nearly every measure is rapidly degrading. It is a world of desperate inequality, where the world's richest 1 percent of people are worth as much as the poorest 57 percent; and where the richest 10 percent of the US population has an income equal to that of the poorest 43 percent of the world.

It is clear that globalization as currently constituted has been failing the poor. And yet the potential that globalization offers to developing countries is real. The ability to leapfrog decades, to recapture lost ground, to unleash reform in national economies, and redeem long-standing promises of prosperity to the people, is achievable—if there is the political will to do so.

The Millennium Development Goals: a manifesto for pro-poor globalization

In the year 2000, all 189 UN member states agreed at the United Nations Millennium Summit that the central challenge now facing the planet is to ensure that globalization becomes a positive force, not just for a rich minority but for all the world's people. By signing up to the Millennium Development Goals (MDGs), world leaders resolved to tackle the problems of global poverty and inequality by creating an environment—at both the national and global levels—conducive to development and the elimination of poverty. The MDGs are a political framework of time-bound, measurable goals and targets to combat poverty, disease, illiteracy, environmental degradation, and discrimination against women, and to create a global partnership for development. By clearly setting out a framework to create a just and equitable future for all people, the MDGs are in essence a manifesto for globalization, an agenda to make globalization a friend of the poor.

Nowhere was the need for this political agenda clearer than at the recent meeting of world trade ministers at Cancún. It was hard to believe that those gathered at the WTO Ministerial Meeting represented the very same countries whose leaders endorsed this visionary global compact to build a more inclusive globalization. Indeed, the failure of some rich countries to make crucial concessions, particularly in agriculture, was a clear indication that rich countries simply do not understand the two-way bargain of globalization. Managing globalization so that it is a force for good—for North and South alike—cannot be an optional extra when the future security and sustainability of our planet depends on it. In 2003, the world has seen a deeply divisive war in Iraq, accompanied by heightened international tension and fear of terrorism. Those who argue that the war on poverty and the building of an equitable global system should take a back seat until the war on terrorism has been won are wrong. Creating a pro-poor, legitimate global economic strategy—the goal of the Doha Development Agenda—should contribute to a safer world; that is the vision of the Millennium Declaration.

The Millennium Development Goals are in effect the effort of the international community to set the terms of a globalization that is not solely driven by the interests of the strong but also managed in the interests of the poor. While the Goals may not by themselves constitute a comprehensive development vision, they do synthesize in a single package many of the most important commitments made separately at the United Nations international conferences and summits of the 1990s, recognizing explicitly the interdependence between growth, poverty reduction, and sustainable development. The MDGs may indeed be the ultimate bottom-up approach to creating a pro-poor globalization, with their clear focus on the pocketbook issues of the fight against poverty and hunger: seeing boys and girls in school, tackling infectious diseases. These everyday issues are the stuff of elections across the developing world, because they are the top priority concerns of parents and voters. They are also inescapably part of a global vision that sets out a mutual commitment to progress, struck at the highest political levels, between developed and developing countries to achieve these Goals. This agenda works from the *barrio* and street to the boardrooms of the international financial institutions or the G-8.

As was made clear at the Financing for Development Conference in Monterrey in 2002, and later that year at the World Summit on Sustainable Development in Johannesburg, while the primary responsibility for achieving the Goals clearly lies with developing countries themselves to undertake good-faith economic, political, and social reforms, the eighth goal—"a global partnership for development"—comprises a set of commitments by developed countries to support these efforts through measures such as increased development assistance, debt relief, and fairer trade rules. Donor countries also committed themselves to increasing their public investment in healthcare, education, infrastructure, and other support to developing countries when developing countries did their part.

Reallocating and mobilizing more domestic resources towards targets related to the MDGs, strengthening governance and institutions, and adopting sound economic and social policies are all steps that developing countries need to take to achieve the Goals. But they are far from sufficient. Even assuming that developing countries adopt sound polices and maximize the use of domestic resources, an additional US$50 billion a year in aid is likely to be needed, at a very minimum, to meet the Goals. Some very promising proposals for raising the balance of the additional US$50 billion have been put forward, notably the International Finance Facility proposed by the British Chancellor, Gordon Brown, which deserves serious consideration. But some donor countries are already starting to back away from the pledges they made only last year. At a time when billions of dollars are being pledged to one country, Iraq, the argument that resources are not available is simply untrue. Continued progress on debt relief must also be made if developing countries are to escape from deeply entrenched poverty traps.

Making trade work for the poor

Trade restrictions are one of the key structural obstacles that prevent developing countries from participating more fully in the global economy. At Cancún it was clear that in trade, the North continues to demonstrate its myopic and short-term approach to globalization. While rich countries have been enthusiastic sellers of free trade to developing countries, they themselves have failed to practice what they preach.

Nowhere is this clearer than in agriculture, which accounts for more than 70 percent of employment in low-income countries. OECD countries continue to provide their farmers more than US$300 billion in agricultural subsidies each year, which allow farmers from the United States and European Union to export some crops at prices more than one-third lower than the cost of production. Subsidies to US cotton growers are more than triple the amount of US government aid to sub-Saharan Africa, depressing world cotton prices and presenting a serious threat to the livelihoods of the poor. And in the EU, the cash subsidy to every dairy cow exceeds total per capita EU aid to sub-Saharan Africa. In areas such as textiles, clothing, shoes, and processed agricultural products, developing countries continue to be barred from the markets of rich countries by high tariffs. Bangladesh, for example, has made some progress in participating in the global economy, mainly through exports of textiles and garments, but on its annual exports of about US$2.4 billion to the US it pays 14 percent in tariffs, while France exports more than US$30 billion to the US and pays only 1 percent in tariffs.

What lessons do we learn? For poor countries, “free” trade is neither free nor fair. This is not only unjust, it demonstrates how the North is failing to understand the very nature of globalization—namely, that we are all interconnected now. What happens in one part of the world affects us all, be it the environment, drugs, migration, or, of course, terrorism. Failing to include the majority of the world's population in the global economy, and thereby contributing to increased poverty and economic marginalization, is only storing up problems for all parts of the world.

An agenda for change

The lack of agreement at Cancún on agriculture and on providing greater substance to the concept of special and differential treatment for developing countries was deeply disappointing. Even so, a positive outcome was the formation of the so-called Group of 22 developing countries that refused to accept the watered-down Doha mandate on agriculture. Now the South has an organized voice. My belief is that Cancún will be remembered as the Conference that saw the emergence of a new kind of global trade negotiation, more participatory and less dominated by rich countries. The challenge for developing countries is to ensure that they too do not focus on rhetoric to the detriment of results; the deal on the table at Cancún was not good enough, but both sides will need to make concessions to secure an agreement so that everyone benefits.

The experience at Cancún also demonstrates how the time is now right for a paradigm shift in which globalization is framed not simply around economics, with trade as an end in itself, but around a globalization process that embraces human development and poverty reduction as its *raison d'être*.

The Millennium Development Goals provide a measurable set of human development benchmarks. Through annual reporting these are not just becoming a scorecard on national performance, but are also providing clear indications of whether the world is managing to build the more "inclusive and equitable" globalization called for in the Millennium Declaration.

Ultimately, to achieve the fundamental vision of the Millennium Development Goals as a means of better managing globalization on behalf of the poor, the eight goals need to be seen as an indivisible package. This is a package that holds unprecedented promise for crafting a globalization built around the interests of the many, not the few. And it represents a promise every country in the world has already pledged to keep.

Note

1 This chapter is the text of Mr Malloch Brown's presentation on October 11, 2003 at the conference *The Future of Globalization.*

5 Globalization and the future of human rights

Mary Robinson

Today's world is a world of contrasts. Markets, people, and ideas are linked as never before. While many people believe that growing international trade and communication ties are good for their countries and their families, ours is a world of greater divisions—between North and South, multilateralists and unilateralists, religious and secular, powerful and powerless.

These divides are reflected in statistics. According to the *Human Development Report* from UNDP, issued annually, more than fifty countries, mainly in sub-Saharan Africa, are poorer now than in 1990. In many countries, a larger proportion of people are going hungry, more children are dying before the age of five, and life expectancy has fallen. The 2003 Pew Global Attitudes Project survey found that for many people, the quality of life seemed to have deteriorated over the past five years. They point to the lack of good jobs, to poor working conditions, to the spread of disease, to the unmanageable costs of healthcare, and to growing gaps between rich and poor.

Since 9/11, the sense of a divided and insecure world has only intensified. Threats by terrorist groups have raised real concerns about the future of open societies that ensure the protection of basic civil liberties. In many countries, the concerns are very different: security in these countries is not equated with where terrorists might strike but instead with where safety from internal conflict can be reached, or with where the day's only meal will come from, or with where the medication needed for a dying child will be found.

This mix of conditions has in part sparked a growing movement of people across borders, and often into countries that treat migrants as a threat rather than a boon to their societies. A fortress mentality has taken hold in many prosperous countries because of perceived economic, cultural, and security risks, spawning policies designed to keep migrants out or drive them underground, and further widening the divide between those who have wealth and power and those who lack them.

This then is the snapshot of the world I see: a world of enormous potential in human and financial resources, technologies, and know-how, and at the same time, a world of unspeakable poverty, repression, and injustice. Security is a preoccupation in all countries, albeit for different reasons; no one will deny that turmoil in one region can spread rapidly to others, through terrorism, armed conflict, environmental degradation, or disease. This fact should bring out a new sense of interconnectedness. But it is only now that tackling poverty and gross inequality is beginning to be perceived as a necessary component of strengthening human security worldwide. And we seem less and less able to tackle global problems in a coordinated way in which burdens and responsibilities are shared.

All of these features of today's world imply a need for new thinking about almost every aspect of globalization. The central challenge is to build on the connections that globalization has fostered, while bridging the still-growing divides among people and among nations. To meet this challenge successfully, it will be essential to respect the human rights of all people. We need leaders who will make principled decisions, organizing national and international relations with a greater sense of shared responsibility for the fate of people who are excluded from the potential benefits of open markets and societies. Most of all, we need better, more accountable systems of governance at every level—local, national, and international—that are seen by the world's people as legitimate and that will hold leaders accountable for the commitments they have made.

Human rights and accountable governance

Human rights are the end goals we all seek to achieve for every individual on the planet. They are the fundamentals of a life of dignity. We do not create markets for their own sake, but as tools to help achieve the better living standards needed to fulfill basic rights to education, healthcare, and adequate housing, among other things. What is not always recognized, however, is that the international human rights framework also provides a set of tools, which can be used to push for the accountability that is so lacking at every level of governance today.

As I traveled to more than eighty countries during five years as United Nations High Commissioner for Human Rights, what I heard again and again was people's frustration about their lack of means to participate in and influence the decisions that affect their communities and nations. In many ways, these people instinctively knew that problems close to home were the most urgent. Courts and police were inefficient, overburdened, and sometimes corrupt. This led to violations of basic civil rights. Social ministries were under-resourced or lacked qualified staff. Because of these problems, basic rights to adequate healthcare or education remain unfulfilled or well below minimum expectations. To change this situation requires better mechanisms to ensure accountability.

The World Bank's *World Development Report 2004: Making Services Work for the Poor* makes this point. The report stresses that even when governments have the basic infrastructure in place to provide services such as clean water, preventive healthcare, or primary education, the poorest people often cannot access these services. What has been missing is accountability at three levels:

between consumers and providers of services, between people and policy-makers, and between policy-makers and service providers. As the Bank acknowledges, making these changes and strengthening levels of accountability involve fundamental shifts in power. Such changes cannot happen overnight, but it is precisely the issues of power and accountability that need to be addressed.

How might the situation look if policies and accountability mechanisms were formulated, implemented, and monitored with regard to the relevant human rights standards and commitments that governments have already accepted? The following sections of this chapter give examples of how my organization—Realizing Rights: The Ethical Globalization Initiative—seeks to bring human rights commitments more directly into efforts to address global issues.[1]

Promoting the right to health: HIV/AIDS and women's rights

The AIDS crisis is the single greatest challenge facing the world, and it will be more effectively tackled when human rights are seen as central to local, national, and global strategies.

Of the more than 40 million people worldwide living with HIV, about three-quarters are in sub-Saharan Africa. The epidemic has taken a disproportionate toll on women, who now comprise more than 60 percent of the people living with HIV/AIDS in the region. This percentage is increasing. HIV/AIDS continues to set back African social, economic, and human development, to endanger lives and livelihoods, decimate health systems, reduce access to education, and destabilize communities.

At a conference we co-organized on this issue in Botswana, it was clear that across Africa, lack of respect for women's rights worsens the impact of HIV/AIDS and makes it harder to reach women with treatment and prevention. Where there is gender inequity, women are less able to protect themselves from HIV or from the sexual violence that may expose them to the disease. Economic dependency worsens women's vulnerability to infection by partners they are not in a financial position to leave, and who may or may not be faithful to them. Women usually have less access to healthcare and treatment for themselves but bear the burden of caring for the community. Social constraints may prevent women from speaking out while simultaneously condoning male sexual norms that place women at risk. These are all crucial factors that fuel the spread of HIV/AIDS, allowing it to reach epidemic proportions, while denial and discrimination prevent it being acknowledged.

Recognizing HIV/AIDS not just as a global health crisis, but also as a call to action to ensure greater respect for the rights of women, is a key element of strategies to contain the further spread of the disease in Africa and in other parts of the world. The Convention for the Elimination of All Forms of Discrimination against Women (CEDAW), ratified by 183 countries, provides an important UN framework for civil society, and women's groups in particular, to hold their governments accountable for how AIDS policies are being implemented.[2]

To hold governments accountable for the legal commitments they have made to women's rights requires a change of attitude and understanding at every level of society. We must develop strategies for communicating about human rights in ways that uphold and value the diversity of lifestyles and culture. The strong involvement of women from all regions and all walks of life is essential to this process. At the same time, we cannot allow respect for multiculturalism and diverse cultures to be misinterpreted to justify the abuse of women sanctioned by traditional cultural norms.

Our goal within Realizing Rights: The Ethical Globalization Initiative over the coming years is to increase the awareness of policy-makers about human rights tools for tackling HIV/AIDS and other fundamental challenges to promoting the right to health, most importantly strengthening local health systems. We will also highlight the importance of women's leadership in the development of women's rights policies and legislation at the national level.

Migration

Unlike the challenge of addressing AIDS, which clearly begins at the local level, the issue of international migration has traditionally been seen as exclusively a matter of state policy. Most migrants leave their home countries to escape poverty or conflict, or to take advantage of economic opportunities in other countries, and frequently a combination of all three. Both the pressures and the incentives to migrate are linked to the processes of globalization.

At the heart of the resistance to more open borders is a fear that increased migration will dilute national culture and cause cultural conflicts. This fear has been exploited for political reasons, inflaming racism and xenophobia, and leading to ever more restrictive immigration policies, especially in Europe. But this negativity towards migrants belies the demographic reality that developed economies face: aging populations and a declining workforce mean that these economies must increase immigration if they are to sustain themselves. Moreover, migrants' remittances to their families are an important and growing source of development assistance; the IMF reports that in 2001 alone, migrants' remittances were around US$100 billion, or nearly twice as much as official development assistance (US$51 billion).

With avenues for legal migration more and more limited, migrants increasingly have resorted to undocumented entry and unauthorized stay. This has fueled the activities of human smugglers and traffickers, who often show little respect for the humanity of their cargo. Unknown numbers of people die in transit, and people who do reach their destinations often find themselves trapped in a cycle of abuse and exploitation, giving a new face to slavery in the modern era. They are part of a growing population of undocumented immigrants who find themselves vulnerable to exploitation in employment, to racist crime, and to security measures pursued as part of the "war on terrorism."

Awareness is growing of the contradictions inherent in the current situation—whereby liberalized regimes for the free movement of goods, capital, and services exclude the free movement of people. So is the recognition that current approaches to migration must change. At the national level, the Swiss government has led the Berne Initiative to elaborate a set of common understandings on migration between selected sending and receiving states.[3] And the Global Commission on Migration studied these issues in greater detail.

On migration, there is a need to reframe the debate, so as to recognize that the rights of people who have left their countries in search of greater human security must be protected and that governments—both sending and receiving—must be accountable for safeguarding these rights. The public debate around migration in destination countries has thus far been marked by negativity, hostility, and fear of migrants. What is needed today is a new approach, anchored in human rights, that acknowledges migration's potential benefits to both sending and receiving countries.

Our aim at Realizing Rights over the coming years is to work with others to develop and distill concrete and effective messages around a more constructive rights-based approach to migration, and to mobilize other respected public figures to reinforce these messages. We will set out in a non-technical way the human rights standards that should guide policy-makers in the migration arena, and identify good international and national migration practices that exemplify the economic and developmental benefits of migration.

Trade and international governance

Reflecting on globalization and the future of human rights is difficult without discussing developments taking place at the multilateral level. Accountable governance in today's world has an international dimension, and governance failures at the international level directly affect the lives of millions of people.

Trade

The Doha Round of negotiations in the World Trade Organization, known as the "Development Round", was launched in November 2001 with one of the aims being to lower trade barriers in areas that would help poor countries the most. With more than three-quarters of the world's poor living in rural areas (and most of them working as small-scale farmers), the decisions made on agricultural trade policy will define whether the WTO can deliver on a pro-development agenda. At Doha, rich countries promised to reform their agricultural sectors in order to put a stop to the damaging practice of export dumping—a result of high subsidies to rich farmers and agri-business. The commitment at Doha was not just naive generosity on the part of the rich countries. It was a wise realization that sustainable development in poor countries means increased stability and prosperity for all.

Cooperation at the WTO Ministerial meeting in Cancún, however, was very disappointing, and one of the saddest aspects was the lack of significant progress on agricultural trade reform.[4] The US has threatened to strike more bilateral deals with willing partners, and Europe, though quick to criticize US policy, has its own impressive compendium of bilateral deals, both extant and in the pipeline. It is vital that these deals are not seen as a substitute for multilateral trade rules. They are not good for developing countries—which are often intimidated into accepting conditions that compromise their chances of sound economic development—nor for the world economy as a whole.

While the WTO has certainly failed to fulfill expectations in many areas, and needs reform, abandoning it would be shortsighted and dangerous. Regardless of who is to blame for the failures of trade talks, the critical step now is for all countries to move forward and reassert a commitment to the WTO and to the ideas and ideals laid out at Doha.

International governance

We must ask ourselves what is needed to improve the quality of international governance, whether in the WTO, the World Bank, the International Monetary Fund, or the UN. How can a more coherent relationship be forged between sound economic organization and the achievement of social and economic fairness?

Here too, I believe the international human rights framework has a vital role to play in helping shape new international trade and development policies that work for the greater good. As a first step, there is an opportunity now to reflect on how the international trade system measures up to the values at the heart of human rights: shared values with which most people throughout the world intuitively identify: equality, non-discrimination, accountability, empowerment, and participation.

Those values seem to be far from center stage today. Powerful interests can often obtain privileged access to information on trade negotiations or create opportunities for influencing them. Yet few other concerned groups are consulted, and civil society groups may have little or no opportunity to express their views on proposed international trade rules. And smaller countries that are members of the WTO are not always able to participate fully in the WTO decision-making that affects them.

Taking a values-led, human rights approach would change that by ensuring more space for participation by those who are affected by trade policy. Such an approach would contribute to developing trade policy that is more responsive to the needs of the people it is said to serve, as well as being seen as more legitimate and more sustainable.

The report *Civil Society and the WTO* looks at how two African countries, Kenya and Uganda, have made important strides in involving a wider range of stakeholders in dialogue with trade policy-makers (CAFOD *et al.* 2003). Their aim, to create more ownership of policies that reflect the needs and interests of the public, is the type of approach that Realizing Rights intends to foster.

Conclusion

With each new program or initiative we undertake, at whatever level, we need to ask questions about the benefits for promoting human rights and about the potentially negative effects on human rights. We also need to be mindful of the human rights commitments that governments have already made, and then be prepared to hold our leaders accountable. This applies as much to the governance of a village or local organization as it does to the governance of states or international organizations.

I believe the future of human rights will depend, first and foremost, on whether countries themselves succeed in building their own national structures to ensure the protection of fundamental rights. These structures will need to respond to prevailing conditions and cultures, and in the process respect ethnic, cultural, religious, and linguistic diversity. We know from experience that those societies where the domestic infrastructure reflects the state's commitment to democracy and the rule of law—such as to a pluralistic and accountable parliament, an executive ultimately subject to the authority of elected representatives, and an independent, impartial judiciary—are also those societies best able to ensure respect for human rights and to achieve sustainable development.

But we cannot expect to bridge the divides in our world without also being prepared to help the least developed countries to put in place or reform the building blocks of human rights protection. More assistance from the richest nations will be needed to see these governance capacities strengthened. As an alternative to pre-emptive security measures, this assistance may prove less costly, more welcome, and more effective.

At the start of the new century, world leaders agreed a common agenda aimed at making globalization work for all people. These commitments, laid out in the UN Millennium Declaration and distilled in the UN Millennium Development Goals,[5] include halving the number of people in extreme poverty and hunger by 2015; achieving universal primary education for boys and girls by 2015, and specific targets for promoting gender equality and empowerment of women; combating HIV/AIDS, malaria, and other diseases; ensuring environmental sustainability; and developing a global partnership for development. That Agenda was costed in Monterrey at the Conference on Financing for Development as requiring an additional US$50 billion a year in global development spending. Compared with the cost of a medium-sized war, that figure should not daunt the international community.

Implementing this common agenda will create a new globalization process based on shared values and shared commitments—a process that connects the promotion of human rights with the requirements of human development and the protection of security for all people.

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Notes

1 See *http://www.eginitiative.org*
2 See *http://www.un.org/womenwatch/daw/cedaw/*
3 *http://www.iom.int/en/know/berneinitiative/index.shtml*
4 And yet, according to participants from both developed and developing countries, there *were* some promising deals under discussion before the talks collapsed.
5 See *http://www.developmentgoals.org*

6 The future of globalization

Lessons from Cancún and recent financial crises

Joseph Stiglitz[1]

In the 1990s, globalization was viewed with enormous optimism. "Globalization American-style" was expected to bring unprecedented prosperity to all countries in the world. International flows of capital had increased six-fold. New trade agreements were heralded as introducing a new era. We talked about what these would do for jobs and prosperity in the United States.

By the end of the decade, all of a sudden globalization looked quite different. The World Trade Organization meeting in Seattle was supposed to open up a new set of trade negotiations that President Clinton wanted to start in the US, to be called the Seattle Round or—even better—the Clinton Round. But instead of a new round, there were riots of a kind that the US had not seen in twenty years. If countries were prospering from trade agreements, they didn't know it.

There were good reasons for much of this unhappiness. A study by the World Bank pointed out, for instance, that the poorest region in the world—sub-Saharan Africa—was actually worse off by about 2–3 percent than a decade earlier. Not only had the United States gotten the lion's share of the gains from globalization, but some of the gains had come at the expense of other countries. By the late 1990s, a large number of problems were becoming evident: most notably the East Asia crisis of 1997, followed by the global financial crisis of 1998. A little harbinger in Mexico was a minor event compared to what happened in East Asia, Latin America, and Russia in the following few years. The US Treasury and the International Monetary Fund attempted to shift the blame for the crises, away from the policies that they had pursued and advocated, and the frameworks that they had established, and on to the countries that were badly affected, pointing to these countries' lack of transparency and weak banking systems. These were real problems but not the main problems, as I shall explain below.

Globalization has had some successes, particularly in East Asia, where incomes increased in the 1960s, 1970s, and 1980s. Countries such as Korea increased their per capita incomes eight-fold, almost eliminated poverty, achieved universal literacy, improved health standards, and increased their life expectancy. These countries based their growth on exports and on absorbing technical knowledge from the most advanced industrial countries. They thus based their gains on globalization—but on globalization that they defined in their own terms. China, for instance, has had enormous success over the last twenty-five years, but still has not fully liberalized its capital markets, notwithstanding the advice that was peddled by the international financial institutions. China has embraced foreign direct investment but not the kinds of destabilizing capital flows that plagued those parts of Asia that opened their markets to speculative capital.

By contrast, Latin America has experienced real difficulties as a result of globalization. At the beginning of the 1990s, Latin America reflected the same kind of optimism that we in the United States felt about globalization. The high growth of the early years masked hidden problems and, for the decade as a whole, growth was little more than half what it had been in the 1950s, 1960s, or 1970s. And of that growth, a disproportionate part went to the upper third or even the top 10 percent of the population. Countries of the region undertook reforms that increased their openness to the rest of the world and were supposed to lead to more efficient markets. Instead, unemployment rose by 3 percent each year and an increasingly large fraction of workers found themselves in the informal sector, without the normal protections offered by formal sector jobs. Something had gone wrong, and in these failures the successes of the past were almost forgotten. As reform failed, people in Latin America asked why, and why globalization had failed them.

One of the important lessons to emerge from the experience of the last decade is that when globalization is properly managed, it can deliver enormous benefits—benefits that not only bring economic growth, but make sure that the growth is widely shared. But when globalization is not well managed, it can have very adverse effects. In this chapter I first review what has gone wrong over the past decade. Then, I outline what I see as the fundamental problems of globalization. In the third section, I outline a set of lessons for policy that would make globalization work more fairly, providing a more secure world for all.

What went wrong, and how did we get to where we are?

In my book (Stiglitz 2003), I look at what happened in the 1990s, and suggest that some of what I call the seeds of destruction—the problems of globalization that emerged at the end of the 1990s, and the economic downturn that we have had in the last three years—were sown in that decade.

One of the problems is that economic globalization has outpaced political globalization. The end of the Cold War opened up new opportunities to create a new global economic order—a more principled order, based on ideas of social justice, that would provide the countries of the world a more level playing field. We missed that opportunity. Part of the reason was that we lacked a clear vision of what we wanted or what should have been created.

Meanwhile, the commercial and financial interests in the United States had a vision of what *they* wanted. They seized the opportunity to open up new markets for the advanced industrial countries. And they used the US government to advance their interests. Supported by Europe to some extent, the US used its economic and military supremacy to create a set of policies that are grossly unfair—particularly in the area of trade, and particularly to the developing countries. The US pursued an approach to globalization that was based on unilateralism rather than multilateralism, and that was carried forward by global economic institutions that are fundamentally undemocratic and non-transparent. At the IMF, for instance, only one country, the US, has veto power. The US used the threat of its veto to shape the Fund's stance on economic policy.

We are now reaping some of the consequences of unprincipled globalization. For instance, as I mentioned, sub-Saharan Africa has become worse off. The underlying reasons are fairly clear. There are asymmetries in international trade agreements, because the developed countries insisted that the developing countries remove their trade subsidies and trade barriers for goods in which the North had a comparative advantage, but the developed countries did not reciprocate.

These asymmetries can be seen not only in traditional areas of negotiation like agriculture, but also in new areas that were the hallmark of the Uruguay Round of trade discussions completed in late 1993. For instance, one of the so-called advances of the Uruguay Round was the extension of liberalization to trade in services. Seeking an agreement on services made enormous sense. Manufactured goods, the focal point of discussions on trade for the previous fifty years, had dwindled as a share of the American economy and been overtaken by services. (Today, only 14 percent of the American labor force works in manufacturing.) But the services that featured on the agenda were financial services—those services in which the US had a comparative advantage. Services such as maritime or construction services that are intensive in unskilled labor were not on the agenda. And the US remains extremely protectionist in those areas.

A few examples will show the nature of the imbalance. One of them is the subsidies of more than 100 percent that the US pays to its cotton producers. These subsidies amount to about US$4 billion, while the value of what the cotton farmers produce is about US$3.5 billion. These subsidies cost American taxpayers an enormous amount. Many of them, by inducing farmers to use heavy fertilizers, are very bad for the environment as well. The subsidies go to 25,000 very well-off American farmers. This is not the type of farm program typical of seventy-five years ago during the Great Depression. Now the average farmer in the US has an income higher than the average American, so average Americans are subsidizing the well-off Americans in the farm program.

While 25,000 American farmers are getting these large amounts of money, 10 million African cotton farmers are being hurt enormously. The way this happens is quite simple: we subsidize our farmers to produce more cotton than they should, given that their production is economically inefficient. The increasing supply lowers the price of cotton. Cotton farmers in Africa are in bare subsistence mode and we are pushing their incomes even further down. In several African countries, farmers' loss of income from US cotton subsidies is equivalent to 1–2 percent of GDP. The loss is more than the foreign aid that the US gives, so we are not even compensating these countries for the damage that we are doing.

This is not just an American problem; Europe shares the guilt. The average cow in Europe gets a subsidy of two dollars a day, which is a better daily income than that of 2.8 billion people in the developing world.

Another topic that featured in the Uruguay Round is intellectual property. We all recognize the importance of intellectual property (it is even the subject of a provision in the American Constitution). But we should also recognize that a successful intellectual property regime regulates the interests of both users and producers. There is no natural law of intellectual property. During the discussions of intellectual property in the Uruguay Round, both the Council of Economic Advisors that I was on at the time, and the US Office of Science and Technology Policy opposed the council for intellectual property that the US trade representative was advocating. We believed that that proposal was bad for American science, and bad for innovation in America, because the most important input to research is other research, and if you make it more difficult to get access to knowledge, you can actually impede the advance of science. We were also concerned about how the Uruguay Round Agreement would affect access to life-saving drugs. When the Agreement was signed in Marrakech, it condemned thousands, perhaps millions, of people to death, by raising the prices of life-saving drugs to levels that few people in African or other developing countries could afford. It took four or five years to achieve public recognition of the problems that we argued over in 1993–94. The US trade representative paid no attention to us. US policy was driven by the pharmaceutical industry and the entertainment industry, and the official view was that the stronger the intellectual property agreement, the better.

The consequences were as we predicted. Eventually, the outrage became enormous, and the issue was put on the agenda. At the November 2001 WTO meeting in Doha (a place less receptive to public demonstrations than Seattle), an agreement was reached to proceed with an agenda of trade negotiations to correct the imbalances of the past. The Doha Round was labeled the "Development Round", in recognition that past trade negotiations had not been fair to the developing countries.

Europe and the US essentially reneged on that agreement, but eventually all countries except the US agreed to give countries such as South Africa, Brazil, and India licenses to manufacture life-saving drugs like AIDS medicines. Small countries such as Botswana, whose AIDS incidence is 20–25 percent of the population and which are too small to have their own manufacturing capacity, were left in a difficult predicament. The US took the view that they had to pay the US$10,000 per capita needed for buying AIDS medicines from the US, rather than buying from neighboring developing countries producing under license. Obviously, taking that view meant condemning all the AIDS sufferers in small poor countries to death, since they could not possibly afford such sums.

The way that trade negotiations have been conducted in the past is to take such unreasonable stands for a long time and on as many issues as possible and then at the last minute to make a concession and say, "See how good we are, we finally conceded." The focus is not on creating a fair trade regime, but on "What can we do for America? What is the best bargain that we can get?"

The US made no concessions in other areas, including agriculture. Optimists had believed that although the Uruguay Round had left agriculture highly subsidized, there was an understanding that agricultural subsidies would come down. Instead, the United States doubled its subsidies. And the possible "concession" discussed at Cancún was the restoration of those subsidies to the level that they had before they doubled. Many developing countries saw that this was not in the spirit of fair play. In a nutshell, the meeting in Cancún failed because the United States and Europe reneged on their promise to make the Doha Round a development round.

Fundamental problems underlying globalization

While globalization might have driven what I call "a special privilege agenda," the fundamental problems underlying globalization have not been addressed.

Financial system

These problems have to do, in particular, with the global financial system. Recently six crises took place in a period of six years. These were not the first crises; we have had almost a hundred crises in a period of about thirty years. But what is particularly disturbing is that, while we talk about how wonderful our financial system is at addressing the problems of risk, the developing countries are left to carry the burden of volatility in interest rates and exchange rates.

The deficiencies of the financial system have had enormous consequences for developing countries. In Latin America, at the beginning of the 1980s, countries went into a debt crisis, defaulting on their loans. The fundamental problem was that they had been forced to carry the burden of interest rate volatility. Their loans would have been manageable had their interest rates been kept at historical levels. But to fight inflation in the United States, the US Federal Reserve's Paul Volcker raised interest rates to unprecedented levels. And at the Fed, when they were discussing this, someone from Mexico who had been a distinguished faculty member at Yale warned that this was going to have very serious adverse effects on Latin America. Even that was an understatement. But the Fed took the view that "Our responsibility is to fight inflation in America. We will fight inflation in the US and Latin America must take care of itself." The consequences were predictable. Many of the problems in Latin America are exactly the same now as then: interest rates increased enormously after the financial crises of the late 1990s, forcing problems on to several of the Latin American countries.

Developing countries also have to cope with the risks of exchange rate volatility. A little over a year ago, I was in Moldova, which today is one of the poorer former Soviet Union countries, having been one of the richest. The transition from communism to a market economy was supposed to bring Moldova unprecedented prosperity, but in fact brought unprecedented poverty. In the course of the transition, the GDP of Moldova has fallen by 70 percent, and in 2001, the government was spending 75 percent of its meager budget on servicing the foreign debt. Moldova did not even have electricity to light its cities at night or to provide oxygen to the hospitals. While I was there, one of our team members had to go to the hospital and they ran out of oxygen, so he died.

Developing countries bear the risks of the global financial system. Economic theory says that risks should be borne by the rich; that markets functioning well should transfer risks from those who are less able to those who are more able. But the markets have not done this.

Global reserve system

A second problem is the global reserve system, which I believe is the underlying source of the instability that we have seen in recent years. This system has a number of peculiar attributes. One of them is that the US is effectively borrowing money from much poorer countries. The richest country in the world is unable to live within its means; it has an enormous trade deficit, running at US$600 billion a year, and it borrows more than US$1.5 billion a day. Meanwhile, the US is lecturing all the poorer countries about why they should live within their means. With a global reserve system in which the dollar is held as a reserve, poor countries need to think carefully about what this entails.

Let me give you an example. Suppose you are the government of a poor country anywhere in the world and one of your country's firms borrows US$1 million from a US bank, paying interest at, say, 18 percent. To provide prudently against the eventuality that the money might be called, you need to set aside US$100 million in reserves. The way poor countries hold reserves is typically in US Treasury bills. What does this mean? It means that while the US is lending this country US$100 million at 18 percent, the poor country that holds a reserve in US Treasury bills is lending the United States US$100 million, and at an interest rate of 1 percent. Borrowing at 18 or 20 percent and lending at 1 percent is not good economics. It does help the meager growth rate in the US. But it is not good for growth in the developing world.

This helps us to understand why the US Treasury and the US government have opposed reforms in the global reserves system. In the narrow sense, the US benefits from the status quo. Taking a broader view, however, the global reserve system contributes to global economic instability, and all of us suffer from global economic instability.

Lessons and prospects

For economics, I draw two lessons in particular from the global economic instability that we have seen.

The first is about the liberalization of capital markets. From cross-country regression studies of the factors that contribute to economic instability, one of the factors that stands out is the rapid liberalization of capital markets and financial markets. We already knew the destabilizing effect of such liberalization before the East Asia crisis. Nonetheless, the international financial institutions continued to push the agenda of capital market liberalization. In fact, an attempt was made at the Hong Kong meeting of the IMF in 1997, just at the beginning of the East Asia crisis (the timing could not have been worse!), to revise the Fund's charter so as to require all countries to change their economic systems and open themselves up to hot, speculative money.

Perspectives have now changed, and in March 2003 an IMF study pointed out what academics had known for a long time: that capital market liberalization not only leads to enormous instability but also does not produce faster economic growth. The simplest reason for this is that firms do not create jobs on the basis of temporary speculative foreign capital. Thus, one of the important lessons is to re-examine the role of liberalization, and to move away from the ideological perspective to look more closely at which policies actually work.

The second lesson is that, when an economy faces a downturn, it needs to be stimulated. Those who hold this Keynesian view have been appalled by the policies that the IMF has promoted around the world. In East Asia, and in Argentina, the IMF told countries that they ought to contract their fiscal and monetary policies. The good news for the economics profession is that our predictions were correct: those contractionary fiscal and monetary policies did worsen the economic downturns; there were even downturns during recessions, leading to depressions. I hope that, going forward, the lesson of those episodes will be learned.

For politics, I offer the lesson that the US might be the strongest superpower, economically and even militarily, but that having all that power does not get you what you want. In the area of trade, we have seen at Cancún that the US may have wanted another trade agreement, but could not achieve it. Mexico, with Brazil and India, played a critical role in Cancún in stating the demand for a fairer global economic system.

In a way, the outcome at Cancún is a victory for democracy. Let me explain why. For years, the US trade representative would say to the other countries' trade representatives, often quite candidly, "We agree with you that what we are asking is unreasonable, and we recognize that our agricultural subsidies hurt you, but our hands are tied. We have a democracy in America and our Congress won't allow us to get rid of these subsidies. Maybe we will eventually be able to do something, but you know, reform can take decades." Meanwhile, they would tell the developing countries, "Change your policies in the next 30 days," and insist that these countries' parliaments pass the necessary legislation. At Cancún, the developing countries said, in effect, "We too are democracies." India has an election in 2004, and an active press, and if the Indian trade representatives were to have returned from Cancún with a treaty as unfair as the last agreement, their political bosses would have lost their jobs. So they had no choice but to say to developed countries, "Unless you can give us a fairer trade agreement, we can't go along." The situation is similar in Brazil and the other countries. It is a testimony, I think, to the strength of a free press and to democracy that they said, "No agreement is better than an unfair agreement."

Specific policy lessons

Let me end by outlining briefly some of the more specific policy lessons that I think ought to emerge from the episodes of the past ten years.

Craft trade and capital market liberalization policies carefully. Capital market liberalization and trade liberalization can expose markets to enormous risks, and policies on the sequence and pace of such reforms need to be carefully crafted. The result otherwise can be enormous costs without benefits.

Improve the distribution of risk in the global reserve system. A related issue is that we must address the fundamental problems of the distribution of risk in the global reserve system.

Respond better to countries in difficulty. No matter what we do to address those underlying problems, there are going to be economic crises. (For 200 years, the history of capitalism has had ups and downs.) What to do with countries when they have recessions? The big bailout strategy is at best questionable. It failed, I would argue, in Thailand, Korea, Indonesia, Russia, Brazil, and last in Argentina. That is a remarkable record, and particularly so because the bailouts kept on coming—even while the theory was quite strong and the evidence was mounting that the bailouts were part of the problem and not part of the solution. After Argentina collapsed, there was some recognition that more systematic alternatives were needed.

Of course, the notion that borrowers may be unable to repay all they owe has been a part of capitalism for a long time. In the nineteenth century, bankruptcy was not handled very well. From Dickens' novels, we know that people who went bankrupt were put in debtors' prison. This wasn't a particularly good way to get creditors repaid, because prisoners did not get high incomes. But it offered a good incentive to repay, so the virtues of the incentives outweighed the lost debts of the people who were imprisoned. Meanwhile, international bankruptcy was handled a little more roughly, as Mexico can attest. When countries couldn't pay their debts, European governments sent in their armies to enforce payment. Britain and France invaded Mexico in the mid-nineteenth century. They did not actually take over, but put in a puppet ruler for a while. As recently as 1902, when Venezuela could not repay its debt, European powers bombarded it—with US approval—to get it to change its mind. And in the 1930s, when Newfoundland (which was not yet part of Canada) defaulted on its loans, the creditor countries shut down the Parliament saying, "If you can't repay your loans, you can't have your own government."

Today we send the IMF to address such problems. We do need a better system; in particular, we should not have a major creditor lead the bankruptcy proceedings. (Nobody in the US would like it if we had Citibank—though maybe Citibank might like it—be the judge in bankruptcy proceedings.) Countries that have a problem need a fresh start just as individuals need a fresh start. Some of the proposals that have been presented do not make much sense, but the notion that there ought to be an alternative to bankruptcy and standstills is an important step forward.

Recognize that recovery is based on the real sector, not on money. The contractionary fiscal policy that was imposed on Argentina, after the country's tremendous problems, predictably sent the economy into a deep recession, or depression. A fixed exchange rate became uncompetitive, especially when linked to the overvalued US dollar. But Argentina has begun to recover, and without money from the IMF. Its policy-makers recognized the core issue: that recovery is based on the real sector, not on money. Had they taken money from the IMF, the money would have gone straight back to the IMF—the check would never have left Washington. They figured out that the money would do little for the people in Argentina, while the conditions that stood to be imposed on their country would make Argentineans worse off. They said, "We would like an IMF program but only if the conditions are right." And because they insisted on this and because they structured their own program, Argentina successfully recovered from its very severe economic downturn.

Rich countries need to make concessions in trade. Further opening up trade and creating a more integrated world economy has the potential to raise living standards in both the North and the South. But unless the rich countries make meaningful concessions, the developing countries are unlikely to make further reciprocal trade liberalization agreements.

Why is this the case? Developing countries can see that American import tariffs are already relatively low, at about 3 percent, and that the US policies that really hurt the developing countries are agricultural subsidies, peak tariffs, and anti-dumping duties. Anti-dumping duties are important because when countries do succeed in getting access to American markets and competing with America, we very often respond by saying, "You're dumping."

The anti-dumping law provides that if you sell foreign goods in the US at a price below cost, you are deemed unfair, and the US imposes a tariff to represent the difference between the fair market price and what you actually charged. But the US has a double standard. For goods produced *within* the US, the law on unfair trade practices (the Predatory Pricing Laws) applies a standard completely different from that applied to goods produced abroad. If we applied the same standard that we use for foreign companies to companies within America, more than half of American firms would be found guilty of dumping. Similarly, if we applied the domestic standards to goods imported from abroad, almost none of the anti-dumping cases would survive. Eliminating this double standard is not even on the agenda.

To illustrate how a free trade agreement does not guarantee free trade, I have a story about a Mexican avocado. The newly signed North American Free Trade Agreement allowed Mexican products free access into the US except for goods that might compete strongly with domestically produced items. The Californian avocado industry got very upset about the onslaught of Mexican avocados. And they finally came up with an idea. They said, "Mexican avocados have fruit flies," and the Mexicans said, "You can't see them," and the Californians said, "That's exactly the point." So, Mexico was enormously cooperative and said, "Send down your American agricultural inspectors and you'll see that we have no fruit flies in Mexico." The inspectors went down and came back and they said, "We can't see any fruit flies," and the American avocado industry said, "That's exactly the point. You can't see them." Then the Mexicans made another suggestion, which was that they would only send avocados into New England in the winter—the theory being that any fruit fly that arrived in Boston in winter would immediately freeze to death. Surely this would solve the problem of the invisible fruit fly. But still the Americans said, "How do we know that we killed them if we can't see them?" Some of us were puzzled as to why there was such resistance to allowing avocados just into New England in the middle of winter. We discovered that there is one day in January on which the US consumes more avocados than on any other day of the year: Super Bowl Sunday. It has become part of American culture—if you can call it that—to eat guacamole dip while watching the football game.

Another example of how a free trade agreement does not equal free trade is the story of the broomcorn brooms. After the North American Free Trade Agreement, the US saw itself faced with an onslaught of Mexican broomcorn brooms. Mexican broomcorn brooms, like American broomcorn brooms, are made from the tassels from a kind of corn that is called broomcorn. The US could not argue that the broom producers were dumping. But it invoked another provision called safeguards, whereby if an imported product is a threat to the American economy, you can take strong action to keep it out of the US until the economy can adjust. Only between 100 and 300 people in the US made their livelihoods out of broomcorn brooms. We must have spent between 1,000 and 3,000 hours discussing the issue, and we finally did impose the safeguard so that Mexico would not wreck the American economy by shipping us all those broomcorn brooms.

There are hundreds of such stories, but the point is that developing countries now recognize problems like this, and unless the rich countries change their policies and practices, the developing countries have little to gain from a new free trade agreement. The US is not willing to change its agricultural policy or the anti-dumping agreements. Even worse, in the discussions leading up to the meeting in Cancún, the US and Europe made demands that would make development even more difficult for the developing countries. Issues were put on the agenda that should not have been, and had nothing to do with trade. For example, given that the IMF had recognized that liberalized capital flows are destabilizing and do not promote economic growth, the US and Europe turned to promoting capital flows through trade negotiations.

Democratize international decision-making. The final lesson that emerges from these episodes is that there are some fundamental problems in international governance. I mentioned at the outset that globalization has been promoted by international economic institutions that in many ways lack consistency, democratic structures, and transparency. In the United States, the Freedom of Information Act gives citizens the right to know what their government is doing, and it is integral to our fundamental freedoms. By contrast, citizens of this or other countries do not have the right to know about the decisions and voting patterns inside economic institutions, where much of what happens goes on in secret. In one episode, for example, there was a directive on how the US representatives ought to vote on certain issues, and the US representative did not follow the directive. Congress did not know about the vote because it was secret. Thankfully these institutions leak. And so eventually it became known that these representatives had not voted the way Congress told them to and they were chastised. Things are getting better.

The international governance problem stems from what I like to call the smokestack structure of international economic decision-making. Decisions about finance are made by finance ministers and finance governors, and decisions about trade are made by trade ministers. Little would be wrong with this if trade decisions only affected trade and finance decisions only affected finance. But international agreements on trade and finance and the policies of economic institutions have an enormous impact on a whole variety of aspects of life, including health, education, and the environment. In the United States—and this is true in almost every administration—when we make decisions about economic policy, all the affected parties are seated around the table. Some voices may be louder than others, but all the voices are heard. The process is an attempt to bring into the decision-making process a wide range of views and a wide range of interests and frameworks. That does not happen in an international institution. And I think that is one of the reasons why globalization has been having such adverse effects. To go back to my earlier example about intellectual property: if that issue were being discussed within the United States, the Secretary of Health would have had a view; the

Office of Science and Technology would have had a view; the Council of Economic Advisors would have had a view. And those views would differ widely from the views that were pursued by the US trade representative. But given the way trade negotiations are actually conducted, those other views are barely heard.

To conclude, we have not managed globalization very well. Globalization entails the closer integration of the countries of the world, and closer integration means more interdependence. Our well-being will depend on others, and it will depend on how globalization is managed. America, as the sole superpower with the strongest economy, has a special role. Our failures in this area go back a long way, though I would argue they have grown far worse in the past three years. There are reforms, some of which I have briefly sketched above, that would make globalization work better, both for developed countries like America, and for developing countries. I think that if we want a better world—even if we only want a more secure America—then it is imperative that we undertake these reforms.

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1 The keynote address, presented October 10, 2003, at the conference *The Future of Globalization*.

Part II

Trade, growth, and inclusion

7 Investment climate and international integration in Asian developing economies

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This chapter explores the idea that trade liberalization needs to be complemented by a sound investment climate if developing countries are to achieve greater foreign trade and investment and higher growth. What we mean by investment climate is the institutional, policy, and regulatory environment in which firms operate: factors that influence the link from sowing to reaping. It seems likely that in a country whose government is highly bureaucratic and corrupt, or whose provision or regulation of infrastructure and financial services is inefficient so that firms cannot get reliable services, the returns on potential investments will be low and uncertain. If the investment climate is poor, it will be difficult to get foreign investors to locate in that country or to get domestic entrepreneurs to invest in response to potential export opportunities.

This concept of investment climate is closely related to what some authors in the macro literature have called high-quality institutions (Knack and Keefer 1995; Acemoglu, Johnson, and Robinson 2001) or "social infrastructure" (Hall and Jones 1999). The latter authors, for example, write:

> Our hypothesis is that differences in capital accumulation, productivity, and therefore output per worker are fundamentally related to differences in *social infrastructure* across countries. By social infrastructure we mean the institutions and government policies that determine the economic environment within which individuals accumulate skills, and firms accumulate capital and produce output. A social infrastructure favorable to high levels of output per worker provides an environment that supports productive activities and encourages capital accumulation, skill acquisition, invention, and technology transfer. . . . Social institutions to protect the output of individual productive units from diversion are an essential component of a social infrastructure favorable to high levels of output per worker . . . Regulations and laws may protect against diversion, but they all too often constitute the chief vehicle of diversion in an economy.

The idea that social infrastructure influences growth has been investigated in the cross-country studies noted above using proxies for the strength of property rights and government efficiency. This literature is suggestive, but it suffers from three problems: (1) there are not that many countries in the world, so that the statistical results are not that robust;[2] (2) the proxies used as explanatory variables do not provide much specific guidance about what countries need to do to improve their investment climates; and (3) using national-level data assumes that the investment climate is the same across locations within a country, when in fact there may be interesting variations based on local governance.

Aside from the cross-country growth studies, there are cross-country studies of flows of direct foreign investment. A number of these have found that where institutions and/or infrastructure are better, direct foreign investment is more likely to take place. However, the cross-country studies do not always agree, and like the growth studies they suffer from the three problems noted in the previous paragraph.[3]

In this chapter we explore how institutional and policy weaknesses actually affect firms. We have collaborated with in-country partners on large random surveys of establishments in Bangladesh, China, India, and Pakistan. These surveys provide data on company ownership, sales, inputs, and outputs, as well as on measurable aspects of the investment climate, such as how long it takes to get goods through customs, how long it takes to get a phone line, or how frequent and disruptive are electric power outages. These four countries are all major exporters of garments and other labor-intensive manufactures, so that they face similar international market conditions. It is natural then to inquire why their performance has been so diverse.

The analytical framework for the study is straightforward. If there are systematic differences in investment climate across locations then, for the producers in these locations, total factor productivity should be related to investment climate; bureaucratic harassment, power outages, and so forth will result in less value added being produced from the same capital and labor. Drawing on trade theory, we argue that since the four countries studied are exporting similar products (have the same comparative advantage), those that have poor investment climates would need to lower wages and the returns to capital in order to compete. These lower returns would make them less attractive to investors, including foreign investors, as destinations for new plants or for expansion of existing ones. Other things equal, we would expect a random drawing of plants in a sector such as garments to have more foreign-invested plants where the investment climate is good. Also, some of the bottlenecks we investigate, such as delays in customs clearance, act as a form of trade barrier. Where such barriers are lower, we would expect a random drawing of plants to include more exporters.

The chapter proceeds as follows. The first sections briefly review trends in economic openness and growth in the four countries, and then introduce the surveys and the main indicators of investment climate that we use in the empirical analysis. We then estimate probit models for the probability that a firm is foreign-invested and for the probability that it exports. We find a clear relationship between investment climate indicators and international integration: foreign investment and exporting are much more common in places in which hassles and delays are few. And the fact that the investment climate indicators are highly significant, even after controlling for geography, population, and country dummies, is consistent with the view that local governance is very important.

Integration and growth in Asian developing economies

Developing countries as a group have grown faster than rich countries over the past fifteen years. However, this good aggregate result masks the fact that some developing countries have had the fastest growth rates in the world, while others have languished or even declined. The four countries that are the focus of our study—Bangladesh, China, India, and Pakistan—demonstrate this diversity. The four had similar per capita GDP in 1990, but in the subsequent decade China grew spectacularly well; Bangladesh and India, moderately well; and Pakistan not at all (Figure 7.1).

A popular view holds that such differences partly reflect the extent to which countries avail themselves of opportunities afforded by globalization.[4] Certainly, the growth performance of these four countries, and of developing countries more generally, is highly correlated with the increase in their openness over the 1990s, as measured by the increase in the ratio of trade to GDP (Figure 7.2). In turn, this growth in trade is closely related to another aspect of globalization, namely direct investment by multinational corporations. Over the 1990s, China received an average of 4 percent of its GDP per year in

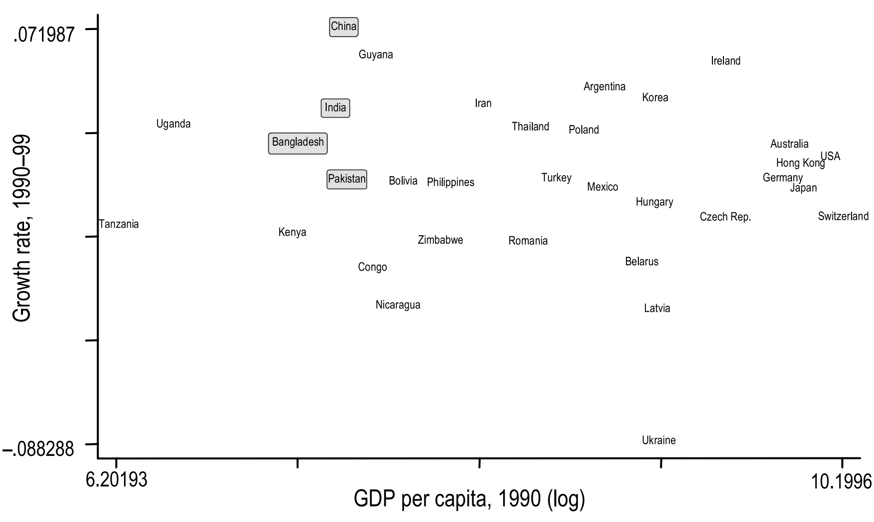

Figure 7.1 Per capita GDP growth rates, 1990–99, and per capita GDP in 1990.

foreign direct investment, while the South Asian countries all received less than 1 percent.

The correlation between integration and growth, however, begs the questions: What has led to China's extraordinary integration with the global economy, and why has Pakistan's trade, in contrast, not increased at all?

Part of the answer may lie in trade policies. Of these four countries, China has been the most energetic in liberalizing trade; by the end of the 1990s, its average import tariff rate had declined to 16.8 percent, below the rates in South Asia (Figure 7.3).

However, it seems unlikely to us that trade policy is the whole story. For example, Pakistan lowered its average tariff rate quite significantly but saw no change in the ratio of its trade to GDP. Bangladesh had a very significant increase in trade integration during the 1990s, and brought its average tariff rate (22.2 percent) almost as low as China's; it achieved decent economic growth, but its performance lags well behind China's. Thus this chapter

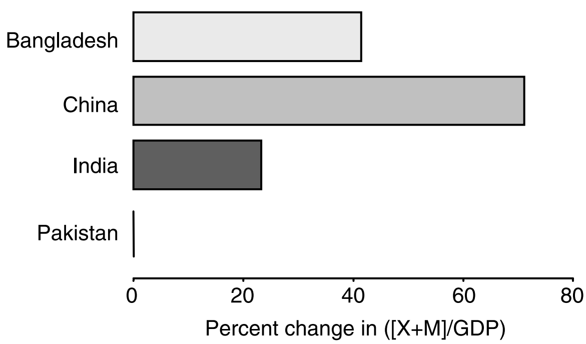

Figure 7.2 Increasing economic openness between 1980s and 1990s (Change in ratio of trade to GDP).

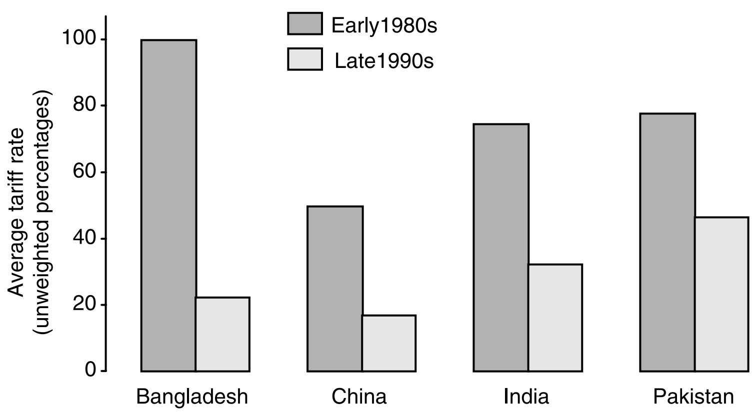

Figure 7.3 Trends in average tariff rates.

focuses on the role of investment climate in promoting international integration and thereby growth.

Measuring the investment climate with firm-level data

The empirical growth literature has used a number of proxy variables to investigate different aspects of the investment climate: subjective measures of the strength of the rule of law, expropriation risk, and government effectiveness in providing public services. This approach has the advantage that it can cover a lot of countries and establish a general link from investment climate to growth. The disadvantage of these indicators is that they are subjective and do not provide much specific guidance about how the investment climate affects firms and about which aspects of the investment climate are especially important.

At the end of the day, all growth occurs at the firm level (defining firms broadly to include farms and productive households). Hence we turn to firm-level data to get better measures of the investment climate and a clearer understanding of how it relates to firm performance, international integration, and growth.

Characteristics of the surveys

The surveys are based on large random samples of establishments in particular sectors that vary somewhat across the four countries.[5] Each survey uses a similar methodology; a stratified random sample of establishments is drawn in each country. The sample sizes are 1,001 firms in Bangladesh, 1,500 in China, 1,900 in India, and 879 in Pakistan.

The samples are first stratified on the basis of subsectors, to allow the collection of data on production and investment from firms that produce broadly the same products. The garment sector was covered in each country and is the best example of a relatively homogeneous industry in which we have observations from all four countries. The other sectors covered are textiles, leather products, electronic and electrical goods, chemicals, and food products in Bangladesh; business services, IT, electronic equipment and components, consumer appliances, apparel and leather products, and auto parts in China; textiles, leather goods, food products, drugs and pharmaceuticals, electronic consumer goods, metal products, plastics and machine tools in India; and textiles, leather goods, food processing, sporting goods, electronics, electrical goods, chemicals, and information technology in Pakistan.

The samples are also stratified based on location. The locations covered are Dhaka and Chittagong in Bangladesh; Beijing, Chengdu, Guangzhou, Shanghai, and Tianjin in China; thirty-eight cities in India; and Sindh, Punjab, Balochistan, and Northwest Frontier Province in Pakistan. The surveys cover about sixty cities in the four countries.

We developed the survey questionnaire through pilot testing and with input from firms about the key bottlenecks that they face. In each country we worked with a local partner to draw the samples and to train enumerators to visit the establishments. The typical observation is based on a three-hour visit to a factory. Because of the interest and support from the business community in each country, we obtained high levels of cooperation from firms.

Quantitative data on investment climate

Table 7.1 presents some quantitative measures of the investment climate collected by the surveys. For simplicity, we focus the presentation of data here on ten large cities, for each of which we have at least seventy-four observations.

Customs clearance

A question that relates both to bureaucracy in general, and to bureaucratic control of access to international markets in particular, is how long it took importing or exporting firms to get their last shipment of goods through customs. Some of the Chinese cities look the best here, especially on the export side. Exporters get their goods through customs in an average of 3.9 days in Guangzhou and 4.4 days in Shanghai (though Tianjin, at 6 days, is not as efficient). In Karachi, at the other extreme, the average delay in export customs is 15.8 days. In India, Chennai is not far from Chinese standards, but Calcutta has an average of 8.1 days. For garment producers, who basically work to a 60-day production cycle, losing a week or more on the import of fabric, and another week or more on the export of finished garments, is a serious bottleneck. The advantage of basing these means on large samples is

Table 7.1 Investment climate indicators for ten Asian cities

City	*Days to clear customs*		*Loss due to power outages (% of total sales)*	*Days to get a telephone connection*	*Share of firms with overdraft facility*
	Imports	*Exports*			
Bangalore	8.22	6.71	2.12	126.44	0.46
Calcutta	10.09	8.07	5.98	22.56	0.57
Chengdu	13.46	9.93	2.84	13.61	0.16
Chennai	6.65	4.54	6.44	24.03	0.75
Chittagong	12.8	8.56	3.05	53.38	0.66
Dhaka	11.46	8.88	3.35	168.47	0.66
Guangzhou	5.43	3.90	2.01	23.60	0.25
Karachi	10.55	15.78	6.14	18.43	0.33
Shanghai	6.67	4.40	1.45	13.18	0.37
Tianjin	7.63	6.03	1.56	6.96	0.16

that the standard errors are fairly small, and hence the differences between Guangzhou and Shanghai, on the one hand, and Calcutta and Karachi, on the other, are highly significant statistically.

Infrastructure

Overall, the infrastructure questions provide a fairly consistent picture in which China looks better than the other three countries, and Pakistan usually lags behind the other South Asian countries.

Our experience with this survey work over several years has taught us that the reliability of the public power grid is a big concern for firms, especially in South Asia. We asked firms to estimate their losses in sales attributable to power outages. Again, China has the best record, with losses of less than 1.5 percent of sales in Shanghai and around 2 percent in Guangzhou and Tianjin. These losses are significantly lower than in Dhaka (losses of 3.4 percent), which in turn performs much better than either Indian cities, such as Chennai and Calcutta, or Karachi in Pakistan. All the latter have firms losing about 6 percent of their sales to unreliable power. Many firms guard against such losses by investing in their own power generators, but for small and medium enterprises (SMEs) the cost of maintaining a generator is burdensome. Thus, another gauge of the reliability of the power supply is the proportion of firms that have their own generators. The share of firms with their own generator is 42 percent in the Pakistan sample and only 16 percent in the China sample. The numbers for firms with their own wells are nearly identical to these, at 44 percent in Pakistan and 16 percent in China.

A question that relates to both infrastructure and government bureaucracy is how many days it took to secure a phone line, for firms that have secured one in the past two years. Again, China's performance looks relatively good (16 days for the sample as a whole), compared to 18 days in Karachi, 126 in Bangalore, or a whopping 168 in Dhaka. These are all countries in which the public sector plays a role in allocating fixed phone lines.

Financial services

The survey questionnaire includes a series of questions on financial services. The government has a dominant stake in the banking sector in all four countries. None of the countries has particularly good financial services, and this is one area in which parts of China seem to be lagging behind the other countries. As to whether firms have overdraft facilities, the responses range from a low of 16 percent in Chengdu and Tianjin to 37 percent in Shanghai, 66 percent in Dhaka, and 75 percent in Chennai. Average clearance times for checks range from two days in Pakistan to nearly five days in China. In our China sample, there are many private medium-sized firms, and the data reveal that in general they are not well served by the largely state-owned financial system.

In summary, across and within these four countries we see significant variation in many of the investment climate measures. Hence the potential is there to explain differences in international integration and firm performance based on variations in the investment climate across locations.

Data on international integration

Table 7.2 reports two measures of international integration—the share of firms that are foreign-invested and the share that export—for the ten cities that we have highlighted. It can be seen that foreign investment is much more common in Guangzhou and Shanghai than in the other cities: from randomly chosen samples, 41 percent of the Shanghai firms and 28 percent of the Guangzhou firms have foreign participation. At the other extreme, less than 1 percent of the Karachi sample is foreign-invested. The share of firms exporting is very large in these two Chinese cities and in Dhaka (45 percent of the sample firms). Again, Karachi is much less integrated, with only 15 percent of its sample firms exporting.

These variations can arise from a number of sources. The sectoral composition of the samples is not identical in each city, so that, for example, the large share of exporters in the Dhaka sample partly reflects the dominant weight of garment manufacturing in the sample there.

Conclusions from the survey data

Thus far, we have established that there are statistically significant differences across cities in the extent of foreign investment and the extent to which firms export. There are also systematic differences in many of the indicators of investment climate. We can say confidently that customs clearance is faster in China than in Bangladesh, and faster in Bangladesh than in Pakistan. If we presume that time delays and service breakdowns are bad for business, then we can say that China looks the best of the four countries on many

Table 7.2 Indicators of international integration for ten Asian cities

City	*Share of firms foreign invested*	*Share of firms exporting*
Bangalore	0.05	0.30
Calcutta	0.03	0.24
Chengdu	0.11	0.21
Chennai	0.08	0.36
Chittagong	0.02	0.31
Dhaka	0.03	0.45
Guangzhou	0.28	0.42
Karachi	0.01	0.15
Shanghai	0.41	0.38
Tianjin	0.23	0.27

of the investment climate measures (fast customs clearance, fast access to new phone lines, few power outages). However, each location tends to have relative strengths and weaknesses. In China, for example, the state-owned banking system provides only poor services to the firms (largely privately owned) in our sample. We also find that there are important differences across cities within a country.

Investment climate and international integration

In this section we isolate and test for the importance of the investment climate for international integration.

Here it is important to have in mind alternative theories or models that might explain the empirical patterns we observe. A competing, but not mutually exclusive, hypothesis about why different locations in the developing world have such different experiences concerns the role of geography. It is possible that distance from markets and/or agglomeration economies can explain the dynamism of some locations and the stagnation in others.[6] We thus control for these factors in the analysis below. It is also possible that there is something else about China (for example, political stability, culture, size) that can account for its success. In our analysis below we include country dummies to capture these effects. A strength of our approach is that we can identify the importance of investment climate based solely on variation across cities within countries.

Choice of indicators of investment climate

In the survey instrument there are sometimes multiple questions that cover a similar theme. For example, as a measure of access to finance, there is information on the use of overdraft facilities as well as on the share of firms that have a bank loan or on how long it takes to clear checks. Within the same theme, the correlation of the indicators is high. Thus, we have decided to focus the empirical analysis on the five indicators that were presented in Table 7.1. These five were selected because the questions have high response rates in all countries and because they capture different dimensions of the investment climate.

We have tried to develop questions that objectively measure the investment climate, and we shall treat the investment climate as exogenous to firms. Nevertheless, there may be endogeneity problems if firms' performance affects these measures. For example, it is possible that an especially efficient firm can work within the exogenously given environment to reduce inspections, or power losses, or days needed for customs clearance or phone lines. That same efficiency may make it more likely that a firm is an exporter. To address this possibility, we average the indicators across firms in a particular city. Thus, for example, we take an average of these indicators for firms in Dhaka, and that location-specific mean enters the empirical analysis.

This approach has a further important advantage for us: only 140 firms in Bangladesh report getting a phone line in the past two years and hence provide information on how long it took them. If we took each investment climate indicator at the firm level, we would end up with only a relatively small sample of observations in which all the investment climate indicators are available. By creating the location averages, we are taking the view that the average experience of Dhaka firms in getting phones in the past two years tells us something about the investment climate that is relevant to all firms in Dhaka.

Investment climate and foreign investment

We begin the analysis by estimating a probit function across the 5,280 firms for which we have the necessary data. We focus again on the ten cities highlighted in Table 7.1. The dependent variable is a zero-one indicator of whether or not a firm has foreign equity participation. We want to estimate the probability that a randomly chosen firm in a particular city has foreign participation. It is likely that this varies by sector. Our hypothesis is that it depends as well on the investment climate indicators that were discussed above. Foreign investors have a large number of potential production locations to choose from, and their choice is likely to be influenced by the regulatory and infrastructure environment. Other factors may be relevant as well, and we will control for a number of these. But we start with a simple specification in which we have sector dummies and the five investment climate indicators discussed above.

We find a clear relationship between investment climate and the likelihood of foreign investment (Table 7.3, column 1). All of the investment climate indicators have the expected sign, and two of them are individually significant: foreign investment is more common where customs clearance is quick,

Table 7.3 Maximum likelihood estimates of a probit model of being foreign invested (Investment climate indicators aggregated at the city level)

	(1) Share of firms foreign invested (1)	*(2) Share of firms foreign invested (2)*	*(3) Share of firms foreign invested (3)*	*(4) Share of firms foreign invested (4)*	*(5) Marginal effects for (3)*
Investment climate indicators					
Days to clear customs, imports (log)	–0.441 (0.045)*	–0.291 (0.011)*	–0.198 (0.028)*	–0.199 (0.043)*	–0.019 (0.028)*
Days to clear customs, exports (log)	–0.068 (0.763)	–0.247 (0.084)	–0.180 (0.167)	–0.165 (0.206)	–0.017 (0.167)
Loss due to power outage, % of total sales (log)	–0.623 (0.001)**	–0.167 (0.031)*	–0.035 (0.724)	0.019 (0.849)	–0.003 (0.724)

Days to get a telephone connection (log)	–0.122 (0.214)	–0.115 (0.039)*	–0.040 (0.537)	–0.059 (0.392)	–0.004 (0.537)
Share of firms with overdraft facility (log)	0.187 (0.348)	0.156 (0.102)	0.419 (0.000)**	0.295 (0.005)**	0.040 (0.000)**
Sectors					
Textiles	–0.518 (0.015)*	–0.137 (0.423)	–0.026 (0.890)	–0.246 (0.189)	–0.002 (0.890)
Garments and leather goods	–0.642 (0.002)**	–0.303 (0.104)	–0.173 (0.390)	–0.354 (0.089)	–0.015 (0.390)
Food	–0.398 (0.093)	–0.008 (0.969)	0.102 (0.670)	0.001 (0.997)	0.011 (0.670)
Electrical/electronic	0.197 (0.044)*	0.202 (0.041)*	0.221 (0.025)*	0.183 (0.073)	0.024 (0.025)*
Auto components	0.158 (0.223)	0.156 (0.254)	0.161 (0.239)	0.067 (0.616)	0.017 (0.239)
Chemical/pharmaceutical	–0.133 (0.477)	0.274 (0.075)	0.359 (0.034)*	0.221 (0.185)	0.044 (0.034)*
Business services	–0.245 (0.117)	–0.429 (0.002)**	–0.435 (0.001)**	–0.358 (0.012)*	–0.031 (0.001)**
Geographic variables					
Distance of city from major markets (log)		–0.930 (0.000)**	–0.475 (0.001)**	–0.614 (0.000)**	–0.046 (0.001)**
Distance of city from port (log)		0.008 (0.230)	0.006 (0.356)	0.002 (0.726)	0.001 (0.356)
Population of city (log)		0.208 (0.003)**	0.189 (0.002)**	0.156 (0.020)*	0.018 (0.002)**
Country dummies					
China			0.725 (0.004)**	0.259 (0.314)	0.093 (0.004)**
India			–0.341 (0.101)	–0.329 (0.105)	–0.031 (0.101)
Bangladesh			–0.379 (0.040)*	–0.403 (0.030)*	–0.030 (0.040)*
Employment size (log)				0.151 (0.000)**	
Constant	0.867 (0.164)	4.675 (0.032)*	0.648 (0.743)	1.730 (0.393)	
Observations	5280	5280	5280	5128	5280
Chi-sq test	32.510	36.584	59.851	32.309	59.851
Prob > Chi-sq	0.000	0.000	0.000	0.000	0.000

Notes: See text for explanation of the specifications underlying the five columns. Robust p values in parentheses. * significant at 5 percent; ** significant at 1 percent. The chi-square test tests the joint significance of the five investment climate indicators.

power losses are small, the time needed to get a fixed phone line is short, and the availability of overdraft facilities is high. There is a fair amount of correlation across locations in the various indicators, and this tends to mute the individual significance of the variables. The joint test on the five variables is highly significant (at well below the .01 level).

We now re-specify the model to find out whether or not the predicted effect of investment climate on foreign investment is robust and economically meaningful. In the new set of estimates we address the geographic clustering of errors: the basic specification reflected in column 1 of Table 7.3 is now augmented in column 2 to include several geographic variables that the literature suggests are potential determinants of the location of production—the city's distance from major markets, distance from the nearest port, and population size.[7] Not surprisingly, we find that geography does matter for foreign investment: the latter is less likely in locations that are far from major markets and have small populations. Still, the investment climate variables that were important in the first specification remain so here.

One can easily think of a whole host of other factors that might influence the locational choices of foreign investors, such as the political or macro stability of the country, the quality of its legal system, or availability of high-quality labor. We now use country dummies to control for these factors, so that the relationships identified result only from the variation across locations *within* a country. Column 3 of Table 7.3 reports the results of the full specification with geographic variables and country dummies. Here the importance of the investment climate is somewhat muted, but nevertheless comes through clearly. The joint test of the five investment climate indicators is highly significant (p-value below .01). The coefficient on the China indicator variable is positive and significant, showing that there are things about China other than our investment climate indicators that make China more attractive to investors than the benchmark country, Pakistan. Still, the positive relationship remains between foreign investment and the investment climate—efficient customs, reliable power, telephone connectivity, and availability of financial services.

While we have been careful to make our samples random draws from the available lists of firms, we are somewhat concerned that the registration of formal sector firms is not always up-to-date and comprehensive in developing countries. It turns out that the average size of firms in the China and Bangladesh samples is significantly larger than the average size in the India and Pakistan samples. This variation may be an endogenous response to the differences in investment climate; but it is also possible that there was some bias in the underlying lists from which we sampled. If large firms have easier times with customs or with obtaining phone lines, then potentially the errors introduced are not random, but rather correlated with our variables of interest. Hence as a robustness check we include, in column 4 of Table 7.3, firms' employment size as an additional right-hand-side variable. We find that though firm size is highly correlated with foreign investment, its inclusion does not fundamentally change the relationship between investment climate and foreign participation.

Finally, in column 5 of Table 7.3, we turn the column 3 estimates into marginal effects so that we can conduct some counterfactual experiments to get a sense of the magnitude of these estimated effects. Recall that these are the estimates that include both geography and country dummies. We consider how the probability of foreign investment would change if lagging cities such as Calcutta, Dhaka, and Karachi had the same vector of investment climate characteristics that we find in Shanghai. Shanghai performs significantly better than most other cities in the sample in terms of power losses, customs clearance, and days to get a phone line (though not so well in financial services), and its advantages make it more attractive than them to foreign investors.

The results from this calculation are plausible and economically important. They show that in Calcutta, the share of foreign-invested firms would increase by more than half, from the current 2.5 percent of firms to 3.9 percent. In Karachi, the share of foreign-invested firms in these sectors would rise from the current 1 percent to about 5 percent (Figure 7.4).

After controlling for the investment climate indicators and the geographic variables, China's advantage over the other Asian countries is quite large: there is a 9 percentage point difference between the share of foreign-invested firms in the China sample and the share in the other samples.

Investment climate and exporting

Here our hypothesis is that the international firms attracted to a good investment climate have a global sales orientation. In addition, domestic firms are more likely to achieve the quality and scale required for exporting if they are operating in an environment of efficient customs and reliable infrastructure. Table 7.4 uses the same specifications as Table 7.3, but now the dependent variable is a zero-one indicator of whether or not a firm has export sales.

We find a clear relationship between the investment climate indicators and the probability of exporting, even though the coefficient on the days needed

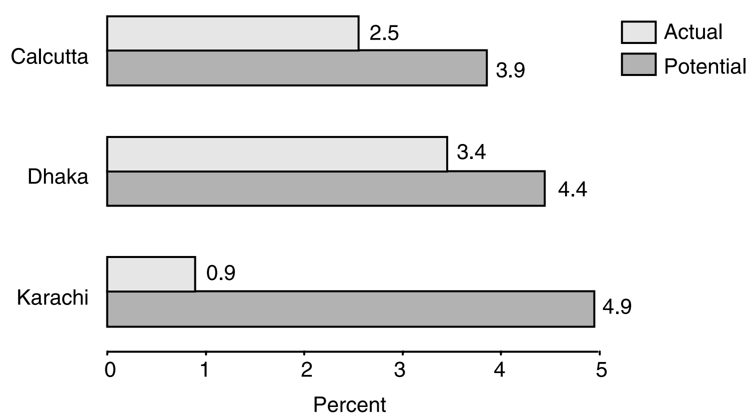

Figure 7.4 Actual versus potential share of firms that are foreign-invested.

Table 7.4 Maximum likelihood estimates of a probit model of exporting (Investment climate indicators aggregated at the city level)

	Share of firms exporting (1)	*Share of firms exporting (2)*	*Share of firms exporting (3)*	*Share of firms exporting (4)*	*Marginal effects of (3)*
Investment climate indicators					
Days to clear customs, imports (log)	–0.355 (0.089)	–0.327 (0.094)	–0.303 (0.101)	–0.289 (0.131)	–0.097 (0.101)
Days to clear customs, exports (log)	–0.157 (0.459)	–0.207 (0.315)	–0.198 (0.325)	–0.206 (0.306)	–0.063 (0.325)
Loss due to power outage, % of total sales (log)	–0.421 (0.000)**	–0.348 (0.006)**	–0.347 (0.041)*	–0.306 (0.080)	–0.111 (0.041)*
Days to get a telephone connection (log)	0.010 (0.871)	0.002 (0.976)	0.046 (0.623)	0.087 (0.404)	0.015 (0.623)
Share of firms with overdraft facility (log)	0.275 (0.010)*	0.270 (0.020)*	0.306 (0.020)*	0.106 (0.421)	0.098 (0.020)*
Sectors					
Textiles	–0.256 (0.123)	–0.217 (0.196)	–0.192 (0.301)	–0.474 (0.013)*	–0.058 (0.301)
Garments and leather goods	0.770 (0.005)**	0.799 (0.005)**	0.827 (0.005)**	0.655 (0.015)*	0.298 (0.005)**
Food	–0.481 (0.003)**	–0.426 (0.021)*	–0.397 (0.048)*	–0.552 (0.006)**	–0.112 (0.048)*
Electrical/electronic	–0.200 (0.052)	–0.212 (0.040)*	–0.209 (0.040)*	–0.273 (0.005)**	–0.064 (0.040)*
Auto components	–0.357 (0.002)**	–0.355 (0.003)**	–0.356 (0.003)**	–0.590 (0.000)**	–0.102 (0.003)**
Chemical/pharmaceutical	–0.207 (0.219)	–0.158 (0.341)	–0.142 (0.419)	–0.353 (0.046)*	–0.044 (0.419)
Business services	–1.230 (0.000)**	–1.287 (0.000)**	–1.303 (0.000)**	–1.194 (0.000)**	–0.252 (0.000)**
Geographic variables					
Distance of city from major markets (log)		–0.143 (0.587)	0.078 (0.759)	–0.096 (0.727)	0.025 (0.759)
Distance of city from port (log)		0.002 (0.823)	0.001 (0.892)	–0.009 (0.402)	0.000 (0.892)
Population of city (log)		0.063 (0.272)	0.069 (0.236)	–0.004 (0.944)	0.022 (0.236)
Country dummies					
China			0.295 (0.575)	–0.544 (0.306)	0.098 (0.575)
India			–0.003 (0.982)	0.229 (0.149)	–0.001 (0.982)
Bangladesh			–0.072 (0.745)	–0.364 (0.150)	–0.023 (0.745)
Employment size (log)				0.339 (0.000)**	
Constant	1.172 (0.001)**	1.366 (0.556)	–0.827 (0.782)	0.273 (0.932)	

Observations	5280	5280	5280	5128	5280
Chi-sq test	84.309	48.692	46.163	23.149	46.163
Prob > Chi-sq	0.000	0.000	0.000	0.000	0.000

Notes: See text for explanation of the specifications underlying the five columns. Robust p values in parentheses. * significant at 5 percent; ** significant at 1 percent. The chi-square test tests the joint significance of the five investment climate indicators.

to get a phone line has a counterintuitive sign and is close to zero. Geography seems to matter, as it did with foreign investment; being far from markets and having a small population make a city less likely to have large numbers of exporters (column 2 of Table 7.4). And, as it did with foreign investment, a country dummy for China has a positive effect (column 3 of Table 7.4). Note, however, that the effects of the geography variables and the country dummies are not statistically significant. On the other hand, the investment climate indicators are jointly highly significant (p-value below .01). Even with country dummies included, we find that customs delays, power reliability, and financial services are all important determinants of export status, with signs in the expected directions. And column 4 of Table 7.4 shows that controlling for size of the firm does not materially affect the probability that a firm is an exporter.

From the marginal effects in column 5 of Table 7.4, we can ask how the probability that a firm exports would change, if Calcutta, Dhaka, or Karachi had the same vector of investment climate characteristics that we observe in Shanghai. The results show that if Calcutta could attain Shanghai's investment climate, the share of firms exporting in these sectors would nearly double from the current 24 percent to 47 percent—comparable to what is found in coastal Chinese cities. In Karachi we find that a similar 20 percent

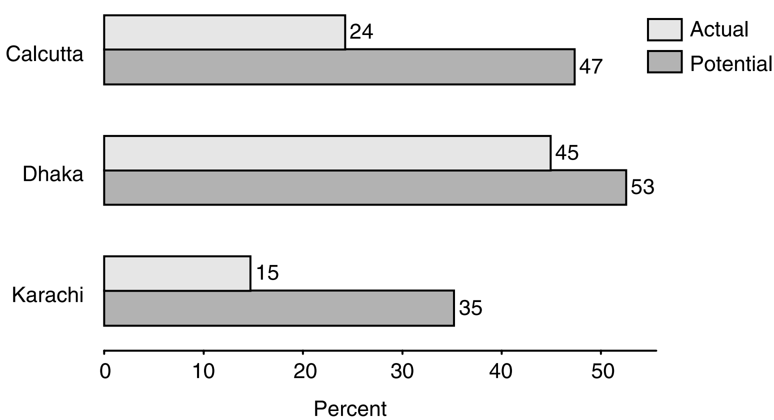

Figure 7.5 Actual versus potential share of firms exporting.

rise would take place in the percentage of firms exporting, from 15 percent to 35 percent. In Dhaka, which is already a fairly successful exporter, the gain would be 8 percentage points (Figure 7.5, p. 99).

Conclusion

A number of major cities in China have created good investment climates, compared to other locations that were at similar levels of development ten years earlier and had similar good potential for access to the international market. As a result, these Chinese cities receive large amounts of foreign investment and have large numbers of firms that are selling internationally. Returning to the puzzle we started with, the evidence reviewed in this chapter supports the view that the interaction of open trade and investment policies with a sound investment climate has created especially dynamic growth in a number of Chinese cities.

Our estimates also confirm that there is some truth to the stories that emphasize natural geography and agglomeration economies. We do not find manufacturing plants randomly distributed around rural locations. That said, most of the locations we cover are large cities, and many of them are ports, with at least potential access to the international market. Locations such as Calcutta (India), Karachi (Pakistan), Chittagong (Bangladesh), and Tianjin (China) are not performing as well as Guangzhou and Shanghai in China. So, while being a big port city is an advantage, poor local governance can easily undo the advantage.

We have shown in a companion paper that a good investment climate is related to high productivity, wages, and profitability at the plant level, and that where hassles and bottlenecks are great, productivity and profitability are low (Dollar, Hallward-Driemeier, and Mengistae 2003).

The new results here complement that earlier work. We find that a sound investment climate—as reflected in short customs clearance times, reliable infrastructure, and good financial services—attracts foreign investment. Foreign firms generally introduce superior technology and management, and hence raise the average productivity of a randomly chosen sample of firms. The same investment climate factors make it more likely that domestic firms will export, enabling the more productive among them to expand their scale and scope.

Clearly other factors, including geography and national-level policies, matter as well. But the point that we emphasize here is that, among large port cities in Asia, there are large differences in the volume of inward foreign investment and in the extent to which the cities' firms successfully sell in international markets. There are also large differences among the cities in the investment climate indicators that we have collected. In Karachi, it is difficult to move goods through customs and difficult to get reliable power or telecom services. Similar problems—though not as extreme—hamper firms in the port cities of Calcutta and Chittagong. It is no surprise, then, that the lagging cities have relatively little foreign investment and export activity.

We see these results as consistent with the larger literature on the importance of institutions and policies for economic growth. Our contribution is to use data from a large number of firms in order to see how weak institutions actually affect the environment in which firms operate and to investigate the importance of local governance. Most of the existing work on the relationship between institutions and growth assumes that the important institutions are uniform throughout a country. The empirical link that we establish between investment climate indicators and firm performance is robust to the inclusion of country dummies, which reveals that there is significant variation in the investment climate across locations within countries. So local governance is important.

In this chapter we have stressed the *combined* significance of the investment climate indicators and the fact that together they predict performance differences across locations, of magnitudes that are both plausible and important. As more surveys are completed and the sample size grows, it will be possible to gain confidence about the importance of specific aspects of the investment climate. At present, it appears that customs clearance times, power reliability, and availability of financial services are the indicators that most consistently influence foreign investment and export status. This suggests that the government's role in providing a good regulatory framework for infrastructure, access to the international market, and finance is particularly important.

Looking ahead, we plan to sponsor repeat surveys (rolling panels) on about a three-year cycle.[8] We hope that these surveys will be a useful tool for communities that are trying to improve their investment climates, helping them to benchmark themselves against other locations and to measure their progress over time.

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Notes

1 Development Economics Department, World Bank. We would like to thank Victoria Levin for excellent research assistance. We are grateful for the financial support from the United Kingdom's Department for International Development and from the World Bank's research support budget. Views expressed are those of the authors and do not necessarily reflect official views of the World Bank.

2 See Levine and Renelt (1992); Rodriguez and Rodrik (2000); Dollar and Kraay (2003).

3 The role of developing countries' institutions and policies in the competition for foreign direct investment has received attention in a number of recent studies. Although some authors (Wheeler and Mody 1992; Hausmann and Fernández-Arias 2000) find that host countries' institutions do not induce greater inflows of FDI, numerous other empirical studies reach the opposite conclusion. Shang-Jin Wei (1997; 2000) shows that both the average level of corruption in host countries and the uncertainty caused by the variability of the bribe rate have a significant negative correlation with inward bilateral foreign direct investment (FDI). Using a variety of institutional indicators and different estimation techniques, Stein and Daude (2001) confirm that the quality of developing countries' institutions has a positive effect in attracting FDI. Working with investor firm-level data, Smarzynska and Wei (2000) provide further support for the negative relationship between corruption in the host country and foreign investors' decision to invest there, while also exploring the differential mode of entry (wholly owned enterprise versus joint venture) based on the level of corruption in the host country and the level of technical sophistication of the investor firm. While suggesting that domestic sociopolitical considerations are irrelevant for investor decisions, Wheeler and Mody (1992) demonstrate the prominent role played by host countries' quality of infrastructure in determining foreign investor expenditure there. Démurger *et al.* (2002) use differential growth rates in Chinese provinces to disentangle the effects of geography and policy on growth; akin to Wheeler and Mody, they assert that local improvements in infrastructure matter for integration into the world economy, and subsequently, for growth.

4 The recent Pew Global Attitudes Survey (Pew 2003) found very robust popular support for international economic integration among households in the developing world. For example, the shares of households who thought that growing international trade and businesses ties were good for their country were 84 percent in Bangladesh, 90 percent in China, 69 percent in India, and 78 percent in Pakistan.

5 This investment climate survey project has evolved over time and has a number of precursors within the World Bank. Based on this practical experience, we have developed a common set of objective questions that will be included in all future such surveys sponsored by the Bank. Bangladesh, China, India, and Pakistan are among the first countries to be covered by this common survey instrument.

6 Krugman and Venables (1999) argue that in many lines of production there are advantages to producers locating close together, and that these agglomeration economies could explain the concentration of production in certain locations. Limão and Venables (2001) provide cross-country empirical support for this notion. Gallup and Sachs (1999) focus on a different aspect of geography: the debilitating effect of malaria and other diseases and their impact on productivity. In our work we will introduce variables that attempt to capture the importance of being close to markets and major concentrations of population, as highlighted by the Krugman-Venables work. We are not well placed at present to look at the geographic factors emphasized in Sachs's recent work, because few of the locations that we cover in this study have major malaria or disease problems. As the investment climate surveys are extended to more locations (surveys, for example, are underway in Tanzania and Uganda), it will be possible to examine the effect of malaria or AIDS on foreign investment and linkages to the international market.

7 The distance to major markets variable is the smallest distance from the location to Brussels, Washington, or Tokyo—the capitals of the three largest markets. The distance to port variable captures the fact that some locations in our sample are interior locations (Chengdu, Lahore, Bangalore), while others are themselves port cities (Calcutta, Chittagong, Guangzhou, Karachi, Shanghai, Tianjin). The third

geography variable that we use is the population of the city, which indicates whether there is a large market in the immediate vicinity of the firm.

8 Many of the institutional features that we are capturing are likely to be quite persistent. On the other hand, there are communities around the world that are deliberately trying to create a better environment for entrepreneurship and productivity, so gradually we should be able to find time-series variation in the investment climate and to investigate the question of whether, within a location, improvements in the investment climate lead to greater foreign investment and more domestic firms exporting.

8 The future of the global trading system

Doha Round and beyond

T. N. Srinivasan[1]

> Those who cannot remember the past are condemned to repeat it.
>
> Santayana (1905)

A formal meeting of the Trade Negotiations Committee (TNC) of the Doha Round of Multilateral Trade Negotiations consisting of the entire membership of the World Trade Organization (WTO), on July 1, 2006 in Geneva, Switzerland brought to an end about three days of discussions among a representative group of ministers. No progress was made in trying to narrow the gaps on formulas for reducing tariffs and subsidies and other disciplines that would be in the "modalities".[2] The TNC requested Mr Pascal Lamy, the Director-General of the WTO "to conduct intensive and wide-ranging consultations with the aim of facilitating the urgent establishment of modalities in agriculture and NAMA (non-agricultural market access), and instructed him that his "consultations should be based on the draft texts prepared by chairs of the negotiation groups" and that "he should report to . . . [the] TNC as soon as possible" [http://www.wto.org/english/news_e/news06_e/mod06_summary_01july_e.htm—accessed on July 7, 2006].

Futile blame games, similar to the ones that were played after the collapse of the Cancún Ministerial meeting of the WTO in 2003 followed the failed TNC meeting of July 2006. For example, EU and many developing countries blamed US intransigence for the failure to close a deal at the TNC meetings. In turn, Susan Schwab, the US Trade representative accused some of the big emerging market countries of using developing country solidarity as an excuse to refuse more cuts in import tariffs on goods, services and agriculture. She is quoted as having said "The Brazils, the Chinas, the Indias of this world can and should expect to participate in this negotiation, including opening their markets to benefit other developing countries" (Beattie 2006). Mehta (2006) quotes the Zambian trade minister Deepak Patel as having said "We are not here to bend backwards to accommodate more market access for industrialized nations," with his Indian counterpart, Kamal Nath, saying "India was prepared to negotiate commerce, but not subsistence," and finally, with Brazilian foreign minister Celso Amorim adding for good measure "The burden of leadership in this particular case has to be on those who have more to give and those are of course richer countries!" There is no need to engage in such a pointless exercise here; the need is to draw lessons with which to go forward with the Doha Round.

It is widely understood and agreed that unless Mr Lamy's consultations result in an agreement on modalities by the end of July 2006, the prospects will be slim for concluding the Doha Round with an agreement by the end of 2006.[3] Most observers believe that an agreement after that date would be unlikely to enable the US government to present the agreement to the US Congress for an up or down vote before the expiration in June 2007 of the Trade Promotion Authority of the US President.[4]

The failure of the TNC to agree at its July 1, 2006 meeting is only the latest among a long list of failures before and since the launching of the Doha Round of Multilateral Trade Negotiations (MTN) at the Fourth Ministerial meeting of the WTO in Doha, Qatar, in November 2001. The attempt to launch the Round at the Third meeting in Seattle had failed spectacularly. The Fifth meeting in Cancún, Mexico, in September 2003 was meant to review the status of MTN since Doha in view of the failures to meet the deadlines set at Doha. The meeting was expected to set the negotiations back on track and to achieve an explicit consensus on modalities for negotiations in areas including the so-called "Singapore issues" (trade and investment, trade and competition policy, transparency in government procurement, and trade facilitation). The Cancún meeting ended with no agreement on any of these items.

After the collapse of their meeting at Cancún, the ministers predictably engaged in accusations and recriminations as to the responsibility for the collapse. In a petulant reaction, Robert Zoellick, the head of the US delegation to the meeting, threatened that the US will pursue bilateral and regional preferential trade agreements with renewed vigor. The threat, if it was meant to prod the members of the WTO into returning to the Doha multilateral negotiations with proposals that would elicit an agreement, was basically empty, since the US was already pursuing the bilateral and regional option with maximum vigor. In any case, after tempers cooled, attempts were made to pick up the pieces from the shambles of Cancún and to put the negotiations back on track. These attempts led to the so-called July 2004 package (http://www.wto.org/english/tratop_e/dda_e/dda_package_july04_e.htm) which, though not a ringing declaration of progress, provided a basis for subsequent negotiations. This basis was expressed in differing levels of detail across the negotiating agenda, with agreed frameworks for modalities in some areas and reaffirmation of commitment to progress in others. The package reaffirmed the Doha declaration, adopted a framework for negotiations on trade in agricultural products, as well as on NAMA, and included yet another set of deadlines to be met prior to the Hong Kong Ministerial in December 2005. It recommitted members to fulfill the development dimension of the Doha agenda, in particular instructing the TNC to redouble its efforts to find appropriate solutions to implementation problems, a matter of concern to developing countries; and on other items of the agenda the package in effect promised to make progress. Negotiations were launched on Trade Facilitation, one of the Singapore issues.

In the year that followed, negotiations continued on the basis of the July package. At its meeting in February 2005, the TNC agreed to drop all other Singapore issues except Trade Facilitation. There was agreement also on the need for a substantial breakthrough at the Hong Kong Ministerial of December 2005 in five key areas: modalities in agriculture, modalities in NAMA, securing a critical mass of market opening offers in Services, making significant progress in areas such as Rules and Trade Facilitation, and effectuating a proper reflection of the Development Dimension.

In his report of July 28, 2005 to the WTO's General Council, the chairman of the TNC and then Director General of the WTO, Supachai Panichpakdi, noted that he had warned of the immense scale of the task that the July 2004 package implied and of the need not to underestimate the difficulty of resolving some potentially intractable problems. At the same time, he also stressed that the participants had to get down immediately to substantive negotiations in all areas, meaning real give and take would be required. He admitted in his report that none of his warnings seemed to have been well heeded and concluded that, although there were some positive developments in the year since July 2004, the negative side of the ledger outweighed the positive. In his frank assessment, there was a long way to go to achieve the goals of an ambitious and balanced outcome in the negotiations.

The new Director General of the WTO, Mr Pascal Lamy, succinctly laid out on September 24, 2005 what remained to be done in the three months before the ministers were to meet in Hong Kong:

> In agriculture, by Hong Kong, we need to set a date for the elimination of export subsides, figures for slashing trade distorting farm support and a package of equivalent ambition on market access. We need to agree on the big numbers to cut substantially but fairly tariffs on manufactured products. In services, where developing countries have now become increasingly important players and which are an ever-increasing part of economies, we also need a big push. We need to arrive, as near as possible, to draft negotiated texts in areas such as anti-dumping and subsidies. Finally, on measures to cut down red tape at the border, trade facilitation in our jargon, the good progress achieved needs consolidation.
>
> Above all, we need to remember the development objective of this Round. It will be one of the benchmarks of success. By Hong Kong, substantial results must be in sight in each particular area of negotiations, if their sum is to deliver on the promise of the Doha Development Agenda.
>
> (http://www.wto.org/english/news_e/sppl_e/sppl03_e.htm)

By the time the Sixth Ministerial opened in Hong Kong, some, but not much, progress had been made on Lamy's agenda. Nor did the ministerial itself achieve much. The ministerial declaration at Hong Kong (WT/MIN(05)/DEC) was primarily in a "Doha is not yet dead" mode. It once again reaffirmed the decisions adopted in Doha and in the July 2004 package, while affirming the modest progress made in agriculture and other areas since July 2004. It emphasized yet again the importance of the development dimensions in every aspect of the Doha Work program. A few new deadlines were set, including a very important one of April 30, 2006 for agreeing on modalities for agricultural trade liberalization and NAMA. A deadline for concluding the round with an agreement by the end of 2006 was also set.

The April 30, 2006 deadline came and went without any agreement. The Trade Negotiations Council (TNC) met on March 28, 2006 and May 1, 2006 to take stock of the situation. Pascal Lamy delivered a sobering report to the TNC on May 15, 2006:

> At our meetings at the end of April and beginning of May, we collectively faced up to the fact that we had not been able to establish modalities in Agriculture and NAMA, or reach an agreement on the RTA Transparency Mechanism, by 30 April. . . . I believe we all realise that we are now in the red zone, and that we are not far from the red part of this red zone . . . There is urgency. We have only a very few weeks ahead of us to achieve consensus where it is most badly needed.
>
> (http://www.wto.org/english/news06_e/tnc_chair_report-may06_e.htm)

The subsequent meeting of the TNC on July 1, 2006, as noted earlier, did not reach the needed consensus.

In what follows I assess the future of the global trading system given the dim prospects of successfully concluding the Doha Round in the near future. I conclude that the possible collapse of the Doha Round need not be fatal to the system as long as the right lessons are learned from it and appropriate actions taken. As a prelude to my assessment, I briefly describe the history of the world trading system during the era of the General Agreement on Tariffs and Trade (GATT), until GATT was subsumed under the WTO on January 1, 1995. The history is interesting because it reminds us that some of the current attitudes and positions taken by major participants have been present from the very inception of GATT.[5] In the next section, I discuss the Uruguay Round. Concluded in 1994, this was the last of the eight rounds of multilateral trade negotiations undertaken under GATT auspices. Part of the reason for the failure at Cancún can be traced to the disappointment, particularly among developing countries, that the costs and benefits of implementing the Uruguay Round agreements had not lived up to expectations. I then trace the reasons both for the failure to launch a new round at the third ministerial meeting, held in Seattle, USA, in December 1999, and for the success in launching a new round at the fourth ministerial meeting at Doha. The next section outlines the agenda set by the Doha ministerial declaration and reviews the progress on it prior to Cancún. I then analyze the sequence of events leading up to the Cancún meeting and some reasons for the meeting's failure, and indeed of the attempts since then to set the Doha Round on track, and I draw lessons for moving forward. I conclude by outlining possible directions for the world trading system.

A brief history of the global trading system

A global trading, financial, and migration system largely free of national, policy-created barriers functioned well for nearly half a century until the outbreak of the First World War. Lord Keynes bemoaned its collapse with the words, "What an extraordinary episode in the economic progress of man, that age was which came to an end in August 1914!" and described it in vivid detail, albeit from the perspective of an upper-class Englishman.[6] During the Second World War, sensing their impending victory over the Axis powers, the Allied powers thought ahead to the design of a world economic system that would prevent a recurrence of the economic disasters of the inter-war period: global economic depression, competitive devaluation of national currencies, and raising of tariff walls (the most notorious being the Smoot-Hawley Tariff of the United States).

The famous conference in 1944 at Bretton Woods, New Hampshire, founded the International Bank for Reconstruction and Development (the World Bank) and the International Monetary Fund (IMF). The World Bank was created to provide long-term finance for reconstruction and development. The IMF was designed to enable its members to maintain a system of fixed exchange rates by providing short-term balance of payments support to deal with temporary and reversible shocks to their balances of payments, while allowing flexibility for orderly changes in the exchange rates of its members facing possible long-term shifts in their balances of payments. The Soviet Union had participated in the Bretton Woods conference as an allied power, but, with the Cold War looming, it chose not to become a member of either the World Bank or the IMF.

The creation of a similar organization for international trade issues did not feature in the Bretton Woods conference, even though one of the chief architects of the conference, Lord Keynes had envisaged such an organization in a memorandum written two years earlier and most participants firmly believed in the need for it. The first concrete move towards establishing a framework for the world trading system was taken by the United States, with its Proposals for the Expansion of World Trade and Employment. These were published on December 6, 1945 and forwarded to all other countries in the world.[7] At the same time, the US extended an invitation to fifteen countries, including Brazil, China, Cuba, and pre-partition India (which then comprised contemporary Bangladesh, India, and Pakistan), to take part in negotiations for the reduction of tariffs and other barriers to trade. All these countries, with the notable exception of the Soviet Union, accepted the invitation.

The next move, again by the US, was the introduction of a resolution at the first 1946 meeting of the United Nations Economic and Social Council (ECOSOC), calling for an international conference on trade and employment, with the proposals as its possible agenda. The resolution was unanimously adopted. ECOSOC appointed a preparatory committee for the conference, consisting of Chile, Lebanon, Norway, the US, and the fifteen countries that had been invited by the US for tariff-reduction negotiations. The Soviet Union chose not to participate in the committee. The US circulated a suggested charter for an International Trade Organization (ITO) to the committee.

In its first meeting, the preparatory committee added a chapter on economic development but essentially adopted most of the US draft charter, leaving it to a committee at UN headquarters in New York to complete and edit the text. India and other developing countries on the committee viewed the US's proposals and charter as serving the interests of industrial countries, and inimical to development. But, after voicing their opposition, they joined the committee in agreeing on and publishing a draft, known as the New York Draft, in January 1947.

The committee also approved a memorandum on procedures to be followed in US-initiated negotiations for tariff reductions, and at its second meeting, in Geneva, it held discussions on the new draft of the charter simultaneously with tariff negotiations. The tariff bargaining proceeded on a product-by-product basis between pairs of countries wherein one country was the principal supplier of each commodity for the other. From April to October 1947, the participants completed some 123 negotiations, and established 20 schedules containing tariff reductions and bindings that became an integral part of the General Agreement on Tariffs and Trade (GATT). These schedules resulting from the first round covered some 45,000 tariff concessions and about US$10 billion in trade. By comparison, the value of world exports was $58 billion, of which the share of the then GATT contracting parties was 60 percent (WTO 2005, Table II.2). Thus tariff concessions covered about one-third of the trade among contracting parties.

General Agreement on Tariffs and Trade (GATT)

The GATT was signed on October 30, 1947 in Geneva by the twenty-three original contracting parties, consisting of the participating members of the preparatory committee (colonial India having been partitioned into independent India and Pakistan by then), Burma, Ceylon (now Sri Lanka), Southern Rhodesia (now Zimbabwe), and Syria.

The announcement of the completion of the GATT set the stage for the United Nations Conference on Trade and Employment, which opened in Havana, Cuba, on November 21, 1947. Fifty-six nations, again with the notable exception of the Soviet Union, participated. At the conference the most protracted controversies were on development issues.[8] These were resolved, after prolonged deadlock, by a series of compromises. The Final Act of the conference, embodying the charter for an international trade organization (ITO), was signed on March 24, 1948 by fifty-three countries; Argentina and Poland refused to sign, and the authorization for Turkey's delegation to sign had been delayed in transmission.

The GATT had been envisaged as an interim measure to put into effect the commercial policy provisions of the draft charter of the ITO, which was expected to be approved by the Havana conference. For fear that tariff reductions in the GATT might unravel if not implemented immediately, negotiators had wished to bring the GATT into force before the ITO came into being. The US government, mindful that the negotiating authority delegated by the US Congress to the President for tariff reductions was due to expire in mid-1948, also wanted to bring the GATT into force without waiting until the ITO charter was ready. However, other countries preferred to put the GATT and the ITO charter simultaneously through their ratification procedures. The Protocol of Provisional Application of GATT reflected the compromise reached between those who wished to implement GATT before the ratification of the ITO charter and those who preferred to wait.

However, the signatory governments made no commitment to ratify the ITO Charter. The US failed to ratify it,[9] and in the end, the ITO was stillborn. All subsequent attempts to ensure definitive, rather than provisional, application of the GATT failed. The review session of the contracting parties in 1955 drafted a new protocol for an "Organization for Trade Cooperation"—an organization far less elaborate than the proposed ITO—and this too failed to win the approval of the US Congress.

In Jackson's words, "The GATT has limped along for nearly forty years with almost no 'basic constitution' designed to regulate its organizational activities and procedures." The only substantial formal amendment to the GATT was the 1965 protocol to add Part IV, dealing with trade and development.[10]

Even so, under GATT's auspices, eight successful rounds of multilateral negotiations for reducing barriers to trade were concluded. The liberalization of trade barriers under successive rounds resulted in remarkably rapid growth, at nearly 8 percent a year on average, in the volume of world trade between 1950 and the first oil shock in 1973. In the roughly two decades thereafter (1973–90), which included the second oil shock of 1979 and the debt crises of the 1980s, average trade growth slowed to around 4 percent a year.[11] During 1990–2004, it recovered to an average of slightly less than 8 percent a year (WTO 2005a, Chart II.1). In all these periods, trade grew faster than output, so that the share of trade in output increased substantially.

GATT and the developing countries

Despite the success in reducing trade barriers and accelerating the growth of world export volume, many countries did not participate significantly in either.

First, most developing countries chose to remain outside GATT. Some elected not to become contracting parties of the agreement (for example, Mexico did not become one until 1986), and others chose not to participate actively as contracting parties in multilateral trade negotiations until the Tokyo Round of 1973–79. Driven by the then-dominant faith in inward-oriented, import-substituting industrialization as the appropriate development strategy, they erected and maintained relatively high barriers to foreign trade. The only exceptions were countries in East Asia that chose to move away from an inward-oriented to an outward-oriented development strategy from the mid-1960s onwards.

The second, and no less important, reason is that partly because developing countries did not participate in effect in the bargaining over reciprocal reductions of tariffs (or exchange of tariff concessions, to use GATT terminology) in GATT, trade barriers in commodities of export interest to these countries were not reduced to the same extent as trade barriers in commodities mostly traded among developed countries. After each round of multilateral trade negotiations, developed countries retained higher barriers against imports from developing countries than against imports from other developed countries. Agriculture, a sector of great interest to developing countries, largely remained outside the GATT framework until the Uruguay Round. Trade in textiles and apparel had been exempted from GATT rules since 1961; the initial short-term arrangement covering cotton textiles was quickly converted to a long-term arrangement in 1962, and twelve years later this was expanded into the Multifiber Arrangement (MFA), which covers trade in textiles made from almost all natural and man-made fibers![12] The MFA has been a particularly egregious exception to GATT rules: apart from being an outright violation of the fundamental non-discriminatory Most Favored Nation (MFN) treatment enshrined in Article I of GATT, it also permits the use of bilaterally negotiated trade quotas on an item-by-item basis between each importer and exporter. One cannot imagine a worse way of segmenting and heavily distorting markets. The MFA expired only on January 1, 2005.

Up to the conclusion of the Tokyo Round in 1979, many developing countries perceived that GATT promoted the interests of developed and industrialized countries and that it had frustrated several attempts by developing countries to get their concerns reflected. "Concessions" granted to developing countries, such as the inclusion of Part IV on trade and development and the Tokyo Round's enabling clause on special and differential treatment, were mostly rhetorical, and others, such as the Generalized System of Preferences (GSP), were always heavily qualified, and their benefits small.

In sum, from the perspective of developing countries, the GATT was unfriendly, if not actively hostile, to their interests.

It is a matter of debate whether or not developing countries' frustrating experience in seeking greater access to the markets of developed countries was a consequence of their relentless but misguided pursuit of the import-substitution strategy of development, which in effect led them to opt out of the GATT. Had they participated fully, vigorously, and on equal terms with the developed countries in the GATT, and had they adopted an outward-oriented development strategy, they could have achieved far faster and better-distributed growth.[13] The experience of East Asian countries that adopted outward-oriented strategies of development from the mid-1960s onward, and also that of China and India since the mid-1980s supports this assessment.

Unfortunately, even when developing countries actively participated, and with cohesion, as they did in the Tokyo Round (1973–79), the outcomes were not in their long-term interests, primarily because their demands continued to be driven by the import-substitution ideology. The formal incorporation at the Tokyo Round of their demands for differential and more favorable treatment—including not being required to reciprocate tariff "concessions" by the developed countries—triply hurt them: once directly, through enabling them to continue their costly import-substitution strategies; a second time by allowing the developed countries to retain their own GATT-inconsistent barriers (in textiles) against imports from developing countries; and a third time, by allowing the industrialized countries to keep higher-than-average MFN tariffs on goods of export interest to developing countries.

The Uruguay Round (1986–94)

Within three years of the conclusion of the Tokyo Round, the US wanted to use the 1982 GATT ministerial meeting to initiate another round of multilateral trade negotiations. The meeting had been called to examine the functioning of the multilateral trading system. The US was interested in extending the traditional negotiating agenda to include service issues, including intellectual property protection. A group of developing countries led by Brazil and India strongly opposed this, on the grounds that developing countries were not ready to negotiate on services trade on an equal footing with developed countries, and that, besides, the latter had not lived up to their obligations in the case of trade in textiles and agricultural products. They demanded commitments from developed countries not to introduce any new GATT-inconsistent measures (the "stand-still" demand) and to remove any such measures in existence (the "roll-back" demand).

The US did not succeed in launching a new round but it enunciated a two-year work program for the GATT that involved seventeen topics, including services. Even before the work program was completed, the Japanese Prime Minister had initiated a discussion on a new round and persuaded the G-7 industrialized countries to consult their trading partners about the objectives and timing of such a round. Eventually, the opposition of Brazil and India was worn down, and a committee was established to prepare recommendations for adoption at the GATT ministers' September 1986 meeting at Punta del Este, Uruguay.

There was no agreed draft of a ministerial declaration from the preparatory committee as the Punta del Este Ministerial meeting started.[14] Alternative drafts were in circulation from individual countries and country groups, such as the G-40, including twenty developing countries as well as major industrialized countries, and the G-10 developing countries, led by Brazil and India.

The G-10's position eroded as the Punta del Este meeting went on, with the US succeeding in luring away the members until only India held firm. When the consultation committee met for the last time at 6 p.m. the day before the ministerial meeting was scheduled to end, nothing substantial had been decided. After the US threatened to withdraw from the conference if the issues of its interest were not included in the declaration, a growing consensus emerged around the US position.[15] The chairman on his own initiative decided to treat the G-40 text as the basis for discussion in the consultation committee, over the protests of those developing countries that supported the G-10 text. But he allowed amendments to the G-40 text that in turn drew protests from developed countries. Thirty-one amendments were initially offered, and were reduced subsequently to fourteen.

By midnight, once India and the US had agreed that the negotiation on services would be undertaken separately, other disputed issues such as trade-related intellectual property and investment measures were quickly settled. In agriculture, agreement was reached at 2 a.m., and by 4:30 a.m. the fourteen amendments to the G-40 text had been discussed and withdrawn.[16] The draft agreed by the consultation committee was approved by the full plenary by midday and the Uruguay Round was launched.

The events on the last day of the Punta del Este ministerial meeting have their counterparts in what went on later at Cancún in 2003. At Cancún also, leading developing countries—Brazil, India, China, and South Africa—formed the so-called G-20 (members are listed in the Appendix to this chapter) to negotiate on developing countries' behalf at the meeting. However, the US and European Union did not succeed in dividing the G–20 and the group did not disintegrate (except for the defection of El Salvador, primarily under US pressure) and stuck to its position until the end. Also, the US delegation did not make any ostentatious threatening gestures. However, as I argue below, the chairman at Cancún, Foreign Minister Luis Derbez of Mexico, perhaps closed that meeting too soon.

The course of negotiations of the Uruguay Round was tortuous; from the start in September 1986 to the approval of the Final Act in December 1993, the process was just as full of conflicts and periodic breakdowns as the pre-negotiations that led to its launch. The negotiations were to take place in Geneva, with a mid-term review in Montreal at a ministerial meeting in

December 1988, and to be concluded in December 1990. In fact, by the time of the ministerial meeting in Brussels in December 1990, final agreements had been reached on almost none of the topics. Serious negotiations did not begin until 1988, two years after the launch of the Round, and when the ministers met in December for the interim review, only six of the fifteen negotiating groups had clear texts for approval by the ministers. The US sent a powerful signal that it would aggressively pursue unilateral actions without necessarily first exhausting its options under the GATT or awaiting the outcome of negotiations on others.[17] The interim review meeting ended inconclusively with agreement in a few areas such as tropical products, interim reforms of the GATT dispute-settlement procedures, commitments to reduce tariffs on average by a third, and the provisional introduction of a new trade-policy review mechanism (Schott 1994: 8). But on agriculture, textiles, trade-related aspects of intellectual property rights, and safeguards, the ministers could not agree.

An accord between the United States and the European Community on agriculture was reached in November 1992. The US President's negotiating authority under the Fast Track procedure, approved and renewed by the US Congress, was due to expire on December 15, 1993. Meanwhile, the summit of the Asia Pacific Economic Cooperation (APEC) forum welcomed a report that advised APEC to set a goal of free trade in the Asia Pacific region, break the Uruguay Round deadlock by offering an additional package of liberalization beyond Uruguay Round proposals, and pursue an active program of regional trade liberalization. The success of the APEC summit signaled to the European Community that the US and its APEC partners (accounting for 40 percent of world exports) had other options if the Uruguay Round were to fail.

These factors, along with the appointment of a very active new Director General of the GATT Peter Sutherland, led to intensive negotiations in the second half of 1993, and culminated in the Final Act of the Uruguay Round, agreed in December 1993.

The road to the Doha Round: failure at Seattle and success at Doha

The Uruguay Round Agreement as a single undertaking[18] includes agreement on traditional GATT issues such as reductions of tariffs and tariff bindings; a not completely successful attempt to bring agricultural trade under multilateral disciplines;[19] a major revamping and strengthening of the Dispute Settlement Mechanism; phasing out of the Multifiber Arrangement; agreements on Trade-related Investment Measures (TRIMs) and Trade-Related Aspects of Intellectual Property Rights (TRIPs); and a new General Agreement on Trade in Services (GATS). Since the conclusion of the Round as envisaged, multilateral agreements on Financial Services and Telecommunications have been concluded as part of the GATS.

In accordance with the built-in agenda of the Uruguay Round Agreement, a review of the agreements on agriculture and TRIPs was initiated in 2000. Agenda items left outside of the GATS (including the movement of natural persons and maritime services) have been folded into the post-Doha negotiations.

When the third ministerial conference of the WTO opened at Seattle in November 1999, members were deeply divided. In particular, the agricultural exporters of the Cairns Group, Japan, the European Union, and the United States were divided over the elimination of export subsidies and import restrictions. As at the earlier meeting in Punta del Este and at subsequent meetings in Doha and Cancún, there was no agreed draft for a ministerial declaration. The absence of an agreed draft had not prevented the launching of a new round at Punta del Este, but this happened in Seattle.

The reasons for failure at Seattle lay elsewhere than the violent street demonstrations that took place outside the meetings. First, developing countries were genuinely concerned that the distinction had become blurred between discussions leading to an agenda and modalities for negotiations, on the one hand, and substantive negotiations on agenda items, on the other. They justifiably feared that any compromise they made on issues to be included in the negotiating agenda would hurt them in subsequent negotiations. For example, when they had agreed to include intellectual property in the Uruguay Round negotiating agenda, most of them had not anticipated the outlines of the eventual TRIPs agreement. With the high perceived cost to them of TRIPs very much in their minds, they were less willing to compromise on the agenda of any future round. Second, developing countries had no voice in the so-called "Green Room" process at the Seattle session, in which a selected group of countries participated in the negotiations and decided on an agenda, which they later presented to the plenary. Third, the fact that the leader of the delegation of the most powerful trading nation of the world, the US, also chaired the ministerial did not help. But the single most important reason for the failure was the statement by then-President Clinton that market access should be conditioned on the observance of core labor standards and that trade sanctions could be used to enforce this condition. That statement ruled out any compromise on the part of developing countries.

The deep divisions between developed and developing countries had not been resolved when the ministers met at Doha in November 2001. There were fears that ministers would again fail to agree on a new round of negotiations. But these fears were belied, and at the conclusion of the Doha meeting the ministers declared that they would "undertake [a] broad and balanced work programme . . . that incorporates both an expanded negotiating agenda and other important decisions and activities necessary to address the challenges facing the multilateral trading system" (WTO 2001a: paragraph 11).

There were basically two reasons for this more successful outcome. Following the terrorist attack on the World Trade Center in New York on September 11, 2001, the widespread belief that frustration with lack of development contributed to the rise of terrorism led the developed countries to be more receptive to the concerns of developing countries and to visualize the new round as a "development round." The developing countries were motivated to be more accommodating, given the rise in protectionism in the developed countries that had followed the economic slowdown since 2000. They also saw an opportunity to be more successful than in earlier rounds in getting their concerns addressed in the post-September 11 atmosphere.

The Doha Declaration and decision

The chairman of the Doha meeting, Qatari Minister of Finance Youssef Hussain Kamal, structured the discussion around six topics: agriculture, implementation, environment, WTO rules, the so-called Singapore issues (trade and investment, trade and competition policy, transparency in government procurement, and trade facilitation), and intellectual property. Informal discussions took place on each topic, with any delegation that wished to participate being invited to do so. A "friend of the chair" led the discussions and reported their progress regularly to the full heads of delegation. This process, of holding informal discussions on each topic simultaneously with formal meetings at which ministers made their conference statements, avoided much of the unhappiness associated with the "Green Room" process of earlier ministerial meetings.

Implementation issues

Some countries, including India, had taken the position that implementation issues—that is, the difficulties the developing countries had encountered in implementing their Uruguay Round commitments—had to be resolved before they would endorse a new round. In their Doha declaration, ministers attached "the utmost importance to the implementation issues and concerns raised by members" and indicated their "determination to solve them by making them an integral part of the agreed work program" (WTO 2001a: paragraph 12).

Agriculture

The Uruguay Round Agreement on agriculture, in its Article 20, had recognized that "the long-term objective of substantial progressive reductions in support and protection resulting in fundamental reform is an ongoing process," and mandated that "negotiations for continuing the process will be started one year before the end of the implementation period" (GATT 1994: 55). These negotiations began in 2000, with the first phase ending with a stock-taking meeting in March 2001, and the second phase in progress as the ministers met in Doha.

The Agriculture Committee had considered the issues of concern to developing countries: export credits, guarantees and insurance, the negative effects of agricultural trade reform (particularly relating to food aid and associated issues) on the least developed countries and food-importing developing countries, and the transparent and equitable administration of tariff-rate quotas. It decided mainly to continue to review these issues and to report to the Council in late 2002.

At Doha, as at Punta del Este, the most divisive issue was that of phasing out export subsidies, import tariffs, and domestic support measures. The European Union was reluctant to commit to a phase-out in advance of negotiations. Eventually, a compromise was reached in which the ministers, "without prejudging the outcome of negotiations," committed themselves to "comprehensive negotiations aimed at: substantial improvements in market access; reduction of, with a view to phasing out, all forms of export subsidies; and substantial reductions in trade-distorting domestic support . . . modalities for further commitments including provisions for special and differential treatment, shall be established *no later than March 31, 2003*" (WTO 2001a: paragraphs 13, 14, emphasis added). Apart from undertaking these new commitments, the ministers reaffirmed an earlier commitment, "to establish a fair and market-oriented trading system through a program of fundamental reform encompassing strengthened rules and specific commitments . . . to correct and prevent restrictions and distortions in world agricultural markets" (WTO 2001a: paragraph 13).

Non-agricultural products

The ministers also agreed to negotiations (albeit by modalities to be agreed) "to reduce or, as appropriate, eliminate tariffs, including the reduction or elimination of tariff peaks, high tariffs, and tariff escalations, as well as non-tariff barriers, in particular on products of export interest to developing countries. Product coverage shall be comprehensive and without *a priori* exclusions" (WTO 2001a: paragraph 16, emphasis in original).

Textiles and clothing

Trade in textiles and clothing represented nearly 7 percent of world trade in manufactures in 2004 (WTO 2005, Tables IV–69 and IV–67). Developing countries regard this major manufacturing sector as one in which they have a comparative advantage. In the Uruguay Round Agreement, the Agreement on Textiles and Clothing provided for the phase-out of the bilateral import quotas of the Multifiber Arrangement (MFA) in three stages, over a ten-year period ending on December 31, 2004. The developing countries came to believe that industrialized countries were exploiting this three-stage process to their advantage: on nearly half the products covered by MFA, the quotas remained in place until the final stage, and were to be eliminated in one fell swoop the day before the Arrangement expired.[20] Hence the benefits accruing to the developing countries from the phase-out were limited up to the final day. Viewing this as an imbalance in the implementation of the Agreement on Textiles and Clothing (ATC), the developing countries called for faster trade liberalization than specified in the ATC. The developed countries maintained that they had been scrupulously observing the stipulations of the ATC. At Doha, the developing countries lost, in that the Doha declaration does not refer at all to trade in textiles and clothing.

Trade-Related Intellectual Property Rights (TRIPs) Agreement

At Doha, trade-related intellectual property rights featured both in the main ministerial declaration and in a separate one concerning TRIPs and public health. In the main declaration, ministers agreed to negotiate the establishment of a multilateral system of notification and registration of geographical indications for wines and spirits, by the fifth session in Cancún. More relevant for developing countries is the extension of protection of geographical indications to other products, such as Basmati rice. This issue was left to be addressed by the Council for TRIPs, which has also been instructed to examine the protection of traditional knowledge and folklore.

The main demand of the developing countries at the Doha meeting related to the public health provision of the TRIPs Agreement. The "Declaration on TRIPs Agreement and Public Health" appeared to go a long way toward addressing the concerns of developing countries. First, it recognized the gravity of the public health problems resulting from HIV/AIDS, tuberculosis, malaria, and other epidemics in poor countries. Second, it stressed the need for wider national and international actions to address these problems and for TRIPs to be part of these actions. Third, while recognizing that intellectual property protection was important for the development of new medicines, the ministers explicitly recognized certain flexibilities in the interpretations of TRIPs commitments. Thus they agreed that the TRIPs Agreement "does not and should not prevent members from taking measures to protect public health. Accordingly, while reiterating [their] commitment to the TRIPs Agreement, [they] affirm[ed] that the Agreement can and should be interpreted and implemented in a manner supportive of WTO Members' right to protect public health and, in particular, to promote access to medicines for all" (WTO 2001b: paragraph 4). In particular, the ministers recognized the right of each member "to grant compulsory licenses and the freedom to determine the grounds upon which such licenses are granted . . . to determine what constitutes a national emergency or other circumstances of extreme urgency, it being understood that public health crises, including those relating to HIV/AIDS, tuberculosis, malaria, and other epidemics, can represent a national emergency or other circumstances of extreme urgency" (WTO 2001b: paragraph 5). The ministers left each member free to determine its own regime of intellectual property rights exhaustion.[21]

Interestingly, while they recognized that WTO members with insufficient or no pharmaceutical manufacturing capacities could face difficulties in making effective use of compulsory licensing, the ministers left it to the Council on TRIPs to find an expeditious solution to this problem.[22] The least developed country members were given until January 2016 to implement or apply Section 5 (on Patents) and Section 7 (on Undisclosed Information) of TRIPs without prejudice to their seeking other extensions.

Labor standards, competition policy, environment and investment, government procurement, and trade facilitation

When the ministers met at Doha they had a draft declaration to discuss, put together by Stuart Harbinson, chairman of the WTO General Council. The draft also proposed a negotiating agenda. Since this was by no means a consensus draft, the issue remained open whether the negotiating agenda would be narrow, as advocated by the "minimalists" including the US, or comprehensive, as proposed by the European Union. The "minimalists" had argued, even before the third session took place at Seattle, that there was no need at all for a new round of negotiations until after the built-in agenda of the Uruguay Round Agreement (namely the review of the agreements on agriculture and services) had been concluded. In their view, these negotiations would be complex and time-consuming and would call for difficult compromises. The developing countries mostly were still of the minimalist persuasion; they wanted to discuss the implementation problems and failures relating to the Uruguay Round Agreement in addition to its built-in agenda.

At Doha, the minimalists clearly lost, except on the vital issue of labor standards, on which the ministers simply reaffirmed the decision they had taken at the Singapore ministerial to leave the issue to the International Labor Organization.

As regards the Singapore issues, the ministers recognized "the case for a multilateral framework to secure transparent, stable and predictable conditions for long-term cross-border investment, particularly foreign direct investment," and agreed that "negotiations will take place after the fifth session of the ministerial conference on the basis of a decision to be taken, by explicit consensus, at that session on modalities of negotiations"[23] (WTO 2001a: paragraph 20). Until that session, the Working Group on the Relationship Between Trade and Investment was to continue its work. They also recognized the case for a multilateral framework to enhance the contribution of competition policy to trade and development. On this, they agreed that negotiations will take place at the same time and on the same terms as set forth for negotiations on trade and investment (WTO 2001a: paragraph 23).

On trade and the environment, the ministers agreed to negotiations on the relationship between existing WTO rules and specific trade obligations set out in multilateral environmental agreements (MEAs); on procedures of exchange between MEA secretariats and the relevant WTO committees; and on the reduction or, as appropriate, elimination of tariff and non-tariff barriers on environmental goods. The ministers instructed the Committee on Trade and Environment to pursue work on all items on its agenda and its current terms of reference, while giving particular attention to: the effects of environmental measures on market access, particularly that of developing countries and least developed countries; relevant provisions of TRIPs; and eco-labeling (WTO 2001a: paragraph 32).

Capacity-building, special and differential treatment, and least developed countries

The Doha ministerial declaration refers in several of its paragraphs to the specific problems of least developed countries, to the need of these countries for technical and other assistance, and to the special and differential treatment accorded to developing countries.[24] The ministers agreed that the provisions for special and differential treatment of developing countries were an integral part of the WTO agreements and that all such provisions "shall be reviewed with a view to strengthening them and making them more precise, effective, and operational" (WTO 2001a: paragraph 44).

WTO rules and dispute settlement

The ministers agreed to negotiations aimed at improving disciplines under Article VI of GATT (on anti-dumping subsidies, and countervailing measures) and on disciplines and procedures under the existing WTO provisions applying to regional trade agreements, taking into account the development aspects of these agreements.

Lead-up to the Cancún ministerial and the collapse of negotiations

> This is like déjà vu all over again.
>
> Yogi Berra (1998)

The deadlines set at Doha (Box 8.1) make clear that a lot of work was to have been completed before the Cancún meeting. Had all the deadlines been met and the planned work completed, the ministers would have had a long agenda at Cancún for a five-day meeting. As it happened, most deadlines had not been met.

To begin with, the target date of January 1, 2005 set at Doha—for the completion of the round less than four years after its formal launching—was extremely ambitious. The Tokyo Round and the Uruguay Round took nearly six and eight years, respectively, from their launch to the signing of their final agreements.

In retrospect, the failure of the Cancún Ministerial is analogous with what happened at Montreal in 1988. As noted above, at the time of what was

Box 8.1 The key deadlines set at Doha

- *Implementation issues*

The ministers established a two-track approach. Those issues for which there was an agreed negotiating mandate in the declaration would be dealt with under the terms of that mandate. Those implementation issues for which there was no mandate to negotiate would be taken up as “a matter of priority” by relevant WTO councils and committees. These bodies were to report on their progress to the Trade Negotiations Committee by the end of 2002 for “appropriate action.”

- *Agriculture*

The formulas and modalities for countries’ commitments were to be completed by March 31, 2003 with countries’ comprehensive draft commitments to be made by the fifth session of the ministerial conference at Cancún, Mexico in September 2003. The Cancún session to undertake a stocktaking.

- *Services*

Requests for market access to be presented by June 30, 2002; initial offers to be made by 31 March 31, 2003; and stocktaking at Cancún.

- *Market access for agricultural products*

Stocktaking at Cancún.

- *TRIPs*

(1) Geographical Indications Registration System: to complete negotiations by Cancún meeting.
(2) Geographical Indications, extending the “higher level of protection” to other production: a two-track approach as in the case of Implementation Issues.

Review of TRIPs Provisions: Report to the General Council by the end of 2002 with a solution on compulsory licensing and lack of pharmaceutical capacity.

- *Relationship between trade and investment*

Working Group to continue to work with defined agenda until Cancún meeting.

- *Interaction between trade and competition policy*

Same as in Trade and Investment.

- *Transparency in government procurement*

Same as in Trade and Investment.

- *Trade facilitation*

Continuing work in Good Council with defined agenda until Cancún meeting.

- *WTO rules*

(1) Anti-dumping and Subsidies: stocktaking at Cancún.
(2) Regional Trade Agreements: stocktaking at Cancún.

- *Dispute settlement*

To conclude agreement by May 2003.

- *Trade and environment*

Committee to report to ministers at Cancún.

- *Electronic commerce*

Report on progress at Cancún.

- *Small economies*

Recommendations by the General Council to the ministers at Cancún.

- *Trade, debt, and finance*

Working Group to report to the General Council, which was in turn to report to the ministers at Cancún.

- *Trade and technology transfer*

Same as for Trade, Debt, and Finance.

- *Technical cooperation and capacity building*

Global Trust Fund set up by December 2001; Director-General report to General Council by December 2002 and to the ministers at Cancún.

- *Least-developed countries*

Report to General Council, early 2002.

- *Special and differential treatment*

Report to General Council, early 2002.

Source: www.wto.org/english/tratop_e/dda_e/dohaexplained_e.htm

then thought to be a mid-term review of the Uruguay Round in Montreal, negotiations seemed to be at an impasse, yet the deadlock was eventually broken, partly because of the pressure of the impending expiry of the US Fast Track Authority in December 1993.

The possibility that a failure at Cancún need not doom the prospects of an agreement being reached later by no means reduced the gravity of the unmet deadlines. The issues affected included access to essential medicines for poor countries that lack capacity to manufacture such drugs themselves, as well as special and differential treatment for developing countries. The then-Director General of the WTO, Dr Supachai Panitchpakdi, noted that, "failures to meet these deadlines have been quite disappointing. These two issues are of great importance not only to developing countries but to the organization itself and to the broader trade negotiations that are part of the Doha Development Agenda." Dr Panitchpakdi put a brave face on the failures by adding, "nonetheless, I have been informed of the Mexico commitment to work to find agreement in these complex, difficult negotiations. I am hopeful a solution can be found in the early part of 2003" (WTO News: Speeches, Director General Supachai Panitchpakdi, January 8, 2003).

His hopes were dashed at the Tokyo mini-ministerial meeting in February 2003, even before the ink was dry on the text of his speech. He had issued a dire warning that failure to make progress on these issues had deepened suspicions among developing countries that the "Development" part of the Doha agenda might be little more than a slogan. But the ministers from twenty-two countries, including those of the European Union, made little progress in resolving the issues.

Agriculture

On agriculture, the ministers at the Tokyo meeting had before them a draft of the modalities paper, prepared by Stuart Harbinson, who chaired the negotiations. The Harbinson proposals were widely criticized as either too soft or too tough, and the ministers sent the draft back to be revised, for consideration before the deadline of March 31, 2003. There was no agreement as the deadline passed.

At Tokyo, the European Union and Japan took hard positions. Japan's Agriculture Minister, Tadamosi Oskima, was reported as having said that proposals to halve Japan's outrageously high 490 percent tariff on rice were "difficult to accept," and rejected calls to raise the amount of rice that could enter Japan. Franz Fischler, the EU representative on agriculture, was reported to have been equally adamant and to have said, "We don't do reforms on the invitation of someone else" (Ken Belson, *New York Times*, February 17, 2003). The French President, Jacques Chirac, at the Francophone African Summit in Paris, called for the suspension of subsidies by rich countries on agricultural exports to poor African countries. This position ignores the fact that the prices of agricultural commodities are determined in *world* markets, not by the relatively small markets of African countries, which import less than 4 percent of world exports!

In the US, Congress had approved, and in May 2002 the President had signed, a farm bill that raised spending on support to agriculture to US$249 billion. The new law sent a clear signal that the US was not yet ready to reduce distortionary intervention, but it did not breach what was allowed under the Uruguay Round Agreement on agriculture. In Phase I of the WTO agricultural trade negotiations during 2000–1, the US put forward proposals that offered to reduce substantially farm export subsidies, tariffs, and domestic supports (US 2000a, 2000b, 2000c).

The EU opposed these US proposals as too liberal. However, in August 2003, a month before the opening of the Cancún meeting, the US and the EU agreed to make a joint proposal on agriculture that tilted more towards the EU position (US-EU 2003). Predictably, this proposal was criticized by many countries—both developed and developing—for its timidity, lack of specificity, and failure to address the concerns of the developing countries.

TRIPs

Discussions in Tokyo and, subsequently, in the Council for TRIPs on 18–20 February 2003, failed to narrow the differences on the use of compulsory licensing by a country to authorize itself or third parties to produce patented drugs without authorization by the patent-holder. The Council had failed to adopt the draft prepared by its chair, Perez Motta, on December 16, 2002, suggesting a compromise solution.[25] The US rejected this draft, on the grounds that it did not limit the diseases for which the provision on compulsory licensing is to be invoked to HIV/AIDS, malaria, tuberculosis, and similar infectious diseases.

Just two weeks before the Cancún meeting, the US changed its position from rejection of the draft to acceptance, once a statement had been added to the effect that countries that produce generic drugs would not exploit the agreement to increase exports to nations that are not poor and do not have a medical emergency. It was widely believed that the US Trade Representative, Robert Zoellick, did not want to reject the December 16 draft but was overruled by the White House at the urging of the powerful American pharmaceutical lobby.

The negotiation process at Cancún

The Cancún meeting opened with a draft ministerial declaration prepared by Carlos Pérez del Castillo of the General Council and Director General Supachai Panitchpakdi of the WTO. In their covering letter to ministers, they stressed that while the draft declaration had not been agreed "in any part" and did not include many of the member governments' proposals, in their best judgment it constituted a workable framework for action by ministers at Cancún. The draft in particular included a version of the US-EU joint proposal on agriculture.

On the first day, the chairman of the meeting, Mexican Foreign Minister Luis Ernesto Derbez, appointed five ministers as "facilitators" to help him with the negotiations on agriculture, non-agricultural market access, development, the Singapore issues, and other issues. On the fourth day of the conference, the chairman distributed a new draft compiled from texts supplied by various "facilitators" who had had extensive consultations with participant ministers.

A large number of ministers commented on this revised draft. According to a press summary distributed by the WTO:

> Although most recognized the effort that had been put into bridging some of the gaps, most ministers criticized the points they disliked. They largely repeated well established positions arguing that their particular concerns had not been included in the text.
>
> For example, they found the agriculture section either too ambitious or not ambitious enough. They differed over whether to launch negotiations on the Singapore issues or whether there is no consensus to do so. They had comments on the non-agricultural market access text, including the description of the tariff cutting formula and whether sectoral deals (zero tariffs for all products within specified sectors) should be compulsory for all members.
>
> Several said the text on the cotton initiative did not reflect the proposal to phase out subsidies and for subsidizing countries to compensate the African producers in the interim. And a number of African and Caribbean countries in particular said the draft does too little on special and differential treatment for developing countries.
>
> A few countries, both developed and developing, expressed concern that the negative sentiments would wipe out what they described as possible significant results in areas such as agriculture, which are particularly important for developing countries. Two large members warned that each delegation would be responsible for what happened that night.
>
> (WTO 2003a)

Chairman Derbez, while recognizing that ministers wanted to put their positions on record, stressed that agreement was needed in order to give the world economy a boost, and that only the enemies of the world trading system would be the winners if the ministers failed to agree. He held consultations with various groups representing regional and other interests, starting first with the group concerned with Singapore issues, since "speech after speech" of heads of delegations had been about these issues. Although positions shifted during these consultations, allowing the possibility of dropping negotiations on one or two issues, participants reached no consensus and he decided to close the meeting, ahead of its scheduled time.

Picking up the pieces and moving forward: lessons from Cancún

> It ain't over till it's over.
>
> Yogi Berra (1998)

The blame-game and finger-pointing started soon after the Cancún meeting ended. It is more important to move forward than engage in futility.

Tactical and strategic errors at Cancún

Clearly the various countries and country groups made tactical, if not strategic, errors. The US—instead of compromising with the EU on agricultural trade policy—could have vigorously sought support for its initial proposals from like-minded developing countries. The US also underestimated the damage that its large subsidies on cotton, to fewer than 20,000 farmers, were perceived to be causing to much larger numbers of very poor farmers in sub-Saharan Africa. Meanwhile, Korea insisted that all Singapore issues be negotiated, knowing that the strong opposition of others would preclude the adoption of that proposal and any compromise, given that an explicit consensus was needed for adoption. Many observers saw Korea's insistence as a ploy to avoid reducing its excessive protection of rice—which it would have had to do were agricultural negotiations to progress. The developing countries, including the G-20, overplayed their hand, although the accusation that they were "pontificating and not negotiating" was unfair. The G-20-plus in fact tabled a proposal on agriculture, albeit one that asked more of others than of themselves; the EU and US did not respond to this proposal. The countries of the Africa-Caribbean-Pacific group refused to negotiate on government procurement and trade facilitation.[26]

Lastly, as suggested above, Chairman Derbez perhaps closed the meeting too early. One may contrast his relative lack of experience with the imaginative and forceful role that the very seasoned chairman Enrique Iglesias of Uruguay was able to play at Punta del Este. Just before the Cancún meeting closed, there was a narrowing of the gap between contending positions on market access issues on both agricultural and non-agricultural products, as well as on export subsidies and domestic support. There was also considerable movement towards agreeing to drop two of the Singapore issues—competition policy and investment—from further negotiation while retaining the other two, namely, government procurement and trade facilitation. A final agreement might have been hammered out had the meeting not been formally closed ahead of its scheduled time.

The failure to reach an agreement did not preclude the members of the WTO from agreeing on July 24, 2004 a package that included a framework for subsequent negotiations. Yet the various deadlines set in the package were not met by the Hong Kong ministerial. It is tragic that the very same issues of agricultural protectionism in developed and developing member countries of the WTO, high tariffs (and tariff escalation) on some primary commodities and labor-intensive manufactures exported by developing countries, and the desire of developing countries to keep their markets protected while clamoring for increased access to developed country markets, continue to stall progress now as they did in the past. Clearly, in order to move forward, a rethinking of the rationale for the re-entrenched positions is needed. At the same time, an exaggeration of the consequences to the World Trading System of either a complete collapse of the Doha Round or a delay in concluding it successfully should be avoided. I now turn to needed rethinking and reasons why undue pessimism of the consequences of a collapse is unwarranted.

A development round?

First, the high hopes created at Doha that the new round would be a "Development Round," and the apparent dashing of those hopes at Cancún and later at Hong Kong and Geneva, are both unwarranted. There is little doubt that greater integration of the developing countries with the world economy—through reducing barriers to integration in developing countries and a liberal global environment for trading, finance, and technological progress—will contribute to their faster growth and to development. But it would be a mistake to underestimate the domestic constraints of social and economic structure, as well as governance, in the developing countries. Indeed, reduction in barriers to global integration in a liberal world environment provides countries with opportunities. Countries' ability to seize these opportunities to achieve growth and development depends on their success in removing domestic barriers (Srinivasan 2004). Moreover, some of the conceded demands of developing countries are not in the interests of the developing countries as a group; for example, the duty-free, quota-free market access accorded to least developed countries, if it succeeds in increasing their exports, could reduce export opportunities for other developing countries. On the other hand, the success of this access could be limited or even non-existent if developing countries' domestic supply constraints and/or barriers other than tariffs and quotas in rich countries are severe.

Special and differential treatment (SDT)

Second, developing countries have continued to be ambivalent towards a non-discriminatory and rule-based global trading system. In the negotiations that led to the GATT, in the preparatory committee for the Havana Conference, and at that conference, developing countries had sought to exempt themselves from rules, eventually succeeding in persuading the GATT Contracting Parties to adopt the so-called enabling clause entitled, "Differential and More Favorable Treatment Reciprocity and Fuller Participation of Developing Countries" in November 1979.[27] This clause, *inter alia*, excuses the developing countries from having to reciprocate commitments undertaken by Developed Contracting Parties. Ever since its adoption, achieving SDT has been the overarching objective of the developing countries. The developed countries, for their part, found the SDT provision convenient since it enabled them, too, to get away with exceptions—such as the Multifiber Arrangement—to GATT rules.

At the heart of the demand for SDT is the notion that differences in countries' stages of development should be reflected in the multilateral trading system. According to this principle, the least developed countries are exempted from many commitments and from reducing whatever barriers they have on their trade.

Such differentiation makes a mockery of a rule-based system, and creates invidious distinctions among developing countries. Even more importantly, it creates perverse incentives, by allowing countries to delay the domestic actions that would be necessary for them to take full advantage of the opportunities that a liberal trading system offers. This is not to say that heterogeneity among countries' stages of development does not matter—it does. But such heterogeneity should and could be accommodated without compromising the longer-term development prospects of countries that are at relatively early stages of development. Exempting such countries from rules, commitments, and obligations creates the expectation that exemptions can be extended indefinitely. This, in turn, blunts the incentives for these countries to address the weaknesses in administrative capabilities, human capital attainments, and social and economic infrastructure that account for their "least developed" status. Thus, the very forces of their catch-up with more developed countries are weakened.

A rethinking of SDT is needed. Giving countries at earlier stages of development a somewhat longer time horizon to conform to common rules, commitments, and obligations would avoid the disincentives just outlined, provided that all countries are credibly committed both to the common rules and, most importantly, to the agreed, but diverse, time horizons. Further, given such commitments, transfers to poorer countries to ease the burden of adjustment costs would be appropriate. By committing to a known and irrevocable future date for complying with common rules, countries would remove uncertainties about their future economic environment, and encourage appropriate investments in institution-building as well as in human and physical capital.

Reciprocity

Third, partly because the developing countries were given special and differential treatment, and partly because of their obsession with import substitution, some of the larger and mid-level developing countries (India is a prime example) have retained high trade barriers, even after the commitments they made under the Uruguay Round Agreement. These barriers have not come down to the levels prevailing in the historically outward-oriented economies of East Asia. It is also the case that barriers in some developing countries adversely affect the trade of others. Unilateral reduction of such high barriers would be beneficial, both to the reducing developing countries and to other developing countries. Indeed, studies by the World Bank have consistently shown the developing countries have a lot to gain from their own individual and joint liberalization, much of it coming from exploiting the great potential for trade among themselves.

Greater access to rich country markets would add substantially to these gains. Developing countries' high barriers and their reluctance to reduce these barriers significantly in the reciprocal bargaining process do not provide grounds for the developed countries' unwillingness to reduce their (albeit lower) barriers. There are two reasons why.

1 Developing countries have in fact reduced their barriers, particularly import tariffs. For example, looking at the imports of ten developing countries, which accounted for 60 percent of the merchandise imports of all developing countries, customs revenues fell from 13 percent of landed cost in 1985 to 4 percent in 2000 (WTO 2003b, Chart I B.2).
2 Though it may well serve a rhetorical purpose for the rich countries to point out that developing countries' tariff barriers are higher than their own, one must take a deeper look at how tariffs affect developing countries. The developing countries in 2004 accounted for around 24 percent of world merchandise imports (WTO 2005a, Table I.3).[28] A large share of those imports are likely to be necessities and vital intermediate goods (such as oil), demand for which is likely to be very price-inelastic. Under the circumstances, it is unlikely that developing countries' imports, particularly from rich countries, will grow substantially. Of more importance are the import barriers that developing countries face in the considerably larger markets of rich countries: the rich countries buy a large share of the exports of the developing countries, and these exports are likely to be relatively price-elastic. How a given tariff rate affects exports depends on market characteristics. Thus, a given tariff rate in rich countries with larger and more price-elastic markets would reduce developing countries' exports to rich countries by proportionately more than the same tariff

> rate in developing countries with smaller and less price-elastic markets would reduce rich countries' exports to the poor countries. The World Bank, UNCTAD, and other multilateral agencies are not off the mark in pointing to the deleterious effect on developing countries of the trade barriers in rich countries.[29]

In sum, a rethinking of the demand for special and differential treatment, and a willingness by developing countries to offer deeper cuts in their barriers, are necessary.

Agricultural trade

Since the early years of GATT, agricultural trade has been massively distorted by a plethora of interventions in almost all countries. Neither the US-EU proposal on agriculture, nor the counterproposal from the G-20 that was tabled at Cancún, and those of the US, EU, and G-20 on the table as of July 10, 2006, would have done much to dismantle the system of distortionary interventions.

Confounding the protection of agricultural trade with the legitimate, but quite different, goals of food security, i.e. ensuring access to food at affordable prices for the poor in developing countries, protecting the interests of subsistence and marginal farmers, and preventing degradation of the rural environment, is not conducive to progress either in liberalizing agricultural trade or in protecting the poor or the environment. More generally, trade policy instruments are rarely the most cost-effective in achieving domestic redistributional objectives. Once members realize that they can and should use non-trade policy instruments to pursue their legitimate objectives towards agriculture and farmers, at far less cost to themselves and their trading partners, agricultural trade negotiations are likely to move forward.

Narrowing the agenda for negotiation

Besides being overly ambitious in setting the target date of January 1, 2005 for completing the round, the Doha declaration loaded the negotiating agenda with items on which there was no widespread agreement, let alone consensus. The most contentious of these were the Singapore issues. Trade and investment, anti-dumping, and regional and preferential trade agreements were the others. At Cancún, the reports on many of these issues, intended to enable ministers to make decisions to guide subsequent negotiations, were not ready to be presented. Fortunately, since Cancún, except for trade facilitation, all other Singapore issues are no longer on the negotiating agenda.

In WTO's TNC, a body of 149 in which consensus is the norm for decision-making, a long agenda containing many items on which there is no widespread agreement is a prescription for failure. This is one of the important lessons from Cancún. Its implication is also clear: an agreement to narrow the agenda to urgent issues is absolutely essential for making progress towards a deal by December 31, 2006. In the meantime, therefore, it would be sensible to restrict the negotiating agenda to just the items on which there are considerable narrowing of differences, while agreeing not to take any possibly WTO-inconsistent prejudicial action on others.

Avoiding exaggeration of the differences in negotiating positions and the consequences of failure of the Doha Round

Contrary to what one might conclude from the rhetoric surrounding the positions of the US, the EU, and the G-20 on agriculture, and of the developing and developed countries on NAMA, the differences among them are not too large to be narrowed through relatively intense but short negotiations. A month before the Hong Kong Ministerial was to open, Jagdish Bhagwati had observed that "the history of the Doha round is more encouraging than conventionally believed . . . [a] historical perspective suggests that panic is not warranted . . . the outlines of a deal that would close the Doha round are . . . clear." In his view, all that remained was for "Mr. Lamy to present them [outlines] forcefully . . . in Hong Kong. . . . and to get the member states to follow with an extraordinary meeting within six months, in a pro-globalization country such as Denmark, where the penultimate steps to finalizing a deal by the end of 2006 and its approval by early 2007 would be taken" (*Financial Times*, London Edition, November 15, 2005, p. 19). Hopefully in his ongoing consultations Mr Lamy will suggest persuasively the outlines of such a deal.

It would have been of immense help to Mr Lamy in his consultations if the leaders of G-8 other than Russia (which is yet to become a member of the WTO) and the leaders of Brazil, China, and India, who met in St Petersburg during July 15–17, 2006 were to make a forceful declaration of their intention to conclude the Doha Round by the end of December 2006 and instruct their trade negotiators to return to the table and negotiate with renewed vigor. Unfortunately, such a declaration was not made. This was because short-term political considerations arising from impending presidential elections in Brazil and France and mid-term congressional elections in the USA, and the compulsions of keeping the diverse governing coalition intact in India, trumped any long-term economic gain to all members of the WTO from concluding the Doha Round successfully by December 2006.

What if Mr Lamy's consultations reach an impasse and the Doha Round collapses altogether? Surely the potential gains from a successful conclusion would be delayed, if not lost altogether? But the loss could be contained significantly by appropriate unilateral actions by developing and developed countries alike. Since it is in the interests of many developing countries, including India, to open their markets more than they have been willing to do thus far, particularly for non-agricultural commodities to external competition, their doing so unilaterally, and not as part of a multilateral agreement, would be eminently sensible.

At the same time, similar unilateral liberalization of their agricultural trade by the US and EU, to the extent of the least liberal of their respective current proposals, again without waiting for developing countries to liberalize their NAMA, would be feasible and appropriate. Also, there is absolutely no reason to presume that the collapse of the mis-labeled "Development Round" would retard development prospects, in particular progress in eradication of poverty. As argued earlier, the constraints on development, and even more so in eradicating poverty, are largely in the domestic political economy arena in developing countries. Of course, greater market access (and perhaps resource transfers from the rich[30]) would help, but their potential benefits would be much higher if the domestic constraints, such as those relating to governance, are addressed at the same time. The collapse of the Doha Round need not make it more difficult to address them, and if they are addressed, the pace of development and poverty reduction would accelerate.

Future directions

GATT, the World Bank, IMF, the UN, and other intergovernmental agencies were created in the 1940s, and it is often suggested that their design reflected the need to address the pressing problems of the period. The problems of the twenty-first century are not the problems of the 1940s, and it is argued that, for this reason alone, structural reforms of these institutions are urgent and new institutions must be created as needed. Some commentators go even further to argue that globalization inevitably erodes national sovereignty in many areas of policy-making and shifts it to intergovernmental agencies, and that this in turn calls for supra-national agencies for policing competition (global anti-trust) and regulating financial intermediaries and migration. Some argue for global taxation, to address cross-national externalities of various kinds, including environmental externalities and those relating to the volatility of short-term capital flows and redistribution.

Clearly, international institutions have responded to the changing mix of problems; indeed, they have been pushed to do so by their members' reluctance to contemplate other alternatives. The responses have not always been efficient and cost-effective,[31] and in effect, the jurisdictions of the institutions have been expanded without any significant restructuring. The International Monetary Fund, for example, instead of sticking to its original mandate, has involved itself in medium- to long-term structural adjustment, growth, sovereign debt restructuring and bailouts, and, more recently, in poverty alleviation, in which it has neither mandate nor competence. Several of these areas are also in the jurisdiction of the World Bank. The World Bank itself has become so diffused in its activities (for example, promoting interfaith dialogue) that one must wonder whether it has diluted whatever analytical competence it might have had in any core area of development.[32]

This blurring of institutional boundaries does not necessarily contribute to the design of more efficient and less costly solutions to problems.

A vision for the global trading system and WTO

The jurisdiction of the WTO has already been enlarged to cover intellectual property, aspects of investment, and trade in services, and, depending on how the Singapore issues are resolved, others will be added. Some characterize the emerging WTO as a World Bargaining Organization and argue that there is no reason to restrict it to bargaining only on trade policies, and that too with no income transfers between countries. There is the further danger that expecting trade regimes to solve development problems might place undue pressure on the WTO to become yet another development institution. If this happens, it would be unfortunate. It would dilute the WTO mandate on matters of trade and erode its effectiveness.

Tinbergen pointed out long ago that in general there must be at least as many instruments of policy as there are objectives, and that in achieving any objective, the policy instrument that has the most direct impact on the objective will most likely, though not always, do so at the least social cost (Tinbergen 1952, 1956).

Following Tinbergen, the vision for the WTO must start from the presumption that its mandate would be the governance of a rule-based global system of world trade in goods and services. This mandate for the WTO, and an overarching goal for it—namely, removing policy-created barriers to trade in goods and services as the organizing principle for its constitution and rules—has several implications.

First, issues that are not explicitly and directly trade-related would be outside the mandate of the WTO, and within the domain of other institutions specifically designed to deal with them. Of course, it is very likely that the membership of the WTO and of these institutions would largely overlap. It should in principle be simple, therefore, to avoid conflict among the rules and decisions of the various institutions and to bring about coordination, as long as the members of each of the institutions, as well as national governments, have a coherent view on the issues in the relevant mandates of each, taken together.

Second, since any decisions in the WTO are implemented by means of national and international policies, the WTO must remain an intergovernmental organization. Clearly, civil society—national and multinational—should be heard, but the arena for the debate must be primarily the national political arena. By influencing the positions of national governments through a participatory process, civil society organizations will indirectly influence decisions at the WTO. Giving these organizations direct representation in some form, such as observer status, would be counterproductive. The deeper problem of the undemocratic character or non-participatory status of some national polities, and hence the denial to their civil societies groups of a hearing, does indeed arise—but a sustainable solution to the lack of democracy does not lie in giving representation to civil society in an intergovernmental organization. The notion of democracy in its decision-making process has no meaning, but transparency certainly has.[33]

Third, while any rule-based system must have a means for settling disputes,[34] it is arguable whether the ultra-legalistic system for the WTO, devised in the Uruguay Round at the insistence of the US, improves upon the basically political system of the GATT that it replaced. Effective access to the system depends on being able to hire expensive legal expertise, which poor members may be unable to afford without assistance. Also, the quality of the jurisprudence of the system will suffer if it is overloaded with too many disputes, as seems likely to happen. One unfortunate consequence—based on the successful inclusion of TRIPs—has been the clamor to bring within the ambit of WTO other issues such as labor standards and environmental concerns, not because of their trade-relatedness but only because of the availability of WTO's dispute settlement system to enforce disciplines through trade sanctions (Srinivasan 2005).

Fourth, a fundamental premise of the vision for the WTO, and its overarching goal, is that the trading system should be global in coverage and governed by multilateral disciplines and rules. To make the system truly global, the process of accession of new members such as Russia needs to be streamlined and accelerated. Multilateralism is incompatible with preferential trading arrangements, including the so-called regional free trade agreements (FTAs). As is well known, such agreements have little to do with free trade, and their complex rules of origin (ROOs) for obtaining access to preferential treatment boggle the mind. For example, the FTA between the US and Singapore apparently includes 203 pages of text on ROOs! ROOs provide great scope for manipulation by trade lawyers to create non-transparent and opaque protectionist measures. This being the case, it is essential to repeal Article XXIV of GATT/WTO on Customs Unions and FTAs, and replace it with one that ensures that trade preferences of any regional or other agreements are extended to all members of the WTO on a Most Favored Nation basis within a specified (say, five-year) period after the conclusion of such agreements.[35] The rationale for this is that the primary driving force behind most regional agreements (for example, the European Union) is political. The political benefits of such agreements ought to be adequate to prevent defection even if the benefits of trade preference are limited to a specified period so as to minimize the damage they inflict on non-members. Repeal of Article XXIV may not be achievable in the near future; still, a first step towards a more informed evaluation of the regional FTAs and other preferential trade agreements was taken with the approval on June 29, 2006 of a Transparency Mechanism for Regional Trade Agreements by the Negotiating Group on Rules of the Doha Round (WTO News, July 10, 2006).

Fifth, the WTO articles on Anti-Dumping Measures (ADMs) need to be repealed. As is well known, the only economic rationale for dumping, namely predation, is no longer plausible, if it ever was. ADMs have become *de facto* preferred instruments of protection—the US and EU are frequent users of ADMs—and developing countries such as India have begun to use them extensively. ADMs are the most distortionary and discriminatory among protectionist instruments. Since WTO Articles allow the use of other less distortionary means, such as safeguard measures, ADMs are neither necessary nor desirable.

Transition to a truly global, multilateral, and liberal trading system

Once it is agreed that an unfettered trading system is the ultimate goal, the modalities for negotiations for the transition become simple. Instead of negotiating first on a framework for agreement and the modalities for its content involving complex formulae for reduction commitments regarding tariffs, non-tariff barriers, subsidies, and so on, the goal would be their complete elimination by an agreed, but fairly near, future date. To accommodate the diversity in countries' stages of development, this date could vary within agreed limits. The same principle would apply for specific commodities and services—each member could choose, again within agreed and narrow boundaries, longer periods for eliminating barriers in those commodities and services it deems sensitive.

The US must take the lead if this vision is to be achieved, and if the failures thus far are not to impede progress towards a successful conclusion of the Doha Round. After all, the GATT was the outcome of a US initiative and every round of multilateral trade negotiations under the auspices of GATT was either started at the insistence of the US or successfully concluded once the US strongly pushed for it. Neither the EU nor the developing countries has ever called for a round of MTN to be initiated, and most often these groups have acted to delay, if not to obstruct, the compromises needed to conclude a round successfully.

Thus, the US has a critical role to play. But, unlike in earlier rounds, it should avoid threatening gestures—including the threat to go regional—and not try to overload the WTO with non-trade-related mandates in order to appease its domestic lobbies. Instead, as a strong believer in the fundamental role of free markets and competition, it needs to forge a consensus for reaching the ultimate goal of freeing the movement of goods, services, factors of production such as labor and capital, and technology from policy-created barriers anywhere in the world.

Postscript

Soon after members of the TNC failed to agree at their July 1 meeting, the leaders of the G-8 and of Brazil, China, India, and South Africa, met in St Petersburg, Russia, during July 15–17, 2006. There was some hope that they would make a forceful declaration of their intention to conclude the Doha

Round by the end of December 2006, and thus would instruct their trade negotiators to return to the table and negotiate with renewed vigor. Mr Lamy told the leaders at the mid-July meeting that they had the chief political responsibility for determining whether Doha would be a success or failure since their countries accounted for 85 per cent of the World's GNP and 75 per cent of world trade and, whether they or anyone else liked it or not, the remaining topics of negotiation now depended on solving the agricultural and industrial conundrum.

Instead of making a forceful declaration, the leaders simply set a new deadline of middle of August 2006 for agreement on modalities and promised flexibility in negotiating positions, although the French President said that the French position was unlikely to change much. Following the meeting of the leaders of the G-8, the trade ministers of the WTO member countries were to try to reach an agreement at their meetings in Geneva on July 23–24 and again on July 28–29. Given the inflexibilities shown by all major participants until then, predictably it became clear during the first of these meetings that "unbridgeable decisions remained between negotiators, particularly in the politically charged area of agricultural trade. The failure [to bridge the differences] means that the round would be suspended with no near term prospect of being restarted" (Alan Beattie, *Financial Times*, July 24, 2006).

According to the WTO news (http://www.wto.org/english/news_e/news06_e/mod06_summary_24july_e.htm):

> Mr. Lamy, told an informal meeting of the TNC on July 24, 2006 that he will recommend a "time out" to the General Council on 27 July. He did not suggest how long the talks will be suspended. They can only resume when progress can be made, which in turn will require changes in entrenched positions, he said. The suspension will apply to all negotiating groups . . . . . . Stressing that movement has to come from the members themselves, Mr. Lamy told them: "The ball is clearly in your court." . . . Members shared the disappointment and frustration. Some blamed the deadlock on inadequate offers to make significant cuts in domestic support in agriculture. Some blamed it on market access offers that would not produce genuine increases in trade. Some blamed it on rich countries' demands for improved market access that would put subsistence farmers in poor countries at risk instead of the rich countries tackling the distortions of their own subsidies. Several members said fingers should not be pointed at individual members, but that the responsibility for failure should be borne collectively by all members. Some argued that the gaps are not as wide as they appear. . . . Several were uncomfortable about the uncertainty. They called for a clearer picture in September, after the European summer break, of when and how work will resume.

Now that it is clear there is no prospect of an agreement any time soon, what next? The optimists, basing themselves on a similar impasse during the

Uruguay Round before its successful outcome, hope for a similar success at the WTO Council meeting expected to be held in October 2006. If they prove wrong, as is most likely, the potential gains from a successful conclusion would be delayed if not lost altogether. But the loss could be contained significantly by appropriate unilateral actions by developing and developed countries alike.

Since it is in the interest of many developing countries to open their markets to external competition more than they have been willing to do thus far, particularly their markets for non-agricultural commodities, their doing so unilaterally, and not as part of a multilateral agreement, would be eminently sensible. At the same time, similar unilateral liberalization of their agricultural trade by the US and EU, even to the extent of the least liberal of their respective current proposals—and again without waiting for developing countries to liberalize their NAMA—would be feasible and appropriate.

There is absolutely no reason to presume that the collapse of the mislabeled "Development Round" would retard development prospects, and in particular, progress in eradication of poverty. The constraints on development, and even more so in eradicating poverty, are largely in the domestic political economy arena in developing countries. Of course, greater market access (and perhaps resource transfers from the rich) would help, but their potential benefits would be much higher if the domestic constraints, such as those relating to governance in particular, are addressed at the same time. The collapse of the Doha Round need not make it more difficult to address these issues, and if they are addressed, as they must be, the pace of development and poverty reduction would accelerate.

Appendix 8.1 Membership of the G-20, pre-Cancún*

Argentina	Guatemala
Bolivia	India
Brazil	Mexico
Chile	Pakistan
China	Paraguay
Colombia	Peru
Costa Rica	Philippines
Cuba	South Africa
Ecuador	Thailand
El Salvador	Venezuela

* Egypt and Kenya are not formally members, but are supportive of the G-20 text.

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Notes

1 This is an updated (mid July 2006) version of a paper with a slightly different title presented at the Conference on "The Future of Globalization," organized by the Yale Center for the Study of Globalization in October 2003. In writing this paper, I have drawn extensively from Srinivasan (1998, 2002, and 2003). I thank Bernard Hoekman, Nicholas Hope, Jessica Wallack, and John Whalley for their valuable comments on an earlier version.
2 The "modalities" are targets (including numerical targets) for achieving the objectives of negotiations, as well as issues related to rules. See www.wto.org/english/ratop_e/negoti_mod1stdraft_3.htm
3 Subsequently the suspended negotiations were resumed but did not lead to an agreement. Indeed at the time this volume goes to press, the key countries of G-4 consisting of Brazil, EU, India and the US failed to agree at their latest meeting at Potsdam, Germany during June 18–20, 2007 on parameters of a possible agreement. Though an agreement at a meeting of the full membership of the WTO in Geneva cannot be ruled out technically as yet, it is extremely unlikely to happen.
4 It is interesting to recall that an impending expiry of a similar presidential authority in mid-1948 led the General Agreement on Tariffs and Trade (GATT), signed in October 1947, to be brought into force with a provisional protocol of application while awaiting the adoption and ratification of the Charter for an International Trade Organization (ITO) of which GATT was to have been the commercial policy chapter. Again, the agreement concluding the Uruguay Round was also driven in part by the impending expiry of presidential authority in December 1993.
5 On the history of the participation of developing countries in the global trading system, see Srinivasan (1998).
6 "The inhabitant of London could order by telephone, sipping his morning tea in bed, the various products of the whole earth, in such quantity as he might see fit, and reasonably expect their early delivery upon his doorstep; he could at the same moment and by the same means adventure his wealth in the natural resources and new enterprises of any quarter of the world, and share, without exertion or even trouble, in their prospective fruits and advantages; or he could decide to couple the security of his fortunes with the good faith of the townspeople of any substantial municipality in any continent that fancy or information might recommend. He could secure forthwith, if he wished it, cheap and comfortable means of transit to any country or climate without passport or other formality, could dispatch his servant to the neighbouring office of a bank for such supply of the precious metals as might seem convenient, and could then proceed abroad to foreign quarters, without knowledge of their religion, language, or customs, bearing coined wealth upon his person, and would consider himself greatly aggrieved and much surprised at the least interference. But, most important of all, he regarded this state of affairs as normal, certain, and permanent, except in the direction of further improvement, and any deviation from it as aberrant, scandalous, and avoidable" (Keynes 1919: 6–7.)
7 See Srinivasan (1998, Chapter 2) for details.
8 For a candid and very critical account of the position of developing countries (particularly Latin American countries), see Wilcox (1949: 32).
9 President Truman submitted the charter to the Senate for approval in 1948. How-

ever, the political climate, both domestic and international, changed with the success of the Republican Party gaining control of the US Congress. At the end of 1950, President Truman announced that he would no longer seek Senate approval for the charter.

10 Jackson (1989: 89). According to Dam (1970), this step was also a reaction to the preparations already in progress for the first United Nations Conference on Trade and Development (UNCTAD). The proposed amendments were approved in 1964 and became Part IV of the GATT, entitled "Trade and Development." Dam concludes that apart from its symbolic importance in sensitizing the contracting parties to the new role of the GATT in development, less-developed countries achieved little by way of precise commitments (and even these were highly qualified).

11 Although the debt crisis is often referred to as the Latin American crisis initiated by the Mexican default threat in 1982, Poland had earlier run into problems in 1981 with its borrowing from German and other European banks. Other countries having problems in the 1980s with their foreign borrowing included Korea, the Philippines, and Turkey, as well as countries in sub-Saharan Africa. Nicholas Hope drew my attention to these facts.

12 It is interesting to note that the Short-term Arrangement was introduced mainly to limit cotton textile exports from Japan to North America and Western Europe. When Japan became a leading exporter of automobiles in the late 1970s, "voluntary export restraints," another discriminatory trade policy measure (which technically was GATT-legal because it was "voluntary" though it violated GATT norms), were negotiated in 1981. Complaints about the undervalued yen, Japan's huge bilateral trade surplus with the US, and the high Japanese savings rates were also raised. It is no surprise that as China emerged as the fourth largest exporter in the world, similar whining by the US about China's exchange rate, high savings rate, and huge bilateral trade surplus is heard now, loud and clear.

13 It is sometimes argued that because of GATT's origins in the US proposals and because of the stillbirth of ITO—in large part due to non-ratification by the US—the rules of GATT were determined by the US and stacked against the developing countries from the outset, and there was no way in which the rules would have changed to become fairer even with active participation by developing countries. This argument is not plausible: first of all, the US proposals were circulated to all countries of the world. The original twenty-three contracting parties of GATT, including eleven developing countries, were also among the fifty-three signatories of the ITO charter. Thus, developing countries had ample opportunities to express their concerns in the GATT negotiations in Geneva and in the Havana conference, and indeed they did so. If they were not satisfied with either the GATT or ITO Charter, they would not have signed them.

14 At subsequent ministerials at Seattle, Doha, Cancún, and Hong Kong, there were no agreed drafts either.

15 The US delegation announced with great fanfare that it would go home the next morning with or without a final declaration and threatened to call for a vote in consultation committee rather than achieve a consensus via the customary process in GATT. Thus the departure home of the Indian trade minister a day ahead of the TNC meeting of July 10, 2006 after venting his frustration with the lack of progress had a precedent, except that his premature departure had no effect, unlike the US threat to depart at Punta del Este, for the obvious reason that India, unlike the US, is only a minor player in world trade with less than 1 percent share of world exports in 2004.

16 Except for a statement that was included in the objectives section of the final text and that called on nations to link actions on trade liberalization with efforts to improve the functioning of the international monetary system.

17 It did so by invoking the provisions of the Super 301 section of the Omnibus

Trading Act of 1988 and naming Brazil, India, and Japan for possible retaliation for their alleged barriers to US investment and inadequate protection of intellectual property rights.

18 It seems that the concept of "single undertaking" first emerged in the preparatory process of the Uruguay Round as an initiative of the EC (now, the EU) and subsequently embraced by a number of developing countries, particularly in Latin America. The EC saw it as an instrument to stall or even walk away from the negotiations if the package likely to emerge did not meet its expectations. The developing countries viewed it as a means of ensuring that issues of interest to them (e.g. agriculture) were not side-tracked in the negotiations. Regardless of the self-serving reasons of the EC and developing countries for their interest in the concept of single undertaking, it nonetheless had a more appealing rationale in that it formalized the strategy of issue-linkage and extended the process to one that bound all the issues and all participants into a single decision. Thus it provided a means of engaging in trade-offs between negotiation areas, while at the same time allowing the possibility of withdrawing concessions agreed to in one area in response to deviations from any real concessions in another area. On the other hand, it lacked the flexibility of the earlier *à la carte* system of multilateral and plurilateral agreements in different areas while avoiding its cost of obvious selectivity. I have drawn from Patel (2003) in this description of the concept of single undertaking.

19 The process of "tariffication," namely, converting the impact of various interventions at the border into their tariff "equivalents" and binding them as a base for reductions to be agreed upon during the negotiations, degenerated into a farce. Most countries chose to "tariffy" and bind the tariffs at much higher levels than were being applied at that time. For example, as against an applied tariff (AT) of only 3 percent on beef and veal, the US chose a bound tariff (BT) of 31 percent. The EU chose a BT of 361 percent on rice as compared to an AT of 153 percent. Poland, in anticipation of its eventual membership in the EU, chose an even higher BT of 450 percent, even though it hardly grows any rice! Developing countries were no better. Thailand, a rice exporter, chose to set a BT of 58 percent as against an AT of 3 percent on rice imports.

20 Although at the time of the signing of the Uruguay Round Agreement in 1994 there was considerable doubt whether MFA would in fact be phased out on January 1, 2005, it was. The eliminated quotas were not replaced by other protectionist measures. Since bilateral quotas enabled some developing countries that were not competitive to export, the elimination of quotas, as is to be expected, gave an opportunity to those who were competitive to expand their share of world exports at the expense of non-competitive ones. For example, as the MFA quotas were being eliminated in a phased manner, China (and to a lesser extent, India) rapidly expanded its share in world exports of textiles and clothing from 6.94 percent and 8.9 percent respectively in 1990 prior to the phase-out of MFA to 17.2 percent and 24.0 percent in 2004 just before its full phase-out. The US and EU have responded to the flood of Chinese exports by imposing temporary safeguards due to expire in 2008.

Also, the Africa Growth and Opportunity Act (AGOA) passed by the US in 2000 eliminated quotas on textile and apparel exports from Africa. This induced foreign apparel manufacturers, mostly from Asia, to invest in African countries to take advantage of quota-free exports to the US. With the expiry of MFA quotas this advantage no longer exists, and it is likely some of the foreign investors will exit from the African countries. It is no surprise that these countries and uncompetitive textile and apparel manufacturers in the developing and rich countries have an interest in the safeguard actions in the US and EU against Chinese exports.

The rationale for the phase-out was in part that by letting the timing of the elimination of quotas on a product depend in effect on the extent of cost disadvantage to rich country producers of that product, such producers were given a longer time to adjust to expected increases in competition from low-cost developing country producers once the quotas were eliminated. Implicit in this was the expectation that such adjustment would indeed be completed by the time all MFA quotas expired on January 1, 2005. In fact, rich country producers did not adjust and instead clamored for safeguard actions after the expiry of the MFA—and got them.

21 Such a regime may provide for either global or national exhaustion of property rights. Under a global set-up, the property rights are exhausted any time the patent holder licenses production or produces anywhere in the world. So, for example, if Glaxo has decided to produce one of its patented drugs in India, any other country would be free to import that product from India. Under a national set-up, by contrast, the patent holder can segment its markets. Brazil, India, and the UK, for example, would then represent three different markets, in which the patent holder could exercise to the fullest the separate monopoly rights granted in each of those markets. From the point of view of the welfare of the poor, arguments can be made in favor of either global or national exhaustion; the choice for a country depends on whether the uniform market price in a global exhaustion set-up is likely to be above or below the monopoly price it would face in a segmented market.

22 The General Council of the WTO in its decision of August 30, 2003 did provide a solution by allowing any eligible member who notifies the WTO confirming that it has insufficient or no manufacturing capacities in the pharmaceutical sector for the product(s) it wishes to import, to import from an exporting member who has been issued a compulsory license (http://www.wto.org/english/tratop_e/trips_e/implem_para6_e.htm).

23 A literal reader of the declaration would conclude that the phrase "decision to be taken, by explicit consensus" applied only to the modalities of the negotiations, and not for undertaking the negotiations. On India's insistence, the chairman of the Doha ministerial clarified that it applied to both. The legal standing of this clarification is unclear.

24 Developing countries constitute an overwhelming majority of the 148 members of WTO. But many of them are small and poor. Their effective participation in the decision-making processes of the WTO and in trade negotiations is possible only if they have an adequate capacity for informing themselves and analyzing the relevant issues. This being the case, the importance of capacity-building and raising resources for it cannot be overstated.

25 At the Geneva TRIPs Council meeting, the chairman did not make his intended statement on his "understandings," from consultations with members, that the system of compulsory licensing to be established was "essentially designed to address national emergencies or other circumstances of extreme urgency", *Bridges* 7 (6), February 19, 2003.

26 Some developing countries apparently had put special and differential treatment at the top of their priorities among the issues for negotiation, followed by implementation, TRIPs/public health, modalities for agricultural negotiations, and, lastly, market access for non-agricultural products. At Cancún, the discussions did not proceed according to this sequence. This perhaps prevented a compromise on Singapore issues of interest to the developed countries and significantly reduced the chances of success at Cancún. I owe this observation to Bernard Hoekman.

27 Although it was included in the enabling clause, the principle of non-reciprocity had already been introduced in Part IV of GATT adopted in 1965, and not for the first time either. It had in fact been included in the principles for negotiations set forth by the ministerial meeting that launched the Kennedy Round (1964–67) of

the multilateral trade negotiations (Dam 1970). Besides, as early as the Dillon Round of 1960–62, the European Community had announced that it would not expect reciprocity from developing countries.

28 Developing countries are defined as Asia (excluding Japan), all of Africa, and South and Central America. Their share in world commercial service imports is around 23 percent (WTO 2005, Table I.3).

29 Of course, tariffs vary by commodities. It is well known that tariffs in rich countries on commodities exported by developing countries are higher than average, and that tariffs increase by stage of processing, adversely affecting developing countries' prospects for doing more processing before exporting.

30 On the beneficial effects of resource transfers, the evidence is not strong (Easterly 2006).

31 Part of the response has been the expansion of the activities of the World Bank and the IMF into areas in which they do not have competence.

32 Clearly, religious and ethnic conflicts could affect development prospects, as crude cross-country growth regressions suggest (Easterly and Levine 1997). But this does not mean that international financial institutions have the competence and means to address them. Recognizing the relevance and social value of culture or religion again does not mean that economic policy instruments are cost-effective in promoting either. Worse still, capture by groups with other objectives is a possibility, as is evident in the cynical, protectionist capture of the need to preserve rural values and scenic beauty under the rubric of the "multi-functionality" of agriculture. Be that as it may, there is no doubt that the IMF and the World Bank have strayed from their original mandates under pressure from countries who have large weights in their decision-making: the US, Japan, Germany, France, and the UK. There has been a manifest tendency on their part and others to regard the World Bank and the IMF as instruments for providing a solution, and that very cheaply, for any real or imagined global problem, despite their proven inability to solve the problems or even contribute positively to the search for a solution.

33 I am avoiding the issue of legitimacy of intergovernmental organizations such as the UN, World Bank, WTO, and many others. Addressing it would require an in-depth analysis of the foundations of international law and much more. At the very least, one has to distinguish peoples from states and types of peoples and states. An extremely thoughtful and deep analysis of the law of peoples is by Rawls (1999). His concept of "burdened societies" whose historical, social, and economic circumstances make their achieving a well-ordered regime difficult, if not impossible, and the duty of well-ordered societies to assist them are extremely pertinent to analyze the problems of many developing countries in the WTO. Equally pertinent is his admonition "It does not follow, however, that the only way, or the best way, to carry out this duty of assistance is by following a principle of distributive justice to regulate economic and social inequalities among societies. Most such principles do not have a defined goal, aim, or cut-off point, beyond which aid may cease" (Rawls 1999: 106).

34 There is a danger that if the Doha Round collapses, the WTO would largely become a *de facto* dispute resolution body.

35 The Committee on Regional Trade Agreements (CRTA), the body entrusted with verifying the compliance of RTAs with the relevant provisions of WTO (primarily Article XXIV), and its predecessors in the GATT called Working Parties have not had much success in pronouncing on compliance. As the WTO (2004: 70) ruefully admits: "Since the establishment of the WTO [in fact since the inception of GATT] members have been unable to reach consensus on the format, and the substance, of the reports on any of the examinations entrusted to the CRTA" (WTO 2005b: 59). Thus, since Article XXIV has been ineffectual, its repeal is appealing.

9 Liberalization and industrial performance

Evidence from India and the UK

Philippe Aghion and Robin Burgess

The relationship between liberalization and economic performance has been intensely debated. Advocates of liberalization argue that, by increasing the size of markets and by fostering product market competition, liberalization enhances growth.[1] Critics counter that liberalization can limit growth, by inhibiting infant industries and learning-by-doing.[2] Most of the evidence gathered so far on the issue is at the country level, and arrives at no clear consensus.

This chapter draws out the implications of two recent studies on how macroeconomic reforms affect microeconomic outcomes, as picked up in panel data sets on industries and firms from India and the UK.[3] In particular, we are interested in how a firm's technological capabilities and institutional setting affect its response to liberalization, as reflected in changes in its productivity, investment, and output.

We find that reducing barriers to the entry of foreign products and firms has a more positive effect on the economic performance of those firms and industries that are performing closer to the technological frontier prior to the reform. In contrast, liberalization may damage the performance of those firms and industries that are initially far from the frontier. Liberalization magnifies the initial differences in productivity. The reason is that incumbent firms that are sufficiently close to the technological frontier can deter the entry of foreign firms by innovating, so that an increase in the entry threat stimulates more intense innovation among these firms. In contrast, firms and industries that are far below the frontier are in a weaker position to fight external entry. For them, an increase in the entry threat reduces the expected payoff from innovating, since their expected life has become shorter.

Another key finding is that the institutional environment in which firms function has a central bearing on whether or not they benefit from liberalization. Here, our focus is on labor market institutions, which affect the distribution of rents between firms and workers. Our theory predicts that the response of innovative investments to liberalization is dampened in regions whose labor regulations favor workers over employers. Thus, in relative terms, trade reforms hurt growth in regions with pro-labor regulations and enhance growth in regions with pro-employer regulations.

Our approach, which applies Schumpeterian growth theory to analysis of Indian and UK panel data, allows us to draw several important policy insights. First, the stage of technological development of a firm or industry matters. Policies that allow firms to upgrade their technological capabilities, or enable workers to relocate from low-to high-productivity sectors, will help to increase the extent to which a country or region benefits from liberalization. Second, the impact of liberalization on a firm's performance depends upon institutions such as labor regulations, which differ across regions and affect the incentives for firms to invest and innovate. This in turn points to a complementarity between liberalizing product and labor markets. Domestic policy reforms can thus play a central role in determining the extent to which firms and industries benefit from macroeconomic reforms that lower barriers to entry.

First, this chapter sketches a theoretical framework that links liberalization and entry to industrial performance across heterogeneous industries. It shows the impact on industrial performance of India's liberalization reform of 1991, using a three-digit state-industry panel for the period 1980–97, and presents related findings of the impact of increased foreign entry on productivity and patenting, using a UK firm-level panel data set for the period 1987–93. This provides evidence that some institutions that appear to favor growth at an early stage of a country's development may become obstacles to growth at a later stage.

Theoretical framework

A simple multi-sector Schumpeterian growth model

All agents live for one period. In each period t a final good (henceforth the numeraire) is produced in each state by a competitive sector using a continuum of intermediate inputs, according to the technology:

$$y_t = \frac{1}{\alpha}\left[\int_0^1 (A_t(v))^{1-\alpha} x_t(v)^\alpha \, dv\right]$$

where $x_t(v)$ is the quantity of intermediate input produced in sector v at date t, $A_t(v)$ is a productivity parameter that measures the quality of the intermediate input v in producing the final good, and $\alpha \in (0,1)$. The final good can be used either for consumption, or as an input in the production of intermediate goods, or for investments in innovation.

In each intermediate sector v, only one firm (a monopolist) is active in each period. Thus the variable v refers both to an intermediate sector (industry), and to an intermediate firm that is active in that sector. Like any other agent in the economy, intermediate producers live for one period only and property rights over intermediate firms are transmitted within dynasties. Intermediate firms use labor and capital (final good) as inputs. As shown in Acemoglu *et al.* (2003), the equilibrium profit for each intermediate firm will take the form:

$$\pi_t(v) = \delta A_t(v) \tag{1}$$

where δ reflects the bargaining power of the firm *vis-à-vis* its workers, with a higher δ corresponding to a more pro-employer labor market environment.

Technology and entry

Let $\overline{A}_t$ denote the new productivity frontier at date t and assume that this frontier grows at the exogenous rate g. At date t an intermediate firm can be either close to the frontier, with productivity level $A_{t-1}(v) = \overline{A}_{t-1}$, or far below the frontier, with productivity level $A_{t-1}(v) = \overline{A}_{t-2}$.

Before they produce and generate profits, firms can innovate to increase their productivity. For innovation to succeed with probability z, the intermediate firm at date t must invest

$$c_t(z) = \frac{1}{2} z^2 A_{t-1}(v).$$

Intermediate firms face an entry threat from foreign producers. Let μ denote the probability that a new entrant appears. Liberalization then corresponds to an increase in μ. Foreign entrants at date t are assumed to operate with the end-of-period frontier productivity level $\overline{A}_t$.

If the foreign firm manages to enter and compete with a local firm whose productivity is lower, it steals all the market. But if it competes with a local firm whose productivity matches its own, the profits of both the local and the foreign firm will be driven to zero by Bertrand competition. We assume the parameters to be such that the foreign firm will always find it profitable to try to enter if the local firm has a productivity level below the frontier. However, the foreign firm will never enter in period t if the local firm has achieved the frontier productivity level $\overline{A}_t$. Therefore, the probability of actual entry in any intermediate sector v is equal to zero if the local firm v was initially "advanced" and has successfully innovated, and the probability of entry is equal to μ otherwise.

Equilibrium innovation investments

Using equation (1), together with the above innovation technology, we can analyze the innovation decisions by intermediate firms that are close to and far below the frontier. Firms that are initially far below the frontier at date t (we refer to them as type-2 firms) choose their investment so as to maximize their expected profits net of research and development costs, namely:

$$\max_z\{\delta\left[z(1-\mu)\overline{A}_{t-1} + (1-z)(1-\mu)\overline{A}_{t-2}\right] - \frac{1}{2}z^2\,\overline{A}_{t-2}\}$$

so that by first-order condition:

$$z_2 = \delta(1-\mu)g \tag{2}$$

Firms that are initially close to the frontier (we refer to them as type-1 firms) choose their investment so as to:

$$\max_z\{\delta\left[z\overline{A}_t + (1-z)(1-\mu)\overline{A}_{t-1}\right] - \frac{1}{2}z^2\,\overline{A}_{t-1}\}$$

so that:

$$z_1 = \delta(g+\mu) \tag{3}$$

As noted, we take an increase in the threat of product entry, μ, as a proxy for liberalization reform. Straightforward differentiation of equilibrium innovation intensities with respect to μ yields:

$$\frac{\partial z_1}{\partial\mu} = \delta > 0; \frac{\partial z_2}{\partial\mu} = -\delta g < 0.$$

This means that increasing the threat of product entry encourages innovation in advanced firms and discourages it in backward firms. These comparative statics suggest that the greater the threat of entry, the more instrumental innovations will be in helping incumbent firms that are already close to the technological frontier to retain the local market. However, firms that are already far below the frontier have no chance of prevailing over a potential entrant; for them, a higher threat of entry will only lower the expected net gain from innovation, reducing their *ex ante* incentives to invest in innovation.

Next, we consider the effects of changes in labor market regulations on innovative investments:

$$\frac{\partial z_1}{\partial\delta} = g + \mu > 0; \frac{\partial z_2}{\partial\delta} = (1-\mu)\,g > 0.$$

This shows that pro-employer labor market regulations encourage innovation in all firms.

Finally, if we look at the cross-partial derivatives with respect to reform μ and labor regulation δ, we get:

$$\frac{\partial^2 z_1}{\partial\delta\partial\mu} = 1 > 0; \frac{\partial^2 z_2}{\partial\delta\partial\mu} = -g < 0.$$

Thus, in particular, labor regulations that are more favorable to employers—signified by the higher δ—increase the positive impact of entry on innovation investments in type-1 industries.

Main theoretical predictions

We conclude this section by summarizing our main findings:

- Liberalization (as measured by an increase in the threat of entry) encourages innovation in industries that are close to the productivity frontier and discourages innovation in industries that are far from it. Productivity, output, and profits should thus be higher in industries and firms that are initially more advanced.
- Pro-worker labor market regulations discourage innovation and growth in all industries, and their negative effect increases with liberalization.

The Indian liberalization experiment[4]

India's 1991 reforms represented one of the most dramatic liberalizations ever attempted in a developing country. Up to this point, central government had maintained control over industrial development, using public ownership, licensing, and other controls. Planned industrialization took place in a highly protected environment behind high trade barriers and controls on foreign investment. The New Industrial Policy, introduced in 1991 in the wake of a balance of trade crisis, shattered this old order. Its central elements included:

- *Trade liberalization:* Between 1990 and 1997, tariffs were reduced by 51 percent, and 97 percent of products experienced tariff reductions. Quantitative controls on imports of intermediate products were largely eliminated.
- *Foreign investment:* Approval of foreign technology agreements and of foreign investment of up to 51 percent of equity was made automatic in a large number of industries.
- *Deregulation*: Most industrial sectors were exempted from the need to obtain a license to start up a new production unit, expand production levels by more than 25 percent, or manufacture a new product. The number of industries reserved for the public sector also fell dramatically.

These different reforms would all have the net effect of lowering barriers to entry to foreign products and firms. The 1991 liberalization thus presents an ideal opportunity to study how industries in the different states of India responded to this increased threat of entry.

Industrial sectors in different states of India were subject to the same liberalization reforms. However, as our model makes plain, the impact of these reforms on industrial performance may have differed across state-industries both because of their positions in the pre-reform productivity distributions and because institutional conditions vary across states.

The analytical approach pursued in ABRZ is straightforward. We track three-digit state-industries across pre- and post-reform periods and examine whether being closer to the Indian technological frontier or having more pro-employer labor institutions before the reform affects performance after the reform.

In studying the impact of liberalization on Indian industrial performance, ABRZ focus on the registered or organized manufacturing sector. This covers manufacturing firms with more than ten employees with bargaining power, or twenty or more workers without bargaining power. (Manufacturing firms with employment below these thresholds fall into the unregistered sector.) Over the study period 1980–97, the registered sector comprised about 10 percent of GDP and the unregistered sector about 5 percent of GDP.

We made this choice for several reasons. Manufacturing is often seen as the key driver of structural change and economic growth in discourses on economic development (Kaldor 1967). And it was this heavily protected and regulated sector that was the target of India's liberalization reforms. The labor regulations that we studied also pertain specifically to this sector (Besley and Burgess 2004). And the fact that an Annual Survey of Industries was carried out on firms in this sector enables us to reliably track changes in industrial performance across the 1980–97 period.

The aggregate figures indicate that, overall, liberalization improved Indian industrial performance: annual real per capita manufacturing jumped from about 4 percent in 1960–91 to about 7 percent in 1991–97. But as Figure 9.1 shows, the all-India growth rates conceal a vast amount of variation across states.

This variation becomes even more pronounced when we look at three-digit industries within states.[5] Certain states—Andhra Pradesh, Gujarat, Haryana, and Maharashtra—show marked growth increases after the reform, whereas others—Assam, Bihar, and Orissa—show marked declines. Our theory helps us examine the reasons for these differences. One possibility is that states that experienced declines contained a high fraction of backward industries lying far below the current (domestic) technological frontier and consequently incapable of competing in the post-liberalization environment. In those states, investment and innovation would actually be discouraged by liberalization. The opposite would be true in states that contained a high fraction of industries close to the (domestic) technology frontier. Another possibility is that declining states had pro-worker labor institutions, which would further blunt the incentives of firms to invest and innovate after a liberalization reform. As a result, the impact of liberalization would be highly unequal across industries and states within the same country.

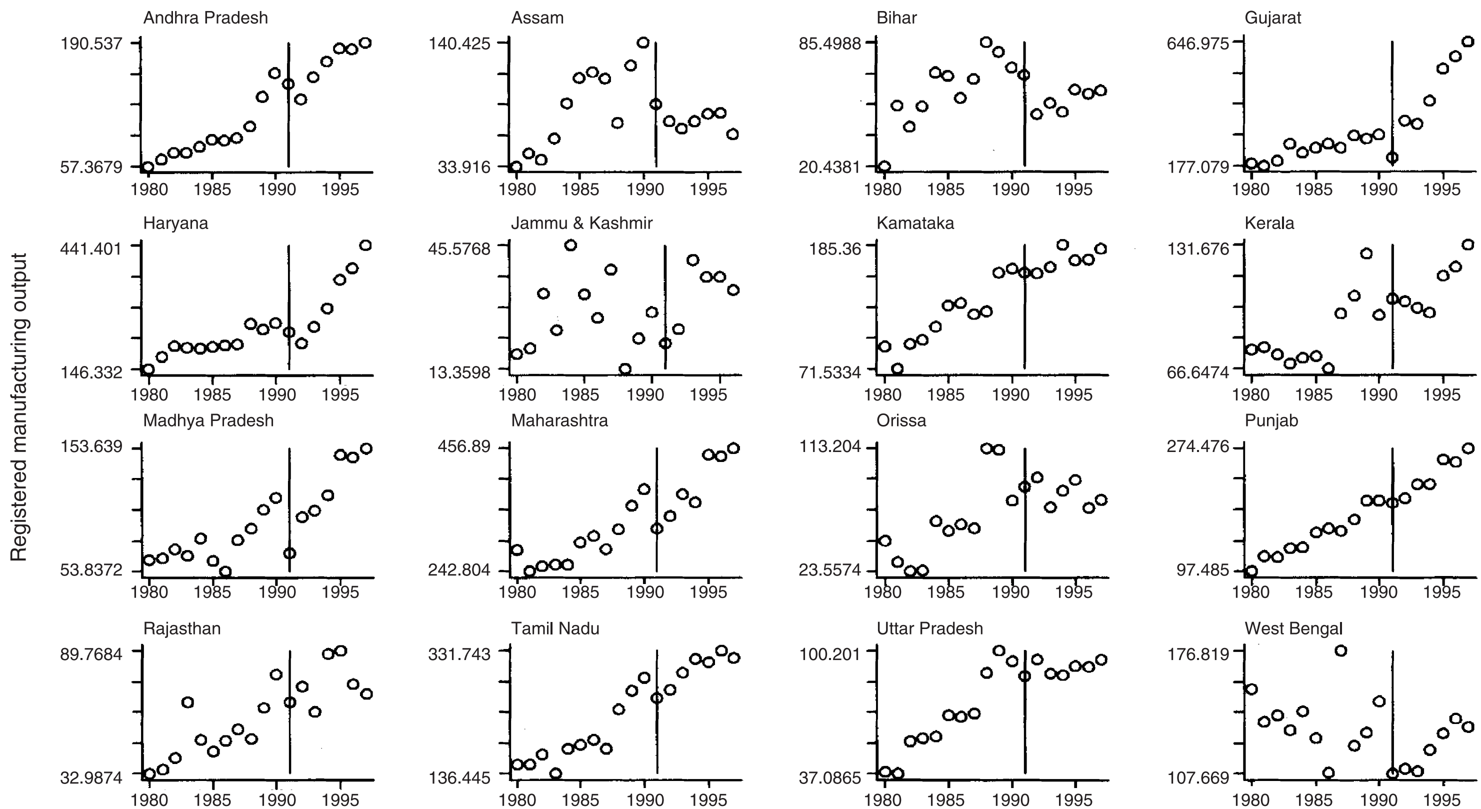

Figure 9.1 Registered manufacturing output per capita, Indian states, 1980–97.

Empirical analysis

To test the main predictions that emerge from the theoretical framework, ABRZ run panel regressions of the form:

$$y_{ist} = \alpha_{is} + \beta_t + \gamma_i t + \delta(x_{is})(d_t) + \eta r_{st} + \theta(r_s)(d_t) + u_{ist} \tag{4}$$

where i indexes a three-digit industry, s indexes the Indian state in which the industry is located, and t indexes years. y_{ist} is a three-digit state-industry manufacturing performance outcome expressed in logs. x_{is} is pre-reform distance to the Indian technological frontier—defined as labor productivity in a three-digit state-industry in 1990 divided by labor productivity in the most productive three-digit state-industry in that year. This measure equals l at the frontier and less than 1 for state-industries below the frontier. (A higher x_{is} therefore corresponds to being closer to the technological frontier.) The liberalization reform is captured with a dummy d_t, which takes a value of 0 for years before 1991 and a value of 1 for those after. The coefficient on the interaction between the pre-reform distance to frontier and the reform dummy d tells us whether three-digit state-industries that were closer to the frontier grew faster in the post-liberalization period than state-industries that were further from the frontier.

To represent state-level institutions, ABRZ use the labor regulation measure r_{it} from Besley and Burgess (2004). The measure captures the extent to which workers can appropriate industrial rents that may affect the incentives of firms to innovate as a response to entry threats (Figure 9.2).[6] These labor regulations are specific to firms in the registered manufacturing sector that are included in India's Annual Survey of Industries. We thus link regulatory change that affects a specific sector to outcome measures within the same sector. We look both at whether the direction of regulatory change during 1980–97 affected industrial performance (the η coefficient) and also at whether pre-reform institutional conditions affected post-reform performance (the θ coefficient).

We include three-digit state-industry and year fixed effects to control for unobserved characteristics of state-industries and common time effects across state-industries. We also include three-digit industry time trends to control for the possibility that industries experience different rates of technological change. Our standard errors are adjusted for clustering by state, to deal with problems of serial correlation (Bertrand, Duflo, and Mullainathan 2003).

Results

The key results from ABRZ are shown in Table 9.1. As our interest is in looking at a productivity measure that captures technological upgrading, we focus in column 1 on total factor productivity (TFP). In the first row of results, we see that three-digit state-industries close to the most productive

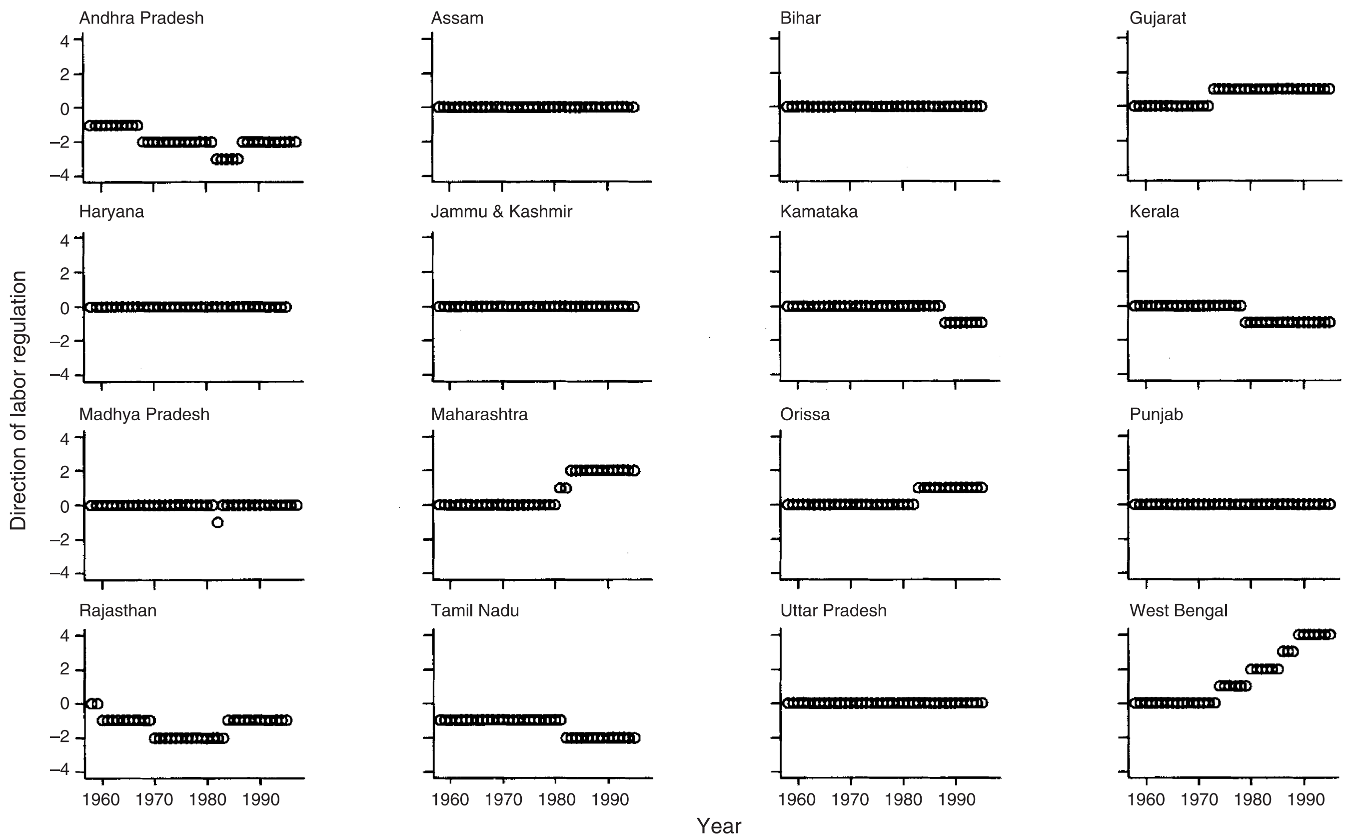

Figure 9.2 Labor regulation, Indian states, 1958–92.

Table 9.1 Liberalization and industrial performance in Indian industries, 1980–97

	Log TFP	*Log investment*	*Log profits*	*Log output*
Pre-reform distance* reform	0.157*** (0.042)	0.539*** (0.168)	0.685*** (0.201)	0.440*** (0.059)
Labor regulation	–0.066*** (0.017)	–0.052 (0.042)	–0.236*** (0.090)	–0.090*** (0.034)
Pre-reform labor regulation* reform	–0.035*** (0.011)	–0.023*** (0.008)	–0.043 (0.032)	–0.061*** (0.015)
State-industry fixed effects	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES
Industry-time trends	YES	YES	YES	YES
State-reform dummies	NO	NO	NO	NO
Balanced panel	NO	NO	NO	NO
Observations	22883	21494	16204	22883
R-squared	0.69	0.87	0.75	0.94

Source: Aghion, Burgess, Redding and Zilibotti (2003). Notes: Robust standard errors in parentheses adjusted for clustering by state, *significant at 10%; **significant at 5%; ***significant at 1%. Regressions are weighted using time-averaged state-industry employment shares. Sample is a three-dimensional panel of 3-digit industries from 16 Indian States during 1980–97. The data consists of a panel of 22,883 observations, where we condition on a minimum of 10 time-series observations for each state-industry and on at least two states being active within an industry in any time period. Log TFP is log total factor productivity. Log investment is log real gross fixed capital formation in registered manufacturing in a state-industry. Log profits is log real registered manufacturing profits in a state-industry. Log output is log real registered manufacturing output in a state-industry. Pre-reform distance is pre-reform state-industry labor productivity relative to the state with the highest level of pre-reform labor productivity within the industry. Reform is a dummy which equals 0 for 1990 and earlier and equals 1 from 1991 onwards. State amendments to the Industrial Disputes Act are coded 1=pro-worker, 0=neutral, –1=pro-employer and then cumulated over the pre-reform period to generate the labor regulation measure.

state-industry in India pre-reform experienced faster post-reform growth in total factor productivity than did state industries far from the frontier. A common liberalization reform thus had a heterogeneous impact on industries (located in different states) within the same three-digit industrial sector.

We then observe, in the second row, that, as predicted by the theory, the rate of technological progress was slower in states with pro-worker labor regulations. This is evidence that the institutional environment in which firms are embedded affected productivity growth in 1980–97. What is more striking is the evidence that liberalization magnified the negative impact of pro-worker regulations on productivity growth. This shows how greater rent extraction by workers blunts the incentives of firms to innovate in order to fight the entry of new competitors. State-specific regulatory policies therefore have a central bearing on whether or not the same three-digit industries located in different parts of India benefit from liberalization.

In our theory, new investment plays a key role in allowing industries to counter the threat of entry. We examine this relationship by looking at fixed capital investment, a large component of which comprises investment in plant and machinery (Table 9.1, column 2). The results confirm that those three-digit state-industries that were closer to the frontier pre-reform increased their investment post-reform. The regression thus helps to establish a link between liberalization, which leads to a reduction in barriers to entry, and the technology adoption choices of firms. Through this mechanism, liberalization has an unequalizing long-run effect, by increasing productivity more in advanced state-industries than in backward state-industries within the same sector.

Column 2 also confirms that industries located in states with more pro-worker industrial relations climates before the reform experienced less investment activity after the reform. This is direct evidence that the institutional environment in a state prior to reform affects the investment response of firms to liberalization. Domestic reforms that improve the institutional environment of manufacturing firms stand out as a means to enhance the benefits of liberalization to industries in a given region. In short, the investment climate in a state matters for whether industries benefit from liberalization.

Because of the innovative investments that advanced firms make, we would expect profits to be greater after liberalization in those firms than in backward firms. Table 9.1, column 3 confirms that this is the case. It is the lure of these greater profits that leads advanced firms to invest in new procedures and technologies, whereas exactly the opposite is true for backward firms, which stand little chance of competing in the post-liberalization environment. Table 9.1, column 3 also shows that states that moved in a pro-worker direction in 1980–92 achieved lower profits. This makes sense, as returns on investments will be lower in industries located in these states. Moreover, the blunting effect of having a pro-worker institutional environment is greater after liberalization. Liberalization creates the lure of greater profits but also magnifies the negative impact of an anti-business institutional environment.

A natural question to ask is how the size of different manufacturing industries was affected by liberalization. This is often what people have in mind when considering the welfare implications of liberalization. Table 9.1, column 4 confirms what we would expect from the theory: advanced industries experience greater output expansion following liberalization than do backward industries. We also see that moving in a pro-worker direction is associated with lower output in registered manufacturing industries. This result lines up with the state-level findings of Besley and Burgess (2004), who show that those states that amended the Industrial Disputes Act in a pro-worker direction experienced lowered output, employment, investment, and productivity in registered or formal manufacturing across the 1958–92 period.[7] They also find that regulating in a pro-worker direction was associated with increases in urban poverty. This finding suggests that institutional environments that discourage firms from innovating can have negative implications for welfare. And, as Table 9.1, column 4 indicates, the negative impacts of having pro-labor institutions before the reform were amplified after the reform.

These results indicate that the technological capability of industries and the institutional environment in which they are positioned have fundamental consequences for whether they expand or contract following a liberalization shock.

Entry and growth in the UK[8]

Estimated equations and measures

As a subject for analysis, the effect of new competitors on the performance and productivity growth of firms in the UK has both advantages and disadvantages compared to the Indian liberalization experience. The main disadvantage is that no equivalent of the 1991 reform has taken place in the UK during the past two decades. The main advantage is the availability of richer micro data on productivity growth, patenting activity, and actual entry of foreign firms.

The lack of a dramatic reform makes it impossible to use a time dummy to capture liberalization in the UK as was done in the case of India. As an alternative, we use a two-stage least squares procedure, regressing performance over the rate of actual entry by foreign firms, while instrumenting actual entry using policy variables that directly affect entry threat. We focus our estimation exercise on an equation of the form:

$$Y_{ijt} = f\,(E_{jt}, F_{jt}, X_{ijt}) \tag{5}$$

where i indexes (incumbent) firms, j indexes (four-digit) industries, and t indexes years, Y is a measure of incumbent firm innovative performance, E is the actual entry rate of foreign firms, F is the industry's distance to the technological frontier, and X is a vector of other firm and/or industry covariates that control for other economic processes that may affect the innovative performance of domestic incumbent firms.

Since we are primarily interested in the effect of entry *threat*, not of actual entry *per se*, we instrument actual entry using a large set of policy instruments, in particular: 53 investigations and decisions by the UK Monopolies and Mergers Commission; 11 cases of the privatization of large publicly owned companies; and 41 indicators for three-digit industries that are expected to be highly affected by the European Union single market program. Thus ABGHP specifies the following reduced-form equation for entry:

$$E_{jt} = Z_{jt}\,\Pi + F_{jt}\Psi + X_{ijt\o} + v_{jt}, \tag{6}$$

with

$$E\left[v_{jt} \middle| Z_{jt}, F_{jt}, X_{ijt}\right] = 0 \tag{7}$$

where Z_{jt} denote the instruments.

We control for unobservable industry characteristics and common macro shocks by including dummies. However, the dummies may not be sufficient to remove all spurious correlation between entry and the growth in total factor productivity (or patent count). In particular, relative changes in the entry rate across industries may be indirectly caused by shocks to UK TFP growth (or patenting). Our approach to removing such temporal correlations is to use policy and foreign technology variables as excluded instruments that determine entry but have no direct effect on the growth in TFP (or patenting).

We measure innovative performance in two ways: first, by growth in total factor productivity, using a very rich data set containing disaggregated information on output and factor inputs at the plant level for the population of UK manufacturing enterprises; second, by patent counts, using the data available for firms that are listed on the London Stock Exchange.

Entry is measured either by the actual number of employees in new foreign plants or by the entry rates of firms into four-digit industries in the previous periods. Distance to the technology frontier is measured by the relative labor productivity index between UK and US industry at the four-digit level. To limit the high variation of a distance measure over time, ABGHP use a three-year moving average.

Data

The empirical models specified above are estimated using micro-level data on the productivity growth and patenting activity of British firms between 1987 and 1993.

Several sources of firm data are used simultaneously:

- Data from the Annual Respondents' Database (ARD) for the manufacturing sector.[9]
- Data from the IFS-Leverhulme database.[10]
- As the main sample for estimating productivity growth models, a panel of 17,741 observations on 2,944 domestic incumbent establishments represented in the ARD between 1987 and 1993.
- As the main sample for estimating innovation models, a panel of 1,101 observations on 179 firms in the IFS-Leverhulme database. All firms in this sample are considered incumbent firms, since firms listed on the London Stock Exchange are all large and old. About 60 percent of the firms in the sample took out patents between 1987 and 1993.

Empirical results

The main empirical findings from ABGHP are summarized in Table 9.2. Column 1 shows that the entry rate of foreign firms has a significant effect on productivity growth, after we instrument for entry as specified above. We also find that productivity growth is negatively affected by distance to the productivity frontier, and positively affected by competition and import penetration. More importantly, we see that the interaction between the entry threat and distance to the frontier is positive and significant at the 1 percent level. In other words, the regression vindicates our conjecture that the

Table 9.2 Foreign entry, productivity growth, and patenting in a UK firm panel, 1987–93

Dependent variable	*TFP growth*	*# of Patents*
Independent variables		
Foreign firm entry rate$_{j,\ t-1}$	2.12**	37.17***
	(0.46)	(11.30)
Entry$_{j,\ t-1}$ *Distance$_{j,\ t-1 \text{ to } t-3}$	3.29***	40.45***
	(1.15)	(15.46)
Distance to the frontier$_{j,\ t-1 \text{ to } t-3}$	–0.05***	–1.33***
	(0.03)	(0.70)
Import penetration$_{j,\ t-1}$	0.05**	0.20
	(0.02)	(0.39)
Competition$_{j,\ t-1}$	0.16**	–9.43**
	(0.07)	(4.75)
Pre sample patent stock$_{i,\ 1986}$		0.004***
D (patent stock$_{i,\ 1986}$>0)		2.50**
Instruments:		
t, CF term (entry)	–2.16**	–1.86*
F, policy inst. red. form	136.07 (86)***	6.65 (70)***
F, US inst. red. form	37.56 (9)***	3.02 (9)***
R^2, reduced form	0.5877	0.5447
Controls:		
Year dummies	YES	YES
Three-digit industry dummies	NO	YES
Establishment fixed effects	YES	NO
# (observations)	15,060	1,059

Source: Aghion, Blundell, Griffiths, Howitt and Prantl (2003). Notes: Column (1)—OLS regression results with robust standard errors in brackets. Sampling probability weights and clustering on the industry level taken into account. 15,060 observations on domestic incumbent establishments between 1987 and 1993. Column (2)—Negative binomial regression results with robust standard errors in brackets. Clustering on the industry level is taken into account. 1,059 observations on incumbent firms listed at the UK stock market between 1987 and 1993. *** (**, *) indicates significance at the 1 (5, 10)-percent significance level.

effect of entry on total factor productivity growth is more positive when an industry is closer to the technological frontier.

Table 9.2, column 2 shows similar results, but with patent count as the dependent variable. Once again, the entry rate of foreign firms, import penetration, and competition all have positive and significant effects on patenting; moreover, the interaction term between entry and the distance to frontier is positive and highly significant (at the 1 percent level), so that the closer an industry initially is to the corresponding frontier, the more entry enhances patenting in that industry. ABGHP also shows that for firms that are far from the productivity frontier, an increase in the entry threat can have an overall negative effect on patenting. This finding confirms that the entry of new firms discourages innovation by firms that are far below the frontier.

More evidence on the interplay between distance to frontier and the nature of growth-enhancing institutions

In a recent paper, Acemoglu, Aghion, and Zilibotti (2004), henceforth AAZ, provide evidence to the effect that some institutions that appear to be growth-friendly at an early stage of development become an obstacle to growth at a later stage. Certain non-competitive policies may have limited costs, or even benefits, when countries are far from the world technology frontier, but become much more costly near the frontier. This implication appears to be consistent with the experiences of many Latin American countries as well as of Korea and Japan.

AAZ look at the relationship between growth and initial distance to the productivity frontier (interpreted as a country's GDP per capita relative to that of the US) using a sample of non-OECD, non-socialist countries, and distinguishing countries with high and low degrees of non-competitive policies/barriers to entry.[11] Growth in per capita income in 1965–95 is plotted against distance to frontier in 1965. We also control for a dummy for sub-Saharan African countries, which have had much lower growth rates. In countries with high barriers to entry, there is a strong negative relationship between growth and distance to frontier, but in countries with low barriers the relationship is much weaker. In other words, high-barrier countries do relatively well when they are far from the technology frontier, but their growth slows down significantly as they approach the frontier, while low-barrier countries grow almost equally successfully whether they are near or far from the frontier. This is consistent with the notion that barriers to entry are more harmful to growth in countries that are closer to the frontier, though this cross-country relationship may be driven by other cross-country differences that are not featured in the analysis.

We find the same pattern when we look at growth in five-year intervals and control for country fixed effects and time effects. Near the productivity frontier a country with high barriers grows at less than its "usual" rate. Therefore, as implied by our model, countries with high barriers slow down more significantly as they approach the frontier.[12]

The same results hold when we compare the growth experiences of countries with different degrees of openness to international trade. Here we split the sample according to the measure of predicted openness constructed by Frankel and Romer (1999). This measure uses a standard gravity equation to reflect such "exogenous" differences in openness as differences in population, land area, proximity, and common borders with other countries, and whether a country is landlocked.[13]

We also explore whether skills should matter more to a country that is nearer the frontier. To see if this is the case, we split the sample according to countries' levels of human capital—low and high—using data on total years of schooling in 1965. We should see a more negative relationship between growth and distance to frontier in low-human capital than in high-human capital countries. This is the pattern we find in the data; now the contrast is somewhat weaker in the cross-sectional regressions, but it is still strong in the fixed-effect regressions.[14] The evidence therefore suggests that cross-country growth patterns are broadly consistent with the basic implications of our approach, though this is only a first pass, and more detailed empirical analysis of these patterns is needed in future work.

Conclusion

There can no *a priori* assumption that an industrial sector will benefit from or be harmed by liberalization; to make a prediction, one has to look into initial technological conditions and the institutional environment. We have first argued and provided evidence that liberalization should enhance performance to a larger extent in firms or industries that are initially closer to the technological frontier. Second, we have shown that domestic institutional and policy choices, such as those that pertain to labor institutions, have a central bearing on whether firms and industries benefit from liberalization.

Our microeconomic analysis allows us to revisit the debate on liberalization. Here we believe that the devil is in the detail. For example, we saw that even if liberalization had a positive aggregate impact on productivity and output in India, it also had a negligible or negative impact on firms far below the technological frontier. This in turn suggests that complementary policies can be designed to encourage technological upgrading, either through providing incentives to existing firms or through reallocating workers from low- to high-productivity firms. Similarly, our finding that pro-worker labor regulations may limit the potential positive impact of liberalization points to complementarities between macroeconomic reforms such as tariff reductions and more microeconomic institutional reforms.

The finding that there are both winners and losers from liberalization helps us to understand why liberalization itself is often opposed even if its overall impact is positive. Even if liberalization reduces barriers to entry, groups or industries that would potentially lose from liberalization may oppose complementary institutional reforms, thus further reducing the overall impact of liberalization on economic performance. Identifying a set of liberalization reforms that are both growth-enhancing and politically feasible is an important subject for future research.

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Notes

1 See, for example, Dollar and Kray (2001, 2002); Frankel and Romer (1999); Sachs and Warner (1995); World Bank (2001).

2 Krugman (1981); Haussman and Rodrik (2002); Young (1991); Stiglitz (1995, 2002); Banerjee-Newman (2003); and Acemoglu-Aghion-Zilibotti (2003).

3 See Aghion, Burgess, Redding, and Zilibotti (2003); and Aghion, Blundell, Griffith, Howitt, and Prantl (2003).

4 This section is drawn from Aghion, Burgess, Redding, and Zilibotti (2003), henceforth ABRZ.

5 An average of 79 three-digit industrial sectors were functioning in each Indian state in any given year within the 1980–97 period.

6 Labor relations fall on the Concurrent List of the Indian Constitution, which implies that both central and state governments can introduce legislation in this area. Besley and Burgess (2004) code amendments to India's 1947 Industrial Disputes Act as pro-worker, pro-employer, or neutral and cumulate these over time to give a state-level picture of changes in the industrial relations climate.

7 Local amendments to the Employment Act were allowed as of 1958.

8 This section is drawn from Aghion-Blundell-Griffith-Howitt-Prantl (2003), henceforth ABGHP.

9 The ARD contains the micro data underlying the Annual Census of Production and covers the period from the early 1970s onwards. It is collected by the British Office for National Statistics under the 1947 Statistical Trade Act and response is mandatory. Detailed accounting information is available for all establishments selected for the ARD survey.

10 This database links patent data from the NBER/Case Western Patent database with firm-level accounting data from DataStream. The patent database contains all patents granted by the United States Patent and Trademark Office between 1968 and 1999. The IFS-Leverhulme database links the patent data to DataStream data on 415 firms listed on the London Stock Exchange (LSE) during the period 1968–96.

11 We do this using a measure of the number of procedures necessary for opening a new business, from Djankov *et al.* (2002).

12 With country fixed effects and time effects, the coefficient on the distance to frontier in the low-barrier sample is –0.036 (s.e. = 0.036), while in the high-barrier sample it is –0.105 (s.e. = 0.046). We also obtain similar results in fixed effect regressions when distance to frontier is instrumented by its past values in order to avoid biases resulting from the fact that distance to frontier is correlated with lags of the dependent variable.

13 In the cross-sectional regressions, the coefficient on the distance to frontier for the "closed" economies is –0.046 (s. e. = 0.012); while for the "open" economies it is –0.020 (s. e. = 0.028). In the fixed effect regressions, the coefficient for closed economies is –0.194 (s. e. = 0.051), while for open economies it is –0.81 (s. e. = 0.031).

14 In the cross-sectional regressions, the coefficient on the distance to frontier for low-education countries is –0.094 (s. e. = 0.047), while for high-education countries it is –0.050 (s. e. = 0.026). In the fixed-effect regressions, the coefficient for the low-education countries is –0.221 (s. e. = 0.065) and for the high-education countries, it is –0.048 (s. e. = 0.030).

10 Openness and poverty reduction in the short and long run

Mark Rosenzweig[1]

Because the poor lack income-producing assets and skills, their principal endowment is their labor. Two main routes for raising their incomes are by increasing the returns to unskilled labor and, from a longer-run perspective, increasing skills.

To some extent, these two pathways to poverty alleviation are contradictory, because any forces that increase the return to unskilled labor reduce the incentives to acquire more schooling. Thus, from a poverty-alleviation perspective, it is too simple to assess any intervention or policy in terms only of its direct impact on the incomes of the poor. Indeed, to the extent that the poor are able to enhance their human capital, policies that raise the return to skills (and thus in the short run directly benefit people with high skills) can be more effective in reducing poverty. In assessing the impact of economic openness on the poor, therefore, it is particularly useful to examine how opening an economy affects both the incomes of unskilled workers and the investments in skills that are made by the poor.

The globalization of an economy that is a consequence of openness has many dimensions. Openness may expand market opportunities, enhance the transfer of technology, and/or permit the flow of investment resources. And openness may transform an economy, moving it from a particular occupational structure that serves its own domestic demand conditions—for example, through manufacturing—to one that meets demands in other countries—for example, through services and communications. These aspects of globalization may in turn have distinct effects on different population groups, depending on how they alter the returns to different endowments.

In this chapter I use evidence from rural and urban India to assess how globalization has affected incomes and schooling investments among the poor. In particular, I use newly available data describing the entire rural population and one urban area of India over the past twenty years to assess the impact of a number of aspects of openness on the wages of the poor, the incentives of the poor to upgrade their skills through formal schooling, and their ability to undertake formal schooling.

India is an important setting for studying the relationship between globalization and the poor, not only because India has many poor people but because over time it has espoused different degrees of openness with respect to global forces. In the mid-1960s to the late 1980s, when India's borders were essentially closed to trade and investment, they were nevertheless open to agricultural innovations, in the form of new, high-yielding seed varieties developed abroad. In the 1990s, India undertook important reforms that opened its economy to international trade and foreign investment. I look below at how the "green revolution," rural industrialization, and the shift away from traditional industry in the urban sector affected the incomes and schooling investments of India's rural and urban poor. I then analyze short- and long-run effects in rural areas, and look at long-run effects in urban areas, before reaching a conclusion.

Short-run rural poverty alleviation in India: 1971–99

This study is based on a series of household surveys undertaken by the Indian National Council of Applied Economic Research starting in 1968. The initial survey was based on a stratified sample of more than 5,000 rural households in 261 villages in India's 17 principal states, which was designed to be representative of the entire rural population of those states. Follow-up surveys of households in almost all the same villages were undertaken in 1971, 1982, and 1999. Thus, we have the experience of a large sample of Indian rural households, residing in more than 240 villages over a period of about 30 years, from which to observe any effects on growth and poverty reduction that arise from policies. In this chapter I concentrate on the period from 1982 to 1999, when the forces of agricultural technical change and rural industrialization were both in play.

The survey data confirm the importance of three "endowments" in determining a rural household's income: land ownership, number of adults, and schooling of the household head. Looking at the situation in 1982, variation in these three variables accounts for about 40 percent of the total variation in rural household incomes. The rural poor are those who own little land and have little schooling. The poorest groups are less likely to own land: 45 percent of the bottom-quintile households are landless as opposed to only 15 percent in the top income quintile. Most importantly, the poorest groups rely more heavily on wage income, as opposed to earnings from capital or land.

The survey data also show differences in educational levels between income groups: although 37 percent of the household heads in the top income quintile in 1982 had completed primary schooling, only 13 percent of heads in the poorest quintile had done so. Together these characteristics suggest that policies to increase wages of unskilled workers would be important for poverty reduction and would disproportionately benefit the poor.

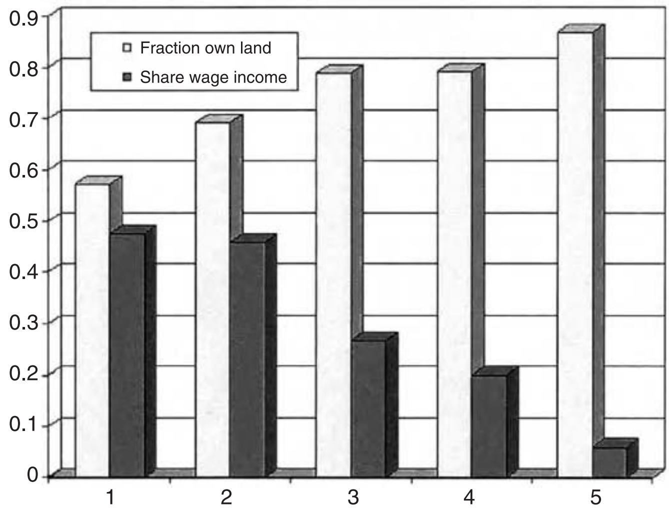

Figure 10.1 Proportion of rural households owning land, and share of household income from wages, by household income quintile, 1982.

Importing new agricultural technology

In the 1970s and 1980s, the "green revolution" was the principal engine of growth in rural areas of India and of the incomes of the rural poor. The Indian green revolution began with the importation of high-yielding varieties of wheat and rice seeds from Mexico and the Philippines, respectively, in the mid-1960s. The Indian government embraced these innovations, by creating programs to help farmers obtain the necessary resources in areas in which the new seeds had the greatest potential and by investing public resources in adapting the new seeds to local conditions. The green revolution is thus an early example of globalization in India, but one in which the public sector played a major, perhaps exclusive, role. For four crops that benefited from the green revolution—corn, rice, sorghum, and wheat—the survey data indicate that between 1971 and 1982 the maximum yields on irrigated lands increased by 80 percent.[2]

The Indian green revolution has a number of features relevant to poverty alleviation. First, at given agricultural prices, raising crop yields increases the demand for agricultural labor, thus raising wages. Indeed, in the period 1971–82, real agricultural wages in the survey villages rose by 44 percent. This was particularly impressive given that the population in these villages grew on average by 26 percent during those years. These productivity improvements also raised the returns to land, so that both rich landowners and the poor, who are reliant on wages, benefited. Second, given that many areas of India could not grow the new seeds, poverty reduction was spatially uneven. Finally, the green revolution refers to a continuing flow of seeds and constant innovation; incomes and wages continued to be affected by seed innovation throughout the 1980s and 1990s, although at a slower rate. In the seventeen-year period 1982–99 in the surveyed villages, yields increased by 74 percent, and real agricultural wages and household incomes rose by 67 percent and 70 percent, respectively; meanwhile, the rural population in these villages increased by 47 percent.

Importing capital

It would be incorrect to attribute all of the rural wage gains in India since 1980 to the green revolution. Between 1982 and 1999, the surveys also indicate that rapid expansion took place in rural factory employment. At the beginning of this period, only 17 percent of villages supplied any workers to rural factories, with average factory employment at only 5.7 workers per village. But by 1999, workers in more than half of the villages were employed in rural factories, and overall factory employment had increased tenfold. The factories competed with farms to employ unskilled labor.[3] Thus, the expansion of the rural factory sector also raised the wages of rural workers, at the expense of larger landowners who employ labor on their farms.

The connection between economic openness and the post-1980s rural industrialization of India is not yet clear. Domestic increases in income increased the demand for industrial goods and consumer durables, but the expanded connections with international markets may have also contributed.

The expansion in factory employment did have two clear characteristics, however. First, the capital used to create and/or expand factories near or in villages was not local. Data show no relationship between growth in village wealth, or increased presence of local banks, and increases in factory employment in the village (Foster and Rosenzweig 2003). From the perspective of the villages, the capital was imported.

Second, factories, and factory capital, were located in low-wage areas. In particular, those regions in which agricultural technical change was slower were much more likely to acquire a factory. By 1999, the villages that had had the slowest agricultural productivity growth were more than ten times as likely to have a factory as were the villages with the highest productivity growth.

The importance of this is that rural factory expansion, which targeted the lowest-wage regions, tended to decrease the spatial inequality in rural wages. Rural spatial wage inequality, as measured by the coefficient of variation, decreased from 62.4 to 30.9 from 1982 to 1999. Given the relatively low levels of migration across regions during this period, it is likely that most of the decrease was due to mobile factory capital seeking low-wage labor.[4]

Which has made the larger contribution to increasing the incomes of the rural poor: rural industrialization or agricultural technical change? Estimates for 1982–99 of the effects of these changes on wages suggest that rural industrialization was the more powerful influence (Foster and Rosenzweig

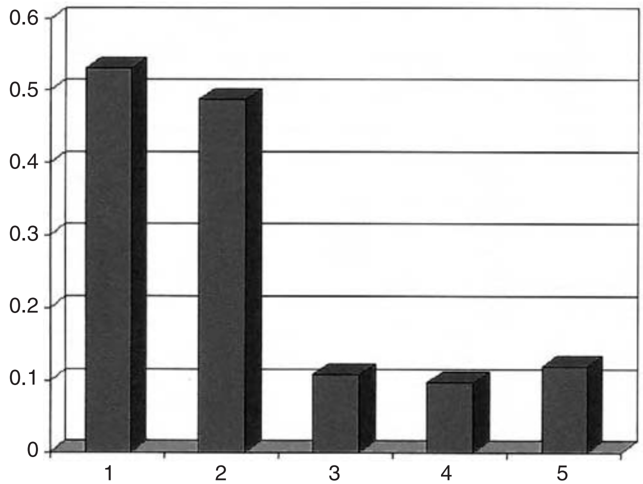

Figure 10.2 Presence of a factory in the village in 1999, by HYV yield growth, 1982–99.

Note: The figure plots the proportion of villages with a factory in 1999 against the ranking of villages, in five equal divisions, by agricultural productivity growth from 1982 to 1999.

2003). Figure 10.3 depicts the estimated effects on wages from doubling agricultural yields, for a given rate of factory expansion, and from doubling factory employment, for a given rate of yield growth. It shows that doubling yields increases wages by 28 percent, while doubling rural factory employment increases wages only by 8 percent. However, over this period rural factory employment increased five times more than yields. Thus, rural industrialization played a large role in the observed rural wage growth.

Long-run rural poverty alleviation: agricultural technical change, rural industrialization, and skill investment by the rural poor

Much attention has been paid in the literature to the role of credit and income constraints as barriers to schooling, and thus to long-run poverty reduction, in poor populations. The reductions in poverty brought about by wage increases, from whatever source, could well be expected to have raised schooling investment among the poor in Indian villages. The data do indicate that income affects school investment; in 1982, school enrollment rates for girls—who are not employed as much as boys in farming—were higher in landed households than in landless households. But if income were the most important determinant of schooling, school enrollment rates would always be lower among children of landless households than among children of landed households. In practice, the survey data show that in 1982 the school

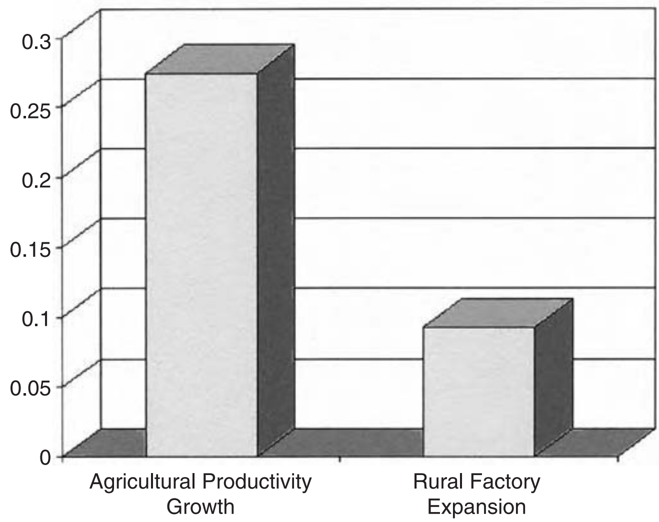

Figure 10.3 Estimated percentage increase in the rural wage from doubling agricultural yields and rural factory employment, 1982–99.

Source: Foster and Rosenzweig (2003).

enrollment rate for boys in the significantly poorer landless households was 22 percent *higher* than that in landed households. The explanation may be that to the extent that boys work on farms, and the labor market for boys is imperfect, the opportunity cost of a boy's schooling is higher in landed than in landless households. One should not ignore the fact that increases in unskilled wages reduce the return to schooling.

How did agricultural innovation and rural industrialization affect school enrollment rates among the two land ownership groups? Both these forces of economic growth increased incomes, as we saw above. Both increased the demand for schooling and relaxed the credit constraints on investment. But both also increased the demand for unskilled labor, thus lowering the net benefit from increased schooling. The evidence also suggests a trend consistent with hypotheses set forth by T. W. Schultz (1975) and Nelson and Phelps (1966), namely that in areas that experienced the highest rates of agricultural technical change, farms with more educated farmers raised their profitability more than did farms with less-educated farmers, reflecting the complexities of adopting and using the new agricultural technologies (Foster and Rosenzweig 1996). Thus, for farmers directly engaged in allocating resources, the green revolution raised the returns to schooling. To the extent that there are rigidities in the land market,[5] such that landed but not landless households expect their children to engage in farm decision-making as adults, agricultural technical change would raise school investment more among landed than among landless households.

Figure 10.4 and Figure 10.5 depict the school enrollment rates of children aged 10–14 by gender and by family land ownership for 1982 and 1999. During this period, as can be seen, enrollment rates for boys and girls went up substantially in both household types—on average by 67 percent. The rates of increase were almost twice as large in landed as in landless households, at 82 percent versus 43 percent. Whereas in 1982, boys in landed households

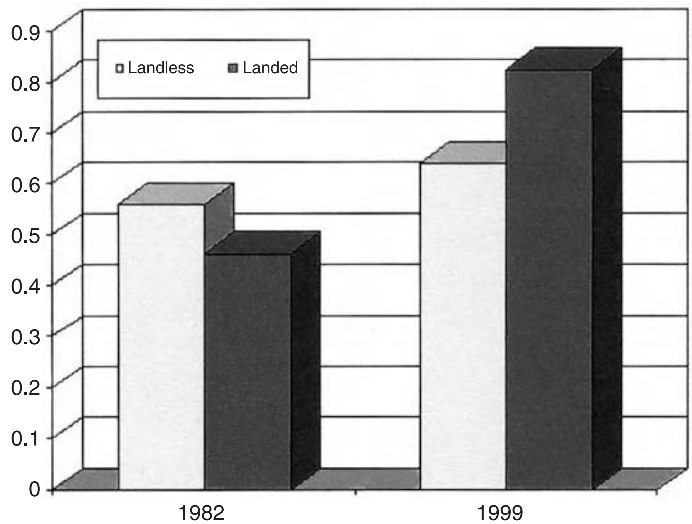

Figure 10.4 Rural school enrollment rates for boys, by land ownership and year, 1982–99.

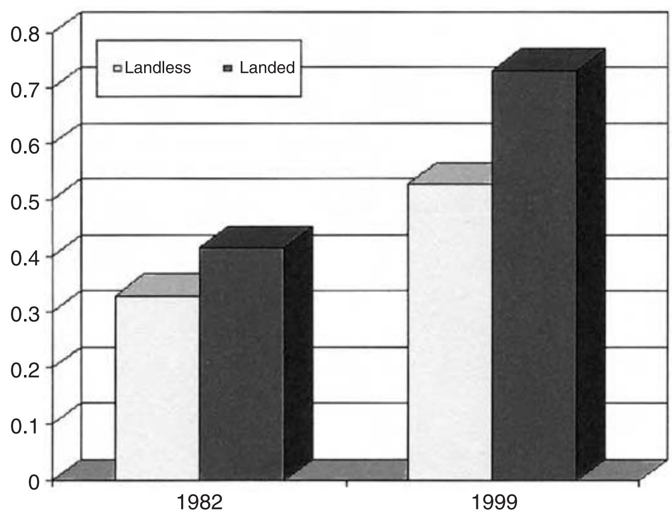

Figure 10.5 Rural school enrollment rates for girls, by land ownership and year, 1982–99.

enrolled in school at lower rates than boys in landless households, in 1999, school enrollment rates in landed households exceeded those in landless households, for both boys and girls.

To what extent are these increases in rural school enrollment rates explained by either agricultural technical change or factory employment expansion? Only to a small extent, it turns out (Figure 10.6). Variations in factory expansion and rates of yield improvements across the sample villages between 1982 and 1999 explain only a small part of the movements in school enrollment, relative to a simple time trend. Agricultural productivity change did increase schooling investment to some extent, and more in landowning than in landless households. Without agricultural productivity improvements, the advance in school enrollment rates would have been 7 percentage points less in landed households and 5 percentage points less in landless households. By contrast, factory employment expansion had no effect on schooling relative to the time trend. We can conclude that the increased

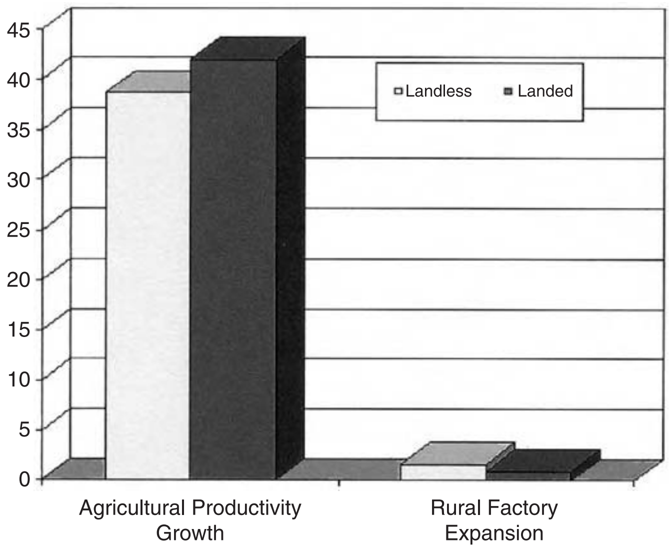

Figure 10.6 Estimated percentage increases in rural school enrollment from doubling agricultural yields and rural factory employment, by land ownership status, 1982–99.

Note: The figure depicts the estimated effects on school enrollment rates among the two land ownership groups, based on the survey data for 1982 and 1999, of hypothetically doubling yields and doubling factory employment relative to the (upward) time trend. The estimates are obtained from a within-village regression of the household school enrollment rates of children aged 10–14 on a time trend, the log of the Laspeyres index of high-yielding seed variety yields in the village, the log of factory employment in the village, interactions between the yield and factory variables and a variable indicating whether the household owned land, the number of boys and girls in the household, and whether there was a secondary school in the village. The estimated effects of the yield index on enrollment and the difference between the yield effect of enrollment across landed and landless households are statistically significant at the 0.001 level.

employment brought about by factory expansion did reduce poverty but did not induce an upgrade in skills.

Long-run alleviation of urban poverty in India: skill investment among low-caste men and women in a transformed urban economy, 1980–2000

Our analysis of the effects of openness on the urban poor is based on a new survey of households in the Dadar section of Bombay designed and supervised by Kaivan Munshi and Mark Rosenzweig and an analysis of those data (Munshi and Rosenzweig 2003). The survey was based on a random sample of enrollment records in the twenty schools in the neighborhood covering the years 1982–2002 and was designed to identify the trends in schooling choices across caste groups over that period. The interviews covered 7,896 households who had, or had had, children enrolled in the schools.

In Indian urban areas caste membership provides an exogenous indicator of a household's resources and endowments, rather as landlessness does in rural areas. The survey data indicate that in the year 2000, household incomes in the Bombay upper castes were almost three times those in the lower classes (rupees 5,198 versus 1,790). The schooling and earnings data for parents show that among men, schooling attainment in the upper castes exceeded that in the lower castes by more than four years (9.4 years versus 13.6 years), and that among women, the schooling gap between castes was more than five and a half years (7.6 years versus 13.2 years). The male/female gap in schooling was less than a year in the upper castes, but more than two years in the lower castes. Clearly, women in the lower castes were the most disadvantaged in terms of schooling.

These statistics, however, reflect schooling choices that were made prior to the Indian reforms of the 1990s. To understand how those reforms, including a policy of economic openness, affected schooling choices, one must examine how the reforms altered schooling incentives and schooling choices in the more recent period.

Changing returns to English language skill

For more than a hundred years, Bombay was an industrial city, with blue-collar occupations that were dominated by sub-caste networks. These networks simultaneously provided important job assistance to their members seeking work and to employers seeking able workers, but they did so exclusively within sub-castes, whose membership was defined by birth and closed by endogamous marriage. Starting in the mid-1980s, and accelerating during the reform period, Bombay's economy experienced an expansion of the corporate, trade, and financial sectors.

One consequence of openness in today's world is an increase in the number of transactions conducted in English, which has become the *de facto* international language. Indeed, one important effect of the structural transformation in India has been an increase in the returns to learning English. In Bombay, an important aspect of schooling choice is whether to enroll at age six in an English-medium school, in which all instruction is in English, or in a school in which subjects are taught in Marathi, the local language. Choosing an English-medium school offers students the promise of fluency in English and thus potential employability in sectors in which English is useful, as well as the ability to pursue higher education, which is almost exclusively conducted in English. About half of the schools in the Dadar neighborhood are English-medium schools. By conventional measures of school quality, these schools do not seem to differ significantly from the other schools, but their tuition costs are significantly higher.[6]

Based on the earnings histories of the parents in the survey, it is possible to estimate the returns to both schooling attainment (years of schooling) and to having been schooled in English in the decades of the 1980s and 1990s (Figure 10.7 and Figure 10.8).

As can be seen, for both men and women there was only a slight rise in the return to years of schooling completed. However, for both groups the earnings premium for having attended an English-medium school rose significantly more. For men schooled in the 1980s, those who attended an English-medium school, for given years of schooling, earned 17 percent more than those who attended a Marathi-medium school. For men schooled in the 1990s, the difference rose to 22 percent. The rise in the returns to

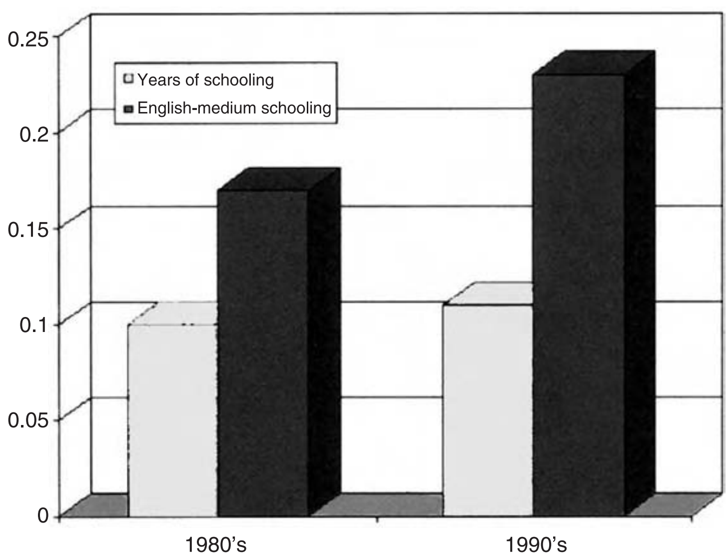

Figure 10.7 Rates of return to English-medium schooling and years of schooling for men in Dadar, Bombay, by decade, 1980–2000.

Source: Derived from estimates in Munshi and Rosenzweig (2003).

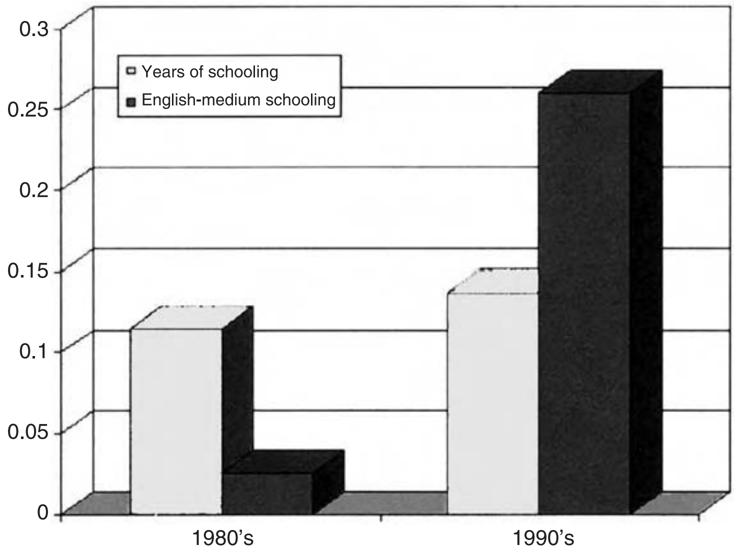

Figure 10.8 Rates of return to English-medium schooling and years of schooling for women in Dadar, Bombay, by decade, 1980–2000.

Source: Derived from estimates in Munshi and Rosenzweig (2003).

English-medium schooling was even more dramatic for women, from essentially no difference in the 1980s to more than a 25 percent difference in the post-reform period. These short-run effects of the opening of the economy surely increased the incomes of the better-off relative to the poor; the proportion of upper-caste men who had been schooled in English was more than eight times that of lower-caste men; and the comparable ratio for women was almost 15 to 1. For the long run, the issue is whether this premium in the returns to English-medium of schooling has diminished, given India's new economic structure.

Schooling investment responsiveness among the urban poor and less poor

Did the changes in the returns to English skill alter schooling choices among the poorer, lower castes? Conventional wisdom, stressing income barriers to schooling investment, would predict that the poorest households would respond relatively little to the changing returns, given the relatively high fees in the English-medium schools, and that the transformation of the economy may have actually lowered incomes in the traditional blue-collar occupations that have been dominated by the lower and middle castes. On the other hand, if we assume that income and credit constraints are unimportant determinants of educational choices, the returns shown in Figure 10.7 and Figure 10.8

suggest that school enrollments in English-medium schools should rise and, most importantly, should converge between income/caste groups.

The data support this proposition. They show that income constraints did not significantly affect schooling decisions, which do appear to have responded substantially to the changing returns in all caste groups. Figure 10.9 shows the proportion of female students who enrolled in English-medium schools in 1982–84, 1990–92, and 1998–2000 by caste grouping—high (Brahmin) and low. In the 1980s and early 1990s, although there was a slight increase in the share of enrollments in English-medium schools by upper-caste girls, there was no such change among lower-caste girls. During the 1990s, however, a significantly more rapid shift to English-medium schools took place within both caste groupings, and lower-caste girls shifted to English-medium schools significantly more than did upper-caste girls. Only 10 percent of lower-caste girls enrolled in English-medium schools in the early 1990s (compared with 41 percent among upper-caste girls), but by 1998–2000 this figure had risen to 35 percent. And by the end of the 1990s, the gap in English-medium schooling between upper- and lower-caste girls had been reduced by about a third. There has clearly been a convergence between castes in the schooling choices of girls—choices that will enable them to participate in the new economy.

The picture for boys is less clear (Figure 10.10). Just as for girls, there was a substantially greater shift to English-medium schools for boys in both caste groups in the 1990s compared with the 1980s. However, there is no convergence for the boys across the castes. Note that the lack of convergence for boys is not due to income constraints, since the boys and girls surveyed within

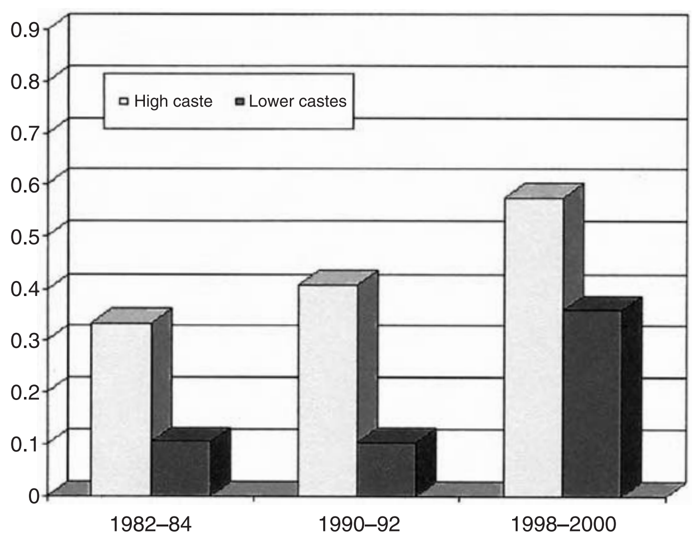

Figure 10.9 Fraction of female students enrolling in English-medium schools in Dadar, Bombay, by caste and year, 1982–2000.

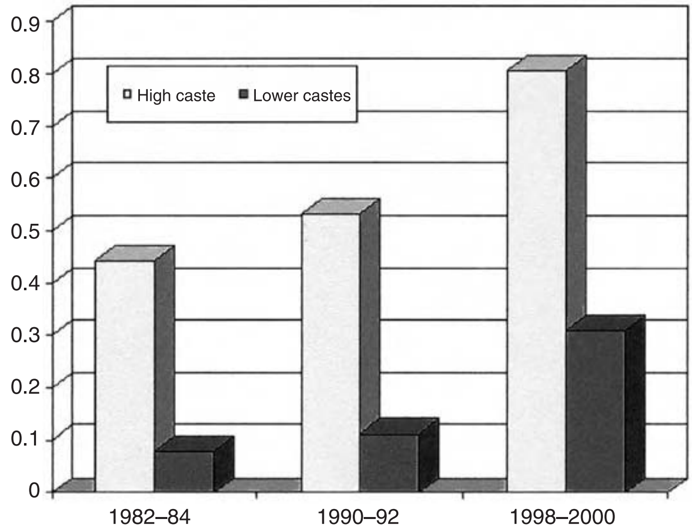

Figure 10.10 Fraction of male students enrolling in English-medium schools in Dadar, Bombay, by caste and year, 1982–2000.

castes on average come from the same families, with the same income and schooling endowments, and the enrollment rates for girls display convergence. Rather, among the lower castes, the difference between boys and girls is that boys are able to take advantage of the caste-based network to obtain relatively high-paying blue-collar jobs in which English skill does not have a payoff. Women do not take such jobs. Munshi and Rosenzweig (2003) find evidence that the network externalities that pervade the blue-collar occupations—in which network size affects incomes—reduced the incentives for boys to shift to English-medium schools and thus to shift occupations. No such forces affected the choices of girls.

Thus, school investment among the urban poor and less poor responded significantly to the changing returns to the specific skills associated with economic openness. The traditional caste system constrained India's transition to the new economy. But it did so in a way that made the most disadvantaged group in the traditional economy, women in the lower castes, among the best positioned to exploit the new, globalized urban economy.

Conclusion

In the short run, poverty reduction entails an increase in the rewards to the unskilled labor that is the major resource of the poor. In the longer run, poverty reduction requires an upgrading of the skills of the poor. The examples from India discussed in this chapter show that opening an economy has complex and sometimes conflicting effects on short-run and long-run poverty reduction. Such effects depend both on *what* an economy opens itself to—capital, technical change, new product demands—and on *how* these elements affect unskilled workers' wages and their incentives to upgrade their skills. India's experience also suggests that the responsiveness of poverty to the forces of openness also depends on indigenous institutions, and will differ across countries and historical periods. Thus, as we have seen, the effects of the green revolution on schooling investments depended on the structure of land markets, and the effects of the globalization of the urban economy on schooling were shaped by the caste system.

Nevertheless, across both rural and urban areas in India, openness has raised incomes, and the accompanying changing incentives for skill upgrading appear to have led to significant changes in traditional patterns of schooling investment among the poor. Finally, these effects were not purely market-driven; public investments in schools and in technical progress have played important roles.

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Notes

1 The research presented in this paper was supported by grants from the US National Science Foundation and the National Institute of Child Health and Development.

2 These yield increases, of course, represent the frontier of technical change for the regions in which these crops were suitable, given climate and soil conditions; they were not experienced in the many areas of India where agro-climatic conditions were different (Evenson and McKinsey 1999).

3 The amount of non-agricultural wage income is unrelated to schooling among the survey households.

4 Intra-rural migration of men for employment reasons is relatively low in India. Moreover, the data indicate that only 24 percent of migrant men who left the villages after 1982 were employed outside the districts of their origin.
5 Panel household data from the 1971 and 1982 surveys indicate that there is little mobility with respect to land ownership. Less than 5 percent of landless households in 1971 became landowners by 1982.
6 Their higher fees in part reflect the increased demand for enrollment they have faced in the past decade.

11 Does the liberalization of trade advance gender equality in schooling and health?

T. Paul Schultz[1]

Since 1945 modern economic growth and the demographic transition have progressed beyond Europe, Japan, North America, and Oceania, and these economic and demographic changes are closely related to the advances of women's schooling (Schultz 1995, 1997, 1998). This chapter explores the following questions: are these advances in educational status of women reflected in other indicators of women's improved well-being, such as longevity and child health? Are the features of globalization in this period—policies that opened domestic economies to international trade and fostered an increase in exports and imports as a share of income—associated with increases in schooling and health and with advances in gender equality expressed in terms of these forms of human capital?

The twentieth century is unprecedented in its acceleration and collapse of population growth, due to first an increase in child survival rates, and then to more than offsetting declines in fertility. World population growth rates increased until 1960–65, and thereafter slowly declined, while the absolute size of some European populations was contracting by the end of the century. Both the decline in mortality and then fertility occurred sooner in those countries that made earlier progress in educating girls as well as boys (Schultz 1997). School enrollment rates and the length of school years have increased, raising the educational attainment of youth entering the labor force, increasing the productivity and wages of workers, and raising the opportunity costs of childbearing which appear to have contributed to the decline in fertility. But the schooling of women lags behind that of men in many countries of South and West Asia, and in most of Africa (Schultz 1995). Inequalities between rich and poor countries in the average years of education attained and life expectancy at birth have diminished, more rapidly than inequalities in personal incomes, which began to decline in the 1970s, after the rate of per capita growth in income in China started to exceed growth in the high-income countries (Schultz 1998). The objective of this chapter is to explore the hypothesis that the liberalization of trade contributed to the diffusion of education and health, and more specifically to the advance in gender equality in these increasingly important forms of human capital.

Hypotheses linking globalization and women's status

The literature dealing with women and development is primeval; it is far too extensive for me to summarize here (e.g. United Nations 1999). The monograph by Ester Boserup on *Woman's Role in Economic Development* (1970) is a rich early source of hypotheses in this area. She documents that women, compared with men, held very different occupational specializations in the economy in different regions of the world. It is, therefore, not surprising that women were affected in diverse ways, positively and negatively, by the impact of colonial regulations and trading regimes of the nineteenth century, by the opening of domestic economies to specialization spurred by international trade, and by the roles assigned to the state and to markets in the allocation of economic resources, both within the developing countries and between them and the rest of the world.

Boserup was not optimistic that colonial development and trade-motivated specialization improved women's productivity and economic status. In Africa, she recognized that women played a central role in producing staples for their families, and cash crops used for exports and taxed by governments were produced primarily by men. Therefore, men might be expected to gain more from early specialization and trade than would women, if any local group gained. The role of women as relatively self-supporting agriculturists in many African contexts allowed the state to rely on men as migratory labor to meet the needs of new agricultural plantations and concentrated industries, such as mining. But in areas of Asia where monsoon climate dictated the use of the plow in agriculture, the dependence on plow technology reserved a specialized, physically demanding role for male workers in the agricultural production cycle, and migration for development was constrained by the cost of moving entire families. In some of these agricultural activities, such as the production of tea in India or cacao in Ghana, women emerged as a beneficiary of the expansion of a cash crop for export. Thus, the consequences of trade-induced specialization in agricultural development may have had varied effects on the relative economic productivity of men and women, but the dominant pattern was for cash crops to employ mostly men. The case remains open whether this outcome occurred because men were initially better educated than women and thus able to coordinate the production, marketing, and credit often required for the new crops, or men were more firmly in control of economic and cultural connections to benefit from promising new lines of production, or men were less risk-averse, or men were more mobile without child-care responsibilities, or men were initially less fully employed than women.[2]

Boserup also did not think the pursuit of import substitution policies by more independent post-colonial developing countries would benefit women, as these policies tended to raise the cost of consumer goods women required for their families and to expand the derived demand for labor in industrial sectors protected by tariffs and quantitative restrictions on imports. The consensus is that these import-substituting sectors and those exporting mineral and natural resources employed predominantly men in the low-income countries. Therefore, North-South trade until the 1970s may not have expanded the demands for female labor relative to male labor, and thus may not have enhanced the economic productivity or status of women compared to men. In the last couple of decades, evidence has accumulated that liberalization of international trading regimes has begun to benefit women in many parts of the world, and possibly benefit women more than men, although there is surprisingly little systematic study of this question.[3] International coordination of trade liberalization policy has reduced tariff and quantitative restrictions on imports, weakened earlier import-substitution policies, fostered more convertible currencies, and gradually reduced regulations on long-term capital movements to encourage more foreign direct investment. These multifaceted changes in trade policy have presumably brought domestic prices on tradeable goods and services into closer alignment across countries.

The conventional economic wisdom, as formalized in the Heckscher-Ohlin-Stolper-Samuelson (1941) model of foreign trade and domestic goods and factor price equalization, suggests that trade liberalization encourages countries to specialize in the production of goods for which they have a comparative advantage; or in other words, countries should export goods which make intensive use of a country's relatively abundant factor endowments, and import goods which embody more of a country's relatively scarce factor endowments. This framework assumes that all countries have access to the same production technologies, and relative factor intensities within a sector do not reverse in a country as output changes. The empirical question remains, however, do low-income countries actually export unskilled labor-intensive commodities—using their abundant factor endowment—and import relatively more skilled and educated labor-intensive commodities? The "Leontief paradox" documented in an early postwar analysis of trade flows that the United States imported capital-intensive goods and exported labor-intensive goods. This finding seemed to challenge the comparative advantage theory of trade if production requires only two homogeneous factors: labor and capital. But as the heterogeneity of labor was gradually recognized, the accumulation of human capital became a central feature in development theories for modern economic growth. The Leontief paradox was seemingly resolved by attributing the human capital-intensive composition of US trade to the relative abundance of highly educated labor in the United States.

Wage differentials between skilled and unskilled workers are expected to diminish as the barriers to international trade decrease. But skill wage differentials in middle-income countries such as Chile and Mexico have instead increased in the 1980s and 1990s with trade liberalization (Robbins 1994; Ravenga 1997; Kanbur and Lustig 1999). For example, in Mexico, Hanson (2003) examined the 1990 and 2000 censuses, before and after trade barriers were reduced under NAFTA, and concluded that wage gains were proportionately larger for better-educated workers in Mexico, but the percentage wage gains for women exceeded those for men with the same education.[4] Technical change emanating from high-income countries may be designed to use intensively skilled labor and benefit from the scale of markets, contributing to a skill-bias in available technologies even when they are introduced into low-income countries (Acemoglu 1998). The growth in wage inequality at "middle-skill" levels in low-income countries could also be due to the conceptual limitations of the commonly employed two-country and two-factor framework for studying the consequences of trade; very low-income countries, such as China, have greatly increased their exports of unskilled labor-intensive goods, forcing middle-income countries such as Mexico and Chile to specialize in the export of "middle-skilled" manufactured goods and specialized agricultural products. These sectors tend to disproportionately employ female workers. What does skill intensity of a sector imply about its use of female relative to male labor? Are women employed predominantly in relatively unskilled jobs, or does that depend on the sector and vary according to the wage gap between women and men with the same education? The wage gap between women and men tends to be wider in less developed countries than in the industrially advanced countries. Reductions in the barriers to trade in the less developed countries may thus create more job opportunities for women than for men and encourage families and society to invest more in women's human capital to prepare them to work outside of their household.

Empirical studies of trade and women's employment opportunities

Can this factor-endowment model of trade account for how the opening of an economy to trade impacts the gender gap in employment and wages? In a high-wage country, such as the United States, when imports increase as a share of domestic consumption in a sector, the factor-endowment hypothesis suggest that more trade ({exports + imports}/ GDP) will reduce wages of the less skilled workers, because imports will be intensive in unskilled labor and may thereby depress the wages of women relative to men.

Trade may also impact market structure and foster a more competitive product market with possible ramifications for the profits and behavior of employers. Becker (1957) argued that discrimination is unprofitable for a competitive firm, and therefore the practice of discrimination is more likely to persist in product markets in which firms have power and profit due to downward-sloping demand curves, compared with a competitive market where profit margins are controlled by free entry of firms. A gender gap in wages due to pre-existing discrimination might then be reduced by increased pressures from imports due to liberalization of trade, and the change in the gender gap would be more pronounced within a concentrated monopolistic industry compared within an initially competitive industry.

Opening of the economy to trade can thus have two offsetting effects on the gender wage gap in a highly skilled developed country. Lowering the barriers to trade according to the Stolper-Samuelson (1941) model of factor price equalization would increase the relative wages of skilled workers, due to both new opportunities to export and increased pressure of imports. Any rise in the relative wage for the abundant factor—skilled labor—is expected to widen the gender wage gap, if women are generally observed to be employed in low-wage sectors or occupations. Conversely, trade liberalization could reduce the gender wage gap in import-competing sectors due to a reduction in the capacity of monopolistic firms to discriminate against female workers. The theoretical sign of the net effect of trade liberalization on the gender wage gap is, therefore, ambiguous in high-income countries because of the conflicting effects of the trade and discrimination models. Nonetheless, empirical studies in the United States generally find that increases in the share of imports to output in a sector increase the wage gap between skilled and unskilled workers and also increase the wage gap between men and women (Murphy and Welch 1991; Wood 1994; Borjas and Ramey 1995; Black and Brainerd 2002). One interpretation of this empirical evidence is that the effect of the factor-endowment trade model outweighs the effect of any reduction in gender discrimination. In sum, the employment opportunities of women in high-income countries may not have benefited relative to men from the recent growth in world trade.

The comparative advantage effects will be reversed when this hybrid framework is applied to a low-income country, with a relatively abundant supply of unskilled labor, and in which the gender gap in education and wages tends to be larger (Schultz 1995). The effects of comparative advantage will now reinforce the anti-discrimination impact of liberalized trade, and both forces are expected to reduce the gender wage gap in import-competing sectors. To the extent that discrimination by gender in the labor market is strengthened by the concentration of producers, the additional competitive pressure to reduce the gender wage gap should be greater in initially concentrated import-competing sectors. Of course, other policies than trade openness could encourage competitive markets, such as anti-trust policy or privatization (Ozler 2000). Several country studies confirm that women's employment has improved relative to men's in low-income countries that were opening their economies to international trade. For example, this phenomenon was documented in Turkey (Ozler 2003), Chile (Levinsohn 1999), and Mexico (Hanson 2003).

Problems in assessing the determinants of women's productive opportunities

In addition to openness to trade, other features of an economy are related to women's relative employment opportunities. Some of these features, such as women's share of employment within sectors, may themselves respond to the structure of the trade regime and are thus not exogenous. Other features of employment opportunities, such as the share of employment in the public/private sectors, are linked to women's advances, but cannot always be measured consistently across countries and are also probably determined simultaneously with trade policies. In Latin America, for example, wages tend to be higher in the public sector than in the private sector, and this public sector wage premium tends to be larger for women than for men, controlling for observed productive characteristics of the workers, such as their schooling and post-schooling potential experience (Psacharopoulos and Tzannatos 1992; Panizza 2003).[5] Unfortunately, I have only found comparable estimates of the size of the public sector in Latin America and the OECD countries, thus making this hypothesis impossible to test in this study across a more representative sample of countries in the world.

Overall wage inequality and labor market institutions, such as unionization and minimum wage policies, may also affect the relative wage status of disadvantaged groups such as women. If increased wage inequality in a national economy has the impact of lowering the relative wage position of low wage racial, ethnic, and gender groups, including women (Blau and Kahn 1996, 1997), then recent increases in aggregate wage inequality within many countries could contribute to increasing the gender gap in wages in these countries, other things being equal.[6] But existing measures of income and wage inequality are not comparable across countries, some being derived from survey questions on household consumption whereas others are derived from a question on individual earnings, which makes it difficult to combine both sources of data on inequality (Schultz 1998). Legislated regulations on the labor market, such as minimum wages, are determined in light of prevailing labor market conditions, and thus tend to be "adjusted for inflation" at intervals when unemployment tends to be unusually low, implying that variation in these wage policies across countries and overtime cannot be treated as exogenous to macroeconomic conditions. More generally, measured wage rates and rates of labor force employment of women and men are determined simultaneously by the labor market restrictions, such as minimum wage legislation, as well as by other conditions affecting the aggregate supply of and derived demand for female and male labor.

Measuring the potential productivity of women and men by their human capital

When wages of men and women are compared, the wages may not represent the productivity of the average man and woman, because they are conditional on the proportion and composition of those who report a wage (Heckman 1979). Correcting for this sample selection bias and controlling for omitted productive characteristics of men and women is methodologically difficult even with good household survey data, as may be available from some high income and Latin American countries. To consider a broader sample of countries for which even rudimentary gender-specific wage data are not available, I adopt the empirical strategy of approximating gender equality by the gap between men's and women's schooling and health. There is some empirical evidence to support the simplifying assumption that measured differences in years of schooling and health human capital among workers are associated with similar proportionate gains in the wage opportunities of all women and men. However, this comparability of private wage "returns" to schooling and health of men and women should not be interpreted as indicating that the gender wage gap would disappear if these human capital stocks could be equalized between men and women.[7]

Gender differences in investments in human capital might arise from two sources. First, there is investment of private family resources in the health, nutrition, and schooling of children and other household members, which may favor one sex over the other. Second, there is investment of public resources allocated toward infrastructure and services required to provide schooling and public health services to the local population. Differentials in human capital investments between boys and girls appear to arise primarily because of choices made at the family level, and gender discrimination in the organization of public service institutions (i.e. schools and health clinics) is probably of secondary importance for explaining these gender differences in human capital.

The family investments in human capital may be influenced by many factors. On the one hand, market-derived demand for different types of labor can enhance the productive opportunities for male and female family members to engage in work outside of the family. Changes in home production technology and the relative price of other home inputs can alter the productivity of family labor in home production. Convergence across countries in international relative prices due to trade and factor mobility may thus affect labor productivity in home production that is consumed by the family, as well as affect the output of family labor that is exchanged in the market, or modify market wage opportunities outside of the family.[8] Although some scholars assume that increased labor force participation of women improves women's bargaining power and status, female participation in the market labor force by itself is an unsatisfactory indicator of women's welfare or status, because it can decrease with the advancement of women, or increase with economic crises penalizing women. For example, in Thailand, where economic development and urbanization have proceeded rapidly from 1960 to 1990, fertility fell from six to two children per woman, but women's participation in the labor force declined over this time. Alternatively, as Argentina has suffered chronic economic recessions in recent years, female labor force participation has increased to help sustain household market income. Before describing in more detail the data used to measure schooling and health of men and women, features of trade liberalization policy, and openness of the domestic economy to trade, the next section proposes how these variables may be expected to interact and how these relationships will be subsequently estimated.

Conceptual framework and issues in econometric estimation

The "trade liberalization process" is expected to increase exports and imports as a share of GDP. What is less often studied is the impact of trade liberalization on the derived demands for male and female labor, and its effect on wage differentials by education level, which could motivate families and society to invest in schooling and health, and potentially change gender differences in these forms of human capital. The first step is to assess whether international trade outcomes (T) facilitated by a trade liberalization regime (R) are in fact associated with the level and gender composition of human capital (HC)? Human capital is measured by the education of men (E_m) and women (E_f) and by their longevity (H_m and H_f), which may be influenced by trade liberalization, controlling for certain exogenous background variables (Z1) that could otherwise affect trade outcomes, such as (a) the natural resource endowment exports (minus imports) as a percent of GDP,[9] (b) population size, which could reduce the benefits from trade specialization,[10] and (c) a linear time trend to capture unmeasured changes occurring over time.

In cross-country comparisons of this form, the demand for female and male labor may also be associated with a variety of structural features of development (Z2), such as (d) the average income of adults, (e) the share of employment in services, and (f) the share of employment in industry. Because schooling is valued as a consumption good as well as an investment in future productivity, families demand more schooling for their children as household income increases. The composition of goods and services shifts with development from primary commodities to industrial goods, and finally to services. It has been noted in a variety of countries that service sectors tend to employ a larger fraction of women than in the rest of the economy, strengthening the incentive for women to become better schooled and healthier. In contrast, industrial jobs are more frequently filled by men, which may correspondingly enhance the returns to male-specific human capital.[11] However, these income and labor demand variables (Z2) may be both determinants and consequences of human capital investments and trade liberalization. Therefore, the relationships between Z2 and HC or T are not readily interpreted as causal effects. The preferred empirical specification of the model estimated here therefore controls only for Z1.[12]

Trade (T) outcomes are specified in three alternative ways: (1) the separate share of exports in GDP, and the share of imports in GDP; (2) the openness of the economy defined conventionally as the sum of export and import shares to GDP; or (3) the trade balance (surplus), which is the difference between share of exports and imports to GDP.[13] Government policies determine the extent to which a national economy is integrated into the world economy by reducing barriers to international trade, exposing its producers and consumers to competitive pressures and world market-priced opportunities for exchange of tradeable goods and services. Three variables summarize the restrictiveness of the trade policy regime (R) and are assumed to be exogenous to human capital investments: (1) proportion of tariffs in the value of imports, (2) proportion of imports restricted by quotas weighted by their values, and (3) the black market premium as a proportion of the official foreign exchange rate.[14] Many unobserved variables may affect both trade (T) and the formation of human capital (HC). To distinguish how trading relationships might affect human capital, trading outcomes (T) are hypothesized to depend on common background conditions (Z1) and the trade policy regime (R), where the key exclusion restriction assumes that the trade regime does not directly affect schooling and health, except as it operates through its impact on trade outcomes (T).[15]

The model outlined above may be fitted empirically to data in two ways: (1) estimating reduced-form equations for determinants of human capital (HC) and trade (T) outcomes in terms of variables assumed to be exogenous to the development process (R and Z1), or (2) estimating structural relationships in which trade outcomes (T) are treated as endogenous but identified by the exclusion of trade policies (R) from directly affecting schooling and health outcomes (HC). First, reduced-form equations are estimated by ordinary least squares (OLS), in which HC and T are assumed to be a linear function of background conditions (Z1) and trade regime (R), where lower-case letters represent estimated parameters and disturbances, and subscripts for country/year observations are omitted for simplicity:[16]

$$\mathrm{HC} = a + b\,\mathrm{Z1} + c\,\mathrm{R} + e, \tag{1}$$

$$\mathrm{T} = f + g\,\mathrm{Z1} + h\,\mathrm{R} + v. \tag{2}$$

Second, if the variables in R are jointly significant in explaining the alternative measures of T in equation (2), then two stage least squares (2SLS) can be used to estimate the determinants of HC as a function of Z1 and T, where now T is treated as endogenous and identified by the exclusion of R from equation (3):

$$\mathrm{HC} = i + j\,\mathrm{Z1} + k\,\mathrm{T} + u \tag{3}$$

The estimated residual, v, from the equation (2), can then be added to the 2SLS estimates of equation (3). If the residual is a significant explanatory variable, this Durbin-Wu-Hausman specification test suggests that the OLS estimates of equation (3), based on the assumption that T is exogenous, differs significantly from the 2SLS estimates of (3), based on the assumption that T is endogenous and identified by R. A significant coefficient on v leads to a rejection of the null hypothesis that R is exogenous and confirms the specification in which T is treated as endogenous. The 2SLS estimates of (3) are then preferred because they are thought to be consistent, while the OLS estimates are not.

Empirical specification of the model, data sources and limitations

Census and household surveys ask adults their education, and different cross tabulations of these data are used to approximate the years of schooling completed by men and women, subject to a variety of working assumptions. Alternatively, schools report the number of students enrolled, and together with population censuses, gross enrollment rates are derived. Enrollment rates are then summed and weighted by the duration in years of each school level, to obtain a "synthetic cohort" measure of the "expected years of enrollment" for an average youth (Schultz 1987). These two measures of education are thus derived from different data sources; they describe educational experiences of different birth cohorts, and have different shortcomings and strengths for the purposes of estimating a lifetime stock of human capital.[17]

Although there is no necessity that a year of schooling, thus measured, in a representative survey is associated with the same percentage increases in wages for men and women, this is often approximately what we observe (Schultz 1988, 1995). If the derived demand for female labor is increased due to trade liberalization, productive opportunities and welfare for women would increase, and families and individuals would be more inclined to invest private resources in the schooling of females, other things being equal.

Several pathways may link the productive opportunities of women and men to investments in their health human capital. Increased derived demand for a group's labor indicates its increased productivity, and this should be associated with an increase of the returns to health human capital, adding to potential years of working lifetime, reducing the disutility of work, and increasing current labor supply if the substitution effect dominates the income effect of the trade stimulated change in factor demands (Schultz and Tansel 1997; Savedoff and Schultz 2000).[18] Intergenerational benefits may also be realized as better-educated women contribute to improving the health of members of their families. Household surveys have generally found that the education of a mother is significantly related to the health and survival of her children (Schultz 1981, 1988, 2001). If trade liberalization increases the demand for female labor and causes female schooling to rise, this should reduce child mortality within a decade or two.

The gap between the education of women and men in low-income countries has attracted widespread interest (Boserup 1970; Joekes 1987; King and Hill 1993; Schultz 1995; King and Mason 2001), but empirical analysis of these gender differences in school attainment at the national or family level has begun only recently (Schultz 1978; Tansel 1997; Holmes 2003; Eloundou-Enyegue and DaVanzo 2003).[19] Life expectancy at birth is consulted as a summary indicator of health status.[20] The gender differences in the expectation of life at birth were less than a couple of years in the nineteenth century, when reliable sex-specific life tables were first constructed for some higher-income countries (e.g. www.mortality.com). Today, these differences are larger, between four and eight years in high-income countries (i.e. favoring women, probably for both biological and economic reasons), although they have remained zero or even negative until recently in some countries of South Asia, such as India, Bangladesh, and Nepal (World Bank 2003). A second indicator of health status analyzed here is the child survival rates per 1,000 live births to a child's fifth birthday, for which the improvements were substantial in high-income countries from about 1900 until the 1970s, and were very large in low-income countries after about 1945.[21]

Measures of effective protection and openness to international trade

A country is open to global economic opportunities and competitive pressures if its barriers to trade are negligible and the movement of physical capital and labor is unrestrained. Most countries, of course, exercise controls over immigration, while foreign exchange and capital markets are extensively regulated by governments. There is no consensus on how to measure capital markets liberalization, as the amount of foreign direct investments responds to investment opportunities as well as the barriers to trade, regulations on the repatriation of earnings, and capital movements. Even import restrictions are typically not transparent, because they may combine laws, which are interpreted by unpredictable judicial institutions and enforced by corruptible bureaucracies.

To circumvent the difficulties of measuring in comparable terms the economic impact of these tariffs, taxes, subsidies, preferences, and quantitative restrictions to trade, Corden (1966) and Balassa (1965) defined an index of "effective protection," which estimated how domestic relative prices differed from international prices of a sector's outputs minus the effect of domestic-international price differences of a sector's inputs. Holding constant a sector's technological efficiency, greater effective protection should raise the profitability of domestic production in that sector, compared with a "benchmark" sector that could trade freely inputs and outputs at international prices. Sector-specific effective protection in a country has been positively related to wages of workers across sectors, controlling for the worker's age, education, and sex (Schultz 1982). Consistent with Boserup's (1970) observations, effective protection tends to be greater in sectors that employ a larger fraction of educated workers and also in sectors that employ a larger fraction of male workers (Wood 1995). Estimates of effective protection are available for only a handful of countries, because their construction requires detailed price surveys and input-output tables, finely disaggregated by import-competing and export sectors. Relatively crude summary measures of the distorting effects of tariffs, quotas, and foreign exchange interventions are therefore relied upon in this chapter.

Tariffs are a major policy instrument determining effective protection. UNCTAD data are used to measure the average tariff on imports of intermediate and capital goods in eighty countries in 1985–88, where the tariff on each commodity is weighted by the value of these imports for that specific country. But quantitative restrictions, quotas, licensing, or prohibitions on many imports are also a commonly used means of protection, which are also weighted by the country's imports of these intermediate and capital goods for the same period. A third policy indicator of price distortions affecting trade outcomes is the black market premium on foreign exchange. It measures the tax on foreign exchange earned by exporters compared with the free market value of the foreign exchange to potential importers. There are obvious problems in measuring prices in an illegal market. Yet it complements the import tariff and quota restrictions to distinguish the degree of government intervention in the allocation of foreign exchange among importers, and suggests the incentive for rent-seeking behavior, or for corruption, in the public sector (Krueger 1974). These three indicators of the restrictiveness of a country's trade regime (R) are used extensively in the literature comparing growth across countries (Sachs and Warner 1995).

Country case studies document how recent trade liberalization and export promotion policies are frequently associated with increased output in sectors where women gain incremental jobs, such as textiles, apparel, and fabrication of electronics (Ozler 2003; Wood 1995). Others have observed that liberalization of trading regimes contributes to more flexible labor markets, thus reducing the barriers to hiring and firing, and allowing firms to substitute female workers for male workers, perhaps at a lower wage. Flexible labor markets, which are associated with liberalized trade regimes, may thus increase the share of female workers, but could also reduce average wages in these more competitive sectors (Standing 1989, 1999). Some observers view this development with alarm and suggest that as women gain jobs in export sectors, the wages benefits and working conditions deteriorate for men. If the progress of women into the labor force reduces the wage of some men, the net welfare effects could be complex. With little systematic empirical evidence on these relationships, this study examines the cross-country patterns between trade barriers, the level of trade, and gender differences in human capital.

Export promotion policies, natural resources and employment opportunities

Although export-oriented growth generally appears to favor women's employment in recent years, the governments' implementation of export-oriented growth can affect which industries and firms become exporters and thereby influence the gender composition of new jobs. In both Korea and Taiwan, the government encouraged export-led growth. In Taiwan, export industries developed throughout the countryside, absorbing low-wage labor from agricultural rural households and providing many jobs to women and often to married women. This expansion of rural industries in Taiwan weakened the incentives for the rural population to migrate to the cities, reduced the need for investments in urban infrastructure such as housing, and moderated the rural-urban gap in household income. In contrast, the government of Korea was involved in the selection of large firms who received credit to produce exports; as a result, Korea's capital intensity of export production was greater, and the size of export firms was larger than in Taiwan. The Korean export sector became more concentrated around the major industrial urban areas than in Taiwan, and the Korean sector employed relatively fewer women and fewer married women than in Taiwan (Brinton *et al.* 1995). Although I would like to incorporate in my analysis these features of industrialization and trade policy as they change the gender and skill composition of the resulting derived demands for labor, I have not found any comparable data across countries with which to analyze this issue.

In an analysis of gender differences in employment opportunities, it is crucial to distinguish the significance of natural resource exports. First, natural resource exports tend to be capital-intensive. They are also sometimes relatively skill-intensive, as in petroleum or, as in the case of mining, intensive at hiring male workers. Second, natural resource exports are largely determined by the fortuitous placement of these mineral endowments, and the development of these exports is not much affected by factor endowments at the national level, which underlies the comparative advantage theory of trade. Historically, countries that are not particularly well-endowed with natural resources have been among those that have grown rapidly, such as in Japan, Taiwan, and Korea, in Asia, or the Netherlands, Switzerland, and Sweden, in Europe. Political economy theories explain this phenomenon by postulating that states have an incentive to expropriate, nationalize, or tax natural resources to extract rents for the government, reducing the political incentives to invest public resources in schooling and health, or to extend civil, property, or voting rights to women (e.g. Acemoglu and Robinson 2000). Natural resource exports are expected to weaken incentives for governments (1) to diversify their base of power in the economy, (2) to invest efficiently in the human capital of women and men, (3) to encourage women to work outside of the home and facilitate efficient social arrangements that weaken gender segregation in the workplace. In other words, natural resource exports allow governments more leeway to discriminate in favor of men, because governments thereby control exceptional rents.

Data sources and limitations

The sample of countries and of years analyzed in this chapter is limited by the availability of data, and there are insufficient observations per country to estimate the model within countries, by allowing for country fixed effects. GDP per adult is expressed in purchasing power parity in 1995 dollars based on the Penn World Tables 6.1. Population size is from the UN database. The gender-specific gross school enrollment rates, which are summed over primary, secondary, and tertiary school levels to estimate the expected years enrolled for today's youth, are from the World Bank *Development*

Indicators in 2003. Schooling attainments are reported in surveys for adults by UNESCO and are converted by Barro and Lee (1993) to averages for all adult men and women over the age of 15. The two measures of gender-specific survival are constructed from the World Bank data, and the three trade policy variables are from Sachs and Warner (1995), while exports minus imports of natural resources, as well as GNP shares of various combinations of exports and imports, are from the IMF database as of 2003. A total of 218 to 230 observations, depending on the dependent variable examined, are available from 70 countries, of which 17 are high-income OECD members. The number of observations in the basic sample available for 1965, 1970, 1975, and 1980, increases from 48 to 53, 59, 66 countries, in the respective four years. The tariff and quota data are only available for a single time period, 1985–88, but the other information varies over time. The basic sample of 226 observations is listed with sample statistics and variable definitions in the Appendix Tables A-11.1.

Empirical findings

The zero order correlations between all pairs of the two education and two health variables by gender and log GDP per adult are reported in Table 11.1 for the common sample of 220 observations. The expectation is that the different measures of education and health should be highly correlated within sexes, and positively related to the logarithm of income per adult. The ratio of female to male education and survival are also added to this correlation matrix to explore how the relative gender gaps in these four forms of human capital vary with log of income. The two independently derived measures of adult educational attainment and youth expected enrollment are correlated with each other for females at 0.91 and for males at 0.87. Adult educational attainment of males and females are correlated at 0.95, whereas the youth expected years of enrollment are correlated at 0.93. Both measures of female education are more highly correlated with the life expectation at birth of males or females than are the male education measures. This is consistent with women's education being more protective of health than men's education, as is commonly found in household survey analyses of child mortality and husband health. For example, in Table 11.1, the correlations between female enrollments and female and male life expectation are both 0.87, whereas the correlations between male enrollment and female and male life expectation are both 0.80. Life expectancy and child survival are almost perfectly correlated between males and females (0.99) implying that these World Bank estimates of survival for males and females vary together within a country.

As often graphically portrayed in international comparative studies of education, health, and development, there is a strong inter-country positive relationship between income and schooling, and income and health, as typically measured by survival rates; the fit of income to these human capital

Table 11.1 Zero order correlations among human capital and income variables

	Adult educational attainment			*Expected enrollment*			*Life expectation at birth*			*Child survival to age 5*		
	Female (1)	*Male (2)*	*Ratio (3)*	*Female (4)*	*Male (5)*	*Ratio (6)*	*Female (7)*	*Male (8)*	*Ratio (9)*	*Female (10)*	*Male (11)*	*Ratio (12)*
1. Attainment female	1.0											
2. Attainment male	.95	1.0										
3. Female to male ratio	.77	.59	1.0									
4. Enrollment female	.91	.89	.73	1.0								
5. Enrollment male	.83	.87	.51	.93	1.0							
6. Female to male ratio	.66	.55	.84	.75	.47	1.0						
7. Life expectation female	.84	.78	.77	.89	.80	.73	1.0					
8. Life expectation male	.81	.76	.74	.87	.80	.66	.99	1.0				
9. Female to male ratio	.42	.35	.45	.39	.24	.47	.38	.23	1.0			
10. Child survival female	.80	.76	.72	.87	.80	.70	.98	.96	.38	1.0		
11. Child survival male	.80	.76	.72	.87	.80	.70	.98	.97	.33	.99	1.0	
12. Female to male ratio	−.38	−.39	−.19	−.43	−.51	−.08	−.50	−.56	−.21	−.44	−.55	1.0
13. Log GDP/Adult	.80	.73	.74	.83	.74	.67	.89	.86	.44	.84	.84	−.45
Sample size	220											

indicators is even closer if incomes are expressed proportionately in logarithms. In this case, real GDP is expressed in purchasing power parity per adult over age 15 to approximate adult productivity and economic well-being for the country. This choice of income per adult instead of income per capita avoids including in this measure of economic welfare an inverse effect due to the recent level of fertility, which is reflected in the portion of the population under age 15. In the bottom row of Table 11.1, adult years of educational attainment is correlated with lnGDP/adult at 0.73 for males and at 0.80 for females, whereas expected years of youth enrollment is more highly correlated with the income at 0.74 for males and 0.83 for females. The correlation between life expectancy and the income variable is even stronger than that between education and income, and it is higher for females at 0.89 than for males at 0.86.[22] One exceptional pattern is the negative correlation between the ratio of female-to-male child survival and income (–0.45) and the fact that this ratio also decreases with the level of all of the education and survival variables. This may be explained by the much more frequent deaths in infancy for males than females in countries with very low income levels. The greater vulnerability of males compared to females in childhood declines as income increases (Preston and Weed 1976). These correlations confirm that: (1) this cluster of education and survival variables improve together for both genders as national income increases with development across countries, and (2) these measures of women's human capital tend to increase faster relative to men's except for child survival, when biological vulnerability dominates socioeconomic differences in the conditions of females and males. The objective of this chapter is to assess whether openness of the economy to trade is associated with improvements in these human capital measures of economic productivity and welfare, holding constant for natural resource exports, population, and time, and whether the gender gap in human capital is systematically related to trade.

The reduced form estimates by ordinary least squares (OLS) represent the association between the various dependent variables measuring education expressed for females, males, the difference between females and males, and the ratio of females to males—1) current expected years of enrollment, 2) years of adult attainment for those aged 15 and over—and the explanatory variables are 1) population size, 2) natural resource exports, 3) tariffs, 4) quotas, 5) black market premium, and 6) a time trend. The last four regressions in Table 11.2 explain the trade shares of GDP. Table 11.3 reports the reduced-form estimates for the two survival outcomes by gender. At the bottom of Tables 11.2 and 11.3 the joint significance of the three trade policy variables is shown, which are highly significant for all 16 education and health dependent variables, and least statistically significant for imports, where they are only jointly significant at the 7 percent level in column (10), but are jointly significant at the 0.3 percent level for exports in column (9). Individually, the black market premium is generally associated with lower levels of male and female school enrollment and attainment and survival, and lower

Table 11.2 Reduced-form ordinary least squares estimates of education and trade outcomes

Explanatory variables	*Years expected enrollment*				*Years adult attainment*				*Percent trade GDP*			
	Female	*Male*	*Difference*	*Ratio*	*Female*	*Male*	*Difference*	*Ratio*	*Exports*	*Imports*	*Openness*	*Trade balance*
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*	*(10)*	*(11)*	*(12)*
1. Population size (millions)	13.7 (5.27)	16.2 (7.14)	2.48 (2.43)	.371 (.25)	10.2 (4.29)	10.2 (5.00)	.0096 (.01)	.257 (1.35)	−42.8 (3.01)	−71.9 (4.59)	−115. (3.97)	29.1 (3.72)
2. Natural resource exports (Percent of GDP)	−.0130 (2.55)	−.00486 (1.09)	−.00814 (3.62)	.000746 (2.40)	−.0164 (3.91)	−.0115 (3.06)	−.00487 (2.98)	−.00144 (3.04)	.0648 (2.56)	.0236 (.85)	.0884 (1.72)	.0412 (2.96)
3. Tariffs (Percent of GDP)	−8.51 (5.95)	−7.72 (6.58)	−.795 (1.42)	−.239 (2.55)	−6.93 (5.92)	−5.82 (5.79)	−1.11 (3.29)	−.447 (4.06)	−4.41 (.65)	4.57 (.62)	.165 (.01)	−8.98 (2.43)
4. Quotas	−2.81 (3.56)	−1.77 (2.48)	−1.04 (3.01)	−1.04 (2.01)	−2.51 (4.70)	−2.43 (5.35)	−.0835 (.39)	−.1116 (1.78)	−5.88 (1.61)	−3.47 (.86)	−9.35 (1.26)	−2.41 (1.20)
5. Black market premium	−.658 (1.88)	−.450 (1.35)	−.208 (3.44)	−.0305 (2.68)	−.528 (2.08)	−.395 (1.42)	−.133 (2.73)	−.0589 (2.74)	−2.77 (2.82)	−2.82 (2.60)	−5.59 (2.80)	.0408 (.08)
6. Calendar year	.136 (4.53)	.108 (4.17)	.0278 (2.08)	.0045 (2.45)	.0617 (2.33)	.0789 (3.27)	−.0172 (1.84)	.00022 (.09)	.653 (4.40)	.917 (5.61)	1.57 (5.21)	−.264 (3.24)
Constant	−.0562 (.03)	2.47 (1.31)	−2.52 (2.59)	.604 (4.43)	1.34 (.69)	.721 (.41)	.620 (.90)	.860 (4.61)	−19.6 (1.81)	−35.8 (2.99)	−55.4 (2.51)	16.2 (2.72)
R^2	.394	.350	.244	.206	.395	.365	.174	.276	.215	.253	.232	.108
Dependent variable mean	8.05	9.10	−1.06	.861	4.25	5.18	−.925	.757	24.5	28.2	52.7	−3.76
Standard deviation	(3.14)	(2.62)	(1.21)	(.169)	(2.68)	(2.38)	(.827)	(.239)	(13.9)	(15.4)	(28.5)	(7.06)
Joint F test of variables 3, 4, and 5 being zero (Prob >F (3,n-k-1)	36.8 (.0000)	28.6 (.0000)	11.7 (.0000)	13.3 (.0000)	36.1 (.0000)	35.6 (.0000)	8.67 (.0000)	19.3 (.0000)	4.72 (.0033)	2.49 (.0612)	3.48 (.0168)	3.80 (.0111)

Table 11.3 Reduced-form ordinary least squares estimates of health outcomes

Explanatory variables	*Life expectancy at birth*				*Child survival to age 5 per 1000*			
	Female (1)	*Male (2)*	*Difference (3)*	*Ratio (4)*	*Female (5)*	*Male (6)*	*Difference (7)*	*Ratio (8)*
1. Population size (millions)	35.6	34.7	.895	−.0532	206.	269.	−62.9	−.0747
	(4.04)	(4.26)	(.55)	(1.89)	(3.58)	(4.28)	(5.27)	(5.22)
2. Natural resource Exports	−.0808	−.0678	−.130	−.00013	−.503	−.554	.0506	00007
(Percent of GDP)	(4.19)	(3.92)	(3.61)	(2.17)	(3.70)	(3.73)	(2.09)	(2.15)
3. Tariffs	−30.9	−26.5	−4.43	−.0378	−182.	−206.	23.6	.0274
(Percent of GDP)	(6.57)	(6.21)	(4.73)	(2.36)	(5.47)	(5.94)	(3.87)	(3.66)
4. Quotas	−6.86	−4.02	−2.84	−.0461	−60.3	−59.8	−.984	−.00081
	(2.31)	(1.48)	(5.84)	(5.61)	(2.58)	(2.38)	(.29)	(.19)
5. Black market premiums	−2.50	−2.19	−.307	−.00279	−17.1	−17.8	.667	.00092
	(2.09)	(2.06)	(2.14)	(1.91)	(1.99)	(1.99)	(1.02)	(1.06)
6. Calendar year	.393	.336	.0574	.00054	2.79	2.87	−.0804	−.00015
	(3.75)	(3.46)	(3.12)	(1.74)	(3.67)	(3.56)	(.62)	(.90)
Constant	42.4	40.5	1.92	1.056	746.	733.	13.0	1.019
	(5.52)	(5.69)	(1.45)	(46.9)	(13.3)	(12.3)	(1.34)	(84.2)
R^2	.423	.367	.458	.343	.376	.378	.162	.159
Sample size (n)	228	228	228	228	228	228	228	228
Dependent variable mean	64.5	59.8	4.62	1.076	905.	896.	9.21	1.011
Standard deviation	(11.1)	(9.85)	(2.12)	(.0332)	(77.1)	(82.4)	(12.0)	(.0148)
Joint F test of variables 3, 4, and 5 being zero	34.8	28.4	45.0	30.3	31.3	32.5	8.19	7.81
(Prob >F (3,n-k-1)	(.0000)	(.0000)	(.0000)	(.0000)	(.0000)	(.0000)	(.0000)	(.0001)

exports, imports, and openness. Tariffs and quotas also are associated with lower levels of education and survival, with the single exception that the association with male life expectancy is not individually significant at the conventional 5 percent level. The association between tariffs and quotas and the trade outcomes, however, are not generally statistically significant individually.

The control variables perform as expected. Countries with larger populations tend to have smaller trade shares of income. A larger share of income from natural resource exports minus imports is associated with larger exports, more openness, and a larger positive trade balance. There is no prediction for the direction of the effect of population size on the education and health variables, though in this reduced-form specification it is positive on the levels for males and females. The time trends in trade shares are upward over time, which is consistent with globalization, and the time trends in schooling are positive and larger for women than for men (i.e. gender convergence). The same is true for life expectancy, although for child survival the advance is approximately equal for males and females holding constant for the other included variables. Of particular interest are the strong negative associations of natural resource exports with both education and survival, and the fact that in all four variables the coefficient on natural resource exports has a larger negative value for the female human capital than for male. In other words, a greater reliance on natural resources for exports is associated with greater gender inequality, in either differenced or ratio form, in terms of both education and survival.

Tables 11.4 and 11.5 report the two stage least squares estimates (2SLS) of the structural equation determinants of education and health, including the share of exports and imports of GDP as endogenous explanatory variables, identified by the exclusion of the three trade policy variables from these structural equations. The Durbin-Wu-Hausman specification tests reported in the bottom panels of Tables 11.4 and 11.5 reject strongly the exogeneity of the export and import shares of income in all 16 education and survival equations, leading to the acceptance of the 2SLS estimates over the OLS estimates that treat exports and imports as exogenous. The effect of exports and import shares is more pronounced if they are associated with the observed three trade policy variables (Table 11.2, columns 9 and 10). The effects of exports on the education variables are positive, while those of imports are negative. The effects of exports are larger in absolute value on female than on male education (columns 4 and 8 in Table 11.4), and the effects of both exports and imports are higher on female life expectancy than on male (i.e. the differences in column 3 or ratios in column 4 of Table 11.5). Population size and time trends are statistically insignificant in these structural estimates, while natural resource exports minus imports as a share of GDP continue to be associated with lower levels of schooling and life expectancy for both sexes, and penalize the accumulation of human capital among females more than among males, as noted in the reduced-forms in Table 11.2.

Table 11.4 Two-stage least squares estimates of education outcomes

Explanatory variables	*Years expected enrollment*				*Years adult attainment*			
	Female (1)	*Male (2)*	*Difference (3)*	*Ratio (4)*	*Female (5)*	*Male (6)*	*Difference (7)*	*Ratio (8)*
1. Population size (Millions)	.865	1.95	−1.08	.0809	2.06	2.04	.0150	.204
	(.09)	(.24)	(.40)	(.22)	(.21)	(.27)	(.01)	(.33)
2. Natural resources exports	−.0606	−.0437	−.0169	−.00229	−.0579	−.0476	−.0104	−.00408
(Percent of GDP)	(3.98)	(3.44)	(4.22)	(4.13)	(4.46)	(4.08)	(4.10)	(4.33)
3. Exports	1.01	.831	.176	.0310	.853	.761	.0926	.0479
(Percent of GDP)*	(4.56)	(4.57)	(2.58)	(3.42)	(4.18)	(4.22)	(2.12)	(3.21)
4. Imports	−.771	−.680	−.0907	−.0199	−.691	−.643	−.0482	−.0280
(Percent of GDP)*	(2.82)	(2.95)	(1.16)	(1.86)	(2.52)	(2.74)	(.75)	(1.53)
5. Calendar year	.185	.188	−.0036	.0026	.151	.183	−.0329	−.0050
	(1.30)	(1.56)	(.09)	(.47)	(1.00)	(1.52)	(.82)	(.52)
Constant	−7.87	−5.52	−2.35	.498	−7.83	−8.48	.652	.759
	(1.10)	(.91)	(1.14)	(1.73)	(1.06)	(1.39)	(.35)	(1.51)
F statistics	7.36	6.46	6.35	6.73	3.16	7.23	5.49	6.46
(Prob > F (5, n-6)	(.0000)	(.0000)	(.0000)	(.0000)	(.0151)	(.0000)	(.0001)	(.0000)
Sample size (n)	226	226	226	226	221	221	221	221
Durbin-Wu-Hausman test of exogeneity								
Export residual	−.899	−.761	−.138	−.0247	−.752	−.671	−.0809	−.0399
	(8.83)	(7.96)	(3.14)	(4.26)	(7.78)	(7.82)	(2.70)	(4.66)
Import residual	.693	.643	.0511	.0144	.611	.584	.0267	.0200
	(4.48)	(4.44)	(.99)	(1.94)	(4.35)	(4.12)	(.64)	(1.63)
Both residuals zero	46.5	35.5	12.3	15.8	41.0	38.0	7.57	22.2
(Prob >F (2, n-k-1)	(.0000)	(.0000)	(.0000)	(.0000)	(.0000)	(.0000)	(.0007)	(.0000)

* Estimated as endogenous and identified by exclusion of tariff, quota, and black market premium from human capital equations, but included in equations predicting Exports and Imports as reported in Table 11.2, columns 9 and 10.

Table 11.5 Two-stage least squares estimates of health outcomes

Explanatory variables	*Life expectancy at birth*				*Child survival to age 5 per 1000*			
	Female (1)	*Male (2)*	*Difference (3)*	*Ratio (4)*	*Female (5)*	*Male (6)*	*Difference (7)*	*Ratio (8)*
1. Population size (Millions)	−5.08	1.72	−8.06	.143	27.0	19.8	7.16	−.0128
	(.17)	(.07)	(1.23)	(1.69)	(.15)	(.10)	(.23)	(.35)
2. Natural resource exports	−.240	−.203	−.0435	−.00047	−1.58	−1.73	.139	.00017
(Percent of GDP)	(4.83)	(5.22)	(4.01)	(3.30)	(4.85)	(4.98)	(4.49)	(4.72)
3. Exports	3.30	2.63	.664	.00794	21.5	23.4	−1.86	−.0022
(Percent of GDP)*	(4.75)	(4.87)	(4.37)	(3.89)	(4.82)	(4.94)	(3.44)	(3.49)
4. Imports	−2.46	−2.00	−.534	−.00634	−15.9	−17.7	1.78	.0021
(Percent of GDP)*	(2.88)	(2.93)	(2.83)	(2.51)	(2.92)	(3.01)	(2.32)	(2.29)
5. Calendar year	.496	.412	.106	.0011	3.01	3.49	−.484	.0006
	(1.09)	(1.10)	(1.06)	(.83)	(1.07)	(1.12)	(1.09)	(1.11)
Constant	19.1	23.3	−3.72	.989	.620	.581	38.9	1.05
	(.83)	(1.23)	(.75)	(14.7)	(4.24)	(3.66)	(1.88)	(43.0)
F statistic	9.55	9.33	15.2	16.9	9.70	9.81	7.09	8.11
Prob > F(5, 200)	(.0000)	(.0000)	(.0000)	(.0000)	(.0000)	(.0000)	(.0000)	(.0000)
Sample size (n)	226	226	226	226	226	226	226	226
Durbin-Wu-Hausman test of exogeneity								
Export residual	−2.88	−2.25	−.616	−.00767	−18.5	−20.0	1.52	.00173
	(8.49)	(7.40)	(9.67)	(7.68)	(8.01)	(8.08)	(3.37)	(3.17)
Import residual	2.12	1.68	.479	.00593	13.4	15.0	−1.55	−.00171
	(4.38)	(3.98)	(5.54)	(4.46)	(3.96)	(4.24)	(2.70)	(2.43)
Both residuals zero	44.1	34.7	54.6	35.1	37.6	38.2	5.89	5.34
(Prob >F (2, n-k-1)	(.0000)	(.0000)	(.0000)	(.0000)	(.0000)	(.0000)	(.0032)	(.0054)

* Estimated as endogenous and identified by exclusion of tariff, quota, and black market premium from human capital equations, but included in equations predicting Exports and Imports as reported in Table 11.2, columns 9 and 10.

To assess the magnitudes of the estimates reported in Tables 11.4 and 11.5, let us assume a country had export and import shares of GDP that are one standard deviation greater than the sample average. In other words, the export share of GDP is 14 percentage points larger than the sample mean of 24 percent, and the import share is 15 percentage points larger than the sample mean of 28 percent. The estimates in Table 11.4 imply that in such a country, female school enrollment would be 2.6 years (i.e. 1.01* 14–.771* 15) longer than the sample average of 8.0 years. In this country male school enrollment would tend to be 1.4 years longer (i.e. .831*14–.681*15). Thus a country with the specified greater involvement in trade due to its tariff, quota, and foreign exchange policies would tend to have a gender gap in schooling of 1.2 years (2.6–1.4) smaller than the sample mean. For the illustrative purposes of this simulation, assume an additional year of schooling increased a woman's wage opportunities by 15 percent. Then this extra measure of openness linked to trade liberalization policies would contribute to advancing women's wages relative to men's by almost a fifth (i.e. 1.2* .15). Adding one standard deviation in openness to international trade to that same country would increase female life expectancy by 9.3 years, compared to the sample mean of 64.5 years, and male life expectancy by 6.8 years, compared to a mean of 59.9, thus adding to women's relative advantage by 2.5 years. These are large gains in economic status for women compared with men based on a standard deviation variation in export and import shares associated with trade liberalization.

How large a change in trade policy is directly associated in the reduced-form equations with these advances in schooling and health? A standard deviation decrease in the three trade policy variables would represent a decrease of 0.19 in the average tariffs, a decrease of 0.25 in the proportion of imports subject to quotas, and a 0.86 decline in the black market proportional premium for foreign exchange. According to Table 11.2, columns 9 and 10, a policy of trade liberalization that would accomplish these changes in the trade policy variables would be associated with an increase in the export share of GDP of 4.7 percent (i.e. (–4.41*–.19)+(–5.58*–.25)+(–2.77*–.86)), and an increase in the import share of 2.4 percent. According to Table 11.4, column 1, such a liberalization of trade on exports and imports is associated with a gain of 2.9 years of female enrollment (1.01* 4.7 –.771*2.4). Alternatively, the estimated impact of the trade liberalization package on female enrollment could also be directly inferred from the reduced form estimates in Table 11.2, column 1, where they are expected to be associated with a gain of 2.9 years in enrollment {(–8.51*–.19)+(– 2.81*–.25)+(–.66*–.86)}. From these regression linearized decompositions of policy effects implied by the reduced-form estimates, it appears that more than half of the effect of the trade liberalization on female enrollments stems from the decline in tariffs, whereas a fourth and a fifth of the enrollment gain can be attributed to the reduction in quotas and to the decline in black market premia on foreign exchange, respectively.

The same decomposition exercise can be used to describe the effects of trade liberalization on female life expectation. From Table 11.3, column 1, a simulated standard deviation decline in the three trade restrictions would be associated in the estimated reduced-form equation with an increase in female life expectation by 9.7 years {(−30.9*−.19)+(−6.86*−.25)+(−2.5*−.86)}, which suggests a gain of 9.6 years according to the two-stage estimates drawn from Tables 11.2 and 11.5. As in the case of female enrollment, three-fifths of the trade liberalization effect on this measure of female health is related to the standard deviation decline in tariffs, whereas the remaining 18 and 22 percent of the effect is associated with the decline in quotas and black market foreign exchange premium, respectively.

Questions for further study

Evidence has been presented that countries that relied more heavily on tariffs and quotas in the 1980s, and for which the black market premium in their foreign exchange markets was larger, were less open to imports and less inclined to export their national output into the global market. However, one must be careful to distinguish exports that are derived from natural resource endowments, as they reflect largely a fortuitous geographical distribution of economically extractable mineral deposits and are not thought to be strongly related to public policies toward trade liberalization.[23] Countries with exports of natural resource endowments are open in the sense of exploiting these resources for the world economy, but their governments are consequently less dependent on other investment opportunities offered by global markets. Natural-resource-determined specialization does not depend sensitively on adjusting domestic prices on tradeable goods to international levels. Women's and men's educational attainment and enrollments are distinctly lower in countries where natural resource exports are a larger fraction of income, and longevity is significantly lower in these settings for both men and women.[24]

The three trade restriction policy variables which are used in this study to describe trade liberalization—tariffs, quotas, and foreign exchange distortions—are associated with women and, to a lesser extent, with men receiving less schooling. Life expectation and child survival rates, which proxy for health human capital, are also lower in circumstances in which countries are pursuing trade policies that are likely to otherwise decrease their export shares of national income. More broadly, economic development increases the share of employment in the service sectors. But these modern developments are also potentially endogenous and partially dependent on human capital investments, and should not therefore be treated as exogenous to the increased schooling of women, which is expected to facilitate women's increased participation in wage employment (outside of their family), and strengthen their economic empowerment in the household, community, and nation. Increased exports other than natural resources are strongly associated with higher levels of education and health. Unfortunately, the common measure of openness of the economy, which combines the shares of imports and exports relative to GDP, does not allow me to distinguish the differential effect of exports and imports on human capital accumulation or the gender inequalities in this process.

The regrettably loose connection between economic and social theories and empirical evidence in applied analyses of this form would probably be strengthened if it could be reformulated into a more realistic dynamic framework and fit to panel data on the same group of countries over time. Changes in trade policy should then be linked to the opening of the domestic economy to international trade, which modifies incentives for further reforms, first in private tradeable goods and services, and then with increased competitive pressures for privatization and greater flexibility in labor market policies which are generally associated with enhanced employment opportunities especially for women. Cross-country empirical regularities, as reported here, do however suggest a plausible path for trade liberalization and globalization to spill over and increase the derived demand for female labor. In turn, this would provide stronger incentives for women's education and health relative to that for men's in countries that have adopted a more open trade regime by fostering exports, lowering barriers to imports, and establishing more competitive markets for foreign exchange.

Appendix

Appendix Table A-11.1 Sample statistics for variables used in regressions on education, survival, and trade

Dependent variables	*Sample size*	*Mean*	*Standard deviation*
1. Expected years of enrollment females	226	8.05	3.14
2. Expected years of enrollment males	226	9.10	2.62
3. Difference of female and male enrollment	226	−1.06	1.21
4. Ratio of female to male enrollment	226	.861	.168
5. Years of adult educational attainment (persons aged 15 and over)	221	4.25	2.68
6. Years of adult educational attainment (persons aged 15 and over)	221	5.17	2.38
7. Difference of female and male adult education	221	−.949	.827
8. Ratio of female to male adult education	221	.757	.239
9. Life expectation in years of females at birth	228	64.5	11.2
10. Life expectation in years of males at birth	228	59.9	9.85
11. Difference of female and male life expectation	228	4.62	2.12
12. Ratio of female to male life expectation	228	1.076	.0332
13. Survival rate from birth to fifth birthday per 1000, for females	228	905.	77.1

(*continued*)

14. Survival rate from birth to fifth birthday per 1000, for males	228	896.	82.4
15. Difference of female and male child survival	228	9.21	12.0
16. Ratio of female to male child survival from birth to fifth birthday	228	1.011	.0149
17. Openness = (exports + imports)*100/GDP	228	52.3	28.3
18. Trade balance = (Exports – imports) × 100/GDP	226	−3.78	7.09
19. Exports as percent of GDP	226	24.3	13.8
20. Imports as percent of GDP	226	28.0	15.3
Exogenous variables			
21. Population size in millions (United Nations)	226	35.6	84.1
22. Natural resource exports-imports as a percent of GDP (World Bank)	226	7.25	33.8
23. Log GDP per person aged 15 or more measured in 1995 US dollars and in purchasing power parity (Penn World Tables 6.1)	226	8.82	.842
24. Percent of labor force employed in services	226	35.0	15.1
25. Percent of labor force employed in industry	226	23.2	11.8
26. Tariffs as a proportion of imports (UNCTAD 1985–88)	226	.168	.190
27. Share of imports subject to quantitative restrictions (UNCTAD 1985–88)	226	.212	.250
28. Black market premium for foreign exchange (proportion)	226	.323	.862
29. Terms of trade (price change in exports-imports)	226	−.00257	.0437
30. Calendar year (last two digits)	226	73.0	5.56

Sample: Unless otherwise specified, observations are available for 1965, 1970, 1975, and 1980:

Algeria; Argentina; Austria; Bangladesh, 1975–80; Belgium; Benin, 1965–70, 1980; Bolivia; Brazil; Cameroon; Canada; Central African Republic, 1970; Chile; Colombia; Congo; Costa Rica; Cyprus, 1975–80; Denmark; Ecuador; Egypt; El Salvador; Finland; France; Ghana; Greece; Guatemala; Guyana, 1980; Hong Kong, 1975–1980; India; Indonesia; Iran, 1975–80; Ireland; Italy; Jamaica; Japan; Jordan, 1980; Kenya, 1970–80; Korea; Malawi, 1970–80; Malaysia; Mauritius, 1980; Mexico; Mozambique, 1980; Netherlands; Nicaragua; Norway; Pakistan, 1970–80; Paraguay; 1975; Philippines; Portugal, 1975–80; Rwanda, 1980; Senegal; Sierra Leone, 1980; Spain; Sri Lanka, 1975–80; Sweden; Switzerland; Syria; Thailand; Trinidad and Tobago, 1980; Tunisia; Turkey, 1975–80; Uganda, 1980; UK; USA; Uruguay, 1970–80; Venezuela; Zaire; Zambia; Zimbabwe, 1980.

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Notes

1 European Society of Population Economists meeting in Bergen, Norway, June 10–12, 2004. Earlier version presented at "The Future of Globalization: Explorations in Light of Recent Turbulence," a conference by the Yale Center for the Study of Globalization and the World Bank, October 10–11, 2003. I appreciate the assistance of Jeremy Magruder in collecting the data reported herein, the comments and editorial assistance of Sarah Cattan, and acknowledge the research support of the Rockefeller Foundation and the Center for the Study of Globalization. paul.schultz@yale.edu.

2 Boserup noted some government institutions, such as agricultural extension services, employed predominantly men, and were therefore more effective in promoting change in farming practices among farmers who were male, than among the majority of farmers who were female. This insight of Boserup was subsequently confirmed by survey research, and some international agricultural research was redirected to focus on enhancing "female" staple crops and to monitor extension activity to better serve the needs of female farmers.

3 For example, a recent survey of the literature on trade, growth, and poverty does

not explore the consequences of trade liberalization for women's status but only for poverty head counts (Berg and Krueger 2003).

4 For example, real wages for women with 13–15 years of schooling increased by 26 percent, whereas wages of comparably educated men gained 11 percent, while wages for women with only 5–8 years of schooling rose only 4 percent and wages for comparable men fell by 23 percent (Hanson 2003: Table 5).

5 Part of this public sector wage premium is associated with the preponderance of women in the informal private sector of Latin America, where women's wages are especially low compared with men's. When the public-private wage comparisons are restricted to private wage earners in only the formal sector, the public wage premium is reduced by a third, from about 30 percent to about 20 percent across 17 Latin American countries in the 1980s and 1990s (Panizza 2003). This public sector gender gap favoring women's wages tends to be larger for less educated workers. It may be expected, therefore, that if the public sector sheds workers during recessions, this retrenchment of public sector employment would have contributed to deterioration in women's wages relative to men's in Latin America during the 1980s.

6 The relative inequality in wages (i. e. standard deviation of the log of wage rates) was lower in the centrally planned economies (e. g. Schultz 1998; Freeman and Oostendorp 2000) than in the market economies. Many of the indicators of trade regimes examined in this chapter cannot be calculated for centrally planned economies, and thus important dimensions of global integration as the centrally planned economies were drawn into the world economy, cannot be analyzed here. Skill-biased technical change can also cause institutional change, such as the decline in the union share of the labor force (Acemoglu and Robinson 2000).

7 When wage functions are estimated for selected countries correcting for sample selection bias based on plausible identification restrictions and on assumed distributions of errors, the percentage wage returns to schooling of men and women are generally of comparable magnitudes. There are few estimates reported on the wage returns to health human capital, but they also suggest broadly similar wage returns to men and women (Schultz 1995; Schultz and Tansel 1997; Savedoff and Schultz 2000).

8 For example, in some settings the income gains for the household due to globalization might motivate more male members to work in the wage labor force, and more female members to substitute their time in non-wage work. The observed market wage for women might increase because of the reduced supply of women working, although the productive opportunities for the average female worker might decline or not change. Thus, a rise in the market wage may be attributed to either or both shifts in demand and supply factors, and cannot be assumed to represent a net improvement in the productivity of all women or even the average woman. Of course, if the productive ordering of all women did not change, and both the wages of women and their participation rate in wage employment increased, it would be clear that the average wage of women increased. But to compare the movement in wages of women to that of men and relate them to the globalization-induced changes in the demand for labor, male and female wage functions would have to be estimated, both of which should be corrected for potential sample selection bias.

9 The largest natural resource export is oil and gas, but other categories of fossil fuel and metallic and nonmetallic natural resources are also dominant sources of national wealth and exports in many countries. The net balance of exports minus imports of all of these natural resource commodities as a share of GDP, expressed in purchasing power parity, is the variable analyzed here as a control variable (Z1). This variable is expected to increase a country's trade by definition, and to weaken national incentives to invest in human capital given its income, and to reduce the likelihood that women will receive an equal share of human capital and participate in the labor force outside of the home, and will consequently reduce gender equality.

10 The size (and geographic placement) of states is likely to affect the trade share of income as an indicator of openness or efficient integration into the global economy. Larger countries, in terms of population, are expected to be more self-sufficient because more inter-regional trade would occur within the boundaries of a larger country. For example, India in 2001 has an openness fraction of 0.20, and Korea of 0.69 (World Bank 2003: Appendix Tables 3, 4), which might be due to India's relatively larger size, or to its greater barriers to trade, or to both. Many other features of an economy could be responsible for its degree of integration into the world economy. For example, access to year-round ocean ports reduces the cost of transportation to and from the rest of the world and thus increases the optimal ratio of trade to income. See Sachs and Warner (1995); Bloom and Sachs (1998); Acemoglu *et al.* (2002).

11 Agricultural employment varies in its gender composition in different regions of the world, and is more difficult to measure in a consistent fashion across developing countries, and is treated as a residual category here (Durand 1975).

12 The income and labor composition variables, Z2, are added to the list of presumably exogenous conditioning variables in an alternative model specification reported in Schultz (2003).

13 If the coefficients on exports and imports in equations determining human capital investments were the same, the openness specification (1) would be consistent with the unrestricted (2) specification, whereas if the coefficients on exports and imports were of opposite signs and equal absolute magnitude the trade balance (3) would parsimoniously represent the pattern captured in (1).

14 Berg and Krueger (2003) survey the evidence of these variables affecting static and dynamic efficiency and thereby the growth of countries in recent decades. They note that it would be preferable to focus on resource distortions caused by trade restrictions, which might assign more emphasis to the variance in effective protection provided different sectors and firms in the economy as a cause for slower growth rather than simply the overall level of protection and foreign exchange distortion. But they show that the level of protection and variance in protection across sectors are positively related across countries, which may justify the neglect here of the variance in protection across sectors.

15 More specifically, the tariff and quota barriers and black market premium for foreign exchange, which suggests distortions in the exchange market (R) are treated as instruments to identify the impact of a trade policy regime on trading outcomes (T), which are expected to impact the incentives to invest in schooling and health of women and men, in hypothetically differential ways.

16 Because Z2 is likely to be endogenous to HC and T, or correlated with the disturbances e and v, controlling for Z2 in equation (1) and (2) would tend to bias estimates of the partial effects of Z1 and R on the outcome variables. For example, Acemoglu (2003: Figure 1) recognizes the endogenous interdependency between income and democracy and fiscal policy, and summarizes the three-way relationship by expressing democracy and tax/GDP as residuals from a regression on log GDP per capita.

17 UNESCO reports gross enrollment rates by school level, whereas educational attainments by discrete school levels for persons age 15 or over are estimated by Barro and Lee (1993). Measure of relative educational status of men and women depends on how their status is affected by schooling. One may focus on the difference between average female and male years of schooling, or the ratio of female to male schooling. For example, assume an additional year of schooling increases the wages of men and of women by a similar percentage, say by 10 percent. Then a difference in two years of schooling between men and women could suggest a 20 percent difference in the wage productivity of men and women, one measure of relative status. As the average schooling of the population increases from 3 years

to 7, holding constant the gender gap in years of schooling, the ratio measure of female to male education implies the gender gap closes from 0.50 (2/4) to 0.75 (6/8), even though the two-year absolute gap in schooling suggests women continue to receive wages that are 20 percent lower than men.

18 However, much of the increase in length of life in the last century is due to the decline in infant and early childhood mortality, which occurs before children start school, and thus cannot directly enhance the returns to schooling, unless the improved survival rates also signal gains in physical development and cognitive performance which enhance returns to schooling among survivors. But even the more modest gains in life expectancy accruing from age 15 to 65 would boost expected lifetime returns to schooling by 10 to 20 percent in recent decades in some low-income countries (Ram and Schultz 1979).

19 The educational disadvantage of women compared with men was less substantial in Latin America than elsewhere in the developing world at the end of the Second World War. The gender gap in education (with the exception of indigenous (Indian) minorities) continued to close in most parts of the region, and in some countries, such as Mexico, Colombia, and Brazil, women today obtain more years of schooling than do men. In East and South East Asia, the more rapid expansion of primary and secondary education reached most segments of the population in the 1960s, including both girls and boys, and the initially large gender gap in education closed quickly.

20 But this indicator of health status can only be constructed for large populations for which deaths are registered and population censuses are collected accurately by age and sex. International agencies report estimates for virtually all countries in recent years, but without the prerequisite data the accuracy of these imputed gender differences in mortality is unclear. In high-income countries today women's life expectancy has increased to 4–8 years longer than men's, whereas in a few countries in South Asia, such as India, Bangladesh, and Nepal, male life expectancy remains greater than female (World Bank 2003).

21 The mortality data are drawn from the United Nations Population Division database.

22 This is consistent with empirical studies that find the household income elasticity of enrollment rates for girls tends to be larger than the income elasticity for boys' enrollment (Schultz 1987).

23 It would be attractive to deduct the value-added associated with the net exports of natural resources from each country's value of exports, rather than as I have done here including the full market value of exports. It is possible that a dollar's worth of oil can be raised for export in Saudi Arabia for a small fraction of the cost in Venezuela, and thus provides more rent to its owner after covering replacement costs. The resource costs of exporting a dollar's worth of copper (including replacement costs) from Chile or aluminum from Ghana may also be a larger fraction of its export value than in the case of oil. The pure rents from natural resource exports would facilitate an assessment of how these rents affect countries. Some of these problems would diminish when enough good data become available to estimate models such as this from panel data, in which fixed effects could be introduced for countries.

24 Many studies suggest that the education of women is a critical input to improving health of both men and women, because women are the managers of health production in the home, controlling the allocation of traditional health inputs such as nutrition, hygiene, and care, and deciding when modern health inputs are required. Just as men may make the majority of agricultural management decisions in South Asia, women are linked to improvements in the production of health, and their education is critical for this task in all regions.

12 Fooling ourselves

Evaluating the globalization and growth debate

Juan Carlos Hallak and James Levinsohn

Does a more open trade policy promote growth? This chapter is about *how* much of the economics profession has evaluated the evidence on this question.

The question being asked is an important one. Broadly defined, that question is whether countries that trade more grow faster. Although it might seem obvious, it's equally important to ask just why one might care about this question. If a country's level of trade were somehow immutable and god-given, economists might still find the relationship between trade and growth of intellectual interest. It would not, though, be the hot topic that it has in fact become. The reason most observers care about the relationship between trade and growth is because of its implications for policy. It is the idea that governments might somehow adjust their trade policies so as to enhance growth. Looked at from this vantage point, there is a behavioral aspect to the issue, not just a statistical relationship. If countries change their policies in certain ways, are they likely to experience higher growth?

The question begs for empirical evidence. Economic theory is informative, but the predictions flowing from the theoretical literature are not unanimous. There are sound theoretical arguments supporting a move to more liberalized trade, but there are also sound theoretical arguments that support protection from international competition for some industries. In this chapter, we provide an overview of how most researchers have generated the empirical evidence. Our emphasis is less on the particular results that a particular researcher obtained, and more on the overwhelming methodological problems that the literature has apparently chosen to ignore. Indeed, this chapter does not provide a comprehensive overview to the trade and growth debate since our premise is that much of the evidence on which that overview would be based is inherently flawed. As the title suggests, the search for confirmatory results has too often ignored some very basic problems.

The debate on how trade policy affects growth has centered on the results of an influential body of empirical research that, even though not unanimous in its findings and policy recommendations, shares a similar methodological approach. This approach consists primarily of looking at cross-country evidence at the macroeconomic level. This literature attempts to identify the empirical relationship between the degree of openness to international trade and economic performance using standard econometric methods on country-level measures of these two variables. The preferred choice of variables and the exact econometric techniques employed have evolved over time. Each has improved. However, despite numerous studies and these considerable improvements, the literature as a whole has not produced a set of results that provide informed and convincing recommendations for trade policy.

We review this literature, but the review is neither extensive nor complete. Rather, we try to highlight the basic approaches to the trade and growth question that branches of the literature have adopted. We then argue that virtually none of these approaches really addresses the trade *policy* question. When we ask whether the results are informative for the practice of trade policy, we conclude that the answer is "no." We instead argue that it is more important to focus research on the ways in which trade policy might impact growth. By researching the mechanisms through which trade impacts growth instead of correlations in outcomes, researchers will be better able to evaluate when trade policy will be development policy. We conclude with a cautionary note on the increasing irrelevance of the measures of trade policy used in the studies of trade and growth.

Lessons from the available evidence

The discussion of the existing literature is organized around three questions. First, what was the literature that initiated the empirical debate on trade and growth, and what was wrong with that first pass? Second, as newer research has attempted to address the shortcomings of the initial studies, what have we learned? Third is the "So what?" question. Here we ask how relevant these newer results are for the practice of trade policy.

Early evidence

A natural first approach to the estimation of trade policy's effect on economic performance is to look at the statistical relationship between measures of openness to trade and measures of economic success. If openness to trade promotes economic development, one should observe that countries that are more open grow faster and attain higher levels of income than countries that hinder international trade. This is the exercise performed by a large fraction of the early literature. Examples include Dollar (1992), Sachs and Warner (1995), Harrison (1996), and Edwards (1998). Measures of openness to trade include policy variables such as the level of tariff protection, the coverage of non-tariff barriers, distortions in the exchange rate market, and whether the government monopolizes the exports of commodities. Economic performance is usually measured with income per capita or the growth rate of GDP. These studies usually find that in the post-war period, countries with more open trade policies have tended to grow faster.[1]

Open trade policies might have a direct effect on growth, but the effect might also be indirect. Open trade policies may promote growth because they lead to a greater intensity of international trade (usually measured by the ratio of trade to GDP). Countries with more trade then grow faster. However, it is not only policy-induced trade barriers that determine the extent or intensity of trade with the rest of the world. Geographic factors such as the size of the country and its distance to other countries are also important determinants of trade intensity. Hence, if what matters is the role of trade (as opposed to just trade policy) in the calculus of economic growth, the extent of a country's government intervention in foreign trade may not be the best measure of its overall trade intensity. In that case, it is a measure of the latter variable that should be considered. A number of studies (among them, Dollar 1992, Levine and Renelt 1992, Harrison 1996) use measures of trade intensity instead of measures of trade policy as the relevant variable determining growth. Measures of trade intensity, though, capture more than just the influence of policy-induced trade barriers.[2] These studies, then, are measuring the impact of openness—here, trade intensity—without special regard for whether openness is due to policy or geography. They typically find, as do the studies measuring openness with policy variables, that more open countries tend to grow faster and/or have higher per capita incomes.

The early evidence is fairly suggestive of a positive relationship between openness and growth. But there are fundamental problems that permeate all of the studies, casting serious doubts on the validity of the estimation results. In particular, the empirical methodology is subject to two severe econometric problems: endogeneity and omitted variable bias.[3]

The endogeneity bias arises because trade policy is endogenous to economic performance. The usual story is that more openness causes more growth. But causality might run in the other direction; countries with lousy economic performance might have a propensity to close their borders to international trade. This might occur, for example, when countries increase tariffs to supplement faltering tax revenue. In the data, one would observe bad economic performance correlated with higher protection, but the causality would run opposite the typically assumed direction. In this case, economic performance would cause trade policy (and thus trade intensity) and not the reverse.

The omitted variable bias arises if variables omitted from the regression are those really driving the relationship between openness and growth. For example, it could be that countries with good institutional infrastructure grow faster. Good institutions may happen to be correlated with open trade policies, but it may be that it is the quality of the institutions that really drives growth. Unless one somehow measures and controls for the quality of institutions, the observed correlation between trade and growth might be misinterpreted as a causal relationship between the two.

Ordinary Least Squares regression, the tool used in most of the early studies on trade and growth, yields biased estimates of the coefficient of interest—the impact of openness on growth—in the presence of endogeneity or omitted variables. The examples above—and others the reader might think of—strongly suggest that endogeneity and omitted variable bias are not likely to be minor technical quibbles; they might be driving the results.

Recent evidence

The trade intensity of a country depends on both policy-induced and geography-induced barriers to trade. A problem with policy-induced barriers to trade, as noted above, is that they are influenced by both economic performance (the endogeneity problem) and other factors omitted from the usual growth regressions (the omitted variables problem). Geography-induced trade barriers, such as distance to other countries, proximity to oceans, and population are instead (plausibly) affected neither by economic performance nor by any omitted variable that also affects economic performance.[4] Frankel and Romer (1999) base their estimation strategy on the exogenous character of geography-induced barriers to trade, which they use to instrument for trade intensity. The instrumental variables approach then essentially uses the relationship between geography-induced barriers to trade and economic performance to infer the impact of policy-induced barriers to trade. Frankel and Romer (1999) find that the geography-induced component of trade does in fact influence economic performance: an increase of 10 percentage points in the share of trade in GDP increases income per capita by a magnitude of between 10 and 20 percent. This result is consistent with the early evidence, which thus appears robust to the instrumentation of trade intensity with geographic (predetermined) variables. However, as we discuss next, once other relevant (omitted) variables are included as controls in the empirical specification, the robustness of the estimated positive relationship between openness and growth seems to vanish.

A theoretical cause for concern about the extent to which a result such as Frankel and Romer's could serve as guidance for policy is the implicit assumption that both geography-induced and policy-induced barriers to trade impact growth in a similar way. Frankel and Romer (1999) acknowledge this problem, noting that "differences in trade resulting from policy may not affect income in precisely the same way as differences resulting from geography." Rodriguez and Rodrik (2001) make the stronger point that "to the extent that policy is targeted on market failures, trade restrictions can augment incomes (or growth rates) even when indiscriminate barriers in the form of geographical constraints would be harmful." Moreover, even if policy-induced and geography-induced barriers to trade had the same impact on income at a particular point in time, it is also assumed that the ways they impact trade change over time similarly, which is even more unlikely. For example, information technology has changed the role of distance compared to what it was only twenty years ago. Similarly, the way in which, say, tariffs impact trade has changed over time as foreign direct investment and outsourcing have become more popular. The instrumental variables approach basically forces these changes over time in how the different barriers to trade work to change in the same way.

In any event, the finding that trade has a positive effect on growth is not robust to alternative empirical specifications that control for omitted variables. The first group of omitted variables includes variables related to a country's geographic location. Here, geography is thought of as a *direct* determinant of long-run growth. A typical example is the distance of a country from the equator. Easterly and Levine (2003) point to the fact that ". . . compared to temperate climates, tropical environments tend to have poor crop yields, more debilitating diseases, and endowments that cannot effectively employ production technologies developed in more temperate zones" to motivate the inclusion of "distance from the equator" in the empirical specification. Frankel and Rose (2002), Rodriguez and Rodrik (2001), and Irwin and Terviö (2002) include this variable as an additional control in the Frankel and Romer framework. Other geographic variables, such as the percentage of a country's land area that is in the tropics or a set of other regional dummies, are alternatively considered. While Frankel and Rose (2002) find the results to be robust to the inclusion of geographic variables, Rodriguez and Rodrik (2001) and Irwin and Terviö (2002) find that the effect of trade on income per capita is substantially reduced and is no longer significant.

A second group of variables relates to a country's level of institutional development. The inclusion of these variables in a regression explaining cross-country differences in per capita income is suggested by a literature that focuses on the role of institutions in economic development (Hall and Jones 1999; Acemoglu, Johnson, and Robinson 2001). The "institutions and growth" literature is subject to most of the same weaknesses that plague the trade and growth literatures. Once again, there are the issues of endogeneity and omitted variables. In the case of the former, do institutions cause growth or does growth cause good institutions? As in the trade and growth literature, researchers have searched for instruments. Acemoglu, Johnson, and Robinson (2001) propose a creative instrument for institutional development—the mortality rates of settlers in the colonial period. They argue that the feasibility of European settlement influenced the type of colonization and the type of institutions created by the European colonizers. In areas with low rates of settler mortality, European settlers "tried to replicate European institutions with strong emphasis on private property and checks against government power." Instead, where settler mortality was high, colonizers created extractive states, with institutions that did not protect private property and did not provide checks and balances against government expropriation. Using settler mortality as an instrument for institutions, these authors find that institutions matter for growth. Rodrik, Subramanian, and Trebbi (2002), and Alcalá and Ciccone (2003) combine the trade and institutions theories into a unifying framework that allows them to estimate the partial effect of each of these forces. They find opposite results. Rodrik, Subramanian, and Trebbi (2002) find that while the effect of institutions on income per capita is robust to the inclusion of trade as an explanatory variable, the effect of trade is not robust to the inclusion of institutions. Alcalá and Ciccone (2003) propose the use of PPP-adjusted GDP to calculate openness, and find a positive and significant effect of this variable on per capita income. Dollar and Kraay (2003) argue that, due to the correlation between the variables capturing "openness" and "institutions," and also between the instruments typically used for these two variables, the identification of the partial effects is weak.

What do we learn?

The final verdict on the impact of openness on growth may have to await further work using alternative data sets, variables, instruments, and empirical specifications. But the available body of empirical work shows that, once earlier methodological problems such as endogeneity and omitted variable bias are addressed, there is no robust evidence of a significant causal connection between openness and growth.

The results might seem disappointing—after all, they do not answer the question that motivated the literature in the first place. However, we next argue that there is in fact an important lesson to learn from this literature. We learn that the question: "Does trade openness promote growth?" does not have a simple and unconditional answer. Thus formulated, this is not the question we should be asking.

The limits of the typical macro-evidence regression

Suppose researchers figured out a completely convincing set of solutions to the endogeneity and omitted variables problems outlined above. Even if the regressions using macroeconomic data could be executed to perfection, the empirical framework would still have at least two flaws. First, every trade and growth regression we have examined summarizes trade policy as a unidimensional index—that is, the combined impact of the different aspects of the commercial policy of a country is represented with a single variable, which captures the degree of "openness" to foreign trade. Examples of this unidimensional representation of trade policy are the openness index created by Sachs and Warner (1995) and the traditional trade intensity index (volume of trade divided by GDP) used by Frankel and Romer (1999) and several other authors. This representation, by design, rules out any differential impact of alternative policy options that result in the same level of measured "openness."

Second, none of the regressions we have examined allows for the fact that a given trade policy may have different effects, depending on the economic environment under which it is implemented.

Even a quick review of how trade policy might work suggests that both of these modeling decisions are unrealistic. In reality, the effect of trade policy on growth is the combined result of many policy instruments operating through many different channels in a particular economic environment. Trade policy may affect economic performance in several ways, for example by affecting the degree of product-market competition, and therefore mark-ups and firms' incentives to innovate and increase efficiency; or by influencing the volume of trade, and thus the extent of learning that might occur in international transactions; or by stimulating the expansion and contraction of different sectors, thus increasing total output to the extent that firms in sectors that expand generate positive externalities, and reducing output to the extent that resources are inefficiently reallocated. Further, there are many instruments of trade policy, including import restrictions such as tariffs, quotas, and import licenses, and export incentives such as export subsidies and subsidized credit to exporters. International trade can also be affected through policies on foreign direct investment, and technology transfer. Any of these instruments can be applied selectively or across the board, over short or long periods of time.

Moreover, how a policy impacts growth may depend on the economic environment under which it is implemented. For example, what works for a poor country may be inappropriate for a rich country (or for when that same poor country becomes richer), and what works for a country whose government has been captured by interest groups may not work for a country with a government that can discipline those groups.

The linear framework as employed in the literature is not flexible enough to capture such state-dependent effects of trade policy. It imposes a monotonic relationship between the single measure of trade policy and growth. Hence, it not only assumes that trade policy can be properly represented with a single variable, but also that the direction in which it affects economic performance is state-independent. This is a very restrictive assumption.

To illustrate, consider the following simplified characterization of two views about what distinguishes the export-led strategy of several East Asian countries and the import-substitution strategy of many Latin American countries. The first view is that the East Asian countries succeeded because they kept their economies open. This view is based on the underlying belief that open trade policies promote growth. The second view is that it was not the overall level of protection but *how* protection was implemented that explains the differing experiences of these two groups of countries. For example, the Korean government provided protection and import licenses to selected firms and sectors on the condition that they fulfilled pre-established objectives such as export targets. According to this view, just as important as the protection itself was the fact that Korean firms expected the government to enforce this *quid pro quo*. In contrast, the disciplinary role of the government was mostly absent in the Latin American experience, where high levels of protection perpetuated inefficient industries. How do these two views fit into the typical trade and growth regression framework? The first view fits reasonably well. The hypothesized positive effect of trade on growth maps directly into a prediction on the sign of a coefficient estimate. The second view, however, cannot be as easily accommodated into the framework. For example, the unidimensional index of openness is unable to capture the disciplinary role of the government or the appropriateness of the particular selection of firms or sectors to protect. Similar levels of overall protection may in fact disguise enormous differences in incentives that firms face.

The restrictive nature of the empirical framework would not necessarily prevent us from answering the question: does trade openness promote growth? If every trade restriction is harmful regardless of the policy instrument, the mechanism through which it operates, and the environment in which it is implemented, then the linear framework would be a reasonable simplification of the true underlying relationship between trade policy and development. In that case, the above concerns would be unimportant quibbles missing the big picture, and the connection between openness and growth would easily show up in the estimated coefficients of macro-level regressions. However, this is not what the literature finds. This implies that, despite the appeal of the linear regression with a single measure of trade policy, this simple framework is too restrictive to capture the underlying relationship between trade policy and development. It also implies that the question "Does trade openness promote growth?" does not have a simple and unconditional answer. If we want to understand the effect of trade policy on growth, we need to change the type of questions that we ask and the type of answers that we look for.

Focusing on mechanisms: using the microeconomic data

Thus far, we have focused mostly on what the previous literature has (and has not) done. We have concluded that this literature, at the end of the day, is quite inconclusive. The fact that clear answers have not been forthcoming does not mean the question is unimportant. To the contrary, we want to know "Does the free trade mantra really work?" Does a more liberal trade policy, appropriately implemented, promote growth? As important as these questions are, the cross-country growth regression framework, the workhorse of the entire literature, is the wrong tool for the job. We argue below that this framework has consistently used the wrong sort of data. We further argue that the literature's focus on outcomes instead of mechanisms is responsible for the ambiguous conclusions of the literature. Furthermore, this focus on outcomes severely limits the policy relevance of the existing trade and growth literature. We proceed by first advocating a change in the type of data that researchers interested in the trade and growth nexus might use. We then attempt to make a case for shifting the research focus from outcomes to a more careful examination of the mechanisms through which more liberal trade policies might enhance growth.

Data issues

The existing trade and growth literature has consistently used country-level macroeconomic data. The problem with country-level data, in a nutshell, is that they are not sufficiently informative. Countries do not produce anything and countries do not trade with one another. Firms and consumers do these things. Exactly how one intended or expected to measure the impact of trade on incomes without any reference to firms and/or households is something of a puzzle. The idea behind using national-level data is presumably that, in some sense, it gets it right on average. That while some firms gain and others lose, that while some households benefit and others suffer, and that while some industries thrive under more liberal trade while others contract, national-level data somehow averages all this out. Furthermore, the national-level data gets these averages right not just for a given country but for all countries. While all this could be true, we are unconvinced. Instead, perhaps the national-level data has been used because it is easy to use, because it is mostly readily available, and because it makes it pretty easy to sit at one's computer and run STATA do-files until one's eyeballs glaze over. That it is easy doesn't make it right.

Country-level data leads one to author papers that seem to address the big questions—questions like "Does trade enhance growth?: A 162-country study of the world since 1972." We suggest below, though, that more progress might be made by asking "smaller" questions and writing papers such as "The impact of trade liberalization on groundnut farmers in Senegal and Gambia." Some of this is, of course, a matter of taste, but perhaps we as a profession risk our longer-run credibility when we make grand claims that might appear in *The Economist*'s "Economics Focus" page, but which over-reach. Country-level data, while informative for some issues, simply is not granular enough to capture how trade impacts firms and households around the globe.

Mechanisms

The aggregated nature of the data often seems appropriate because the question being posed is sufficiently general. Asking whether trade makes a country richer cries out for country-level data on trade and income. At the heart of the problem is the focus on outcomes instead of mechanisms. Researchers ask whether more liberal trade enhances growth without explicitly asking *why* this might be true. These authors presumably have an economic model in the back of their minds. They seldom, if ever, get around to writing it down. This turns out to matter. A well-specified model could help answer the following sorts of questions.

- Which variables need to be in the model and what role do these variables play in the trade growth nexus? Relatedly, are the variables for which data are available reasonable proxies for what really ought to be included in the econometric work?

- Which variables are omitted and hence are captured in the disturbance term of the regression? When this question is explicitly addressed in a model, one can then evaluate whether the usual assumptions about the residual in OLS (or otherwise) make economic sense. This relates closely to the next question.
- Which variables are exogenous and which are not? As it relates to estimation and whether one needs to use instrumental variables, this is an econometric issue. Namely, are included regressors correlated with the disturbance term? To sensibly answer this econometric concern, though, one really needs an economic model, not just plausible stories. For example, while "institutions" has an endogenous sort of ring to it, exactly why are institutions (somehow measured) correlated with the economic phenomena that are aggregated into the residual?
- Through exactly which avenues does trade enhance growth? This is explored further below. Addressing this question is key if the results are going to be policy-relevant. As noted above, there are many ways in which trade and growth could interact, and they don't all result in a linear regression of growth on a unidimensional index of trade or globalization.
- What are the dynamics? It is important to understand and model how the relationship(s) between trade and growth change over time. This is likely to address two related issues. First, how might the particular relationship between trade and growth vary depending on a country's stage of development? For example, the disciplining role of imports may be stronger (and hence have a greater impact on growth) for a newly emerging economy than for a well-developed one. Similarly, policies that open an economy to FDI may be more relevant in middle-income countries than in very poor ones. The general issue here relates to the state-dependence of the impact of policy. *How* a policy impacts growth may depend on *when* it is implemented. Second, even if there is no state-dependence to policy, the role of fundamentals like transport costs and information technology—issues that may explain how trade and growth interrelate—may change over time. Even without state-dependence, it is important to model how (non-state-dependent) relationships change over time.

In short, a model forces the researcher to think about just why trade might enhance growth. In so doing, it overcomes one of the problems with the traditional country-level approach. A focus on mechanisms rather than just outcomes provides insight into choosing among the different flavors of trade policy. Conversely, without a model, it is hard to convincingly answer any of the above questions.

The main benefit of a model is that it allows researchers to start to explore the ways in which trade might enhance growth and investigate the empirical validity of particular avenues. A secondary benefit is that when the econometrics are more closely tied to a well-specified model of economic behavior, one can engage in the iterative process in which if the data do not support a particular prior, one can examine just where the theory fails to find support in the data and then revisit the model. That process allows one to ask if there are perhaps more reasonable modeling assumptions that have more empirical support.

If the trade and growth literature went in this direction instead of the current country-level growth regression direction, the "trade and growth" literature would include the following:

- Detailed plant-level studies investigating whether more competition from abroad makes domestic markets more competitive (by reducing price-cost margins), hence leading to a more efficient allocation of resources and higher real incomes.
- Detailed plant-level studies investigating whether international competition somehow forces domestic firms to be more productive. Higher productivity would be expected to contribute to greater growth.
- Studies examining the spillover effects of international trade. Goods trade may facilitate the transmission of knowledge, and knowledge accumulation may lead to higher growth.
- Studies examining the spillover effects of foreign direct investment (FDI). Perhaps knowledge is transmitted by watching how foreign-owned plants produce. This knowledge accumulation might also contribute to higher growth.
- Studies investigating who works at new FDI plants. In the presence of substantial unemployment, FDI, even absent spillover effects, might increase employment and hence incomes. Do these new FDI plants increase employment and/or raise the wages of the already employed?

This list is illustrative, not complete. There is, in short, a reason why so many economists believe globalization might be good for growth. In fact, there are many such reasons and the policy implications clearly differ across them. For example, in South Africa, it may be the employment effects of FDI that most contribute to growth, while the potential for knowledge spillovers through goods trade is limited. Such an instance would point toward encouraging FDI but with more regard to whether the new investment requires substantial labor and less regard to technology transfer issues. In Venezuela, it could be that a protected and collusive domestic market would respond positively (from a social viewpoint) to liberalized imports but that more FDI would just add another player in the collusive domestic market with little impact on net welfare. The list could go on. There are, though, two main lessons to take from this discussion.

First, by modeling how trade and growth (or incomes) relate, researchers will be better placed to choose among policy options. It is a lot easier and more intellectually sound to draw policy implications when we know how trade and growth inter-relate.

Second, as a profession, we know how to do the sorts of studies we advocate. The literature is full of studies looking at all of the examples listed above. Consider, for example, studies looking at the role of trade on productivity in Chile (Pavcnik 2002), the role of foreign ownership on plant productivity in Venezuela (Aitken and Harrison 1999), and the role of trade on market discipline in Turkey (Levinsohn 1993). There is yet no systematic attempt at finding a unifying framework for understanding how the results of these studies translate into policy recommendations. Moving in the direction that we advocate, soon there might be. But broad and generalized answers will be rare. Rather, the trade and growth nexus may vary depending upon the policy instruments and the prevailing circumstances. The answers will be more specific and limited in scope. But they will be more informative and reliable as a basis for policy.

The changing nature of trade policy

Whether one uses the traditional country-level regression approach or the more idiosyncratic approach we advocate, it is still necessary to somehow measure trade policy. A country-level study, for example, may measure trade policy as an average tariff rate or the average of the coverage rate of non-tariff barriers when the average is taken across all industries. A study of the effect of import competition on price cost margins in the Mexican textile industry would typically condition on the average tariff Mexico places on textile imports. Tariffs and quotas (usually measured by a coverage rate) are, after all, the typical instruments of trade policy. In the past, countries have used these policy instruments as important components to their development and industrialization strategies. Their inclusion in a growth regression or in an industry study, then, was sensible. That is changing. The traditional tools of trade policy, and hence the measures that appear in trade and growth regressions (broadly construed), are becoming less and less relevant.

One reason they are becoming less relevant is that bilateral, regional, and multilateral trade agreements have limited just what countries can do with these trade policies. For example, export subsidies and national content requirements are becoming prohibited under the WTO, and preferential trade agreements typically include strong restrictions on the ability of countries to conduct unilateral trade policy. Another reason is that the very process of globalization has itself made these traditional tools of trade policy less appealing, as they are less often regarded as the proper tools for fostering domestic industries in an integrated world. With the tremendous fragmentation of production, traditional trade policies are simply less relevant. This has implications for the interpretation of the empirical results of studies examining how trade policies, as once practiced, impact growth. For example, the results of studies using data from the 1960s through the 1990s may not apply in a world with substantial FDI and outsourcing. Other policies, as those described below, might have a stronger impact.

If traditional measures of trade policy are no longer quite as relevant, what sorts of policy tools are used, and how do these relate to the trade and growth literature? Many of the newer instruments of trade policy are focused on export promotion and FDI attraction. Examples of the former include trade missions, trade fairs, providing information about external markets, and encouraging multinationals to assist local suppliers to become competitive at the global level. Examples of the latter include tax incentives and other investment incentives, production sharing schemes, support for supplier network formation, provision of infrastructure requirements, and sharing the costs of training the labor force. To the extent that these are important current policy tools (and we suspect their role will only grow in the future), three issues arise.

First, as noted above, the disconnection between today's policies and the sorts of policies that were in previous empirical work means that one needs to be very careful about extrapolating the results of the existing literature. It *may* be that export promotion and FDI attraction policies have the same impact on growth as a reduction in tariffs and quotas since each plausibly increases openness. But this, at this point, is a matter of faith and not evidence. Second, incorporating these newer tools of trade policy into the growth debate is a splendid idea, but it presents challenges. It is a good idea because it is important to know, for example, whether tax incentives to attract FDI enhance growth. It's a challenge, though, because these newer tools of trade policy are hard to measure. Third, while tariffs and quotas are often sector-specific, these newer tools of trade policy are even more so. Because they are often fairly narrow, they may not be well suited for the sort of macro studies of trade and growth that populate the literature. As we peer into the future, the next wave of the trade and growth literature will need to confront the issues posed by these newer instruments of trade policy. In this regard, the jury is not just out; it has not even convened.

Conclusions

Does trade policy promote growth? As economic policy questions go, this one is important. Unfortunately, the attempts of a long literature looking at cross-country evidence have failed to provide a convincing answer. Several studies find an empirical connection between openness and growth, but they tend to suffer from basic methodological shortcomings. Recent studies address these shortcomings but, once they do, they no longer find a robust empirical relationship between openness and growth. We interpret this to mean that the linear regression framework typically used is too simplistic to capture the true underlying relationship between trade policy and growth—a relationship that is full of nuances and dependent on mechanisms and circumstances. A different approach seems more promising. This approach looks at microeconomic evidence instead of at macroeconomic evidence. It focuses on and models the specific mechanisms through which trade or trade policy operate instead of looking directly at the macroeconomic outcomes. It takes into account other elements that might influence the impact of policy measures instead of restricting this impact to be state-independent. This comes at a cost. This approach is more limited in scope. In particular, it does not provide a simple answer to the original question. Instead, it can only provide (conditional) answers to partial aspects of it. Whether one is comfortable with this more limited approach is a matter of taste. Because we believe that there are in fact no general answers to the trade and growth question, we are comfortable with investigating the smaller questions whose answers provide a more reliable basis for policy recommendation. Others will surely beg to differ.

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Notes

1 A recent paper by Wacziarg and Welch (2002), however, reproduces the methodology of perhaps the most influential of these papers (Sachs and Warner 1995) for the 1990s and finds that the positive relationship between trade and growth no longer holds during this period.

2 We follow Rodriguez and Rodrik's (2001) classification of trade barriers as either policy-induced or geography-induced.

3 Most individual papers are also subject to particular conceptual and empirical criticisms. See Edwards (1993) and Rodriguez and Rodrik (2001) for detailed assessments of some of these papers.

4 Omitted variables may still be correlated with geography-induced trade barriers, even though they do not affect them.

Part III

Local and regional experiences

13 The Middle East

Challenges and opportunities of globalization

Heba Handoussa and
Heba Abou Shnief[1]

In this chapter, we refer to economic globalization as the speedier movement of goods, services, and, to a lesser extent, people across national borders as a result of technological advancements in information, transport, and communications. Economic globalization deserves attention because the process has only started to unfold; it implies vast opportunities but also carries the threat of growing imbalances between the haves and the have-nots of the world.

The Middle East and North Africa (MENA) region, and in particular the Arab countries within it, has consistently lost from globalization over the past decade. The region remains largely isolated from the global economy, its growth rate has stagnated at less than half the global average, its shares of global trade and foreign direct investment have shrunk considerably, and it has created too few jobs to match the explosive growth of its labor force. Increasingly, regional conflict, civil wars, and embargoes have curtailed MENA's development performance, diverting resources towards military expenditure and away from improving the investment environment, achieving good governance, and enhancing growth prospects (World Bank 2003c). Already visibly marginalized, the region may become a long-term loser at an accelerating pace, because globalization increases the vulnerability to competition of each economy and of the specific sectors on which they rely for their future sustainability.

Given that the main driving force behind the current process of globalization is neo-liberal ideologies, with their values of democracy, free markets, and multilateralism, the dominant discourse on globalization has centered on opening markets and deregulating economies to allow capital to move freely. But for developing countries in the era of globalization, openness and deregulation present key challenges; the need is to get the balance right between the state and the market, between collective action at the local, national, and global levels, and between government and non-governmental action (Stiglitz 2003b).

MENA faces these choices as it confronts the unprecedented difficulty of creating 80 million jobs for new labor force entrants in the first two decades of the twenty-first century. This chapter examines the economic, political, technological, and cultural dimensions of globalization in the region.[2]

Economic dimensions of globalization

In the MENA economies the state is still, by and large, the dominant player. Private sector contributions to growth and exports have been hampered by bureaucratic intervention and state control in various domains. Unlike in most of the rest of the world, the contribution of trade to growth has barely risen over the last twenty years. Foreign direct investment (FDI) inflows have been much smaller than their potential and have been confined to certain sectors, mainly petroleum. A chronic problem has been the poor performance of public institutions, which shows itself in the various obstacles to trade, FDI, and political reform. The embeddedness of certain policies, institutional arrangements, and norms remaining from the socialist regimes and centrally planned economies of the past still holds back the transition to a market economy.

This section reviews developments in regional trade and trade policy, foreign direct investment, and attempts at global and regional economic integration, before discussing the challenges of economic reform in the region.

Trade liberalization and trade policy

Since World War II, the growth of international trade has been one of the most powerful engines of the globalizing economy, fueled by falling transport and communication costs (Sarcinelli 2000; Srinivasan 2003). International trade has been a central component of the development strategy of the successful developing countries in Asia—notably China, Japan, South Korea, and Taiwan—and the means through which they have integrated themselves into the global economy.

As measured by the high ratio of its exports to GDP, for several decades MENA was more integrated into the world economy than the average region, thanks to the oil boom and quadrupling oil prices in the period 1970–85. But since 1985, other regions have overtaken it. The reasons include MENA's limited diversification of exports, with few sources of dynamic export growth, and relatively high levels of protection against imports. On average over the last twenty years, MENA's trade in services and goods other than oil and gas has remained at around 42 percent of GDP (Srinivasan 2003). And in the 1990s, MENA experienced a persistent decline in the speed of trade integration, as its trade grew more slowly than its GDP.

Exports

Efforts to streamline trade-related regulations and reduce their trade-distorting effects are important in MENA, where excessive protection hinders integration into the global economy. Measures to liberalize trade and improve international competitiveness have been key features in economic reform programs designed to promote export- and private sector-led growth, and between 1980 and 1997, MENA countries slowly diversified their export base. Despite these efforts, the natural resource availability in the region has significantly discouraged diversification, and the exports remain concentrated in a few markets and primary commodities, whether agricultural, raw materials, or minerals. In 2001, fuels and related products still constituted 82 percent of total exports (World Bank 2003c). By the standards of developing regions, the product concentration of MENA's exports is still high (Table 13.1).

However, variations do exist within the region. Generally, labor-abundant and resource-poor countries have done better: Jordan, Tunisia, and Turkey have been able to diversify significantly, and Turkey now is one of the top ten exporters of manufactures in the developing world. Yet the oil-producing countries of the Gulf, including Iran, have not diversified their export base much during the last decade (ERF 2002a). Export concentration has left these countries vulnerable to price fluctuations, so that volatility in oil revenue becomes volatility in budget revenue (Jalali-Naini 2000).

Compounding the problems of product concentration is the concentration of export destinations: more than half of the region's exports go to industrial countries, mainly the European Union and the United States.

Producers in MENA, encouraged by trade policies, have focused on enhancing the price competitiveness of traditional exports rather than on developing a competitive advantage and exploiting product niches. For labor surplus countries in the region, comparative advantage lies in labor-intensive manufacturing such as textiles and clothing and food industries. For most of the oil-rich countries in the region, comparative advantage lies in raw materials and energy-intensive products. Few MENA countries have moved significantly into technology- and skill-intensive production. Even traditional labor-intensive industries are now threatened by competition from low-cost and higher-skilled Asian economies, and from industrialized Latin American economies whose wage levels are comparable to MENA's but whose skills are much greater (Karshenas 1999).

One of the drivers behind integration into global production chains is intra-industry trade, which is the fastest-growing portion of global trade. Within MENA, intra-industry trade is very small, at only 13.5 percent of the region's total trade in 2000, compared with shares of more than 50 percent in countries such as Brazil, Republic of Korea, Malaysia, Taiwan, and China (World Bank 2003d). There is significant room for improving the share of intra-industry trade in MENA, and the prospects may improve as the process of implementing the Greater Arab Free Trade Area, discussed later in this chapter, gains momentum.

The more diversified countries of MENA have gradually moved out of primary products into medium-technology manufactures; in Turkey and Tunisia, for example, primary products now account for less than 15 percent

Table 13.1 Comparative indicators of export diversification, trade openness, and protection

	Export diversification			*Trade protection*				*Trade openness*
	Concentration index[1]		*Index change*[1]	*Simple average*	*Weighted average*	*Standard deviation*	*NTB coverage*	*Trade in goods as % of GDP*
	1980	*1997*	*1980–97*	*Most recent years*				
MENA	0.686	0.517	0.169	16.5	13.8	13.6	15.9	48.1
EAP5	0.323	0.160	–0.012	11.3	8.3	17.9	13.5	47
ECA4	0.191[2]	0.119[2]	–0.009[2]	12.9	7.2	18.3	12.4	n.a.
LAC4	0.328	0.183	–0.060	12.2	12.9	6.9	48.4	23.3

Notes: EAP5: East Asia and Pacific: China, Indonesia, Malaysia, Republic of Korea, and Thailand.
ECA4: Europe and Central Asia: Czech Republic, Hungary, Poland, and Turkey.
LAC4: Latin America and Caribbean: Argentina, Brazil, Chile, and Mexico.
[1] Concentration is measured by the Hirschman index, whose values range from 0 to 1 (maximum concentration). Negative change indicates more export concentration.
[2] Includes only Hungry, Poland, and Turkey.

Source: World Bank (2003d).

of exports. High-tech products still made up no more than 5 percent of the region's exports in the year 2000, and 81 percent of the high-tech exports came from Morocco and Tunisia. Israel exports almost eight times the high-tech exports of Arab countries (Hamdan and Hamdan 2003).

Imports

The prevalence of import-substitution policies continues to limit competitiveness and efficiency. Tariff and non-tariff barriers to trade still run high in the region; reductions have been slow, and sometimes vulnerable to reversal. Average tariff rates are higher than in comparator regions. In countries such as Egypt, Jordan, Morocco, Syria, and Tunisia, simple average tariffs range between 25 and 33 percent (World Bank 2003d). A high degree of tariff dependency makes liberalization much harder, and in countries such as Lebanon, customs duties account for some 57 percent of tax revenue (FEMISE 1999). MENA also has higher non-tariff barriers than other developing regions except for Latin America (Table 13.1).

As a result of high import barriers, MENA's share in world imports in 2001 has been quite meager (Table 13.2). Within MENA, West Asia's higher import share than North Africa's is largely attributable to the low protection levels maintained by GCC countries.

Although domestic regulatory regimes are often established with the purpose of protecting the public interest, they sometimes do not have that effect and impose additional costs on importers (Zarrouk 2000), while providing opportunities for rent-seeking and corruption on the part of the civil service. Administrative controls and red tape are reflected in the multiple customs clearance procedures and health and safety standards that MENA countries impose on imports, and in the region's inefficient transport and logistical networks (Hoekman and Konan 2000). According to a business survey, firms

Table 13.2 Shares of world trade, by region, 2001 (percent)

Region	*Shares of world exports and imports*	
	Exports	*Imports*
North Africa[a]	0.85	0.85
West Asia[b]	3.98	2.94
South America	2.59	2.36
Central Asia	0.31	0.26
Other Asia[c]	19.36	17.76

[a] Algeria, Egypt, Libya, Morocco, Sudan, Tunisia, Western Sahara.
[b] Bahrain, Cyprus, Iran, Iraq, Jordan, Kuwait, Lebanon, Palestine, Oman, Qatar, Saudi Arabia, Syria, Turkey, UAE, and Yemen.
[c] 26 countries in South East Asia.

Source: UNCTAD *Handbook of Statistics, 2002.*

in MENA spend 95 days a year, on average, dealing with trade transactions (World Bank 2003d).

Regulatory barriers and measures impose a serious constraint on intra-Arab trade. Even the simplest trade integration agreement requires the harmonization of regulatory regimes and policy coordination—which has not happened in the Arab case (Carkoglu *et al.* 1998).

Efforts at trade reform

Why have protective policies prevailed over the years? Five political economy factors influence the extent of trade liberalization: the power of import-substitution industry lobbies; the strength of export-oriented industry lobbies; the time elapsed since the inception of the import-substitution policies; country size; and leadership commitment and role. Countries that have achieved more trade liberalization in MENA have had weaker import-substitution industry lobbies and stronger export-oriented industry lobbies (Srinivasan 2003).

Some promising reforms have been taking place in the region to improve the trade environment. Both Jordan and Morocco have rationalized and simplified their customs administration procedures. Morocco's customs reform is considered best practice in the region. Egypt has simplified its business licensing and registration procedures through the introduction of one-stop-shops, and somewhat similarly, Tunisia has introduced *guiches uniques*, offices in which all procedures related to investment are centralized (Economist Intelligence Unit 2002). Lebanon has introduced a modern customs law, based on international best practice, that aims to simplify procedures and modernize customs clearance systems (Neaime 2003).

Improving the trade environment has a direct bearing on the region's attractiveness to foreign direct investors. Countries' success in attracting FDI and encouraging private domestic investment depends on whether they can create an enabling environment for investment. Below we review the challenges this has posed for MENA.

Rising competition for foreign direct investment

One of the driving forces behind globalization has been the huge expansion of foreign direct investment throughout the 1980s and 1990s, creating a qualitatively different set of links between advanced economies and certain developing countries (Gilpen 2000). Global FDI flows rose from an average of US$2 billion a year during 1985–95 to US$4.3 billion a year during 1996–2000 and to US$6.6 billion in 2001–2. They grew three times faster than trade flows and almost four times faster than output (Wade 2000).

MENA economies continue to face challenges in attracting FDI. A rise in the region's share of foreign direct investment in GDP, from 0.69 percent in 1988–98 to 0.87 percent in 1999–2001 (Figure 13.1), reflects to a certain

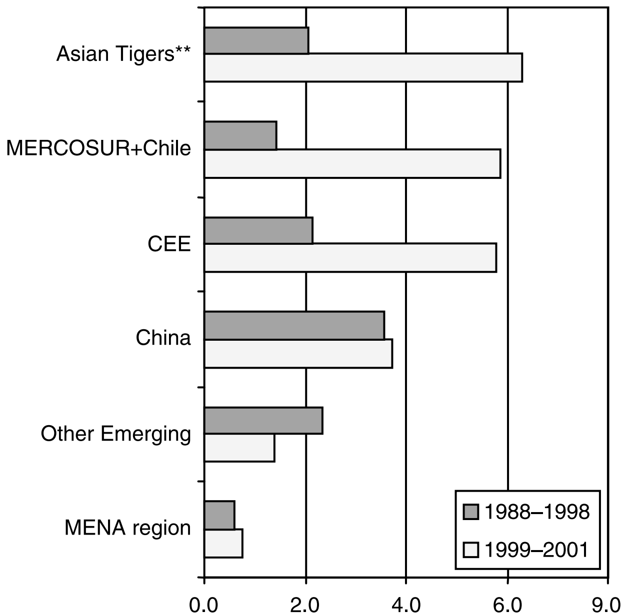

Figure 13.1 FDI inflows as a percentage of GDP, by region, 1988–2001.

Source: UNCTAD, *World Investment Report 2003*.

extent an improvement in the fundamentals and the expectation of a better regulatory framework in these countries.[3] These levels are still low relative to those of other developing regions, however, largely as the result of continuing deficiencies in MENA countries' legal and institutional frameworks, as well as other challenges such as these countries' limited market size. The pace of reforms in the legal framework and investment regulations has been notably slower in MENA than in other parts of the world.

A further problem is that the type of FDI that is attracted to MENA does not meet the region's development needs and aspirations. To date, most of the FDI in the region is concentrated in oil, petrochemicals, and banking in the Gulf countries, and in manufacturing (energy-intensive cement and steel, labor-intensive food and clothing) and tourism in the reforming Maghreb and Mashreq countries. Empirical research has shown that among the significant factors determining FDI in the Arab world are high trade barriers—which attract market-seeking rather than efficiency-seeking FDI—and the availability of resource endowments. Evidence also shows that FDI has depressed the region's total factor productivity growth (Sadik and Bolbol 2001). Further, FDI flows to the region tend to fluctuate widely from year to year, reflecting the dependence on oil-related or primary activities or lack of coherent strategy toward foreign participation on a national and regional scale.

The challenges of economic integration

Several countries in the region have opted for bilateral, regional, or multilateral integration schemes in the hope of stimulating FDI and exports.

Arab regional integration

The Gulf Cooperation Council (GCC) has been quite successful in regional integration. What started as a regional free trade agreement is being developed into a customs union with a common external tariff. The GCC countries maintain much more open economies than the Mashreq and Maghreb countries, as reflected in tariff rates that are the lowest in the region. This is mainly because the Gulf countries are not highly diversified in their economic structure and hence have relatively little industry and relatively few jobs to protect.

The last five decades have seen several attempts at broader Arab economic integration (Table 13.3). The latest, the Greater Arab Free Trade Area (GAFTA), involves eliminating tariff barriers to trade on goods over a ten-year period, through 10 percent annual reductions in tariffs until 2008. The Executive Program of GAFTA also calls for eliminating non-tariff barriers, and there have recently been discussions about liberalizing services.

The various attempts at regional integration have had limited success so far. Several political and economic factors provide common explanations. One is the lack of complementarity in countries' production and export structures (Sabry 2001; Fawzy 2002; Hoekman and Messerlin 2002; Carkoglu *et al.* 1998). Reflecting this lack of complementarity, only 8 percent of Arab trade is with other Arab countries.[4] A second factor is that Arab economies have diverse levels of income (with a particularly large gap between GCC and non-GCC countries), and are of different sizes. Lack of compensatory mechanisms for losers makes concessions difficult.[5] Third, historical and geopolitical factors play a critical role in the patterns and record of regional integration; some commentators argue that the lack of regional security in the Middle East has been one of the main impediments to integration (Carkoglu *et al.* 1998). Political differences have also taken their toll on Arab economic relations, as noted below. Fourth, regional integration efforts, like any trade liberalization efforts, need to contend with the import-substitution

Table 13.3 Attempts at Arab regional integration

Year	*Regional integration scheme*
1953	The Convention for Facilitating Trade and Regulating Transit Trade
1957	Arab Economic Unity Agreement
1964	Arab Common Market
1981	Agreement for Facilitation and Promotion of Intra-Arab Trade
1998	The Greater Arab Free Trade Area (GAFTA)

Source: Compiled from Sabry 2001.

legacy of the 1950s and 1960s; the various stakeholders who have a vested interest in sustaining protection have strongly resisted attempts to reduce import barriers.

Thinking beyond the national interest, as Monnet advocated in Europe, has proven difficult in the Arab case, especially since the gains from integration are asymmetrical. The lack of sufficient incentives to integrate has created an environment of mistrust and unwillingness to make concessions (Zarrouk 2000), and there has been little enthusiasm in practice for transferring power and sovereignty to supranational bodies or institutions.

Given that labor movements have been the most successful form of cooperation between the Arab states (Carkoglu *et al.* 1998; Fawzy 2002), the mobility of labor among Arab countries should be considered as a practical basis for integration. More than half of the labor force in eight labor-importing countries[6] comes from other countries within the region (Carkoglu *et al.* 1998).[7] Factors such as the fluctuation in oil revenues and the oil-rich countries' increased reliance on non-Arab workers have negatively affected labor movements between the labor-abundant and labor-scarce countries within the region. After the second Gulf War, Kuwait reduced its 400,000 Palestinian community to only 50,000 in the mid-1990s. Kuwait's action was mainly politically motivated, but in other labor-importing countries, Arab workers were replaced with non-Arab workers for economic reasons. MENA has 180 million people in the 15–64 age group—a very high proportion of its total population of 301 million in 2001. With the regional labor force growing at 3 percent a year, freeing the constraints on the movement of labor between Arab countries would have significant economic benefits.

Closer economic ties with the European Union

For countries bordering the Mediterranean, Europe is the obvious big neighbor that could act as the locomotive for growth, being the key trading partner, the key source of FDI, and a major destination for migrant labor. The European Union-Mediterranean Partnership agreements aim to establish a free trade area between the twelve South-Mediterranean countries and the EU by liberalizing the movement of manufactured goods between the two groups of countries as well as by facilitating cooperation in trade-related areas (Ghoneim *et al.* 2003).

Although these agreements can act as a vehicle for integrating MENA countries into the global economy, these countries stand to lose on certain fronts. In the low-price manufactures in which the MENA partners specialize, the agreements will intensify competition with imports from within the EU. Other challenges will be to adapt export structures, increase market shares, and adjust to the loss of tariff revenue; import duties still account for between 10 and 20 percent of tax revenue in these countries (Ghoneim *et al.* 2003).

Locking in the removal of trade barriers on imports may help stimulate

FDI inflows to the region and may induce more technology-intensive FDI (Lahouel 2001). Investors will typically prefer to locate their production operations in the EU "hub," and to enjoy market access for their products in the Mediterranean country "spokes" (Dessus and Suwa 2000). But regional integration within MENA could help overcome the hub and spoke effect of the agreements by creating a larger market.

Dynamic effects could accrue from the EU-Med agreements if they were extended to cover the harmonization of standards and to include service liberalization (Chevallier and Freudenberg 2001). Within these agreements, streamlined provisions for export and import procedures would be beneficial, including accelerated upgrading of quality control inspection and mutual recognition of the certification of product standards.[8]

Integration in the multilateral context

The pursuit of liberalization multilaterally in the context of GATT/WTO helps small countries to gain better access to developed countries' markets through the most-favored-nation principle of non-discrimination and reciprocity. The multilateral context also enhances the bargaining power of developing countries. While being members of the WTO imposes mounting commitments on MENA countries, it also provides them with the incentive to cooperate and to coordinate their positions.

The MENA countries have much to do to make their policies and regulatory frameworks consistent with WTO standards. Many of the transition periods granted began to expire in 2000. Besides the significant financial resources that are needed to fulfill these commitments, significant efforts are needed to strengthen the policy environment and reform institutions.

WTO has special provisions to assist developing countries to implement their commitments, including longer time periods for implementation, safeguard measures, and technical support. But numerous implementation requirements impose a heavy burden on MENA countries and strain their already very limited resources—which might be better allocated to other developmental priorities, especially since Special and Differential Treatment has not been binding.

The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) poses some difficult issues for MENA countries. Before the WTO, a country's laws on intellectual property protection were a domestic matter. Compliance with the minimum standards of protection under TRIPs, for six types of intellectual property rights, entails instituting domestic enforcement mechanisms. Besides the heavy expense of compliance, there are significant doubts about the benefits of TRIPs for developing countries. And the reciprocal obligations for the transfer of technology between developed and developing countries are not clear. Even since Cancún, no progress has taken place in defining how these transfers will take place and what they will cover.

As to the so-called Singapore issues raised in the WTO—trade and investment, trade and competition policy, transparency in government procurement, and trade facilitation—the Arab countries' position has been to keep these issues off the WTO negotiating agenda until pending implementation issues have been addressed. If conducted, negotiations on a potential multilateral framework governing investment would seek to eliminate the trade-restrictive and distorting effects of measures that countries apply to foreign investment (export performance requirements, local equity, and local content requirements). If agreement is reached on such a framework, some countries in MENA would need to make significant changes in their laws. In Tunisia, for example, where FDI in the manufacturing sector is unrestricted provided that at least 80 percent of output is exported (Lahouel 2001), there is deep concern that an agreement on investment would constrain the country's ability to choose the mix of investment policies that best suits its level of development.

The Agreement on Technical Barriers to Trade (TBT) encourages the adoption or recognition of international product standards and the work of specialized foreign testing agencies. Considered one of the most important WTO agreements, this deepens member countries' commitment to liberalization by ensuring that national and regional standards and specifications do not impose unnecessary technical barriers to trade. Some current customs procedures and product standards applied by MENA countries are claimed to be used as technical barriers to trade. The costs to the region of complying with the agreement are quite significant; they include training staff and updating institutions.

The debate on whether bilateral preferential trading arrangements or multilateral liberalization would be in the best economic interest of MENA countries has not been resolved (Stern 2001). What is certain is that the value of reform in itself can be significant. If MENA economies choose to engage proactively in the global economy, economic reform can be the answer to the various obstacles they face at either the regional or multilateral level.

The challenge of economic reform

Globalization will have large opportunity costs for countries whose investment environments do not encourage private sector innovation and foreign direct investment. Such countries stand to lose on account of three forces: the technological revolution, the liberalization of world trade and investment, and the emergence of new competitors from the developing world (Handoussa 1997).

To compete successfully in global markets, firms in MENA will have to reduce wages and benefits to workers, which are high by world standards (Hamdan and Hamdan 2003). These changes will affect the social conditions of the population, instigating calls for strengthening social security systems and protecting the poor at a time when public budgets are under pressure and bloated state sectors need modernization.

Although most MENA countries have adopted comprehensive programs of structural adjustment since the early 1990s—Jordan, Morocco, Tunisia, and Turkey being the first to adopt such programs (Springborg and Clement 2001)—distortions still exist in financial markets and in foreign trade, and rigidities in the labor market are still responsible for serious imbalances across various skills and qualifications (Handoussa *et al.* 2000).

A survey of the reform experience of MENA countries shows that macroeconomic stabilization has been quite successful and that structural adjustment has not. Countries that pursued macro-stabilization programs in the early 1990s have reduced their inflation rates and budget deficits to acceptable levels and fixed their exchange rates. In all the South-Mediterranean countries following reforms, inflation averaged about 2.9 percent a year and hard currency reserves covered up to five months of imports. Growth averaged 4.4 percent in 1995–98 before slowing to 2.5 percent in 2001 (FEMISE 2002).

Though few of the reforms have been reversed, structural reforms have not produced the desired outcomes. Part of the problem is that reforms prescribed under the Washington Consensus explicitly or implicitly assumed that once liberalization took place, with other appropriate adjustment policies in place, the market would allocate resources to sectors of comparative advantage and channel them away from others. But, as Rodrik (2000) shows, the application of a single model or recipe for economic development, unaccompanied by country-specific strategies, will fail to deliver desired outcomes. In MENA, insufficient attention was paid to the structural features of the reforming economies, and little research was done on the types of activities in which MENA has a comparative advantage (Karshenas 1999).

MENA's economic reform experience has been dogged by two main problems. One has been the slow pace of structural reform. The other has been the limited supply response in areas where reforms have taken place (Karshenas 1999). The latter problem has been reflected in the slow growth of the private sector and the low FDI inflows compared to the region's potential.

The slow pace of reform may reflect the particular political and socioeconomic characteristics of MENA countries. Waterbury and Richards (1998) suggest that economic reform in MENA has been heavily affected by the difficulties and contradictions of state-led growth and influence from abroad. Economic considerations have been dominated by political ones, to the detriment of economic stabilization and structural adjustment efforts. The decision to embark on any economic reform is largely a political one, but the regimes in MENA have pursued a selective economic rationalization process guided more by political than by economic logic; the goal of policy-makers has often been to achieve a tradeoff between undertaking the badly needed reforms and maintaining their patronage networks. Syria's response to economic crises in 1985 was highly characteristic of the selective reform process. To avoid political instability and reassure constituencies who had a stake in the status quo, the Ba'ath Party affirmed the role of the public sector in the economy alongside the private sector and adopted a piecemeal approach to crisis management (Heydemann 1992).

In many MENA economies, a long legacy of state intervention and a large public sector are major factors complicating the process of economic reform. Even after the structural reforms of the 1990s, the weight of the public sector remains significant, at 40 to 60 percent of gross domestic output and employment in some countries. In the region as a whole, (civilian) government accounts for 17.5 percent of total employment, compared to only 11 percent worldwide. Private investment represents only 40 to 45 percent of total investment in the region—much lower than the 75 to 80 percent typical of Latin America and East Asia (ERF 2002a). Public sector firms have proliferated as a result of import-substitution policies for industrialization, price distortions, and subsidized credit and inputs. The result has been disguised unemployment, limited contributions of state-owned enterprises to exports, and low productivity. The large public sector offers job stability and high wages compared to the workload, and the civil service has staunchly resisted attempts at downsizing.

Political dimensions of globalization

The political dimensions of globalization have centered on the question of good governance and associated issues of democracy, accountability, participation, and transparency. The issue of domestic political reform has become increasingly internationalized, and MENA countries have come under mounting scrutiny and pressure from the international community to reform politically. This has provoked strong resistance to globalization among some regimes in the region, where the security of the state apparatus has tended to prevail over societal interests.

Experience has disproved the assumption that authoritarian or mobilization regimes are more successful than others in adopting and implementing economic reform and structural adjustment. Equally, the idea that democracy comes at the expense of development no longer stands up to scrutiny (Heydemann 1993; Bhagwati 1998). UNDP's 2002 *Human Development Report* states that democracy is not a luxury for developing countries and that, although the links between democracy and equitable development are not strong, democracy has positive implications for social and economic development. It adds that strengthening democratic institutions and democratic politics will enhance participation and accountability. According to Nobel Laureate Amartya Sen, participation through the free and open debates that democracies promote contributes positively to development (UNDP 2002a). Cross-country evidence suggests that political freedom helps to accelerate economic growth (ERF 2002a).

Relative to the rest of the world, MENA countries on average show a sizeable gap in public accountability (World Bank 2003c). Political freedom in MENA is restricted in many instances, and a measure of voice and accountability shows that in 2000/2001, Arab countries ranked the lowest of all regions (Table 13.4).[9] Arab countries still have the lowest levels of political freedom worldwide: Saudi Arabia and the UAE have not granted either men or women the right to vote, and in Kuwait and Qatar, women do not have the right to vote.

Restrictions on the establishment of professional organizations and NGOs in the region, through bureaucratic constraints and tight surveillance of their activities, have hampered efforts to create participatory and proactive civil societies. The quality of governance in most countries of the region is challenged by weak voting systems, insufficient consultative mechanisms, lack of transparency and accountability, and inadequate separation of powers between the legislature, the executive, and the judiciary (World Bank 2003c).

Positive developments are taking place in some countries of the region; for instance, in Bahrain women have won the right to vote; in Morocco and Jordan, women's participation in parliament has noticeably increased (UNDP 2003a); and in 2002, Oman extended voting rights to all citizens over the age of 21 (World Bank 2003f). But generally, reforms have been limited in scope.

Several historical and contemporary factors account for this sluggish performance. Historically, colonialism played a role in creating centralized bureaucracies and institutionalizing a top-down approach to development with minimal room for civil society to participate in decision-making. This trend continued with the revolutions of the 1950s and 1960s, when the process of state-building assumed priority and the goal of governments was to centralize power, so as to minimize and prevent any internal opposition and external intervention. Regimes in the region became increasingly aware of the need to maintain their stability in the face of internal challenges, even at the cost of the economy. Their survival strategies resulted in highly interventionist states, high military spending, bloated bureaucracies, huge public sector wage bills, a well-entrenched civil service, protection of inefficient and sometimes loss-making state-owned enterprises, and the crowding out of the private sector.

Table 13.4 Comparison of regional averages for a measure of voice and accountability, 2002

East Asia	–0.02
Eastern Europe	+0.51
Latin America and Caribbean	+0.38
MENA	–0.72
OECD	+1.38
South Asia	–0.64
Sub-Saharan Africa	–0.63

Note: Range –2.5 to 2.5; the higher the better.

Source: D. Kaufmann, A. Kraay, and M. Mastruzzi 2003: *Governance Matters III: Governance Indicators for 1996–2002*.

MENA's experience suggests a direct correlation between the political status quo and the outcomes of economic reform. The lack of public accountability has delayed the adoption of the austerity measures—including the reduction of subsidies and public sector wages and salaries—that are needed if the region is to cope with the challenges of globalization. Economic liberalization has meant loosening the grip of local patron-client networks and bureaucratic states over societies (Murden 2002), and has often been resisted. In several economies, increased intervention and bureaucratic impediments have promoted capital flight and the expansion of the informal sector. In addition, the rent-seeking behavior of some bureaucratic elements has caused the misallocation of resources as well as resistance to reform.

A strong and dynamic private sector is virtually nonexistent except in Morocco, which possesses the region's oldest-established bourgeoisie. Having a sizeable middle class has proved to be a success factor in that country's stabilization efforts and its move towards a market economy (Waterbury 1998). In most of the region, states have been more interested in creating a crony-capitalist class that thrives on highly protected domestic markets and remains subservient to the state.

Oil rents have been a mixed blessing in the region. They have allowed for significant spending on welfare and infrastructure and impressive improvements in education and health. But they came at the cost of limited accountability of states to their citizens and the limited participation of the latter in governance. Oil reserves have also exacerbated external intervention in regional affairs. The cycles of boom and bust in the US economy have coincided with cycles in oil prices (for example, in the 1990s, a sustained period of low oil prices resulted in the US economic boom). As a result of this association, and owing to its geo-strategic position, the MENA region has long been the victim of multilateral great-power politics (Springborg and Clement 2001).

Oil rents have also fueled the arms race. Regional conflict, especially the Israeli-Palestinian conflict and the two Gulf Wars, has pushed the region's military expenditure to the highest levels in the world. Public spending on the military exceeds that in education and health, reaching 6.7 percent of GDP in 2001, compared with 5.3 percent on education and 2.9 percent on health in 2000 (World Bank 2003a). The current war in Iraq emphasizes that the situation is unlikely to improve over the medium term and that instability will continue to feed the arms race in the region.

Effects of political developments on economic performance

The region's economic performance has been strongly affected by political developments, whether domestic, regional, or international. For instance, the Israeli-Palestinian conflict in 2000–2 halved the GNP of Palestine and tripled the number of poor there (UNDP 2003a).

Repeated attempts to achieve some form of Arab political cooperation or unity include the United Arab Republic between Egypt and Syria of 1958–61 and, most recently, the Arab Cooperation Council (Egypt, Iraq, Jordan, and Yemen) established in 1980 (Ismael and Ismael 1999). Arab collaborative interaction peaked with the Arab oil embargo during the Arab-Israeli war of 1973.

But interregional divisions have taken their toll on inter-Arab cooperation and regional politics. Divisions on the Arab-Israeli and Iraqi questions, in one way or another, have undermined any meaningful cooperation and made the Arab world more permeable to external intervention (Ismael and Ismael 1999). The irregular convention of Arab Summits is just one manifestation of these divisions. The year 1996 saw the first Arab summit in six years, and not until September 2000 did the Arab League Foreign Ministers' Council approve a mechanism for convening regular annual summits. A first Arab economic conference, scheduled to be held in June 2002 in Cairo as the start of a hoped-for annual series of such conferences, did not take place because of the heightening of the Israeli-Palestinian conflict.

Creating a knowledge society and the challenges of ICT development

The crisis in MENA's development process is strongly related to the region's technology policies. The digital divide between MENA and the developed economies is wide and growing. In a region that suffers from restricted access to information and data, a key challenge is to establish effective, dynamic knowledge acquisition systems (UNDP 2002b). Both Syria and Iraq restrict Internet access for the public, and Saudi Arabia only began permitting the public use of the Internet in 1998 (Hopkins and Carr-Hill 2001).

The region's ability to collect, access, and disseminate knowledge depends heavily on the quality and availability of ICT infrastructure. Statistical indices that measure the digital divide between MENA and other developing and developed regions[10] show that the region scores favorably with regard to telephone lines and personal computers but ranks last with regard to websites and numbers of Internet users.

The region clearly lags behind in technology creation and innovation, as measured by patents granted to residents, and in diffusion of recent innovations, as measured by the share of high- and medium-technology exports in total goods exports. New technology in the region is mostly imported through turnkey contracting and reliance on foreign consulting firms (UNDP 2002a). Technology transfer without creative contributions from within the importing country will only result in technological dependence.[11]

A measure of ICT maturity[12] in Arab states categorizes countries into fast-track performers, emerging, and developing. Kuwait and UAE are fast-track performers that have developed an ICT growth agenda and have a high level of readiness to absorb ICT as well as significant usage penetration levels. Emerging ICT markets are Egypt, Jordan, Lebanon, and Saudi Arabia; these countries have developed an environment for fast ICT growth but have insufficient readiness and usage levels or vice versa. Developing countries have generally lagged behind in their efforts to bridge the digital divide; this group includes Morocco, Oman, and Syria (Dutta *et al.* 2003).

Investments in technological innovations can help countries overcome the constraints of low income and weak institutions (UNDP 2003b). Instances of success in technological development in the region include oil extraction and processing in Kuwait, water desalination in Saudi Arabia, the design of sugar production lines in Egypt, and some military manufacturing in Egypt, Iraq, and Syria (UNDP 2003a). Building on each other's experiences and learning can help Arab countries to develop and implement their individual ICT agendas as well as to create a regional ICT market (Dutta *et al.* 2003).

The depth of research and development (R&D) taking place in a country is a key indicator of progress and development. According to the *World Science Report*, Arab countries as a group have some of the lowest levels of research funding in the world; in 1996, their R&D expenditure was only 0.4 percent of GDP—comparable to the figure in Latin America and the Caribbean but lower than in all other regions except sub-Saharan Africa. Government has been by far the largest source of R&D funding; recent data are not available, but in 1992 the private sector supplied less than 1 percent of total R&D expenditure in the Arab world (Qasem 1995).

The links between science and technology institutions and industry are weak in MENA. Most science and technology institutions in the region are inherited from the import-substitution era; they are publicly funded with limited exposure to competition or state of the art technology.

Cultural and social dimensions of globalization

The increased interconnectedness resulting from ICT advancement has tended to expose societies to new ideas and experiences and different cultures and traditions, sometimes posing challenges to their own cultural patterns and practices. Traditional Middle Eastern values such as egalitarianism and the primacy of community are being challenged by globalization, which stresses the logic of the market, profit, and individualism. The responses to the cultural challenges arising from globalization have ranged from acceptance, and emulation of the values that globalization promotes, to outright rejection of globalization and its symbols.

The spread of consumerism associated with globalization is also a cause of concern in MENA. Aspiration to Western and US consumption models has been the driving force for market liberalization in third world countries, China, and the former USSR, and the driving force for economic globalization (Cox 1996). The 1998 *Human Development Report* recorded that the consumption of "luxuries" is rising faster than the consumption of "necessities," widening disparities in consumption standards and leading to exclusion, rather than inclusion, of the poor. Transnational corporations readily exploit consumerism to achieve market access and product marketability. The cheapest strategy for such a firm is homogenization: instead of adapting its products to the different cultures and traditions in local markets, homogenization adapts local cultures to the firm's products and services. The dominant pattern of global consumer culture is Western (Murden 2002), and many services, notably education, media, entertainment, and the food industry, directly embody Western cultural values and symbols that are alien to certain Islamic and traditional values. According to some Arab thinkers, globalization can be perceived as the latest stage of neocolonialism, enabling the center to preserve its markets and cultural influence (Abu-Rabi 1998). Islamic resurgence and fundamentalism in both Arab Muslim and Asian societies is sometimes a reaction to "alien" Western values.

Springborg and Clement (2001) have drawn analogies between responses to colonialism and contemporary responses to globalization in MENA. Examining the structure of the state and civil society, they argue that the dialectics of globalization perpetuate the colonial dialectic that was played out by earlier generations of indigenous elites.[13] Elites in the region today can be divided into "globalizers," who accept globalization and whose behavior embodies its values, and "moralizers," who either reject globalization and its symbols or succeed in synthesizing them with traditional and Islamic values.

Certain forces within MENA society strongly believe that modernization and Westernization are two sides of the same coin: that to modernize, a country must Westernize. Yet many countries, notably China and Japan, have been able to adopt Western technology while preserving their own cultural identities. Saudi Arabia and Iran have to some extent been able to modernize without Westernizing. Yet as Huntington (1996) suggests, modernization and globalization at the societal level enhance economic and military power, resulting in increased cultural assertiveness.

Fortunately, several cultural features in MENA tend to cushion against the negative implications of globalization. One of these features is that social capital plays an important role in development. The importance of community obligations has resulted in the lowest incidence of poverty in the world. A study by Page and Van Gelder (2003) showed that over the last thirty years the region made remarkable progress in addressing extreme poverty compared to other regions in the world. Throughout the 1990s, MENA stands out among the developing regions with the lowest incidence of extreme poverty measured as those living on less than $1 per day (ibid. 2003).

Another challenge faced by MENA is that popular views in the West, fueled by media and political interests, have tended to equate Islamic resurgence and activism with terrorism. This has conditioned the manner in which non-Muslims deal with Muslim societies and, conversely, it affects the response of the latter to the former (Esposito 1992). Emphasis on a clash of civilizations and an "us versus them" argument has strengthened in the wake of the September 11 attacks on the US.

Muslim migration and conversions to Islam are consolidating a new Islamic presence outside the region. Islamic civilization has fostered bonds of solidarity among diverse ethno-cultural groups. In the Ottoman period, Islamic centers of learning—Al-Azhar in Egypt, Qayrawan in North Africa, and Najaf in Iraq—constituted the hubs of intellectual exchange and cooperation between diverse peoples. Today—with 20 million Muslims in Europe and 6 million in the US (Mazrui 1998)—there are chances that an Islamic presence in the West might help to promote a dialogue between peoples of different cultures and religions that can help MENA to retain its cultural independence and help others to understand the values it espouses.

Controlling labor migration into Western countries will only set back this cultural dialogue and mutual understanding and replace it with competition. The European Union, in particular, represents a promising labor market for Arab expatriate workers (ERF 2000). For the European Union to maintain a stable ratio of workers to pensioners over the next fifty years, it would need to import 16 million workers every year. Meanwhile, the annual increase in the labor force of Arab countries is 5 million workers.

Globalization and the participation of women

A problem peculiar to MENA is the inability or unwillingness of most of its societies to fully utilize the potential of their women in development. Despite the significant improvements in the educational attainment and health of women in the Middle East, their economic and political participation and empowerment lag far behind that in other developing regions, implying a considerable waste of skills and talent that have been developed through public investment.

MENA countries have some of the lowest female labor force participation rates and highest fertility rates in the world. Fertility rates are now declining dramatically as women become better educated. Female labor force participation increased from around 24.6 percent in 1980 to 32.3 percent in 2000, and is forecast to reach 44.3 percent in 2020 (World Bank 2003e, 2003f), but is far from commensurate with women's rising educational attainment and declining fertility.

Female labor absorption in the formal private sector has been slow. Despite economic restructuring efforts and the shifting role of the state in many MENA economies, the private sector has not been able to absorb the growing labor market entrants. As noted above, during the 1960s and 1970s, most countries in the region rapidly expanded the public sector. With their guarantees of job security and social protection, public organizations became the largest source of jobs for women, and in several countries they remain so today.

Within the private sector in MENA, female participation in services has increased in the last decade, but the largest employer of women is agriculture. Except in Lebanon, the share of women workers who are in agriculture generally exceeds 40 percent, and it is more than 60 percent in Iran, Morocco, and Yemen (Tzannatos and Kaur 2003). During the 1990s, the share of women employed in private wage work outside agriculture declined, as did the share of female entrepreneurs (employers and self-employed), in the labor force. A growing proportion of working women, especially new entrants to the labor force, are in informal employment (Wahba 2003).

Significant gender-based wage gaps still discourage women from seeking jobs in MENA. If women's characteristics, such as education and experience, were compensated in a similar way to men's, women's average wages in 1998 would have been 15 percent higher than men's in Egypt and 86 percent higher in the West Bank and Gaza (World Bank 2003e). Persistent discrimination in access to labor markets and training reinforces gender-based wage gaps and the limited participation of women in the labor force (UNFPA 2003).

Due to significant changes in the global economy, women's labor force participation rates and shares in the labor force have increased almost worldwide. For women in Middle Eastern societies, globalization has profound implications for the opportunities to work and, potentially, for societal attitudes toward gender. Generally, women have been disadvantaged in labor markets because their working conditions are not adjusted to household and childcare responsibilities (Moghadam 2002). Inflexible working conditions result in women receiving lower-paid, part-time, or temporary employment, and sometimes forgoing promotions and other advancements (World Bank 2003f). But with globalization, the trend worldwide has been a growing demand for flexible labor in export industries and services, altering the pattern of work away from regular and full-time wage employment in favor of more flexible arrangements including part-time and home-based work (UNFPA 2003).

Although this trend may enhance the opportunities for women's employment in MENA, existing social norms in MENA act as a brake on women's interactions in the public sphere. These norms define what are appropriate occupations for women and set expectations regarding responsibilities for domestic work and childbearing. They also specify what are appropriate working hours, commuting distances, and workplaces. These norms shape not only what women and their families perceive as appropriate jobs, but also employers' expectations about the suitability of women as workers (Wahba 2003). The patriarchal gender contract has been particularly pervasive in the region. This is a set of social relationships between men and women predicated upon the male breadwinner/female homemaker roles, in which the male works in wage employment and the female largely depends for support upon male members of her family (Moghadam 2002). It is worth highlighting that Islamic tradition and laws accept the financial independence of women and give them the right to dispose of their assets as they please. However, economic regulations and traditional social norms act as barriers to women's participation in the economic sphere (Chamlou and Yared 2003).

To enhance women's participation in labor markets in MENA, by far the most important challenge is the need for a change of attitude towards women's employment. Policies are also needed that improve women's self-employment opportunities by providing them with credit and loans to set up small businesses. Providing incentives or subsidies to small and medium firms that hire women would help achieve this goal. There is also a clear need to invest more in demand-driven training to enable women to participate in the private sector, as well as to encourage labor-intensive manufactured exports to create jobs. Childcare facilities and other services would enable more women to participate in the labor market.

Conclusion

Two sets of determinants are responsible for MENA's failure thus far to reap the potentially large benefits of globalization. First is the configuration of political and geo-strategic circumstances that has regularly disrupted the region both with intra-regional conflict and with interference from foreign partners in its internal affairs, and has encouraged the hemorrhage of domestic resources—either to be spent on security and defense or to be transferred abroad by the private sector to escape endemic instability. Second is a combination of poorly designed and executed national economic and social policies. Except in three or four of the region's twenty-two countries, economic management has been passive and crisis-driven, lacking a clear vision and related programs for achieving proclaimed goals such as productivity growth, job creation, and export diversification.

Despite their wealth of human and natural resources and rich cultural heritage, countries of the Middle East risk further impoverishment and isolation. Globalization poses enormous policy challenges for the region. The policies associated with past socialist regimes and centrally planned economies sorely need revision. Creating an enabling environment for private sector investment and exporting will help to achieve the growth that is needed to absorb the swelling tide of job-seekers. But adjustment is a difficult process, given the embeddedness of certain policies, institutional arrangements, and norms. Revisiting the role of the state in MENA is imperative in the new global context. At the same time, a delicate balance should be achieved between those policies that aim at integrating the region into the world and those that are needed to maximize its development potential.

The region will make no real progress on the development plane while it lives in constant turmoil, the root of which is humiliation and threats to the identity and future of an entire generation of young Arabs. Globalization should mean widening the scope of human choice and the full exercise of human rights. The Middle East, more than any region in the world, needs a fair arbitrator in the global political arena, along with the provision of all other public goods. When the international community can deliver respect for the rights of individuals to security in their own homes, citizens of the region can better demand democracy from their leaders.

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Notes

1 The Economic Research Forum for the Arab Countries, Iran, and Turkey. The authors would like to acknowledge the research assistance of Yasmine El-Shafei, Economic Research Forum.

2 Countries in the region are often classified into three categories: (1) those that are oil-rich and labor-scarce and enjoy high per capita incomes—mainly the Gulf Cooperation Council (GCC) countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates); (2) countries that are relatively diversified, labor-abundant, and enjoy middle-level per capita incomes—the Maghreb countries (Algeria, Morocco, Tunisia, and Libya) and the Mashreq countries (Egypt, Iraq, Jordan, Lebanon, Palestine, and Syria) as well as Iran and Turkey; and (3) the low per capita income, subsistence economies such as Mauritania, Somalia, Sudan, and Yemen.

3 In particular, in the second half of the 1990s, the reforming Mediterranean countries within the region succeeded in raising their FDI volumes and their ratios of FDI to GDP. Uses of this FDI included greenfield investments, privatization transactions, and joint venture projects with local partners.

4 Trade within the European Union is driven by a high degree of complementarity, but also by imperfect competition and product differentiation (Fawzy 2002).

5 By contrast, the European Union has been particularly successful in compensating losers from trade reform through transfers and soft lending by the European Social Fund and the European Investment Bank (Hoekman and Messerlin 2002). The EU has also used subsidies and protection of sensitive sectors such as agriculture through its Common Agricultural Policy, as well as providing massive amounts of aid to poor and underdeveloped regions.

6 Bahrain, Iraq, Kuwait, Libya, Oman, Qatar, Saudi Arabia, and UAE.

7 Major labor-exporting countries are Algeria, Morocco, Tunisia, Egypt, Jordan, Lebanon, Syria, and Turkey.

8 In the area of customs and port reform, introduction of the EU's single administrative document was suggested (Ghesquiere 1998). The Tunisian-EU Partnership Agreement stipulates that the EU will help Tunisia use European product standards and certification procedures; however, mutual recognition of certification is an objective that will be put into effect only when "the required conditions are met" (Lahouel 2001).

9 This is a measure of the extent of free and fair elections, freedom of the press, civil liberties, political rights, military involvement in politics, transfer of power, transparency, "business kept informed of developments in law and politics," and "business can express its concern over changes in law and politics" (UNDP 2002).

10 Telephone lines and personal computers per 1,000 people in 1999; websites per 10,000 people in 2000; and thousands of Internet users in 1999.

11 The presence of Arab countries in the United Nations Development Program's technological achievement index is very slim indeed. The index was established using data from only five Arab countries—Algeria, Egypt, Sudan, Syria, and Tunisia—since too few data were available for others.

12 ICT maturity is measured on the basis of three parameters: environment (the conduciveness of the environment for ICT development); readiness of stakeholders to take advantage of a strong ICT environment; and usage of ICT services.

13 The authors use the term "dialectic" to refer to a set of ideas and attitudes defining elite-mass relationships rather than material forces.

14 Bangladesh

Development outcomes and challenges in the context of globalization

Wahiduddin Mahmud

Bangladesh faces the challenge of achieving accelerated economic growth and alleviating the massive poverty that afflicts nearly two-fifths of its 140 million people. Strategies for meeting this challenge have included a shift away from state-bureaucratic controls and industrial autarky towards economic liberalization and integration with the global economy. These policy reforms were initiated in the mid–1980s against the backdrop of serious macroeconomic imbalances, which had been caused in part by a decline in foreign aid and in part by a preceding episode of severe deterioration in the country's terms of trade. The beginning of the 1990s saw the launching of a more comprehensive reform program, which coincided with a transition to parliamentary democracy from semi-autocratic rule.[1]

Since the early 1990s, Bangladesh has notably improved both its economic performance and its human development indicators. Even with a significantly reduced and declining dependence on foreign aid, the economy appeared to begin a transition from stabilization to growth. The growth of per capita GDP had been slow in the 1980s, at an annual average of 1.6 percent a year, but it accelerated to 3 percent in the 1990s, and to about 4 percent in the more recent period. The acceleration resulted partly from a slowdown in population growth but also from a sustained increase in GDP growth, which averaged 3.7 percent annually during the 1980s, 4.8 percent during the 1990s, and 5.6 percent since then. Progress in the human development indicators was even more impressive, and Bangladesh ranked among the top performing countries in the 1990s in the extent of improvement in the UNDP Human Development Index.[2]

Bangladesh's achievements may appear as a "development surprise," given the country's allegedly poor record in governance adversely affecting the investment climate and the quality of public service delivery (Ahluwalia and Mahmud 2004; Devarajan 2005). It also shows that the economy is performing below potential. Today there are signs, however, that continued progress may prove increasingly difficult without an improvement in the country's institutions of political and economic governance. Underpinning the growth of Bangladesh's economy has been strong export growth. The export performance has now been put to the test by the threat of fiercer competition in the export of readymade garments market—the country's flagship in the global market—following the expiry of the Multi-Fiber Agreement (MFA) at the end of 2004.[3]

Given its increased reliance on external trade, Bangladesh's overall economic performance has come to depend to a large extent on how well it can cope with risks and opportunities in the global market. Undoubtedly, the country will have to deal with a whole range of internal policy issues, from public finance and the financial system to governance and the investment climate. But much will also depend on the changes in the global economic scenario and on how domestic policies respond to such changes. This chapter highlights this latter aspect in the wider context of Bangladesh's development options and challenges. First, it analyzes the macroeconomic trends and the factors contributing to growth acceleration since the early 1990s. Then, it looks at the impact of trade and exchange rate policies on industrial incentives and examines the prospects for export growth, especially in the context of Bangladesh's possible responses to heightened competition in export markets for garments. There is an examination of the factors underlying the trends in poverty reduction and social development indicators, followed by some concluding remarks.

Macroeconomic performance: from stabilization to growth

Trends in macroeconomic indicators

Bangladesh's economic stabilization program initiated in the 1980s aimed primarily at reducing the fiscal and external deficits to a sustainable level, consistent with the reduced and declining availability of aid. By the end of the 1980s, the external current account deficit had been reduced to about 5 percent of GDP, from between 8 and 10 percent at the beginning of the decade. There was a similar reduction in the overall budget deficit, but this was achieved by cutting back on investment, both public and private, rather than by mobilizing larger domestic savings. The ratio of investment to GDP steadily declined, and the government's development budget became almost entirely dependent on foreign financing. Throughout the 1980s, the share of public savings in domestic savings continuously declined, given the rapid growth in current expenditures along with a stagnant and low ratio of revenue to GDP. As a result, macroeconomic strains started to reappear towards the end of the decade (Mahmud 2001, 2004).

Against this backdrop, macroeconomic indicators improved markedly in the 1990s. Although the net inflow of foreign capital further declined to less than 2 percent of GDP, reflecting a further decline in foreign aid, the ratio of gross investment to GDP steadily increased, from about 17 percent in 1990/91 to 23 percent in 2000/01. This increase was almost entirely due to the dynamism in private investment, which rose from about 10 percent of GDP to about 16 percent during this period, while the investment rate in the public sector remained unchanged at around 7 percent of GDP. The dynamism in private investment has continued in the more recent years as well, but its effect on further increasing the overall investment-GDP ratio has been somewhat muted because of a decline in the rate of public investment.

The increase in the overall investment rate was backed by an even more marked improvement in the domestic (and national) savings rate. A significant increase in the tax/GDP ratio in the early 1990s, following the introduction of the value added tax, helped to raise public savings and reduce the dependence of the government's development spending on foreign aid. Although the government increased its domestic borrowing as aid declined, the overall budget deficit was kept mostly within the limit of fiscal sustainability. Average annual inflation, as measured by the official consumer price index, has come down from about 10 percent in the 1980s to about 6 percent since then, providing further evidence of successful stabilization. The transition to democracy was thus clearly accompanied by better macroeconomic management and improved fiscal prudence. This said, there were some periodic lapses in fiscal discipline related to the timing of approaching national elections, producing the symptoms of the so-called "political business cycle."[4]

Despite the overall soundness of these macroeconomic trends, there were some disconcerting features. While the increase in the investment rate was entirely led by private investment, there were at times symptoms of a feeble investment response to policy reforms. In the early 1990s, for example, the marked increase in the savings rate found no commensurate response from private investment, producing a situation of aggregate demand deficiency. Thus, apart from the resource constraint on investment growth, the "desire to invest" factors may have become important in the post-reform era, particularly because of the withdrawal of public investment from the directly productive sectors.

It is difficult to ascertain whether the rapid reduction in industrial protection achieved through import liberalization in the early 1990s had a role behind the lack of investment response at that time. The uncertainty created by these reforms, which had no pre-announced targets or timetable, could have been a contributing factor as well. But the problem may have much less to do with the structure of industrial incentives than with the overall investment climate. The factors that discourage investment in Bangladesh are well documented, including poor infrastructure, a weak financial system, corrupt and inefficient bureaucracy, collection of illegal protection money, and an inadequate legal system.

The experience of macroeconomic management in the post-liberalization period also shows the fragility of the country's balance of payments, notwithstanding the very impressive export growth. Periods of marked dynamism in investment and industrial activity turned out to be short-lived, limited by the balance of payments constraint and resulting in the depletion of foreign exchange reserves. This was true of the two episodes of mini-boom that took place around 1994–95 and 2000–1. In both cases, there was an upturn in large-scale manufacturing production associated with a rapid expansion of private sector credit and high growth in the import of capital goods and industrial inputs. In both cases, external deficits increased and foreign reserves sharply diminished, until stabilization measures stifled the growth of investment and manufacturing.[5] This pattern reflects the highly import-intensive nature of investment and manufacturing activities in Bangladesh, where most capital goods are imported, domestic manufacturing depends heavily on imported raw materials and intermediate goods, and finished consumer goods account for less than 10 percent of all imports. Bangladesh has little room for adjusting to lower import growth without subduing investment demand or creating capacity underutilization in the economy.

Until hit by the global recession in 2001, Bangladesh had achieved robust and sustained growth of export earnings, averaging about 15 percent a year in nominal US dollar terms in the 1990s. As a result, the ratio of export earnings to GDP doubled from 7 percent to nearly 14 percent. In 2001–2, export earnings declined in dollar terms for the first time since 1985–86, but there was a recovery in the following year and export growth has remained strong since then. In fact, Bangladesh seems to have successfully withstood the initial impact of the post-MFA competition in the global markets for garment export, although as will be discussed later, the real test may be yet to come. Another positive factor has been the continued growth in the inflow of migrant workers' remittances—from about 2.5 percent of GDP in the early 1990s to nearly 8 percent in 2005–6, amounting to about US$4.8 billion annually.

Sources of growth stimulus

All broad sectors of the economy—agriculture, industry, and services—have contributed to the growth acceleration since the early 1990s. The average annual growth of agricultural GDP accelerated from 2.5 percent in the 1980s to 3.2 percent in the 1990s, industrial GDP from 5.8 to 7.0 percent, and the service sector GDP from 3.7 to 4.5 percent.[6] In spite of some fluctuations in crop production, the volatility in long-term GDP growth in Bangladesh is found to be remarkably low among developing countries.[7]

Within manufacturing, the growth has come largely from the readymade garment industry; during the 1990s, medium- and large-scale manufacturing as a whole grew at about 7 percent annually, but at only about 4 percent excluding the garment industry.[8] This implies that growth in the organized manufacturing sector has been mainly export-led. But it also means that the manufacturing and export base of the economy has become more concentrated rather than more diverse. Fisheries have been another high-performing activity, with an annual growth rate rising from about 2.5 percent in the 1980s to more than 8 percent in the 1990s. It is noteworthy that, aside from garments, frozen shrimp was the only fast-growing major export item in the 1990s (Table 14.1).

Table 14.1 Bangladesh: growth of exports since 1990 (Annual export earnings in million US dollars)

Export item	*1990/91*	*2004/05*
Textiles (mainly readymade garments and knitwear)	890	6,418
Frozen foods (mainly frozen shrimp)	142	421
Raw jute and jute goods	395	404
Leather and leather goods	137	221
All other exports	510	1,190
Total exports	1,718	8,654
Of which, manufactured exports	1,411	8,006

Sources: Official export data of the Export Promotion Bureau as reported in Bangladesh Bank's *Annual Report* (various years) and World Bank (2005).

Exports are, however, only a part of the growth dynamics in Bangladesh. Though the structure of the economy is changing, the organized sectors of the economy still remain relatively small, with no more than 12 percent of GDP currently originating from large- and medium-scale manufacturing. Agriculture still contributes about 20 percent of GDP, and a much larger share of GDP originates from the so-called informal sectors outside agriculture: small-scale processing and manufacturing and various informal services.[9] The growth rates of these informal activities accelerated in the 1990s, contributing substantially to the acceleration of overall GDP growth (Osmani *et al.* 2003). Many of these activities—being extremely labor-intensive and requiring very little capital investment—are largely demand-driven, responding to at least three major sources of increased income: crop production, readymade garment exports, and workers' remittances, in that order of importance.[10]

Though these informal activities have expanded largely as the result of demand linkages with the leading productive sectors of the economy, they have their internal growth dynamics as well. There is evidence that their growth acceleration in the 1990s was accompanied by a tilt towards relatively scaled-up activities that use labor more productively and can cater to more income-elastic demand (Osmani *et al.* 2003). Import liberalization is likely to have played a role here, by allowing better access to imported inputs and technology. For example, in the post-liberalization period, small-scale manufacturing activities (excluding handlooms and cottage industries) fared better than large-scale manufacturing, growing at an average rate of more than 9 percent annually in the 1990s.[11] Small industries seem to have benefited from the liberalization of imports of capital machinery and raw materials, while their products—being mostly remote substitutes for imported items—had an advantage over those of their large-scale counterparts, which faced stiffer competition from imports.[12]

The growth in crop agriculture, averaging about 2 percent annually over the last two decades, has thus far been almost entirely due to increased rice and wheat production. Profitability analyses show that, beyond the attainment of self-sufficiency in rice, there is potential to accelerate agricultural growth through crop diversification. Interestingly, Bangladesh does not appear to have comparative advantage in products such as edible oils and sugar, in which there is considerable import dependence and which currently enjoy high protection (Mahmud *et al.* 2000). High-value crops such as fruits and vegetables could be profitably produced both for domestic consumption and for export, but a shift from rice to such crops will require technological dissemination, better integration with processing and marketing, and provision of other support services. Research and development activities in agriculture would also need to be strengthened and would need more funding and donor assistance than is currently available. For these products to enter the export market would require even more sophisticated marketing infrastructure.

External sector policies

Impact of import liberalization

By international standards, Bangladesh has had one of the most rapid episodes of import liberalization, from the withdrawal of quota restrictions during the late 1980s to the reductions in import tariffs in the first half of the 1990s. But since then further liberalization has been rather slow. Taking into account all import duties having a protective effect, the unweighted average import duty rate is estimated to have declined from 74 percent in 1991–92 to 32 percent in 1996–97 and 29 percent in 2003–4. The slower decline since the mid-1990s is partly because cuts in customs duties were offset by other protective duties and para-tariffs (World Bank 2004; Mahmud 2004). As a result of these reforms, Bangladesh still has a relatively closed economy.

An important concern regarding trade liberalization is the possible adverse effect of tariff reductions on government revenue. More than half of total tax revenue still comes from import duties, even though the introduction of the value added tax has reduced the dependence on such duties. Thus far, the revenue effects of reductions in the rates of customs duties have been more or less offset by the growth of imports. If, however, there is a slowdown in trade expansion because of global economic factors, revenue will become a stronger concern in discussions of further trade liberalization.

A feature of the above tariff reforms is the end-use based discrimination in protective duty rates. Capital goods and primary commodities are subject to much lower rates of tariffs compared to intermediate goods, while the highest rates apply to finished consumer goods. This has helped to retain relatively high rates of protection for the later goods even within the much lower average import tariffs; at the same time, the anti-export bias of the tax system is reduced because of lower taxes on imported inputs. Such a system of tariff escalation has suited the interest of the protectionist lobbies, since the domestic import-substituting industries mainly produce finished consumer goods.

But the system of incentives thus created works against a "deepening" of the domestic manufacturing structure, making it even more import-dependent.[13]

As noted earlier, while external liberalization in Bangladesh has been accompanied by acceleration in overall industrial growth, this is almost entirely attributable to the success in garment exports. Many import-substituting industries seem to have been adversely affected; indeed, the official index of Bangladesh's large- and medium-scale manufacturing industries shows that almost half of the country's four-digit industries contracted during the first half of the 1990s—the period of rapid tariff reductions. And though some gains were made in the overall production efficiency of import-substituting industries, they occurred more because of the exit of the relatively inefficient (mostly state-owned) industrial units than because of technological improvements made at the firm level (World Bank 1999). Clearly, domestic industries need to improve production efficiency in order to be able to withstand further reduction in protection. One exception is the pharmaceutical industry, which grew rapidly as an import-substituting industry, trebling its output in the 1990s, and is now well positioned to enter the export market.[14] As noted earlier, small industries as well as many non-tradeable sectors also gained from the better access to imported inputs.

In spite of the reduction in import tariffs, considerable anti-export bias still remains (World Bank 2004). This problem is addressed to some extent by the existing schemes of duty-drawback, bonded warehouses, and selective cash incentives for exports, which are essentially means for providing exporters duty-free access to imported inputs or for compensating for the payment of such duties. There may also be a pure "subsidy" element in the cash incentives, which are currently provided to a number of export items including fresh fruits and vegetables, light engineering products, jute products, and fabrics used for exported garments. However, the scope and effectiveness of such schemes are limited both by concerns for revenue and administrative feasibility.

The extent and speed of further import liberalization remain a contentious issue in the country's economic reform agenda. In the absence of any pre-announced target and timetable, tariff reform in Bangladesh would seem to be a "learning-by-doing" process (even if not consciously recognized to be so). The credibility of such an approach depends on the government's willingness and capability to conduct trade policy reforms in an analytical way. The effectiveness of tariff reforms also needs to be assessed in relation to policy reforms in other areas, such as tax administration, provision of infrastructure and the functioning of financial and labor markets. The impact of protection afforded through tariff escalation and of selective interventions for export promotion is bound to be discriminatory in nature. While the room for such discrimination may be gradually reduced with further liberalization, there is clearly a role for an active industrial policy, at least in the transitional reform period. If there is no well-devised industrial policy, there will be one by default.

Export outlook

Bangladesh increased its garment exports rapidly by taking advantage of export quotas and preferential access in the major markets (the United States and the European Union) along with its abundance of low-cost female labor. Thus far, Bangladesh's garment industry has performed well in coping with the phase-out of the MFA quotas in the US market. In fact, led by a surge in garment export, the country's export earnings in US dollars grew by more than 20 percent in 2005–6.

There are, however, several risks involved. Within Bangladesh's total garment exports, there has been a marked slowdown in the export of woven garments, reflecting a loss of competitiveness in this sub-sector; but this has been more than compensated for the time being by a strong performance in the export of knitted garments. Moreover, in maintaining competitiveness, the country's garment industry has absorbed a sharp decline in export prices, while letting the wages of garment workers, mostly women, fall in real terms. The garment industry is now facing domestic labor unrest as well as increased pressure from foreign buyers demanding better labor standards.

It is difficult to gauge how Bangladesh's garment industry will fare in the longer run. Among the major garment exporters, Bangladesh has the advantage of the lowest wage rate, but it loses out in the marketing value chain because of its dependence on marketing intermediaries. The dependence on imported fabrics and yarns puts Bangladeshi garment exporters at a disadvantage, by increasing the lead-time needed to meet orders from foreign buyers.[15] In the quota-free export market, there is likely to be a restructuring of the garment industry in Bangladesh; the relatively larger firms with better marketing ability will have a better chance of surviving the competition and even gaining.

Bangladesh's export base remains very narrow, with garment exports currently accounting for about 75 percent of total export earnings. Sustaining a strong export growth, which is crucial to the country's overall growth prospects, will require continued growth of garment export as well as export diversification. Bangladesh has potential comparative advantage in a number of export items such as horticultural products, leather goods, light engineering products, and certain chemical products. It should also be able to benefit from the provisions of duty-free access of exports from least developed countries to the EU, Canada, Australia, and other industrialized countries that may allow such concessions. To take advantage of these opportunities, it will need to give attention to a number of export-facilitating factors: better infrastructure, including efficient port facilities; standardization of product quality; technological improvements, leading to higher productivity; and an improvement in the overall domestic investment climate. Foreign direct investment can also be an important factor in promoting exports, not only by bringing in investment funds *per se* but also by providing product quality assurance (for example, through brand names) for buyers in import markets.

It may be noted that the heavy dependence of the domestic manufacturing on imported raw materials and intermediate goods makes it difficult for Bangladesh to satisfy the so-called "rules of origin" in getting preferential access for its exports in the markets of the developed countries. Thus, most of Bangladesh's export of woven garments is not eligible for the Generalized System of Preferences (GSP) in the EU market, since they are made largely from imported fabrics. This is also true of the EU's offer of allowing duty-free import of "everything but arms" from the least developed countries, since the same rules of origin as under the GSP apply here as well. Within the textile category, a relaxation in the rules of origin for knitted garments since 1999 has led to a surge of exports of knitwear from Bangladesh to the EU market.[16]

Trends in the real exchange rate

A remarkable aspect of Bangladesh's reform experience has been the relative stability of its real exchange rate.[17] Though substantial trade liberalization took place at a time of marked and steady decline in external deficits, there was hardly any real devaluation of the *taka* (with only modest devaluation up to about 1997, followed by mild appreciation since then). The strength of the *taka* was due to the rapid growth in export earnings, along with increasing flows of workers' remittances, which together more than offset the decline that took place in aid inflows relative to GDP.

During this time, the currencies of many developing countries, including India and Pakistan, underwent massive real devaluations. This put Bangladesh at a disadvantage in export competition and in marketing its exports within these countries, especially neighboring India.[18] The real value of the Bangladesh *taka* appreciated by an estimated 25 percent or more against the Indian *rupee* between the late 1980s and the mid-1990s. This, combined with the fact that Bangladesh opted for much faster import liberalization than did India, resulted in a dramatic increase in Bangladesh's trade deficit with India. By the late 1990s, Bangladesh's exports to India could pay only for a meager 4 percent of its imports from that country, compared to more than 15 percent a decade or so earlier. From the poverty perspective, however, these movements in the bilateral real exchange rate produced a benefit; with the liberalization of rice imports, commercial rice imports from India can now help to smooth consumer prices when rice harvests in Bangladesh are poor (Dorosh 2004).

While the success of the garment export may have at times raised the specter of the "Dutch disease," the prospect of a large real devaluation caused by an export debacle is a more serious concern for Bangladesh. Most parts of the Bangladeshi economy in effect represent semi- or non-tradeables; these include not only services, which account for nearly half of GDP, but also small-scale manufacturing producing poor substitutes for imports, and many agricultural products, including rice, in which Bangladesh has no commercial foreign trade in most years.[19] Devaluation would depress production incentives in these activities, by increasing the price of imported inputs and turning the domestic terms of trade against these activities *vis-à-vis* tradeable activities—not an encouraging prospect for achieving accelerated GDP growth, let alone pro-poor growth.

The dangers of a large devaluation underline the importance of international support to tide over any adverse balance of payments situation arising from of an export slowdown or other external shocks. They also highlight the importance of promoting export growth and diversification through various non-price incentives and measures, as mentioned above, rather than relying on an aggressive exchange rate policy, as is often advocated. An added implication is that—in an economy that has yet to complete a transition from non-tradeable-based to tradeable-based growth—the use of the exchange rate as a tool for export promotion needs to be approached with caution.[20]

Poverty reduction and social development

With the acceleration in the growth of per capita income, Bangladesh has made considerable progress in poverty reduction. During the 1990s, the national incidence of poverty declined from nearly 60 percent to about 50 percent; and a much more rapid reduction in poverty seems to have taken place in the following five-year period, with the national poverty rate reduced to about 40 percent.[21]

More progress against poverty would have been made in the 1990s had income distribution not worsened in both rural and urban areas. In the recent periods, growth acceleration in many developing countries, including in South Asia, has been accompanied by increased income inequality (Devarajan 2005). The growth-inequality links in the case of Bangladesh seem to be, however, of a different nature. The pattern of growth in Bangladesh would appear to be fairly pro-poor—with the main stimulus to economic growth coming

Table 14.2 Trends in poverty and income distribution in rural and urban areas, 1983–84 to 2005

Year	*Percent of population under poverty line*			*Gini coefficient of consumption expenditure*		*Urban-rural ratio of per capita expenditure*
	Rural	*Urban*	*National*	*Rural*	*Urban*	
1991/92	61.2	44.9	58.8	0.24	0.31	1.65
2000	53.0	36.6	49.8	0.27	0.37	1.87
2005	44.5	28.8	40.6	0.28	0.35	1.67

Notes: The poverty estimates are those of the Bangladesh Bureau of Statistics relating to the "upper poverty line" and derived from a cost-of-basic-needs methodology. The Gini coefficients are estimated by adjusting per capita income for spatial price variations; but urban-rural ratios relate to nominal per capita consumption expenditure.

Sources: Bangladesh Bureau of Statistics (2003, 2006) and World Bank (2003).

from labor-intensive garment exports, small-scale and micro-enterprises in manufacturing and services, and remittances from migrant workers. All these sectors typically provide scope for upward economic mobility for the poor. Even then, inequality tended to increase because the more dynamic parts of the economy happened to be the ones with relatively unequal income—such as the urban/organized sector *vis-à-vis* the rural/informal sector or the dynamic part of the rural non-farm sector *vis-à-vis* agriculture—and also because growth, though employment-intensive, was not strong enough to pull wages in the vast agricultural and informal labour markets.[22]

However, the estimates for the most recent period from 2000 to 2005 suggest that the process of increasing income inequality has slowed down or even reversed; as a result, the impact of income growth on poverty reduction has been much more pronounced during this period than in the 1990s (Table 14.2).[23] If so, Bangladesh is perhaps past the turning point of the "Kuznets curve" in the income-inequality link.[24] It may be noted, however, that the estimates of poverty and inequality for 2005 are from the *preliminary* results of the official household expenditure survey of that year, and the robustness of these estimates and the underlying trends in incomes, employment and wages cannot be ascertained yet.

Human development

Bangladesh has made significant progress in improving human development indicators, particularly since the early 1990s, and is among the few developing countries that are on target for achieving most of the Millennium Development Goals (World Bank 2003a; Government of Bangladesh 2005). The decline achieved in infant and child mortality rates, for example, is among the fastest in the developing world. Bangladesh has already eliminated gender disparity in primary and secondary school enrolment and has made remarkable progress in providing universal basic education (Table 14.3). Its success in reducing the population growth rate through the adoption of birth control methods is also unique among countries at similar per capita income levels. Bangladesh belongs to a regional belt, stretching across northern Africa, the Middle East, Pakistan, and northern India, that is characterized by patriarchal family structures along with female seclusion and deprivation. This makes its achievements all the more noteworthy.

There are, however, some doubts about whether these trends in human development indicators can be sustained. The progress achieved thus far can be attributed to a number of factors: increased budgetary allocations with foreign donor support; the availability of low-cost solutions like oral rehydration technique for diarrhea treatment, leading to a decrease in child mortality; and successful social campaigns, helped by the strong presence of nongovernmental organizations, in creating more awareness (about immunization and contraceptive use, for example). The progress in social development indicators also represents in part a "catching up"; two decades or so

Table 14.3 Improvements in some human development indicators since 1990, Bangladesh and South Asia

		1990–91	*2002–4*
Primary enrollment rate, gross (%)	Bangladesh	80	109
	South Asia	*95*	*103*
Ratio of girls to boys in primary and secondary education (%)	Bangladesh	77	107
	South Asia	*71*	*89*
Under-5 mortality rate (per 1,000 live births)	Bangladesh	144	69
	South Asia	*130*	*86*
Population with access to improved sanitation (%)	Bangladesh	23	48
	South Asia	*20*	*37*

Sources: Estimates of access to sanitation are from UNDP's *Human Development Report 2005*; all other estimates are compiled from the World Bank's *World Development Indicators* as reported in World Bank (2006) and World Bank (2006a).

ago, Bangladesh was in fact a laggard among countries with similar per capita income levels (World Bank 2005). While the situation has now clearly reversed, maintaining recent rates of progress may become increasingly difficult without concomitant rapid income growth and poverty reduction.[25] There is ample evidence that large disparities exist in health and educational achievements among households of different income groups and that poverty and deficiencies in human development perpetuate each other.

Moreover, as the gains from low-cost solutions are reaped, further improvements in these indicators may require commitment of more resources. Lowering the maternal mortality rate, for example, requires the provision of relatively costly health services. Hence the level of public health expenditure and the quality of health services will become important determinants of progress. Similarly, remarkable progress has been made in school enrollment, especially for girls, but there are serious concerns now about the quality of education. Clearly, the challenge in these areas increasingly lies in mobilizing more resources and improving the quality of service delivery.

The trends in the government's budget allocations show that the shares of both health and education in total budget expenditure have increased considerably as a result of fiscal adjustment. The increase has been particularly rapid in education, whose share of the budget doubled from 8 percent in the first half of the 1980s to 16 percent in the second half of the 1990s, while the share of health and family planning increased from 5 percent to 7 percent.[26] Even then, Bangladesh's per capita spending on health and education remains quite low, even by South Asian standards. It should also be noted that the structural shift in the budget towards larger social spending has come about from redefining the role of government and is, therefore, of a once-and-for-all nature (Mahmud 2002). In future, higher allocations to social sectors will require more difficult reforms for public resource mobilization. The decline in foreign aid has made the task even more difficult.

Conclusion

The foregoing discussions highlight the importance of many global economic issues in Bangladesh's development challenges. While most low-income countries depend largely on the export of primary commodities, Bangladesh has made the transition from being primarily a jute-exporting country to a garment-exporting one. The transition has been dictated by the country's resource endowment, characterized by extreme land scarcity and a very high population density, which makes economic growth dependent on the export of labor-intensive manufactures. The issue of access of labor-intensive manufacturing exports from developing countries to the major global markets is, therefore, of utmost importance for Bangladesh. Given the important role of workers' remittances in its economy, Bangladesh is also greatly concerned with the issue of freer movement of temporary workers across borders.

It is not easy for a least developed country like Bangladesh to specialize in manufactured exports, which currently account for more than 90 percent of the country's export earnings. Having low wage costs can hardly compensate for its relative disadvantage in marketing skills and infrastructure (including transport, ports, product standards, and certification facilities). Moreover, its existing and potential exports are likely to have low domestic value-added contents because of their heavy dependence on imported raw materials and intermediate goods; this makes it difficult for Bangladesh to satisfy the so-called "rules of origin" in getting preferential access for its exports in the markets of the developed countries. Thus, while Bangladesh stands to benefit from the European Union's decision to allow duty-free import of "everything but arms" from the least developed countries, it would like to see a relaxation of the "rules of origin" in order to benefit even more, and it would also like to see other industrialized countries, particularly the US, replicate such trade concessions.[27]

Bangladesh also needs to worry about non-tariff barriers such as those relating to environmental or labor standards. Possible anti-dumping actions against its exports are also an important latent threat. Besides, tough sanitary and phytosanitary trade regulations are an impediment for diversifying into prospective agro-processed export items. Clearly, the so-called trade-related assistance sought by the least developed countries like Bangladesh under the WTO arrangements needs to address these issues in a comprehensive manner.

Bangladesh's export base remains low as the impressive success in garment export has yet to be replicated in other industries. Indeed, its experience with the garment industry has demonstrated the limitation of relying on enclave-type arrangements to facilitate export growth in a specific activity, while postponing institutional reforms for improving the investment climate generally. Lack of a favorable investment climate is also reflected by the fact that, in spite of very liberal policies, Bangladesh has yet to become a favorite destination for foreign direct investment.

Bangladesh's development experience also brings into focus the issues surrounding the role of foreign aid, such as in meeting the funding needs for achieving the Millennium Development Goals and providing support to absorb economic shocks. Foreign aid currently received by Bangladesh is much lower compared to the average of low-income countries both as a proportion of GDP and in per capita terms; and this disparity has been increasing over the years.[28] One explanation for this lies in the perceived low "aid absorptive capacity" of the country due to weak governance. Donors are concerned about the possible misuse of aid funds, given the governance-challenged environment in Bangladesh. But there is ample evidence that part of the problem also lies with the donors insisting on unrealistic project design and aid conditionalities (Mahmud 2006). In a recent review of its aid operations in Bangladesh, the World Bank, for example, has admitted the need for finding a "good local fit" for its projects and for engaging in a wide range of critical sectors rather than waiting for reforms to occur (World Bank 2006b). Given Bangladesh's record in reducing poverty and improving social development indicators, the international donor community faces the challenge to find ways of helping the country to achieve its development goals.

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Notes

1 The policy reforms in the 1980s included the withdrawal of food and agricultural subsidies, privatization of state-owned enterprises, financial liberalization, and withdrawal of quantitative import restrictions, while those in the early 1990s were particularly aimed at opening the economy, through making the currency convertible on the current account, reducing import duties generally to much lower levels, and removing virtually all controls on movements of foreign private capital. Besides, fiscal reforms were undertaken including the introduction of a value-added tax.

2 The absolute increase in the value of Human Development Index for Bangladesh between 1990 and 2001 is surpassed only by that for China and Cape Verde among all the countries for which such estimates are available: UNDP (2003), pp. 241–244.
3 The bilateral quota arrangements under the MFA gave Bangladesh's garment exports preferential access to the large US market; in the post-MFA era, Bangladesh will now face new competition, for example from China.
4 For evidence, see Mahmud (2004).
5 This phenomenon is reminiscent of a dominant trade gap in the erstwhile popular two-gap model of foreign aid. The problem seems to be one of the external balance rather than of the aggregate resource balance, that is, the savings-investment balance. In particular, during the later episode of economic upturn in 2000–1, the domestic inflation rate declined to less than 2 percent, but the foreign exchange reserves came down to a critically low level, equivalent to less than two months' import payments; see Mahmud (2004).
6 The estimates are derived from the official national income statistics. The industrial sector includes construction, mining, and utilities, besides manufacturing.
7 World Bank (2003a), pp. 7–8.
8 These are estimated annual compound growth rates between the years 1991/92 and 1999/2000 and are based on the official national income statistics as reported in the annual *Statistical Yearbook of Bangladesh* of the Bangladesh Bureau of Statistics.
9 According to the official 1999/2000 Labor Force Survey, these informal activities employ about three-quarters of the country's non-agricultural labor force.
10 For an estimation of the relative importance of these growth stimuli, see Osmani *et al.* (2003).
11 Estimated annual compound growth rate between the years 1991/92 and 1999/2000.
12 Small industries are likely to have grown also at the cost of cottage industries, whose value added grew at only 2.8 percent annually during the same period.
13 In particular, there is evidence that the reforms of the duty structure have thwarted the growth of a nascent domestic engineering and capital goods industry: Mahmud (2004).
14 Incidentally, Bangladesh stands to gain from the WTO agreement regarding the waiver of patent rights for the domestic production of drugs in the LDCs until 2016.
15 In recent years, there has been some growth in backward-linkage domestic production of fabrics, but only under high cash incentives (subsidies) that are now being phased out.
16 More recently, a similar relaxation in the Canadian market has led to another surge in garment export from Bangladesh to that market, although on a much smaller scale.
17 Mahmud (2004); Mahmud (2001), Chapter 3.
18 According to the IMF estimates, Pakistan, India, and China have all maintained a lower real effective exchange rate of their respective currencies compared to Bangladesh, with 1990 as the base year.
19 The non-tradeable nature of these agricultural products arises from the large spread between export and import parity prices caused by poor marketing infrastructure and limited access to export markets (Mahmud *et al.* 2000).
20 See, for example, Harberger (2001), p. 559.
21 The official poverty estimates are made with reference to an "upper" and a "lower" poverty line, corresponding to consumption baskets that allow for per capita daily food intake equivalent of 2122 and 1805 kcal respectively. The national poverty incidence, according to the lower poverty line is estimated to have declined from 43 percent in 1991/92 to 34 percent in 2000 and 26 percent in 2005.
22 Ahmed and Mahmud (2006), Chapter 2; Osmani *et al.* (2003).

23 According to these estimates, the poverty incidence at the national level has declined by about 2 percentage points annually between 2000 and 2005, compared to about 1 percentage point annually in the 1990s.

24 Although the general validity of the Kuznets process has not been borne out by recent cross-country experience (see, for example, Anand and Kanbur 1993), this does not imply that it cannot be valid for specific country situations.

25 For most social development indicators, the actual values of the indicators achieved by the country are found to be far superior to the predicted values at the given level of per capita income; see Government of Bangladesh (2005), Table 1, p. 9.

26 The figures are five-year averages based on revised budget estimates.

27 Incidentally, the fact that the "Everything but Arms" initiative excludes rice, sugar, and bananas is not of much concern to Bangladesh, unlike some other least developed countries.

28 According to the World Bank's *World Development Indicators*, gross aid as percent of GNP in Bangladesh was 2.8 percent in 1998, compared to the average of 4.7 percent for all low-income countries excluding China and India; in 1993, the figures were 4 percent and 5.2 percent respectively.

15 Combining policies to benefit from globalization

The case of China

Fan Gang

It seems there were no Chinese among the anti-globalization protesters at Cancún in 2003, Genoa in 2002, or Seattle in 1999. This might be partly because the Chinese could not get visas to travel to these spots, or partly because since 1989 the Chinese have not been used to protesting in the street. But basically, it seems the Chinese have quite enjoyed globalization, in as much as their trade dependency has increased steadily (see Figure 15.1) and their country has become the world's largest recipient of foreign direct investment in the world. It seems the Chinese were even cheerful about membership of the WTO, which many analysts had predicted would bring them nightmares.

As a developing country with less than US$1,700 in per capita income in 2005—even after twenty-seven years of high growth—and struggling with many institutional, structural, and social problems for which no one can see a quick fix, China faced tremendous risks in opening its doors to the outside world. China is not an economic and political power that can set the rules for

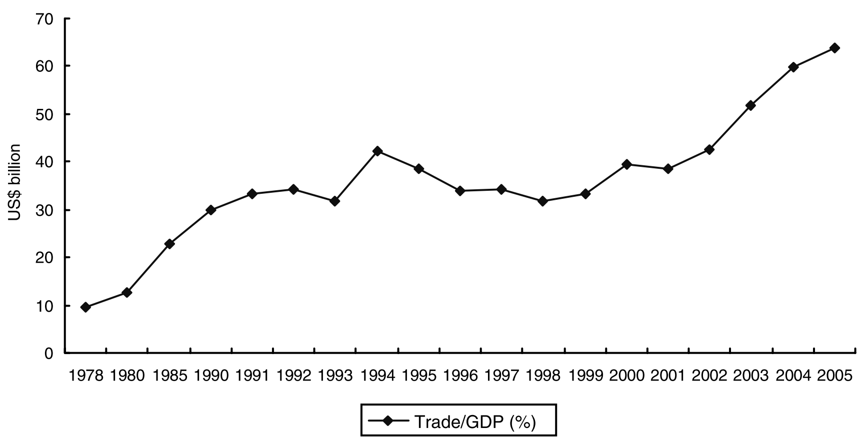

Figure 15.1 China's trade dependency.

Source: China Statistics Yearbook 2005.

globalization to make sure that it can benefit. Nevertheless, China has benefited to a certain extent from opening up and has thus far avoided economic or financial crises.

What has made this possible, and can we draw lessons of relevance for other developing economies? This chapter analyzes the relationship between globalization and China's reform and growth over the past twenty-seven years, to see what combination of policies allowed China to benefit from globalization. First, it reviews China's domestic economic reforms, and looks at foreign direct investment. It then reviews China's decisions on the speed and sequence of liberalization; it emphasizes the value of protecting domestic industries as long as possible (while favoring imports of equipment and technology); and of maintaining control of the capital account until the conditions are ready for its liberalization. The next section comments on education policy. The section following emphasizes the fact that the agenda for globalization is set by the developed countries, but that developing countries must tailor their policies to their own history and their own unique political and economic conditions. A conclusion is then drawn. Fundamentally, it seems inappropriate to draw out "general principles" or "lessons from China" for application by other countries, but the hope is that China's experiences will inspire other countries to succeed in facing their own special challenges.

The most important fundamentals: domestic economic reforms

The economic growth and structural changes that China has achieved so far are less the results of opening its markets to the world than of its institutional transformation from a planned to a market economy.

The key elements of China's market-oriented reforms are: development of the private or non-state sector; price liberalization in the domestic market; relaxation of government control and central planning; privatization of state-owned enterprises (SOEs); and development of the legal framework for private business. Figure 15.2 shows the change in economic structure that took place as the result of progress in these reforms.

For a developing country such as China, the foremost task is to develop the private (non-state) sector, rather than to privatize the state-owned enterprises, no matter how much the latter have dominated the economy. The growth of the private sector itself will accomplish a change in the economic structure and develop the market system. In China, competition from the private sector pushed the SOEs into financial difficulties that made people realize real changes were needed, while the new jobs created by non-state sectors made the lay-offs from SOEs less painful. When the management reforms of SOEs failed to produce results, the capital accumulated by private businesses made privatization viable. And the managerial entrepreneurship capacities developed in the private companies meant that privatization achieved a genuine structural change in the economy, rather than simply ruining previously productive assets. In short, the development of the private sector not only

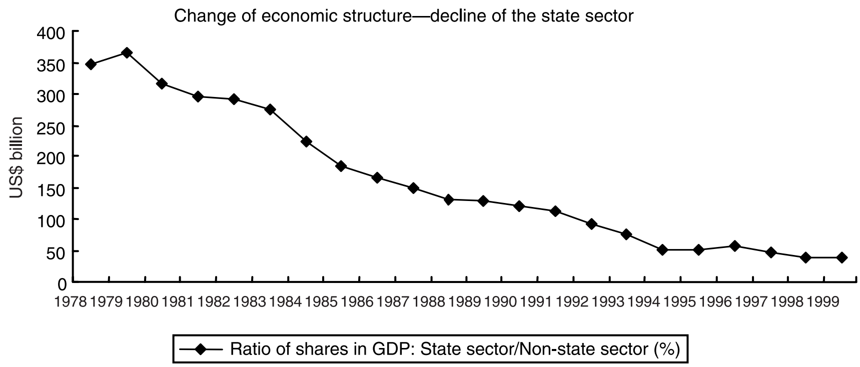

Figure 15.2 Decline of the state sector in China, 1978–99.

produced growth and employment, but also created better conditions for reforming the SOEs.

Eventually, the state ownership of companies in most industries must be abolished. In the short run, state companies may be able to raise their profits by exporting more of their products, or by using more imported new equipment and materials to upgrade their technology, but over the long run they will not be able to compete internationally, and their measures to improve their short-run profitability may become a source of long-term financial deficits. In China, the massive scale of the SOE sector meant that the government had to keep control of SOE investments and price-setting, given that the SOEs lacked the concern for profitability that goes with ownership. Conversely, the government's control and planning system encouraged rent-seeking behavior that provided the potential for high financial risks and low economic efficiency in the broad sense.

Domestic reforms also help a country to improve the environment for foreign direct investment. The development of the private sector and privatization of state-owned enterprises creates domestic forces that demand the building of an appropriate legal framework. And the decentralization of economic and financial responsibilities creates competition among local governments that hope to attract more investment, whether foreign or domestic, to provide more jobs and fiscal revenues in their jurisdictions.

China is still far from completing its economic reforms and institutional transformation. But the progress thus far has played a key role in enabling its citizens to benefit from globalization through increasing trade and attracting FDI—both of which have brought more jobs and higher growth—rather than simply exporting primary resources or falling into financial crisis or social chaos.

How and what should be reformed are matters of debate. It may be argued that China will be more successful if it undertakes more "radical" changes, particularly in the political and financial arena, in order to attract more foreign investment. This may be true. And China is indeed facing some bottlenecks in its reform process, as noted later in this section. But the really relevant points here are the following:

First, you must do your homework, sometimes very painful homework, in order to benefit from globalization. A country may not be able to achieve economic growth and social progress simply by opening its economy to the global players. As shown by many recent examples, liberalizing a country's market without internal institutional reforms may result in hyperinflation, mounting international debts, massive capital flight, financial crisis, social chaos, and long-term economic stagnation after an initial short-lived boom.

Second, reforms must fit the country's initial conditions. Different reform policies and reform patterns may work better or worse, but they certainly will *not* work or work destructively to the economic growth unless they fit the country's income level, development stage, and historical background. Any country that wants to benefit from the global market needs to have a market system as its objective, in order eventually to be able to do business using the same rules and regulations as its market partners. In that sense, everyone must undertake "market-oriented reforms." But there is no universal formula of transition to the market for all nations. Even if some cutting-edge principles for reform are agreed upon, derived from the experiences and interests of more socially mature nations, a country's process of transformation should be local and country-specific, to fit its unique historical background.

Third, any reform policy or policy combination must consider economic and social stability. Persistent chaos caused by reform only damages the economic competitiveness of domestic companies and pushes away foreign investors. The argument that an initial shock might be unavoidable may not be suitable for a poor developing country: the country might take a long time to recover from the shock and the gap with developed countries would become even bigger, and that would make development even more difficult. During a long, devastating recession or stagnation, people may lose their interest in and support for the reform agenda, because they cannot taste any of its fruits in the first stages.

Policy coherence is important. As far as reform policies are concerned, China's experiences may show the importance of coherence between reform policies in different parts of the system. Two types of incoherence may arise: premature changes and bottlenecks. China avoided premature liberalization of its financial market, and thus avoided creating turmoil like the Asian financial crisis of 1997–98. But China may suffer from bottlenecks: it has been too slow in reforming its financial system and political system, and this may cause problems in coming stages of its development.

The key external factor: foreign direct investment

China started to invite foreign direct investors early on—almost as soon as the domestic reform began—to take part in a form of joint venture and in a very few selected cases. Then, with the establishment of the special economic zones and a better investment environment, FDI grew dramatically in the early 1990s, and it has contributed a great deal to China's overall growth and trade (Figure 15.3 and Figure 15.4).

In the whole process of opening up and development of globalization in China, FDI has played very important and positive roles. This is not only because investors bring capital and technology—as globalization is supposed to do in developing countries, to create jobs for underemployed workers—but also, and perhaps more important, because they introduced business experience and management know-how. The Chinese absorbed this experience, with low learning costs, through all kinds of contacts such as joint ventures, cooperating and doing business with investors, and simply observing. Such a spillover effect of foreign investment is critical for a developing nation that wants to catch up in technology and institution-building, and to turn its backwardness into an "advantage of backwardness."

Further, foreign direct investors can be a forceful lobbying group, pushing a country to make changes in institutions and policies in the direction of international compatibility. Foreign investors are always self-interested, of course, but while China's domestic private companies were still weak and low-voiced in the lobby, the foreign companies acted as a major force, arguing on behalf of the interests of private sectors and corporations that were representing the new system. Further, when foreign investors have established vast interests in a country, they may even become a lobbying group for protecting that country's business interests in their home countries or world forums.

FDI under a regime of capital controls seems not to have caused much

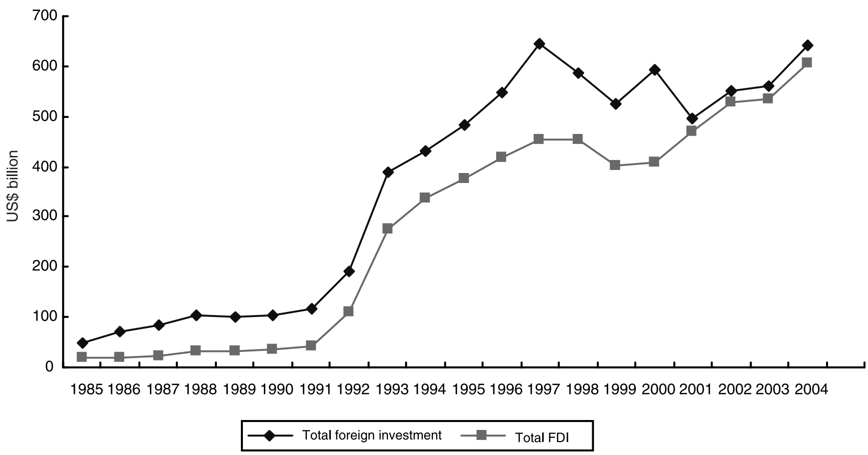

Figure 15.3 FDI to China, 1985–2005.

Source: China Statistics Yearbook, various years.

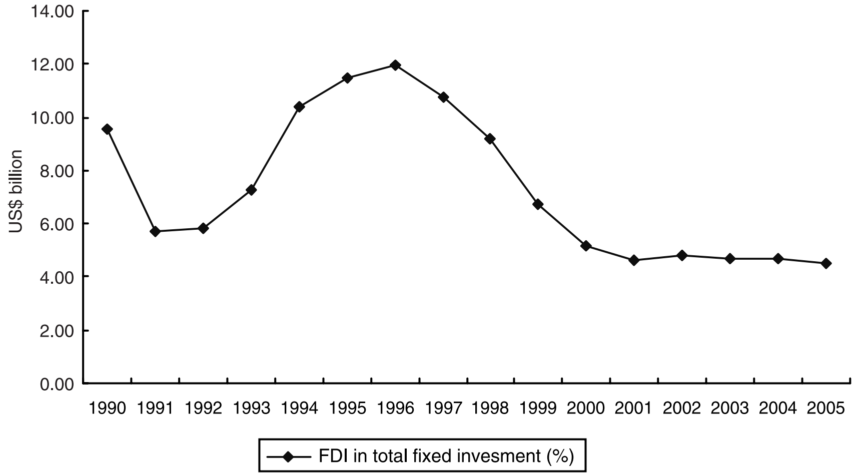

Figure 15.4 FDI in total fixed investment.

Source: China Statistics Yearbook, various years.

Table 15.1 Rights of profit remittance by foreign investors, 1995–2002 (US$billions)

	Rights of remittance
1995	11.77
1996	12.44
1997	15.92
1998	16.64
1999	17.97
2000	14.67
2001	19.17
2002	14.95
Total accumulated rights	123.53

Note: A rough estimation is that only 10 percent of the "rights" shown in this table have been actually remitted out.

Source: State Administration of Foreign Exchange, 2002.

financial harm to China's economy so far. The only increasing concern now is the mounting "rights of profit remittance" from the current account. Foreign companies have tended to reinvest locally their profits from projects in China; they have repatriated only about 10 percent of these profits, keeping the rest as rights of remittance. Their rights of remittance accumulated since 1995 amounted to about US$124 billion by the end of 2002 (Table 15.1). This was equivalent to 45 percent of China's foreign exchange reserves in that year. In the long run, as the projects mature further and improve in profitability, this situation may become more serious. China still maintains control over the capital account, but if anything happens suddenly to drive foreign investors away, capital outflow may become massive and explosive from the current account.

Speed and sequence of liberalization

Keep trade protection on infant industries, but give special treatment to imports of equipment and technology

The conventional theory of comparative advantage may be a good framework to explain the trade and international division of labor among countries that can more or less compete against each other at more or less similar levels of economic capacity—measured in terms of per capita income, education, wealth, market institutions, managerial skills, and so forth. But it may not be a good theory to explain the relationship between highly advanced countries and poor developing countries in today's world of great disparities. A more advanced country may have an advantage in all industries, and be able to dominate in all, particularly the new high-tech industries that have higher value added (and are protected by the Agreement on Trade-Related Intellectual Property Rights!). The backward countries—whose per capita incomes differ by factors of 1:20 or 1:50, not just by 10 or 30 percent, from those of advanced countries—may be able to grow at the beginning of free trade, pulled along by the growth of employment in primary industries such as mining and agriculture. But if trade is totally free at their early stages of development, these countries may end up specializing only in primary or low-end industries. Efficient resource allocation in the global market may be achieved in the short run, but the convergence of per capita income and the economic structure of countries may be never reached.

The argument for protection of infant industries is valid, in particular because globalization thus far does not amount to the free movement of all factors of production. Capital moves across national borders, and so do technology and the "brains" behind capital and technology, but ordinary blue-collar laborers do not move. The capital and technology travel to the developing countries to use the cheap labor available under certain conditions. In the pure economic theory of long-run growth, as long as all kinds of capital and technology are mobile, convergence would eventually take place. But given the realities of political economy and the progress of technology, the more advanced nations will always keep the new technology and higher value-added industries protected by laws on intellectual property rights, and will most likely keep them within their own national boundaries. What are relocated are mainly the low-end, labor-intensive industries or some chains of industries that use technologies not protected by intellectual property rights.

The spillover effects of FDI and international trade may improve the knowledge endowments of a developing nation, but since the international gaps in education and research and development (R&D) capacity are so large initially, the differences in international technological innovation capabilities may widen over time, and the global division of labor may increasingly disadvantage the poor nations. This is especially likely in the era of technological revolution, when the new technology industries in the more advanced countries are growing faster than the knowledge endowments of the developing countries.

China fought hard to maintain trade protection for its infant industries in its early stages of economic take-off. This can be seen, to some extent, from the thirteen years of WTO accession negotiations and the gradual lowering of China's tariffs and other trade barriers. Such a preferential policy has been one of the major reasons for the differences between China's nominal average tariff rate and actual average tariff rate (Table 15.2).

Two examples of industrial development in China are electronics and automobiles. Over the past twenty years, the policy combination for those industries included two key elements: inviting foreign direct investors to undertake joint ventures, governed by some technology transfer and local component requirements, and maintaining trade protection barriers (tariffs and quotas) until the conditions for opening up had improved (Table 15.3 and Table 15.4). During the period of protection, FDI brought in capital and technology. Spillover effects and demonstration effects worked to improve China's domestic capacity; market size grew with income growth, so that producers could benefit from economies of scale; the supply chains built

Table 15.2 Difference between nominal tariff and actual average tariff rates, 1985–2005

	Average nominal tariff (A)	*Actual average tariff (B)*	*Actual average tariff (excluding processing trade) (C)*	*Difference (A-B)*	*Difference (A-C)*
1985	38	16.3		21.7	
1992	42.5	4.8		37.7	
1993	39.6	4.3	6.5	35.3	33.1
1994	36.8	2.7	4.7	34.1	32.1
1996	23	2.6	4.7	20.4	18.3
1997	17	2.7	5.3	14.3	11.7
2000	15.3	4.0	6.8	11.3	8.5
2001		4.2	6.8		
2002	12	2.9	4.9	9.1	7.1
2003	11	2.7	4.5	8.3	6.5
2004	10.4	2.2	3.7	8.2	6.7
2005	10	2.0	3.4	8.0	6.6

Note: The actual average tariff rate is the ratio of the actual tariff revenues to the total volume of imports.

Source: China Customs Administration and Ministry of Finance 2005.

Table 15.3 Change of tariffs on electronic products

	1992	*1994*	*1996*	*2002*
Home electronic tools	80	68	40	30–35
Microwave	100	50	50	35
Recorder	100	90	60	35
Video recorder	100	90	60	45
Color TV	100	50	50	35–45
B/W TV	80	70	50	20

Note: Tariff rates in this table refer only to the tariff for trade partners with mutual "favorite trade status."

Source: China Customs Administration.

Table 15.4 Change of tariffs on automobiles

	1992–1994	*2001*	*2006*
Tariff rate	230–270	70–80	25

Source: China Customs Administration.

up and the local-component ratio increased; and institutional efficiency improved.

The combination of joint ventures and trade protection meant that these industries had become competitive enough by the time China joined the WTO. China joined the WTO as a developing country, and the six-year transition period allowed for its automobile industry is among the longest allowed for Chinese industries.

While maintaining trade protection for most consumer goods, China adopted tariff-preferential policies towards imported technology and equipment, including the production lines and some intermediate inputs necessary for using the imported equipment. Most domestic companies and joint ventures can benefit from these policies for speeding up technological upgrading and transfers, and the policies have obviously helped Chinese companies to be quicker in their catching up.

A developing country should always give first priority to building capacity in production technology, rather than to consumer utility and welfare in the short-run static-equilibrium sense. In China, the purchasing power of consumers was small anyway in the early stages of reform, and it would not grow unless more higher-wage jobs were created through improving competitiveness in the production sectors. A country's consumer market will become increasingly important, particularly when the country becomes a larger supplier in the international market. But in the early stages, letting producers be the first to enjoy the fruits of "free trade" seems the right policy for a developing country that wants to achieve sustainable benefits from globalization.

Maintain capital controls until conditions are ready for capital account liberalization

As noted above, China's currency is only convertible on the current, not the capital, account. Capital controls are one of the key factors that have allowed China to avoid major financial turmoil, including during the Asian financial crisis in 1997–98.

So many analyses have been made since the Asian financial crisis that by now most people have abandoned the doctrine that market liberalization, no matter what the market, is the only good policy. The International Monetary Fund has dropped its recommendations for quick financial liberalization for developing countries. Hence there is no need here to set out the detailed arguments for maintaining capital controls until a long period of reforms and institution-building has satisfied many conditions. The basic theoretical logic is that early liberalization of the financial market may enable a developing country to attract more international capital, but at the same time it may introduce risks the country is not ready to deal with—for lack, say, of the necessary legal framework, political system, ownership structures, taxation, capital market development, bank solvency, or the regulatory framework and management skills of the financial market.

Despite China's capital controls, there are still many loopholes through which speculators in the financial markets can affect the country's international balance of payments. Figure 15.5 shows that capital outflows (measured by the item of "errors and omissions" on the capital account) increased dramatically during the Asian financial crisis because of speculation that the

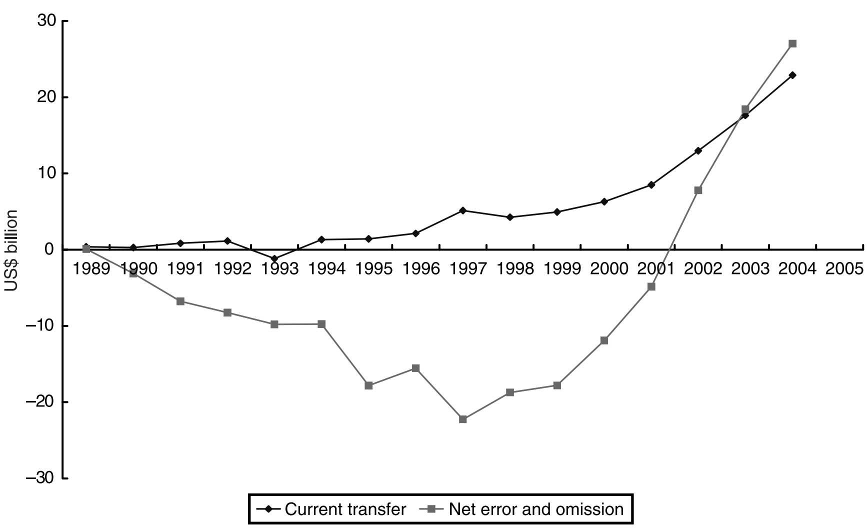

Figure 15.5 Errors and omissions on China's capital account.

Source: People's Bank of China, 2006.

renminbi (or CNY—*Chinese Yuan*) would be devalued, and also that capital inflows rose sharply when the currency was expected to be revalued. It is hard to imagine what might have happened had China liberalized its capital account.

One of the important reasons for maintaining capital controls in the early stages of a country's development and transformation is to fight corruption. The ease of capital flight can be a major encouragement for corruption, which may otherwise be discouraged by the difficulties of spending large amounts of money within the country. A major factor behind the sharp fall of investment and GDP growth in some developing countries and economies in transition was the dramatic increase in capital flight after financial liberalization, which provided the conditions needed for the free movement of dirty money and the draining of a significant portion of national savings. For some developing countries in certain stages of their transformation, capital control is actually corruption control.

It is hard to say that capital account liberalization should always be among the last items of reform and market opening, but safe to say that in general the more sophisticated the market is, and the quicker the movement of the factors (assets), the later it should be liberalized.

Education

Human capital is key not only for growth but for benefiting from globalization. Even a very basic primary education can enable rural laborers to be employed by multinational companies, rather than being left out of the modernization process. Indeed, as technology progresses and more modern equipment is used in production and services, all blue-collar jobs are likely to require at least a basic education.

The Chinese are a nation with a strong educational tradition—giving China some advantages over some other developing countries. Basic education in China was improved generally during the era of the planned economy. Now the problem is to allocate the fiscal resources that are needed to ensure that the compulsory nine years of education is really implemented in the interior rural areas. This is crucial to ensure that the hundreds of millions of rural youngsters will have the skills they need to migrate out of farming and to be qualified to take part in the global economy.

China now also benefits from its policy, adopted in the early 1980s at the very beginning of the reform, of allowing its best students to pursue higher education abroad. The cost of this policy is of course the "brain drain", which may continue for quite a long time, given China's situation of slow wage growth (due to the large working population) and slow improvement in public-goods provision, and its political climate. But after twenty years, the payoff of the policy is clearly visible. No matter how the overseas students choose to come back, either as employees of multinationals, or as visiting professors, or as entrepreneurs with their own new businesses, they have been playing very important bridging roles in foreign investment in China, and have boosted trade and financial transactions. Even if they choose not to come back, the natural ties between them and China still constitute important channels of information and knowledge that are of potential benefit to China's efforts to catch up. The overseas students will be the most important assets for making Chinese companies truly global in the future.

Nothing can be more worthwhile than investment in education in the long run. And education is the area in which international aid for developing countries should be concentrated.

Independent policymaking according to country-specific conditions

From many standpoints the so-called "global issues" are actually developed-country issues, or the consequences of the economic growth of the developed world in past centuries. Globalization is led by multinational corporations and its main political protagonists are the developed countries where the multinationals originated and are headquartered. The developing countries are passive players that are involved in the game but did not initiate it. From this point of view, the developing countries are vulnerable in the first place. The further problem is that the multinationals not only "capture" their own national governments, so that the developed countries' policies favor the interests of their shareholders, but are also able to capture the governments of the developing countries, by various means. This is one of the major forms of corruption. If the economic policies of a developing country work for the interests not of its own people but of the multinationals, the country will be more vulnerable to the volatility of the international financial market, and eventually to domestic political turmoil.

For a developing country, it is important to identify clearly what are the true national interests, and what are the risks associated with espousing a particular policy in that country's particular conditions. Policy-makers need to listen to advice and suggestions from international organizations, foreign governments, and multinationals, but they should always work according to their country's own interests, and decide on development policy priorities according to their country's own conditions. (Of course, every national government will claim it does just this!)

Is there still anything we can call the "national interest" in a globalized world? I believe the national interest constitutes the interests of the country's citizens who are not given visas to move to developed countries. Policy-makers should focus on what these people can do and on how their incomes can be brought up to the level of those in the developed world.

From this point of view, a good national leadership that can make decisions independently can be a positive factor for a developing country to benefit from globalization. Good policy-making depends on good knowledge of the country's conditions, including what development stage the country is in, what are its differences with the developed countries, and what are the relative advantages it can rely on in order to develop and compete in the global market in its early stages of development. It is important to have a long-term vision and to take a "dynamic general equilibrium" approach to decision-making: a particular policy recommendation may be good from the perspective of one special aspect of the economy or society, but from all other perspectives it may be very damaging. Or it may be appropriate for the short run, producing some quick benefits that politicians like the most, but create difficulties for long-run development.

Independent policy-making also means resisting the "good-thing-to-do" policy recommendations—including things that developed countries can afford but many others cannot. For example, a social welfare system covering everybody in the society is a good thing to have in the long run, but if introduced too soon its cost may quickly lead the budget into trouble—which may lead to long-term stagnation and financial difficulties. In the era of globalization, a developing country should be fully aware of the trap of "great-leap-forward" policies designed to attain instant high standards of living, or of emulating the policy objectives of developed countries. It is natural for people in developing countries to dream of achieving developed-country living standards as quickly as possible, nationally or individually. But it is dangerous to try to copy the models overnight without achieving certain preconditions.

The risk here is that history may be forgotten, and that the "ladders" the developed countries have climbed up might be neglected, if not kicked away. As latecomers, the developing countries should learn the lessons and experiences of the developed world, and exploit the advantages of their own backwardness, in order to avoid some mistakes and grow faster. But some basic requirements for development are unavoidable, and some stages cannot be skipped. In some sense, the better historical references for development policy advice today may be the experiences of the developed countries in the nineteenth or even the eighteenth century. Histories are often either forgotten or wanted to be forgotten. But they are relevant. And we the people of the developing countries should never forget which stages of our history we are living in.

Conclusion: "historical ladder" and current policy advice

For a developing country to benefit from globalization takes a combination of many factors. No single policy can work without many others in place in the same time, and a whole situation can get out of hand simply because one element goes wrong. Offering cheap labor is not enough to make growth happen, and there are plenty of risks in the volatile global market.

The larger the gaps, and the more the world is globalized, the more difficult is development for the developing countries, and the more "conditional" the convergence between them and the developed countries.

It is surely urgent for the international community to take development as the top priority on the global agenda. But the developing countries must do the right things themselves to make progress.

In the case of China, there are still many great challenges, and further challenges are emerging—such as the conflicts with existing economic powers in the areas of trade and resource supplies. But hopefully, China may provide a case of successful development in the era of globalization. At least, as one of the most difficult cases, China's example may encourage other developing countries to face their own special challenges and overcome their particular difficulties.

16 Explorations in light of financial turbulence from Asia to Argentina

Padma Desai

This chapter focuses on the origins and management of the recent financial crises in East Asia and Latin America.[1] I will address three issues relating to the East Asian currency and financial crises of 1997–98 and the later financial turmoil and debt default of Argentina in 2001, which threatened the financial stability of Brazil.[2] The first section looks at the similarities between the two sets of economies—the East Asian and the Latin American—in the run-up to their financial upheavals, and the second section analyzes how the two groups differed in their potential for minimizing the impact of the respective crises. This is followed by a description of the assistance provided by the International Monetary Fund (IMF), and the chapter concludes by recommending that the Fund learn from its bailout experience and depart from its standard recipes of fiscal and monetary discipline, to better resolve currency and financial crises in emerging market economies.

East Asia and Latin America: the common features

An alarming feature of the global economy in the early 1990s was the widespread and massive borrowing undertaken by a number of emerging market economies of East Asia and Latin America. Borrowing reached at least 50 percent of GDP in most of them except Malaysia (at 40 percent in 1996) and South Korea (at 28 percent in 1996). In the East Asian cluster of Indonesia, Malaysia, South Korea, and Thailand, government finances were in balance, but businesses and banks borrowed on short term in foreign currency and invested long term in dubious domestic assets. They thus created a double mismatch of short-term borrowing and long-term lending coupled with accumulated debt liabilities (largely unhedged) in foreign currencies and assets in domestic currencies. Latin American sovereign borrowers, among them the governments of Argentina and Brazil, also accumulated significant foreign debt burdens without concern or ability to meet their repayment obligations via export earnings.

Short-term foreign debt as a fraction of foreign exchange reserves ranged from 100 to 200 percent for Thailand, Indonesia, and South Korea in 1996 (Figure 16.1).

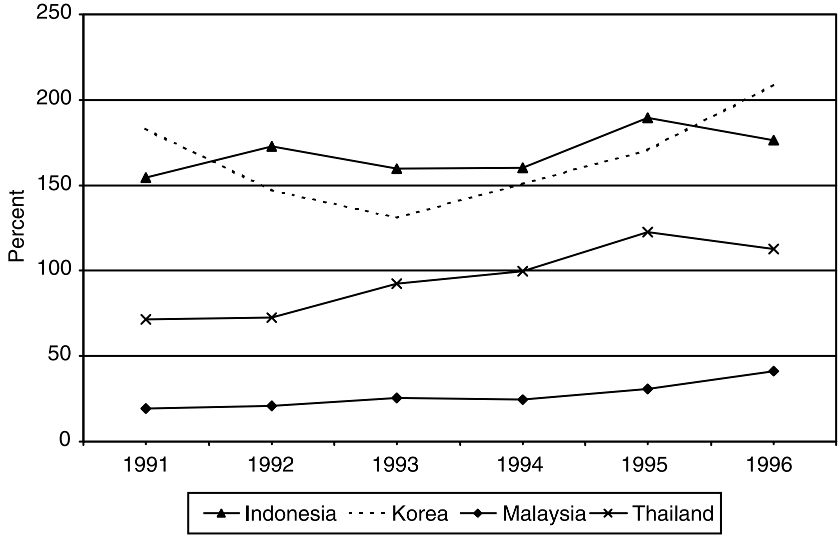

Figure 16.1 Short-term foreign debt as a percentage of foreign exchange reserves: Asian countries, 1991–96.

Source: Economist Intelligence Unit.

These fractions came down in 1991–95 in Argentina and Brazil (1994 in Argentina) but they climbed to 100 percent in 2000 (1999 in Brazil) in the run-up to these countries' crises (Figure 16.2).

These countries facilitated their borrowing binge by prematurely opening up their capital markets to the free entry of short-term, speculative funds. The preferences of developed country lenders—private and institutional—played a role in the hasty liberalization of the emerging economies' financial and capital account transactions involving foreign exchange. The inflows that ensued, pushed by determined Washington policy-makers and supported by avid Wall Street financiers, were massively short term, speculative, and destabilizing. The capital market globalizers overlooked the fact that the countries in the emerging market periphery lacked the institutions and corporate practices necessary to enable investors and borrowers to gain from capital flows.

Consequently, the East Asian economies were swept up in a capital-outflow-led currency and financial crisis, which began in Thailand in mid-1997. Currencies tumbled at varying rates in Russia in August 1998 and Brazil in January 1999. In unrelated developments, Argentina faced similar problems, leading it to default on sovereign debt in December 2001. The crisis-ridden economies ceded their decision-making to the IMF, which imposed extreme monetary and fiscal discipline in the course of its bailout operations.

As well as the borrowing binge of the 1990s, these economies shared

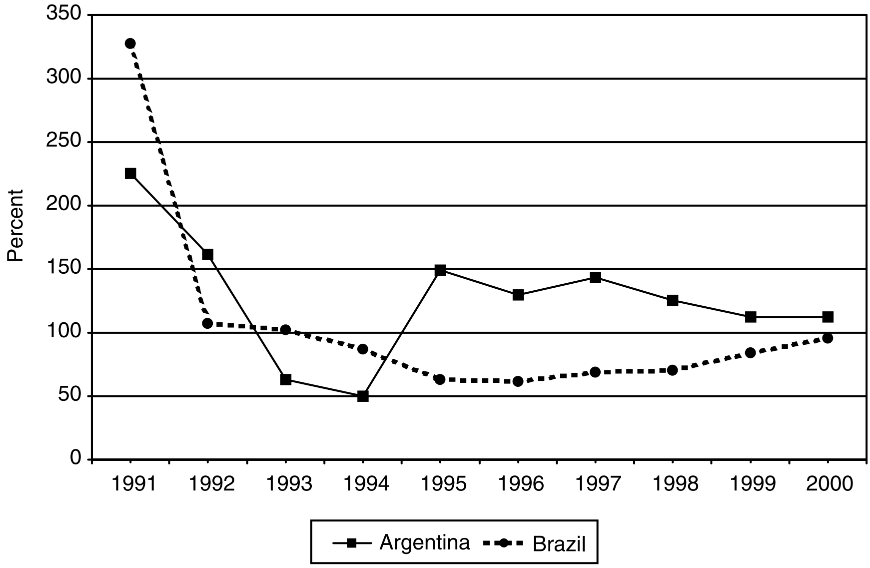

Figure 16.2 Short-term foreign debt as a percentage of foreign exchange reserves: Latin American countries, 1991–2000.

Source: Economist Intelligence Unit.

similar institutional and policy features. Among the institutional handicaps, their banks and financial institutions were poorly supervised and their capital/asset ratios inadequate. Their lenders and borrowers were linked via special ties and traditional norms of financial practices. Portfolio risk management was rudimentary. The institutional and regulatory inadequacy varied from country to country; in East Asia, Indonesia was perhaps more handicapped than Malaysia. As the highly leveraged borrowers—private in East Asia and sovereign in Argentina—missed their debt payments, foreign creditors withdrew funds, aggravating the finances of the borrowers and further dragging down the values of the currencies they dumped.

As to their common policy features, most of these economies followed intermediate exchange rate arrangements, neither firmly fixed nor freely floating, except for the Argentine *peso*, which was fixed to the US dollar on a one-to-one basis. Thus, the East Asian economies and Brazil (before the *real* was devalued in January 1999) in effect followed adjustable pegs, without their central banks openly committing themselves to devaluing or revaluing their currencies in the presence of balance of payments deficits or surpluses. Because the exchange rates in these economies were kept more or less stable without being formally and legally fixed to the dollar, and because their interest rates were substantially higher than in the developed country sources of capital, short-term funds flowed in freely, with significant destabilizing potential.

The differences

The East Asian economies differed from the Latin American as regards their macroeconomic performance and political environments. Overall, in the years preceding the crisis, the East Asian economies had robust macroeconomic fundamentals, but the Latin American group was prone to unsteady inflation control, inadequate budgetary discipline, low saving and investment rates, and shaky growth performance. The Latin American political landscape also differed in being less stable and its heritage more leftist.

Macroeconomic fundamentals

The macroeconomic indicators in the following discussion refer to the period 1991–96 for the East Asian and 1991–2000 for the Latin American set of countries (1999 for Brazil). In the years preceding the crisis, the East Asian economies recorded high annual growth rates averaging 7 to 10 percent (Figure 16.3). By contrast, the real GDP growth rate in Argentina was volatile, and negative in 1999 and 2000. Brazil's growth rate declined from 1994 onwards and was little more than zero in 1999 (Figure 16.4).

Annual inflation rates in the East Asian group were in low single-digit numbers prior to 1996 (Figure 16.5). In the Latin American group, by contrast, inflation rates were high in the first half of the 1990s, but had fallen to

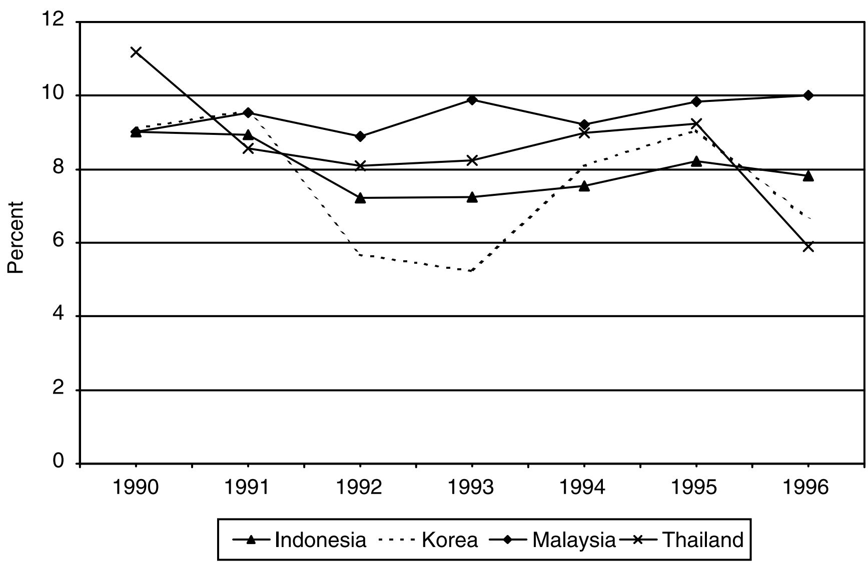

Figure 16.3 GDP growth: Asian countries, 1991–96 (Annual percentage change in GDP).

Source: Economist Intelligence Unit.

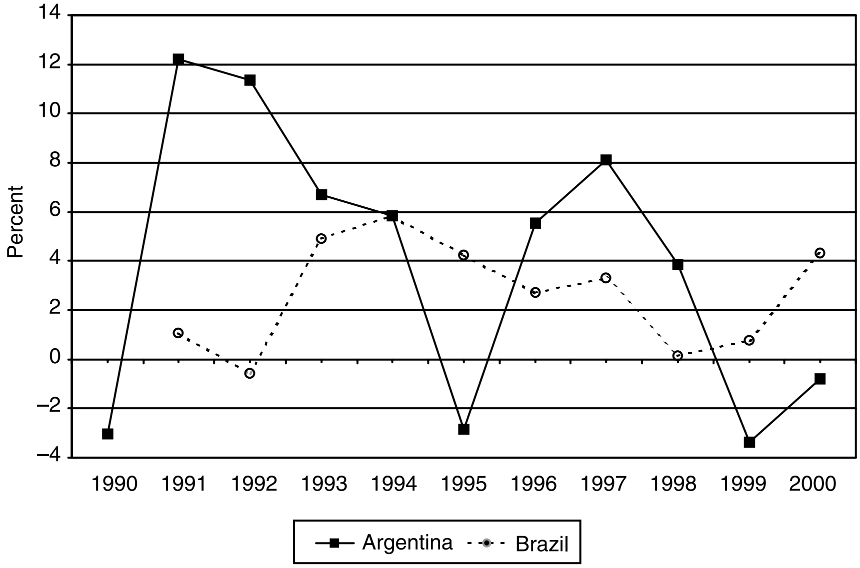

Figure 16.4 GDP growth: Latin American countries, 1991–2000 (Annual percentage change in GDP).

Source: Economist Intelligence Unit.

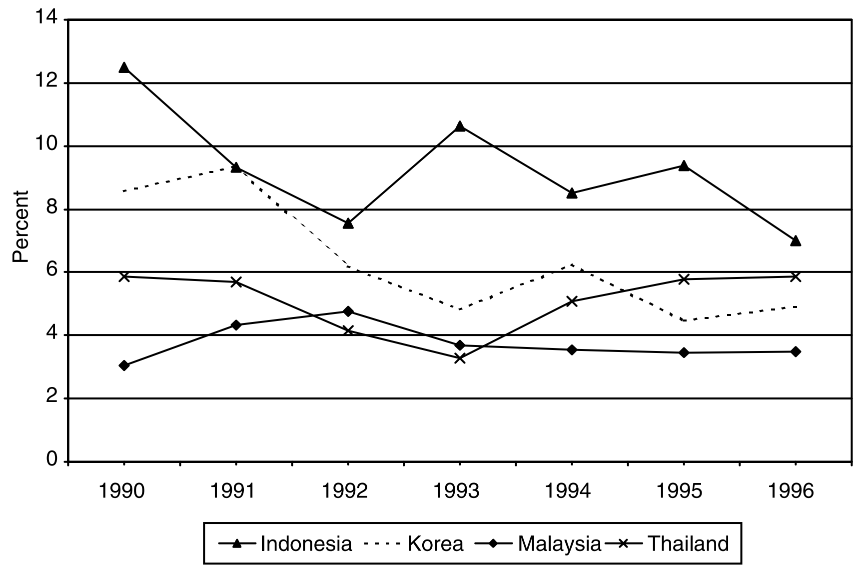

Figure 16.5 Inflation rate: Asian countries, 1991–96 (Annual percentage change in consumer prices).

Source: Economist Intelligence Unit.

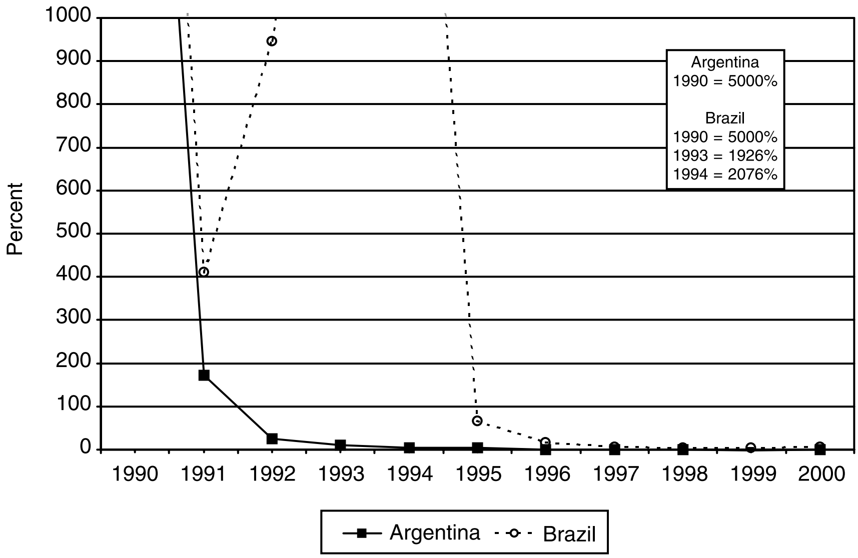

Figure 16.6 Inflation rate: Latin American countries, 1991–2000 (Annual percentage change in consumer prices).

Source: Economist Intelligence Unit.

single digit numbers by 1999 (Figure 16.6). Even so, the inflation battles of Brazil and Argentina were hardly conquered, as can be seen from these countries' post-crisis performance.

Government budgets in the East Asian group were in surplus in most years (Figure 16.7), whereas they were in deficit throughout the period in the Latin American countries, hitting 10 percent of GDP in Brazil in 1999 (Figure 16.8).

The East Asian economies were high investors and savers, showing some spillover of the private sector's net dissaving into their current account deficits. Gross investment rates in East Asia ranged from 30 to 40 percent and higher (Figure 16.9). These in turn were supported by high saving rates, ranging from over 25 to 35 percent and higher (Figure 16.10). As a result, current account deficits were low, averaging 3 to 4 percent of GDP, except for the extreme 8 percent for Thailand in 1996 (Figure 16.11).

Investment rates in Argentina and Brazil, at 15 to 20 percent, were only half those in East Asia (Figure 16.12). Equally discouraging, the saving rate was stagnant at 15 percent in Argentina, and in Brazil it declined to that level in 1999 from 20 percent in 1991 (Figure 16.13).

The current account deficit accordingly was no worse than in the best East Asian performers, although that in Brazil had steadily worsened from a positive 2 percent of GDP in 1992 to negative 5 percent in 1999 (Figure 16.14).

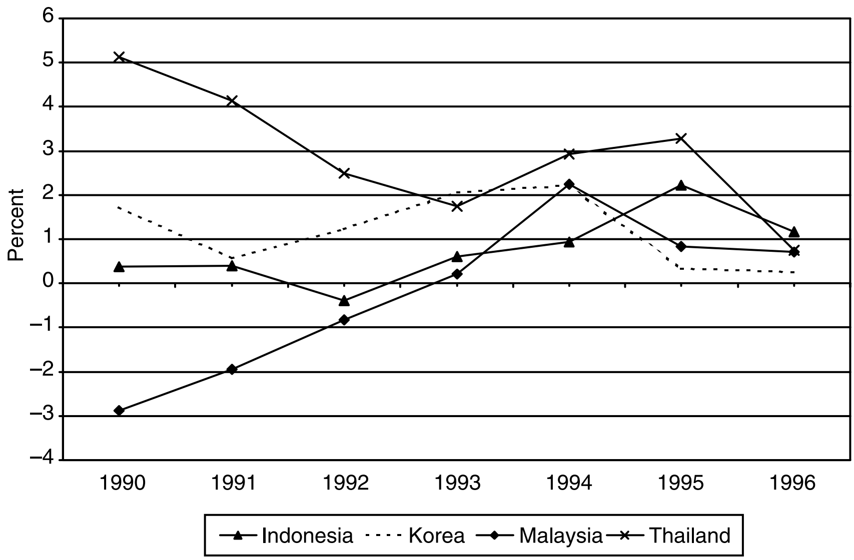

Figure 16.7 Budget balance: Asian countries, 1991–96 (Budget surplus/deficit as percentage of GDP).

Source: Economist Intelligence Unit.

Finally, in the 1980s and 1990s the annualized export growth rates of Korea, Malaysia, and Thailand, averaging 13–15 percent, were more than double those of Argentina and Brazil (Figure 16.15).

The political environment

The newly elected governments that succeeded populist Peronism in Argentina and military regimes in Brazil in the early 1990s increasingly struggled to meet debt repayment obligations by creating budget surpluses, while at the same time providing basic services and subsidies for fuel and food to the rural poor and the urban shantytown dwellers. The free market neo-liberal reforms that swept the continent in the early 1990s faced a challenge, if not a reversal, after the Argentine debt default of December 2001, which in turn affected the financial and currency stability in Brazil and Uruguay. Across Latin America (barring Chile, Mexico, and perhaps Venezuela), electorates were turning away from autocratic regimes of the left and the right, but delivering fragmented governmental and legislative structures to their policy-makers, creating formidable problems for the latter of steering growth-oriented macroeconomic agendas.

In the East Asian countries, needless to say, the financial turmoil interacted with political problems, affecting policy-makers' ability to implement the

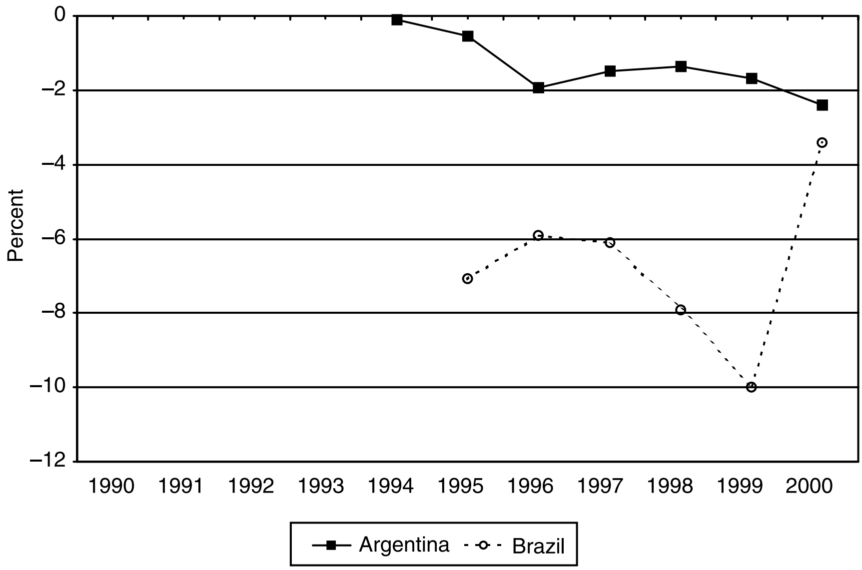

Figure 16.8 Budget balance: Latin American countries, 1991–2000 (Budget surplus/deficit as percentage of GDP).

Note: Data prior to 1994 for Argentina and prior to 1995 for Brazil are not available.

Source: Economist Intelligence Unit.

rescue measures required under IMF monitoring. Elections and their outcomes complicated the process further. South Korea and Thailand experienced political uncertainty during the economic crisis, but in both these countries the political changes were constitutional, serving to reassure the citizens. The new governments started riding out the ill effects of the crisis sooner than in Indonesia under B. J. Habibie, who was handpicked by President Suharto as his deputy and approved as such by a compliant parliament in the summer of 1998. Indonesia's freewheeling Suharto-Habibie brand of politics in the midst of the turmoil also contrasted with Malaysia's autocratic regime under Prime Minister Mahathir Mohamad, who launched his own economic blueprint, bypassing IMF support.

Overall, the East Asian economies had built-in resilience arising from their sustained superior performance and their fiscal maneuverability—something that Brazil and Argentina lacked, because both are federal states continually plagued by the overspending of their constituent provinces.

The International Monetary Fund to the rescue

The IMF sought to resolve the financial crises by imposing fiscal and monetary austerity in the troubled economies in order to stem capital outflows,

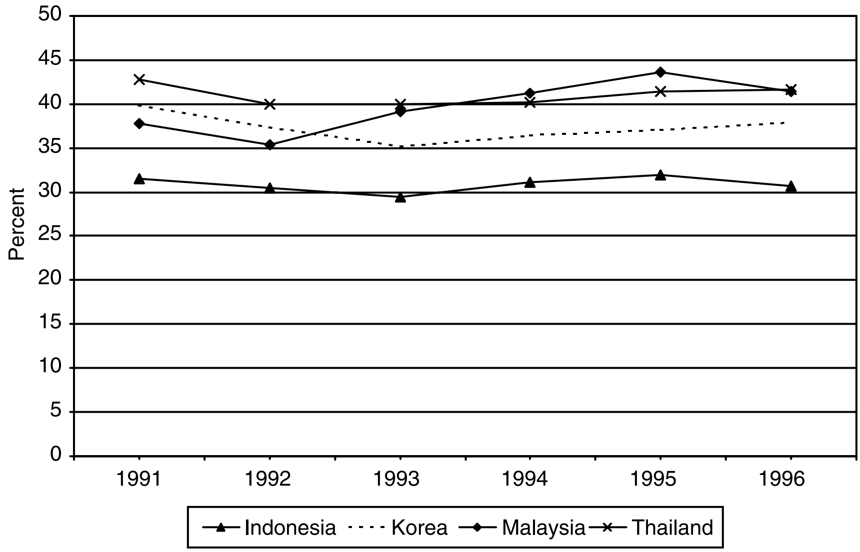

Figure 16.9 Investment rate: Asian countries, 1991–96 (Gross domestic investment as percentage of GDP).

Source: Economist Intelligence Unit.

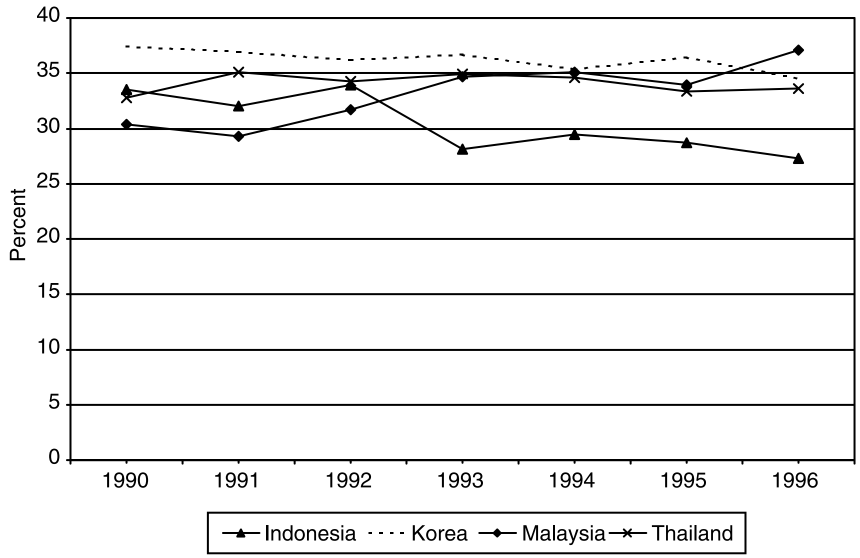

Figure 16.10 Saving rate: Asian countries, 1991–96 (Aggregate national saving by public and private sector as percentage of nominal GDP).

Source: Economist Intelligence Unit.

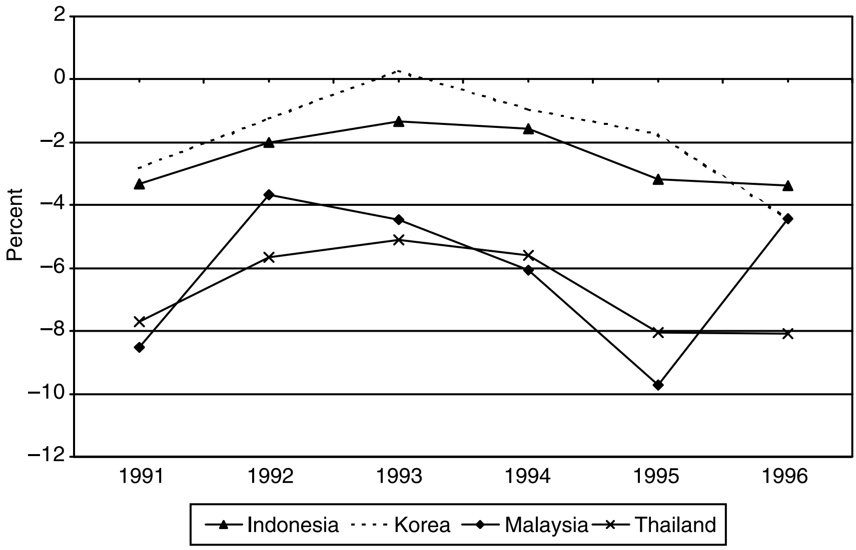

Figure 16.11 Current account balance: Asian countries, 1991–96 (Current account balance as percentage of GDP).

Source: Economist Intelligence Unit.

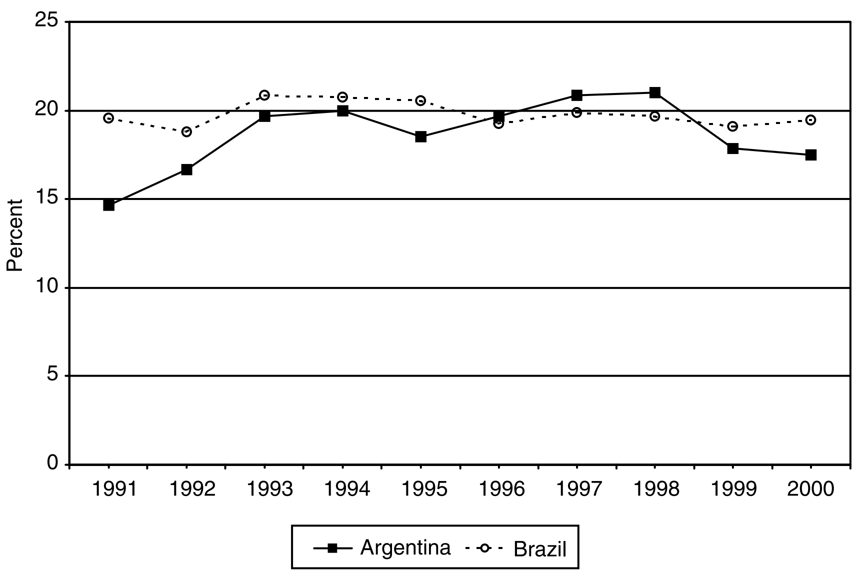

Figure 16.12 Investment rate: Latin American countries, 1991–2000 (Gross domestic investment as percentage of GDP).

Source: Economist Intelligence Unit.

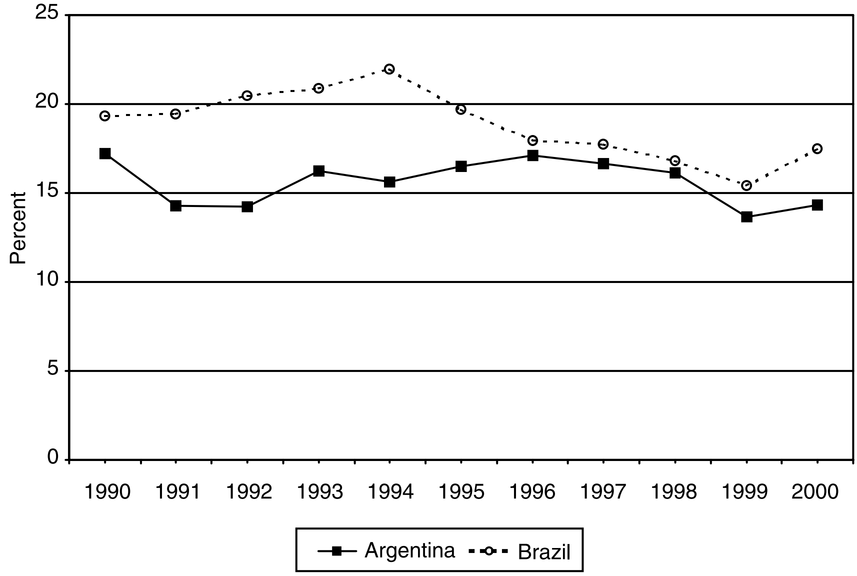

Figure 16.13 Saving rate: Latin American countries, 1991–2000 (Aggregate national saving by public and private sector as percentage of nominal GDP).

Source: Economist Intelligence Unit.

exchange rate collapses, and inflation spirals. It not only misjudged the gravity of the Asian crisis, but also failed to learn lessons that could have prepared it for managing later crises in Brazil and Argentina. It could have intervened earlier with larger financial support, less severe policy strictures, and innovative initiatives for timely and orderly debt restructuring, and thereby could have moderated the need for large bailouts for the crisis-swept economies. The option of imposing Malaysian-style temporary exchange controls on capital outflows also ran contrary to its "one-rule-fits-all-situations" bureaucratic approach and its ideological predisposition against such controls for member countries that seek its financial support.

As the Asian crisis spread at unprecedented scale and speed from Thailand to the neighboring countries and beyond to Russia and Brazil, the IMF found its financial resources and negotiating skills, its technical expertise and public posturing, and above all, its policy relevance, tested to the hilt. Three years later, in late 2000 in mid-recession Argentina, the Fund faced a debt and currency turmoil that arose from the use of an antiquated policy framework that tied the *peso* to the dollar under a currency board straightjacket.

The crisis in East Asia created an unprecedented challenge because it differed starkly from typical past experience. Typically, member countries had sought Fund support to handle imbalances that resulted from excessive public sector outlays, leading to monetary expansion, or from economy-wide

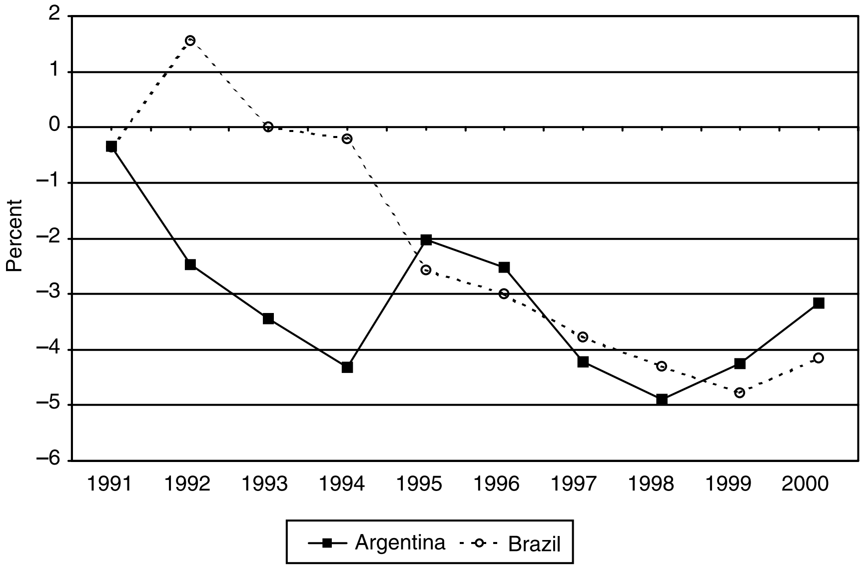

Figure 16.14 Current account balance: Latin American countries, 1991–2000 (Current account balance as percentage of GDP).

Source: Economist Intelligence Unit.

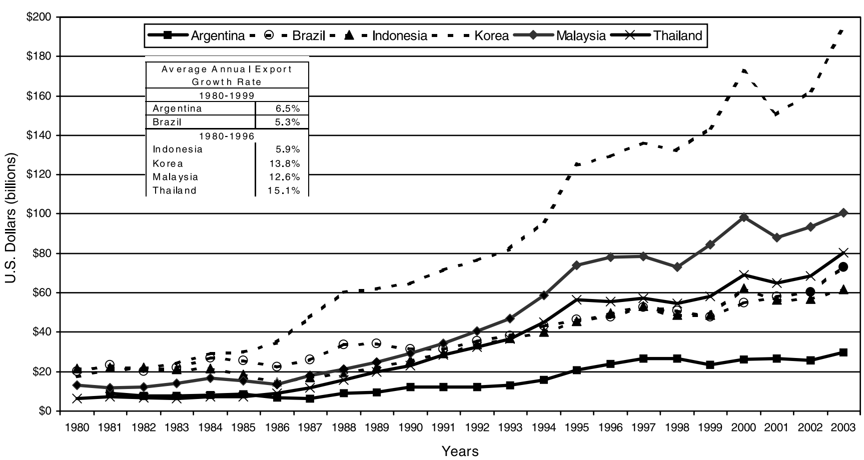

Figure 16.15 Export growth: Asian and Latin American countries, 1980–2003 (Total annual exports (f.o.b.) in US$).

Source: Economist Intelligence Unit.

overspending, spilling into current account deficits. But, except for Thailand, the new supplicants in East Asia had neither fiscal imbalances nor significant current account deficits. Rather, they faced a liquidity crisis triggered by outflows of short-term capital.

In crisis-prone Brazil, a long record of budgetary mismanagement interacted with exogenously triggered capital outflows in 1998 and with specific internal events that in turn aggravated fiscal finances; the IMF rescue, fiscally demanding, had to be steered amidst domestic political ups and downs. In Argentina, the financial crisis, unrelated to the Asian malaise, intensified in late 2000 as the weak fundamentals pressured the *peso*. A declining economy—hobbled by the *peso*'s link to the strong dollar, dwindling tax revenues, unsustainable budget and current account deficits, and escalating foreign debt—kept the international lenders of Argentina's US$132 billion debt nervous about default or *peso* devaluation, both of which in fact occurred in December 2001. Throughout the crisis chronology, the IMF responded with its worn-out recipe of financial support coupled with budget deficit slashing in the midst of declining economic growth and political uncertainties.

In what follows, I analyze IMF activity in these countries, beginning with Thailand and ending with Argentina, omitting Malaysia because it did not seek Fund support.

IMF support in East Asia

On August 20, 1997, the IMF Executive Board approved a loan of US$4 billion for Thailand, the first of the countries discussed here to seek Fund assistance. The three-year stand-by arrangement was part of a US$18 billion package that included additional funds from the World Bank, the Asian Development Bank, and Japan. Indonesia turned to the Fund following a massive depreciation of the *rupiah* in late October, and in November the Fund approved US$10 billion for Indonesia as part of a three-year stand-by arrangement. Indonesia subsequently received US$8 billion from the World Bank and the Asian Development Bank, and a pledge of US$18 billion from bilateral sources as additional support. Korea, which approached the Fund in December, received the largest package, with a total of US$21 billion from the Fund, US$14 billion from the World Bank and the Asian Development Bank, and a pledge of US$23 billion from bilateral sources as a second line of defense.

These levels of support were unprecedented: financial support for Thailand amounted to 505 percent of its IMF quota;[3] Indonesia's package was 490 percent of its quota; and the figure for Korea was a staggering 1,939 percent! The Fund's commitment to these countries amounted to more than US$36 billion. The World Bank and the Asian Development Bank contributed almost US$27 billion, and bilateral sources pledged about US$54 billion, bringing the total to US$118 billion. By the beginning of 1999, a year after the third country had turned to the Fund for assistance, the Fund had distributed US$30.9 billion, or almost all its promised support (IMF 1999: 3). The funding provided foreign exchange to the countries' central banks, enabling them to repay debts falling due.

The Fund's immediate concern was to commit financial resources to Thailand, Indonesia, and South Korea with a view to stemming capital outflows, exchange rate collapses, and inflation spirals. Its related goal was to initiate and enforce structural reforms for restoring investor confidence, capital inflows, and economic growth. The resource commitment noted above was conditioned on the recipient countries' adoption of swift macroeconomic adjustment via monetary and fiscal tightening under a floating exchange rate regime.

The Fund's policies, emphasizing fiscal and monetary contraction in the crisis-swept economies that were sliding into severe slowdown, prompted serious criticism.

The East Asian economies' fiscal health prior to the crisis had given no cause for concern. In fact, strong growth and budgetary positions over time had helped to reduce their ratios of public debt to GDP. Why then did fiscal pruning constitute an important part of IMF conditionality? According to Eichengreen (1999: 35), the Fund was only "mirroring market sentiment." If a country like Brazil (to be discussed below) were to respond to slower economic growth by cutting taxes and increasing public spending, investors would flee, the currency would crash, and the resulting financial distress would only make the recession worse. Thus, market discipline is perverse. As Paul Krugman put it: "Brazil, we are informed, must suffer a recession because of its unresolved budget deficit. Since when does a budget deficit require a recession?"

The Fund's fiscal stance thus violated the received Keynesian wisdom of using expansionary fiscal policies to deal with economic downturns. Radelet and Sachs (1998) asked whether fiscal contraction was not egregious in the presence of the withdrawal of foreign funds. IMF economists Lane *et al.* (IMF 1999) argued that the measures had been taken to assuage the concern raised by their critics; because domestic private agents were expected to scramble for funds as foreign capital withdrew, allowing the government to expand the budget deficit would squeeze the available funds. But the Fund overlooked two alternative possibilities. First, since monetary brakes were activated to stem capital outflows, an overly stringent fiscal tightening aggravated output decline, revenue flows, and budgetary management; thus a less austere fiscal stance was possible and advisable. Second, country-specific, temporary capital control measures could have been used to arrest capital outflows, as in Malaysia, and prevent the "crowding out" of private activity by enhanced government spending that the Fund economists feared.

The Fund subsequently revised and softened its fiscal policy stance in the targeted countries, not with a view to increasing liquidity in their economies but because its projections of their growth and revenue and social safety net requirements had turned out to be wrong. Having applied monetary and fiscal brakes, the Fund relied on unrealistically positive growth projections, and underestimated the need for social safety nets financed via budgetary provisions. Its macroeconomic packaging could have been less draconian had it been combined with successful controls on capital outflows, which would have moderated the recessionary drag in these economies.

The Fund's resources were hopelessly inadequate to meet the formidable financial requirements of the hour. And the financial support received from non-Fund official contributors was also inadequate; it was uncertain and at best slow to materialize, and it had to be phased to ensure the recipients fulfilled Fund conditionality. The official inflows were far exceeded by the massive and fast-paced capital outflows, with their threats of financial havoc, economic downturns, and worker layoffs. "The plain fact is that capital flows have become so large that the official sector often does not have enough resources to stabilize an economy without private sector participation" (Fischer 1998b: 9). Having encouraged the wild beast of capital inflows to freely step into the Asian markets, the Fund tried trapping it in a mousetrap on its outward flight.

The IMF and Brazil

Brazil was the last country to be hit by the Asian payments crisis. It turned to the Fund for financial support in November 1998, to stem the capital flight brought on when an unsustainable public sector deficit spilled into a current account deficit. An emerging market economy under an elected president, Brazil had tamed inflation from a quadruple-digit 1,927 percent in 1993 to a low 7 percent in 1997. During the same period it posted an annual GDP growth rate of more than 3 percent with a reasonably low unemployment rate of 5 to 6 percent. Compared with the East Asian economies on the eve of their payments crises, Brazil financed its current account deficit with relatively less contribution from short-term foreign funds. But Brazil's government deficits posed significant problems: they required the overhaul of public sector finances that had long been accustomed to bloated salary and social security payments, and the resolution of federal-provincial differences in order to rein in traditional overspending practices.

The IMF policy stance in Brazil was based on the short-term goal of stemming capital outflow from the economy and the medium-term goal of restoring credible management of public finances. The former called for higher interest rates; the latter called for fiscal tightening via improved revenue collection and reduced outlays, combined with fast-paced approval of spending cutbacks targeted at permanently restoring fiscal balances.

IMF support program of November 13, 1998

The IMF three-year-standby credit of US$18.1 billion approved for Brazil on November 13, 1998 was supplemented by support from the InterAmerican

Development Bank and the World Bank, raising the aid package to US$-41 billion. To ease the impact of monetary tightening and decline in economic activity, prompt approval was granted for the disbursement of US$4.5 billion of the IDB and World Bank funding, to be used for support to small and medium businesses and to lower-income groups. Monetary control exercised through a rise in interest rates was to be accompanied by fiscal discipline, defined in terms of public sector primary budget surpluses that were targeted to go up from 0.1 percent of GDP in 1998 to 2.6 percent in 1999 and 3 percent in 2001, stabilizing the ratio of public sector indebtedness to GDP at 45 percent.

The Fund expected that the policies and the support package would restore investor confidence, ruling out the need for a change in the prevailing exchange rate arrangement pegging the *real* to the dollar. In practice, capital outflows continued, forcing the authorities to abandon the regime of "managed" devaluation in favor of a float. The currency slumped by 40 percent in eleven days (from R$ 1.32 per US dollar on January 18, when the float was introduced, to R$ 2.14 per US dollar on January 29), necessitating a revised policy framework and program.

Revised IMF program of March 8, 1999

The major policy shift of letting the *real* float (as with the East Asian currencies) was linked with inflation targeting: inflation was to be brought down from its annualized monthly rate of 45 percent to a single-digit range by the end of 1999. But the Fund's attachment to single-digit inflation rates flew in the face of Brazil's weak public sector finances. To contain the inflationary impact of currency depreciation, the Fund prescribed fiscal improvement and monetary tightening via flexible interest rates. The targets for public sector primary surpluses were revised upwards to 3–3.5 percent of GDP for 1999–2001. Interest rates were expected to fall to below 30 percent by the end of 1999, thus easing the burden of public debt relative to GDP. The program anticipated extensive structural reforms—designed to lower social security payments, enhance fiscal transparency, and speed up the privatization of state assets. Most of these structural reforms were calculated to reduce and stabilize budget outlays in the long run.

The austerity measures coupled with diminished interest payments produced a surprise gain in the budget in March 2000, resulting in Brazil's biggest monthly federal budget surplus since 1991. But the authorities struggled with tax, pension, and banking sector reforms, and with the fulfillment of inflation and budget surplus norms in 2000. Despite the 40 percent devaluation of the *real* in January 1999 and the lowering of interest rates, Brazilian export performance remained inadequate, resulting in a current account deficit of 4.7 percent of GDP in 2001. As foreign investment flows from risk-averse investors slipped from US$33 billion in 2000 to an anticipated half that amount in 2001, the *real* slipped by 20 percent between January and

August 2001. The currency depreciation added to inflationary pressures and to the debt burden—which mounted from 25 percent of GDP in 1997 to 47 percent in 2001—and threatened to wipe out the modest gains of price stability and improved fiscal management.

To arrest a further decline of the *real*, the IMF announced US$15 billion of financial support to Brazil in August. The September 11 terrorist attacks on the US raised prospects of the *real*'s further fall, by turning away nervous investors, further denting Brazilian exports as the US economy headed toward a recession, and setting off a damaging ripple effect in Brazil of reductions in tourism, hotel occupancy, and airline activity. Brazil's public-sector domestic debt climbed from 34 percent of GDP in 1997 to 55 percent by mid-2002. The cost of repaying the dollar-denominated fraction of this debt (20 percent of the total) had risen steadily as the *real* fell. Brazil's foreign debt, mostly private, was less than 50 percent of GDP, but since foreign exchange earnings failed to rise sufficiently, the debt service ratio jumped from a minuscule 0.59 percent of GDP in 1990 to 8.20 percent in 2001.

In the run-up to the presidential elections in October 2002, voter discontent, political uncertainty, and the resurgence of fiscal free spending threatened to wipe out the economic gains of price stability. As the political uncertainties of the elections deepened, Brazil found itself mired in low growth, high spending, and unsustainable borrowing. A Fund rescue package of US$30 billion was approved on August 7, of which US$6 billion was promised for immediate use upon approval by the Fund management. But it was doubtful if the dangers posed by the "debt-growth" model encouraged by unsustainable borrowing could be successfully averted.

Brazil failed to resolutely clean up its structural budgetary problems, raise its export earnings, or bring its debt burden under control, and thus it failed to move rapidly to a sure-footed growth path. In this it was unlike Korea, Malaysia, and Thailand, all of which had sustained pre-crisis records of healthy public sector finances, robust export performance, and high saving rates. Brazil's institutional reforms moved too slowly for the government to generate a primary budget surplus large enough to maintain a resolute schedule of debt repayments. Despite the "exuberant optimism" generated by the pragmatic pro-market policy maneuvering of Luiz Inacio Lula da Silva (who became Brazil's president on January 1, 2003), the prospects of strong stable recovery in Brazil are not guaranteed. The Brazilian president must navigate an economic revival in the midst of high interest rates, and generate primary budget surpluses that are large enough to pay off the debt while battling the post-election fragmented politics and satisfying the populist mandate that brought him to power.

The IMF and Argentina

Argentina's crisis exploded with a debt default and *peso* collapse in December 2001. The IMF, judged by the size of its funding programs, their inappropriate policy strategizing, and lack of innovative sequencing, had proved inadequate to the challenges Argentina posed.

A series of financial infusions had begun with the release of nearly US$-14 billion from the IMF—out of US$40 billion worked up multilaterally in December 2000—followed by an additional US$8 billion in August 2001 to support the *peso*-dollar peg and ward off debt default. With each release, the Fund's conditionality had become stricter and its policy stance tilted toward pell-mell debt swaps by Argentine authorities. A prescription for a zero budget deficit had necessitated state salary and pension cuts from the 2001 budget, and required more slashing of payments to individual recipients and provincial administrations from the 2002 budget. Monetary tightening raised the benchmark interest rate for 180-day *peso* loans to 37 percent in early October 2001.

In the final quarter of 2001, the government desperately needed to continuously roll over short-term debt so that some debt could be paid from the (primary) budget surplus, keeping the IMF program on track. It negotiated lower transfers to provincial governments in the 2002 budget and scaled back the debt obligations of these governments to the federal treasury by converting them into instruments with lower interest rates and longer maturities. It arranged a similar swap of government debt of US$60 billion with local banks and pension funds. But despite these frantic efforts, the financial markets still doubted the government's ability to prevent a default on its short-term debt of US$35 billion to foreign creditors.

Both the US$40 billion multilateral support package of December 2000 under the Clinton administration, and the subsequent IMF funding of US$8 billion of August 2001 under the Bush administration, failed to confront the grim reality of the Argentine crisis or to depart from the worn-out IMF policy agendas of monetary and fiscal tightening. The signals from Washington under the new administration pointed to reduced Fund handouts and a need for more self-help and house cleaning by Argentine policy-makers. The new Treasury Secretary, Paul O'Neill, famously remarked: "We're working to find a way to create a sustainable Argentina, not just one that continues to consume the money of the plumbers and carpenters in the United States who make US$50,000 a year and wonder what in the world we're doing with their money" (*The Wall Street Journal*, August 20, 2001, p. A10). And as if to initiate a novel policy departure, US$-3 billion of the US$8 billion in August IMF funding was tied to "a voluntary and market-based" debt rescheduling by Argentine authorities. But this policy wrinkle, a fly swatter aimed at stopping an out-of-control stallion, came too late.

From the start of Argentina's financial problems, the Fund had had three options. Backed by the US Treasury, it could have:

- proposed a debt rescheduling plan for consideration by all parties, and tied the budget targets and a floating *peso* to the plan's acceptance;

- refused Fund support if the Argentine authorities turned down the proposed plan;
- adopted its standard funding package and fiscal austerity, and watched the Argentine authorities implement it via disorderly debt restructuring and escalating budget tightening while remaining in the grip of the destructive *peso*-dollar link.

The Fund chose the third option, which was the one least likely to succeed, most damaging to the Fund's own policy record, and most ominous in its consequences for Argentina's economy.

Problems of restructuring Argentina's debt

The early debt restructuring alternative would surely have featured in the agenda had Argentine debt liabilities heavily affected the balance sheets of US banks (as did South Korean debts); or had they threatened the stability of the global or even the Latin American financial system (which they did not); or if Argentina were a strategic partner (as Turkey was in the anti-terrorism alliance).

What stood in the way of an early restructuring of Argentina's debt? Standing at approximately US$133 billion by the end of 2001, Argentina's debt had moved up in relation to GDP from about 50 percent in mid-2000 to 60 percent a year later, as the economy continued to decline and interest charges accumulated. The debt on federal government account was US$-95 billion in bonds (of which US$60 billion were held by local financial institutions including banks and pension funds), US$4 billion in treasury bills, and the remaining US$34 billion in credits from multilateral and other sources. The debt was a significant 23–24 percent of the emerging market bond index, and market analysts feared that its swap at less-than-market valuation would create a precedent for similar haircuts for investors in Brazilian bonds. The debt was also held by far-flung financial institutions, mutual funds, and insurance companies, domestic and foreign, involving complicated negotiations.

Given the complexity of the problem, the debt settlement formula required multiple features and a bold departure from the Fund's standard policy approach. Since most of the debt was sovereign (unlike the Korean debt, which was private), the government had to be brought into early negotiations and to accept the restructuring option. In view of the wealth losses that the debt clearing was bound to entail, foreign bondholders had the option of facing some losses earlier for their miscalculations on investments gone sour, or risking bigger losses later. For the IMF program to remain on track, the formula also required limits to be placed on the restructuring losses of local holders of the debt, so as to preserve their financial viability and to minimize the fiscal pressures on lower levels of government and Argentine citizens. Asking Argentine voters for further belt-tightening threatened the emergence of populist left-wing politicians who could undo the gains of the successful inflation battles of the early 1990s. The Fund had information at its disposal relating to the emerging fiscal imbalance in Argentina. It was aware of the formidable difficulties of reducing the imbalance quickly via raising taxes or slashing outlays, and of maintaining steady progress in meeting debt repayment obligations out of budget surpluses.

To convince all parties of the urgent need for early negotiated debt settlement, the IMF itself needed to mount an initiative for an early settlement of a member's sovereign debt. No precedent existed, but the signal for such an unusual step came in a communiqué that the IMF's International Monetary and Finance Committee issued at its ministerial meeting on September 24, 2000 in Prague. For countries that faced possible disruptions in their payments to private creditors, the communiqué's approach ranged from the most desirable scenario—speedy and successful access by the debtors to the financial markets—to the least desirable scenario—debt restructuring. Where early restoration of full market access proved unrealistic, the communiqué explained, "a broader spectrum of actions by private creditors, including comprehensive debt restructuring, may be warranted to provide for an adequately financed program and a viable medium-term payments profile. This includes the possibility that, in certain cases, a temporary payments suspension or standstill may be unavoidable" (Mussa 2002: 32–33).

An orderly, timely, and total debt settlement under an IMF initiative could have paved the way for abandoning the *peso*'s link with the dollar and with it the depressing discipline of the currency board. Argentina called for a bold policy move from the Fund at the very start of its bailout in December 2000.

Following the debt default, the *peso*'s break from its eleven-year link with the dollar, and the switch from a three-week dual exchange rate to a free float in the market, the Argentine government and the IMF played a game of chicken and egg, with the Fund demanding reliable budget and growth numbers before extending a fresh round of funding, and the government asking for new credits so that a credible plan could be devised. The *peso* did not crash in its first week of float in early February because banks were restricted from converting *pesos* into dollars and transferring them abroad, and because there was a widespread shortage of cash in the economy.

In Argentina, the IMF faced the indispensable policy trinity of a negotiated, orderly restructuring of all debts; viable budgets; and a floating *peso* before and after the debt default of December 2001. Debt restructuring was essential in order for the banks, companies, and pension funds to start operating normally, and for the Argentine treasury to begin formulating credible budgets across the governmental hierarchy, avoiding the temptation to bridge the gap between revenues and outlays via monetary expansion that could send the *peso* spiraling downward.

Lessons of experience for the International Monetary Fund

The Fund's policy record from Bangkok to Buenos Aires was distorted by its ideological policy preference for capital mobility; marked by its standard pro-cyclical response of imposing fiscal discipline on recession-prone economies with a view to restoring investor confidence; and occasionally influenced by pressure from the US Treasury motivated by non-economic considerations. Itself a slow, inflexible bureaucracy, the Fund failed to carry out timely and innovative solutions tailored to the circumstances of the member countries seeking its support. This section reviews lessons of experience that would improve the Fund's ability to avert and resolve currency and financial crises.

Size and timing of IMF resources for crisis countries

Did IMF provide adequate funding for the crisis-ridden economies, from Thailand in 1997 to Argentina in 2001? IMF credits to these economies were megabucks in contrast to the balance-of-payments relief that it had provided in the Bretton Woods era for member countries in need. And, as noted earlier, the new credits were also substantial in relation to the quota entitlements of the crisis-ridden East Asian recipients. But the funds were grossly inadequate to cope with the recessionary liquidity crunch imposed by actual and potential speculative capital outflows. IMF funding also materialized slowly, and some funding from bilateral sources was unlikely to appear in time, if at all.

Faced with the resource constraint, the Fund imposed severe austerity via fiscal and monetary tightening in countries that were recession-prone (in East Asia and later Brazil) or in the midst of severe recession (Argentina in 2001). The Fund's vigorous imposition in Argentina of the pro-cyclical policies it had used in the Asian global crisis of four years earlier raised reasonable criticisms such as: "What did the Fund learn from its Asian bailout experience? Will it go from crisis to crisis with a recipe not only stale but also brutal in its recessionary impact? Will the Fund leadership, dominated by quota holders from the G–7 center, continue imposing its austerity recipe on the emerging market periphery in financial crisis?"

Potentially, the Fund could counter such charges by following one of two alternatives. In principle, it could increase the amount of financial support with a view to softening the fiscal-cum-monetary pressure on a country in financial trouble and, in the process, become a genuine lender of last resort. Alternatively, it could change its standard outdated recipe by introducing policy innovations to suit the individual needs of a financially troubled emerging market economy and in the process revive it with less economic cost. These alternatives are now explored in turn.

The IMF as a lender of last resort?

According to Allan Meltzer (1998: 83):

> The central bank is called the lender of last resort because it is capable of lending—and to prevent failure of solvent banks must lend—in periods when no other lender is either capable or willing to lend in *sufficient volumes* [emphasis added] to prevent or end a financial panic.

In practice, replenishing IMF quotas with a view to providing the Fund with enough funding to prevent or end a financial crisis would likely be problematic, in view of the political battles in the US Congress that preceded the quota augmentation by US$17 billion in 1999.

More to the point, however, IMF funding for preventing or containing crises has not necessarily followed the objective criteria that would be used by an independent central bank of a particular country. The size, timing, and type of IMF bailouts have been tilted by political imperatives, security concerns, and countries' economic importance. For example, the Soviet planned economy arrangements had to be converted into a market system with active participation by the IMF (and the World Bank) so that Russia, a nuclear power, did not descend into anarchy. Neither could Turkey, a NATO member and a partner in the anti-terrorist alliance, be allowed to go under. And Brazil, the largest economy in the Latin American backyard of the US, must be kept afloat; here again, the bailout decision for an emerging market economy was not only affected by the political and strategic concerns of the US-led center but also by the share of G-7 creditors in the debt obligations of a potentially defaulting debtor. The dominant share of US private banks in South Korea's debt prompted the rescheduling of that debt and a revised IMF rescue plan. These pulls and pressures, involving closed-door networking and negotiating, can reasonably provoke charges that the Fund's bailout procedures involve double standards, when the Fund requires a country it assists to get rid of deals among cronies within its financial sector.

Diversifying IMF policy prescriptions

Since the IMF cannot be an effective and neutral lender of last resort, it should opt for the second alternative and diversify its policy prescriptions. Three suggestions emerge from the Fund's bailout record in the countries considered here. They relate to the need for better inflation control and budget deficit targeting for recipient countries; the need for an occasional departure from the Fund's hidebound ideological insistence on free capital mobility; and a pre-emptive initiative to be orchestrated by the Fund for sequencing orderly debt settlement for a heavily indebted recipient in financial crisis—ahead of and along with the standard macroeconomic agenda to be implemented by the recipient's policy-makers.

The IMF and macroeconomic targeting

Economic targeting, less precise and more painful in its consequences than dartboard shooting, can be improved with practice. For the troubled economies discussed in this chapter, the Fund failed to distinguish between desirable and feasible monetary and budget deficit targets All these countries borrowed heavily in the 1990s following their capital account liberalization drives, but the East Asian group had a sustained record of balanced government budgets and high saving rates before they were hit by the financial crisis. Brazil and Argentina, by contrast, had low or declining economic growth rates, lagging tax revenues, and substantial debt burdens at the onset of their crises. Nonetheless, as part of the Fund bailout, Brazil and Argentina were required to maintain high interest rates so as to retain investor confidence and at the same time to generate sufficient primary budget surpluses (via tax revenues) to meet their debt repayment obligations. Fiscal expenditure cutbacks were politically unmanageable, and tax increases were difficult because the high interest rates curtailed economic growth. The uneven and unsatisfactory performance and policy records of Brazil and Argentina did not substantiate the theory that stricter monetary and budget deficit targets would pressure recipient country governments to achieve better follow-through and greater effort at institutional clean-up. Instead, they ultimately helped to damage the credibility of the IMF.

Despite the differences in the two groups of countries, and despite the differences in the timing and amount of support, the Fund's policy prescriptions were strictly uniform. This uniformity raises the critical issue of the role of the Fund's research staff in working up diverse macroeconomic policy tools for member countries in trouble. A deluge of annual reports and macroeconomic models by Fund economists, who have first-rate expertise and access to vast amounts of information, failed to pre-empt or minimize the costs of financial crises when they arose.

Is it possible that Brazil and Argentina could have benefited from the policy experience of Chile in the 1990s and Malaysia in 1998, both of which temporarily departed from the Fund's policy orthodoxy? Or is it possible that the party line from the top of the IMF, firmly wedded to free capital mobility and free market ideology, rules out the design and implementation of alternative policy scenarios from the Fund research department for emerging market economies? While claiming to be a multilateral organization, the IMF remains a top-heavy agency with an entrenched policy ideology.

The budget deficit and monetary control targets, supported with inadequate IMF funding, could arguably have been less severe had they been combined with temporary controls on capital outflows, given that these countries were in fact overwhelmed with financial chaos resulting from unsustainable short-term inflows. These targets could also have been less stringent had they been linked with an IMF initiative for systematic and timely reduction in debt repayment obligations.

The IMF and capital account controls

Interpreting the IMF approach to capital account controls, Fischer (1998b: 4) states:

> The IMF's attitude to controls on outflows has been that these should be removed gradually, as a country's macroeconomy, balance of payments, and financial system strengthen. The most advanced countries have fully liberalized capital flows, and that is where all countries should ultimately be heading—but not prematurely. With regard to inflows, we see no case for controlling long-term inflows, particularly of foreign direct investment, but can see the disadvantages of surges of short-term capital, both inflows and outflows, and therefore can support market-based controls, along Chilean lines, that are intended to discourage short-term inflows.

The Fund therefore allows temporary market-oriented controls for economies that are inadequately prepared to benefit from capital account liberalization. However, emerging market economies that provoke a severe liquidity crisis by their hasty opening up of capital accounts cannot invoke the argument of insufficient readiness and revoke capital liberalization measures as part of a Fund bailout.[4]

Thus, according to Fischer (1998a: 2), IMF lending is needed because

> . . . from time to time, for whatever reason, countries get into trouble, frequently because of mistakes in their own policies. But the tendency in those situations is to take measures that would be destructive of their own prosperity or of their neighbors. What measures would be destructive of their own prosperity? It would be to close down the system, to increase tariffs, *to impose capital controls* [emphasis added].

Evidently, the imposition of temporary, market-based controls by borrowers seeking Fund support violates the Fund's purpose, which is

> to give confidence to members by making the general resources of the Fund temporarily available to them under adequate safeguard, thus providing them with opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity.
>
> (*IMF Articles of Agreement*: 3)

By the end of 1996, 134 out of 181 Fund members had eliminated controls on current account transactions and more than 50 countries had removed capital account controls. "Careful progress in this direction is attracting increased attention in our policy dialogue" (Camdessus 1996: 1). As the liberalization strategy promoted via "policy dialogue" and subtle pressure pulls in more emerging market economies into the global capital network, and forces them to seek Fund support when they encounter financial problems, the opening up becomes irreversible.

The Fund's practice of denying selective choice of capital account controls to member countries in crisis that seek its support runs contrary to its positive nod in favor of temporary capital account controls. Its mandate of correcting crisis-induced maladjustments without "resorting to measures destructive of national or international prosperity" rules out this option. The East-Asian economies prematurely opened up their capital accounts under the Fund's watch even as the Fund was warning Thai policy-makers about a worsening financial situation. A simultaneous imposition of temporary controls on outflows during the Asian crisis could have moderated the recession in each country and the international contagion—which were arguably more "destructive of national and international prosperity" than the rejected alternative of coordinated restrictions on capital outflows!

Commenting on the adoption of controls by Malaysia to moderate capital outflows, Fischer (1998b: 4) states: "This approach has been taken by Malaysia, and has had support from leading academics. But it is surprising how few countries have intensified capital controls *in the present crisis* [emphasis added]." They did not intensify controls because the IMF would not allow them to regress into such controls. Malaysia went ahead because it did not seek a Fund bailout!

Subsequently, the Fund gave a qualified nod of recognition to the Malaysian selective capital account controls without endorsing them as a crisis resolution strategy. In the IMF's view, the fixed exchange rate of the *ringgit* operated successfully in the controlled regime without a currency black market and illegal outflows because Malaysia already possessed a solid regulatory system and strong financial institutions.

In effect, therefore, the IMF promoted full capital mobility, in and out, for emerging markets by conveying the following signal to their policy-makers: "You must allow capital to move in for you to benefit from its welfare-improving gains, although your economies may lack the necessary institutional and structural underpinning. And you must allow capital to move out because capital controls, in the absence of such underpinning, will lead to criminal activity in your foreign exchange markets and illegal capital flight from your borders." Thus, in advocating unrestricted inflows, the Fund effectively ignores emerging market economies' inadequate preparedness, but in advocating unrestricted outflows it invokes this inadequate preparedness! This approach is asymmetric at best and self-serving at worst, and for the peripheral borrowers it carries enormous costs from speculative inflows and their sudden reversal.

Pre-emptive debt restructuring

The Fund's attempts to minimize losses to crisis-prone borrowers, and to creditors who scrambled to unload their holdings of currencies under pressure, have not included pre-emptive debt restructuring. By reducing the debt repayment burden and promoting effective fiscal management, such debt restructuring can promote investor confidence without requiring explicit capital account controls.

From the IMF perspective, the timely and orderly restructuring of debts (whether private as in South Korea or sovereign as in Brazil and Argentina) raises complicated issues.

The IMF itself cannot undertake such an initiative because its Articles of Agreement do not contain provisions that would enable it to impose temporary debt suspension under internationally legislated bankruptcy laws.[5] Indeed, more than three years into the August 1998 Russian debt default, the G-7 architects of the new financial order had not devised formal procedures for "bailing in" private lenders in order for them to bear the costs of debt overhaul. Prospects for the adoption of such procedures are not promising.

The Fund will refrain from persuading the parties to begin a dialogue because, in its view, borrowers bear the responsibility for debt management and clearance. But such an attitude can degenerate into blame and buck-passing, and subject the Fund to legitimate charges of inflexible policy posturing.

In the 1990s, emerging markets were coaxed by the IMF, the US Treasury, and Wall Street investors to throw open their economies to capital inflows. They fell for the temptation in the same way as they welcomed McDonalds, Madonna's music, Snickers bars, and T-shirts. Only the big players—among them India and China—saw the difference and refrained from hasty capital account liberalization.

The Fund's surveillance mechanism failed when some emerging markets borrowed excessively. If the IMF walks away from the destabilizing consequences of these inflows for the peripheral economies, it can be seen as an emissary of the G-7 center rather than a multilateral institution. South Korea's debt restructuring of 1998, followed by a revised Fund program, provides a precedent for a link between debt settlement and Fund policy packaging.

Perhaps a coordinated pre-emptive restructuring of Argentina's sovereign debt could not have saved the Fund's macroeconomic blueprint for Argentina. But without such an initiative, the funding turned out to be money down the drain. Instead of chalking up a new policy innovation in resolving debt crises in emerging markets, the IMF remained committed to its policy orthodoxy of fiscal and monetary austerity, recently supplemented by a switch from a managed to a floating exchange rate arrangement.

The alternative policy trinities

Indeed, IMF insistence on the triple arrangements of a floating exchange rate, free capital mobility, and presumed monetary policy autonomy creates unmanageable choices for policy-makers in financially vulnerable emerging market economies.

In a global economy with fully liberalized capital markets, are floating exchange rates a genuine choice for these economies? Fully floating exchange rates will imply a policy switch from the old impossible trinity of capital mobility, fixed exchange rates, and monetary autonomy (which I explain below) to the new—presumably possible—trinity of capital mobility, floating exchange rates, and monetary autonomy.

Within the old impossible trinity, a country that chooses to fix its exchange rate with free capital mobility can manage two features out of three. It can fix the exchange rate and allow capital mobility but cannot pursue an autonomous monetary policy. If its exchange rate comes under pressure, the central bank must spend its foreign exchange reserves to protect the fixed peg to which it is committed, but in so doing, it can lose all its reserves if foreign lenders, alarmed at the prospect of an impending devaluation, dump the local currency and bring about its collapse. The IMF concluded from the Asian financial debacle that the managed exchange rates prevailing in the economies contributed to the downfall of their currencies. Foreign speculators, hoping to profit from the substantial interest rate differentials when exchange rates were stable, bought the currencies but discarded them when they came under pressure. In the Fund's view, the situation called for a switch from pegged to floating exchange rates, including arrangements with a wide band.[6] Committed to the orthodoxy of global capital markets, it assumed that such a switch would give greater flexibility and monetary policy discretion to policy-makers in emerging markets.

When capital is freely mobile, the adoption of the alternative policy triad, with floating exchange rates, is unlikely to result in monetary policy autonomy in emerging markets. Most of these countries lack the monetary policy independence that is automatically associated with floating exchange rate regimes. They must move their interest rates in tandem with those in the capital exporting center in order to regulate capital flows. Monetary easing, aimed at reviving the domestic economy, might prompt a sudden reversal of capital flows. Monetary tightening via higher interest rates, aimed at reining in domestic inflation, will attract inflows. These will cause appreciation in the exchange rate, which policy-makers may find difficult to counter either through costly sterilization (because domestic interest rates are higher than foreign rates) or through fiscal cutbacks (because political dissent renders these impractical).

Equally daunting problems arise because of institutional bottlenecks. Banks in emerging markets may not react promptly to monetary signals because of poor lending practices reflected in assets that are inadequately backed with capital. For example, the moratorium on debt repayment by Russia's highly leveraged commercial banks resulted from their inability to raise cash to repay foreign debts. Emerging market financial institutions also lack depth, experience, and electronic transmission capability. Few of these countries have extensive bond markets or a treasury bond rate that can serve as a benchmark for their capital markets.

Thailand provides a suitable example of an economy struggling with monetary policy decision-making. In early June 2001, as Thai policy-makers faced falling exports and foreign exchange reserves, a widening trade deficit, and a declining *baht*, they were embroiled in controversies about lifting the interest rate to stem capital outflows. The finance minister's policy pronouncement reflected a painful choice devoid of genuine monetary policy autonomy: "We want an appropriate interest rate level: not so low that it creates capital outflow and not so high that it disrupts the investment environment" (*Financial Times*, June 7, 2001, p. 7). The government also planned a campaign under the slogan *Palang Paen Ding*—the Power of the Nation—to encourage Thais to curb unnecessary imports.

A regime of free capital flows and floating exchange rates is suitable for economies with low and stable single-digit inflation rates, but can create problems for a central bank battling high and unstable inflation. According to Fischer (1996: 8): "Once a country has achieved low inflation, and provided it can keep fiscal discipline without the constraint of the fixed exchange rate, it can move to a more flexible [exchange rate] system." But among the thirteen emerging economies that have adopted "independently floating" exchange rates (listed in Fischer 2001: 17), it is doubtful whether Brazil, Colombia, Indonesia, Russia, or Thailand can confidently combine autonomous monetary policies with free capital mobility, given their unsteady record of containing inflation.

For some emerging market economies, it would be prudent therefore to link floating exchange rates with market-based temporary capital account controls and, in effect, combine the advantages of floating with monetary policy autonomy.

Can the IMF be leaner and kinder in the context of a fair global financial order?

The challenge of redesigning IMF assistance consists in confronting the question of how a leaner Fund agenda can be implemented fairly in emerging market countries, if structural and institutional weaknesses mean that the market-based, first-best arrangements of free capital mobility and floating exchange rates cannot work to these countries' advantage. Four comments are in order here.

Selective capital account controls

First, as argued above, the IMF cannot function as an impartial lender of last resort under current conditions of selective pressure from its leading quota-holders, led by the US, and of its adherence to free capital mobility despite its pronouncements to the contrary. The selective pressure has influenced the frequency and size of its bailouts, while the adherence to capital mobility has called for funding packages that have proved insufficient to the needs of crisis-swept economies.

The Fund can emerge as a lender of limited resort by cutting back potential funding. It can do this in either of two ways: by extending strict market-based preconditions to more borrowers, as already incorporated in the IMF Contingent Credit Line, or by selectively recommending market-based capital account controls for crisis-prone or crisis-swept emerging market economies. The former approach will divide emerging markets into camps of financial haves and have-nots, with the former camp clubbing with the advanced economies and their creditors in the center.

The latter approach will cast the Fund in a more cooperative and pragmatic role. As the US revives and leads the global system into a fresh economic resurgence, investors' enthusiasm to lend to emerging market economies will resurface, posing dangers of excessive, destabilizing, short-term capital flows from the center to the periphery. A few emerging markets that currently seem financially viable may cease to be so, and their degeneration into financial trouble will resurrect the familiar cycle of debates calling for a departure from the Fund's worn-out policy focus. The current arrangements of free capital flows, with their negative impact on the finances and exchange rates of the emerging market periphery, will confine the Fund to the continuing role of imposing fiscal austerity, intrusive conditionalities, and spectacular failures as in Russia and Argentina. By contrast, a flexible policy framework based on the Fund's monitoring of borrowers' financial sector shortcomings can be tailored, via the adoption of market-based measures, to long-term flows. The IMF faces that choice.

Achieving monetary policy independence

Second, in the presence of free capital flows, the IMF policy preference for floating exchange rates will not endow borrowers with monetary policy independence. Floating exchange rate regimes supported by selective capital account controls will by contrast confer monetary policy autonomy on emerging market central banks.

Case-by-case debt settlement

Third, the adoption of bankruptcy-type provisions and collective action clauses in bond contracts, designed to facilitate debt rescheduling, will not work to the advantage of emerging market borrowers. It will deter potential lenders from the advanced center and stigmatize marginal borrowers in the periphery. It may even precipitate a crisis if it leads lenders to withdraw early from a crisis-prone economy. Case-by-case debt settlement with a formal engagement of the IMF in the bailout funding or informal backdoor negotiations is to be preferred.

More inclusive decision making on financial architecture

Finally, the failure of the G-7 leadership to multilateralize the discussions and negotiations relating to the design of the new financial architecture is a serious shortcoming from the perspective of borrowing countries. The populations of countries hit by the East Asian crisis suffered the severe social and political consequences of the radical recessionary brakes applied by the IMF rescue program. Their leaders felt excluded from the subsequent financial reform agenda, in which they had no defining voice or active role. And excluding the emerging market economies from the discussions that the G-7 is leading to reform the global financial system will result in the emergence of standards and procedures that are designed to promote the stability of the international financial system, rather than to discourage the flow of short-term flows from hedge funds that destabilize these economies.

This exclusionary decision-making in the center has thus far ruled out alternative arrangements, consisting of the temporary adoption of suitable capital account controls and intermediate exchange rate systems for a period during which the Financial Stability Forum norms could be systematically implanted in emerging markets with technical and financial support from the IMF.

The stick-wielding approach taken by G-7 architects is unlikely to readily eliminate the deficiencies in the functioning of the financial systems that the IMF early warning system hopes to identify. Nor has the IMF-led external pressure, embedded in the crisis bailouts incorporating free capital mobility, resulted in the rapid reform of financial sector inadequacies in peripheral economies. These inadequacies will disappear at varying speed in different countries, as the latter recognize for themselves that the practices and institutions of the Anglo-American-style market economy make it worthwhile to modify and destroy the traditional arrangements that constrain the collective gains from the free flow of global capital.

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Notes

1 Several of the ideas in this chapter are developed at length in my *Financial Crisis, Contagion, and Containment: From Asia to Argentina* (Princeton University Press, 2003).

2 Brazil experienced the fallout of the Asian financial crisis in late 1998 and subsequently the impact of the Argentine financial turmoil in 2001 even while it was recovering from the earlier contagion effect.

3 As explained in IMF (1999: 3), a member's quota in the IMF "determines, in particular, the amount of its subscription, its voting weight, its access to IMF financing, and its share in the allocation of SDRs."

4 The Fund may spare a semi-liberalized economy the full burden of its policy orthodoxy by allowing its negotiators the selective *retention* of existing controls on capital flows if they make a sound case for them in terms of, say, their limited preparedness for short-term flows. For India, for example, the IMF extended its US$3 billion funding to help overcome the foreign exchange liquidity shortage in the summer of 1991. It linked the funding to India's decisive removal of the maze of direct controls in industry and trade but allowed the government to stick to IMF Article VIII relating to the current account convertibility of the Indian *rupee*, which was devalued *without being made fully convertible on capital account*. India's situation, however, resembled the traditional balance of payments maladjustment

rather than a serious liquidity crisis brought on by massive capital flows resulting from the premature removal of capital account controls.

5 As noted earlier, the Fund's International Monetary and Finance Committee suggested in a communiqué dated September 24, 2000 that "in certain extreme cases," a temporary suspension or standstill may be an unavoidable policy option.

6 According to Fischer (2001: 2), "In essence, the excluded arrangements are fixed, adjustable peg, and narrow band exchange rate systems." In the presence of free capital mobility, the preferred regimes are "free floating to a variety of crawling bands *with wide ranges* [emphasis added], and then very hard pegs sustained by a highly credible policy commitment, notably currency boards and the abandonment of a national currency . . ." (ibid.). Fischer suggests that, between 1991 and 1999, countries with free capital mobility moved away from the old intermediate arrangements to either hard pegs or more flexible arrangements. I believe, along with Williamson (2000, cited in Fischer), that the emerging market countries' move away from the intermediate arrangements of the adjustable pegs to the more flexible arrangements has been associated with Fund conditionality attached to its bailout support for a number of these countries.

Part IV

Some of the risks

Markets, finance, migration, and the environment

17 The future of global financial markets[1]

Barry Eichengreen

Forecasting is always difficult, especially when it involves the future. More than the usual degree of difficulty is involved when the task is forecasting the future of global financial markets. In the mid-1970s, when Ernesto Zedillo, the editor of this volume, and I were in graduate school at Yale, global financial markets and private capital flows to developing countries were just awakening after a long period of somnolence. Those who anticipated that World Bank loans and official development assistance would remain the predominant sources of external finance for developing countries were surprised by the rapid growth of bank lending to Latin America and Eastern Europe by money-center banks recycling the surpluses of oil exporters and selected industrial economies. But no sooner had these facts been assimilated than lending to emerging markets collapsed in 1982 in response to rising interest rates in the US and UK and debt crises in the developing world. The result was the lost decade of the 1980s, when resources flowed upstream from developing to developed economies and growth stagnated in Latin America. The inability of governments to credibly commit to repay their borrowings, it was argued, constituted a fundamental obstacle to sovereign lending to emerging markets, and efforts by the International Monetary Fund to paper over the cracks were dismissed as creating more problems than they solved.[2] But no sooner had observers accustomed themselves to this brave new world than nonperforming bank loans were converted into bearer bonds. The Brady Plan jump-started the market in fixed income securities, which quickly became the vehicle for renewed lending to emerging markets.[3] Bond markets transferred an impressive quantity of resources to developing countries in the course of the 1990s, but the decade was also punctuated by a series of emerging-market crises that repeatedly interrupted the flow of finance, sent spreads skyrocketing, and prompted emergency intervention by the IMF. This period drew to a close with Argentina's default at the end of 2001. Borrowers and lenders drew back from the market as if they had finally taken the lessons of the 1990s to heart. Developing countries shifted from external deficit to surplus, accumulating unprecedented quantities of international reserves. They repaid external debt to their private creditors and the IMF. By early 2006, no major Latin American or Asian country was in debt to the IMF, and virtually the entire stock of Brady bonds had been retired from the market.[4] The United States emerged as the world's principal deficit country and capital importer, absorbing some two-thirds of the net savings of the rest of the world. But the idea, which gained currency following the Argentine crisis, that international investors had learned that the returns from lending to emerging markets did not justify the risks was again dissolved by the subsequent resurgence of flows into local markets and the decline in emerging market spreads to unprecedented lows (below 200 basis points in the spring of 2006).

If one thing is sure, it is that the future will bring more surprises. Any effort to forecast by mechanically projecting recent events is certain to be wrong. This uncertainty creates a dilemma for an author whose assigned topic is the future of global financial markets.

Major developments

Table 17.1 summarizes basic facts about capital flows to developing countries since the inauguration of the Brady Plan. This table highlights a number of striking aspects of recent experience.

- Private flows to emerging markets rebounded impressively from the turbulence of the late 1990s and from Argentina's 2001 default (the largest external debt default in history, following which the country adopted an uncompromising line in negotiations with its creditors).[5] The Institute of International Finance, in its the forecasts for 2006, projects private net flows of more than $350 billion, very considerably above levels attained any time in the 1990s. So much for the view that investors had concluded that investment in emerging markets did not pay.
- The bulk of these private flows are equity investment, the majority of which in turn takes the form of direct investment in which the foreigner owns if not always a controlling stake then at least a quarter of the value of an enterprise.[6] This has been true, strikingly, for more than ten years. For all the attention paid to bond issues and bank loans, in other words, it is FDI that matters most, at least quantitatively. To be sure, FDI was smaller than private net debt flows (bank lending, bonds, trade credit, other short-term flows) in the first half of the 1990s, partly because the privatization of public enterprise had not reached the point where there were attractive opportunities for mergers and acquisitions, and partly because China had not yet emerged as a prime destination for FDI. But none of this changes the basic point: net FDI flows to emerging markets have remained strikingly stable in the face of macroeconomic and financial turbulence.
- The same resilience has not characterized private debt flows (medium- and long-term flows principally in the form of bank loans and bonds). After rising through the first half of the 1990s and showing surprising stability in the face of the Mexican crisis, these fell sharply in 1998

Table 17.1 Capital flows to emerging markets, and their components, 1989–2005

	1989	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*[e]
Current account balance	–44.7	–17.8	–72.3	–80.2	–128.6	–85.5	–106.5	–83.6	–84.5	–89.4	–4.0	47.1	18.8	69.8	122.3	153.1	248.4
As % of GDP	–1.2	–0.4	–1.8	–1.9	–3.0	–1.9	–2.1	–1.7	–1.5	–1.6	–0.1	0.8	0.3	1.2	1.8	1.9	2.6
Financial flows:																	
Net equity flows	24.5	28.6	41.4	59.7	116.5	133.2	125.8	161.4	199.3	179.4	195.9	182.9	183.3	166.1	186.8	248.8	298.9
Net FDI inflows	21.2	24.1	33.4	45.6	68.2	90.0	105.6	128.6	168.7	172.4	183.3	168.8	176.9	160.3	161.6	211.5	237.5
Net portfolio	3.3	4.5	8.0	14.1	48.3	43.2	20.2	32.9	30.6	6.9	12.6	14.1	6.4	5.8	25.2	37.3	61.4
Net debt flows	50.0	58.0	63.5	95.1	108.6	72.0	151.8	123.7	107.2	54.3	16.3	–1.0	–1.5	10.7	72.8	119.1	120.1
Official creditors	20.5	27.3	30.5	24.7	26.8	15.6	38.8	3.8	13.1	34.3	13.9	–5.7	27.4	5.2	–12.3	–28.7	–71.4
World Bank*								7.3	9.2	8.7	8.8	7.9	7.5	–0.2	–0.9	1.3	0.7
IMF*								1.0	3.4	14.1	–2.2	–10.7	19.5	14.0	2.4	–14.7	–41.1
Others*								–4.5	0.5	11.5	7.3	–2.9	0.4	–8.6	–13.8	–15.4	–31.0
Private creditors	29.5	30.7	33.0	70.4	81.8	56.4	113.0	119.9	94.1	19.9	2.5	4.7	–28.9	5.5	85.1	147.8	191.6
Net m-l debt flows	12.8	15.6	13.9	34.5	48.3	41.3	54.1	82.5	85.0	85.7	22.0	11.5	–6.2	1.2	30.2	77.8	122.3
Bonds	3.2	1.0	8.2	8.6	33.0	28.9	23.4	49.5	38.4	40.6	30.6	20.5	11.0	10.8	26.4	43.0	61.7
Banks	1.8	4.0	4.0	14.8	4.7	8.2	28.6	30.7	44.0	50.3	–7.1	–5.2	–10.8	–2.8	9.8	39.4	67.4
Others	7.9	10.5	1.7	11.1	10.7	4.2	2.1	2.3	2.7	–5.2	–1.5	–3.8	–6.3	–6.8	–5.9	–4.6	–6.7
Net s-t debt flows	16.7	15.1	19.0	35.9	33.4	15.0	58.9	37.4	9.2	–65.8	–19.6	–6.8	–22.7	4.2	54.9	70.0	69.3
Balancing item[a]*								–111.2	–169.5	–127.8	–175.0	–183.6	–118.8	–74.7	–90.3	–116.2	–274.5
Change in reserves (– = increase)		–37.4	–53.2	–14.9	–63.8	–60.5	–101.2	–90.4	–52.4	–16.4	–32.2	–45.4	–81.7	–171.9	–291.6	–404.8	–393.0

(*Continued overleaf*)

Table 17.1 Continued

	1989	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*[e]
Memo items:																	
Total foreign aid-ex tech coop grants	19.2	28.2	35.1	30.5	28.4	32.7	32.8	26.7	25.3	26.7	28.5	28.7	27.9	32.5	43.7	50.3	52.6
Net private flows (debt + equity)	54.0	59.3	74.4	130.1	198.3	189.6	238.8	281.3	293.5	199.3	198.4	187.6	154.4	171.5	271.9	396.6	490.5
Net official flows (aid + debt)	39.7	55.5	65.6	55.2	55.2	48.3	71.6	30.5	38.3	61.1	42.4	23.0	55.3	37.7	31.4	21.6	–18.8
Workers' remittances**	24.5	30.6	31.2	36.3	38.5	43.6	48.1		71.2	73.1	77.0	85.2	96.4	113.2	141.2	161.1	166.8
Total net capital flows (private/ official)*								311.8	322.8	259.6	239.1	201.1	205.2	200.9	282.1	323.8	

Notes: e = estimate

a. Combination of errors and omissions and net acquisition of foreign assets (including FDI) by developing countries.

* Data available for 1996–2004 only.

** No data available for 1996.

Sources: GDF 2002, 2006.

following Asia's crisis, Russia's default, and the all-but-failure of Long-Term Capital Management. Between 1998 and 2001, activity on the bond market declined to the point where net new flows through this channel were running at barely a quarter of previous levels. International bank lending declined even more precipitously. After having been pressured at the beginning of 1998 to evergreen their loans, the banks then drew down their exposures. Net bank lending to developing countries, whose importance had surpassed that of the bond market, turned negative between 1999 and 2002. Even if it is not accurate as a general statement that the private sector had learned that investing in emerging markets is risky and altered its behavior accordingly, one class of investors, the commercial banks, does seem to have responded in this way.[7] In contrast, flows through the bond market rebounded impressively. The enthusiasm of foreign investors for emerging market debt drove spreads down to unprecedented lows in 2005–6, as noted in the introduction. The question is how much of this reflects improved fundamentals in the borrowing countries (strengthened commitments to low inflation, stronger budgetary positions, reforms of corporate governance and prudential regulation, and improved growth prospects) and how much reflects the low level of interest rates in the US, Europe, and Japan, which encouraged investors to search for yield in other markets.[8]

- The uses to which developing countries have put foreign funds are very different than in earlier episodes. If we again focus on the emerging economies (countries with significant connections to global financial markets), we see that this set of countries has put into international reserves every single dollar of private capital received in the last five years, on net, from the rest of the world. This can be seen from comparing the lines denoted "private flows, net" and "reserves" in Table 17.2. Traditionally, a not entirely desirable side effect of capital inflows has been a spending binge by governments, firms, and households which has driven up the real exchange rate, undermined export competitiveness, and diminished national creditworthiness, often precipitating a crisis. Spending by credit-constrained governments and households has been procyclical, and capital inflows, by relaxing that constraint, have amplified their response.[9] In the first decade of the twenty-first century, in contrast, the story has been different.[10] The entire private capital inflow—and more—has been set aside in the form of international reserves rather than being used to finance additional purchases of consumer durables by households, to underwrite a construction boom, to support inefficient corporate investment, and to finance government budget deficits.
- The full picture, inevitably, is more complex, since emerging markets have also used private foreign funds to finance their residents' net investments abroad and to repay obligations to international financial institutions and official bilateral creditors. But the bottom line remains the same. These two additional outflow items have not prevented emerging markets

> from salting away the entire net foreign private capital inflow in international reserves because this set of countries has also been running current account surpluses since the turn of the century.[11] This is in contrast to the situation typical of the previous decade. It is another way of seeing that, contrary to the traditional pattern, emerging markets have not allowed capital inflows to affect their spending patterns this time around.[12]

This brings us to the issue of global imbalances and to the fact that the current account surpluses of emerging markets have as their counterpart the current account deficits of the United States (since the other advanced industrial countries are in neither substantial surplus nor substantial deficit).[13] This situation where a large high-income country is in substantial deficit *vis-à-vis* the rest of the world and lower-income countries are financing its external position has a peculiar feel for economists schooled in the history of the late twentieth century.[14] This phenomenon is not easy to interpret, which is a polite way of saying that economists do not agree on its sources. The simplest way of making sense of the controversy is to recall that the current account is, by definition, the difference between investment (I) and savings (S) and that, in the absence of trade with other planets, the US current account deficit (S-I) must equal the surplus of the rest of the world (S*-I*).[15] There are thus four classes of explanation for the growth of the US current account deficit since the mid-1990s, focusing on, respectively, US saving, US investment, foreign saving, and foreign investment.[16]

The first view emphasizes low US national savings. Only corporate savings have held up well in recent years; both household savings and public savings, as conventionally measured, have declined sharply.[17] By 2005, US gross national saving had fallen to 13.6 percent of GDP, as measured by the IMF, down by 3.3 percentage points from the 1983–2000 average and barely half the level prevailing in the rest of the world. The US had already been running current account deficits on the order of 3 percent of GDP on average in 1983–2000. Thus, as a matter of arithmetic, the decline in savings can explain much of the subsequent rise in the US current account deficit.

Explaining this fall in the US savings rate, much less suggesting what policy-makers might do to reverse it, is not easy.[18] The obvious place to start insofar as we are interested in aggregate phenomena is with macroeconomic policies. The low level of interest rates in the United States since 2001 has supported a run-up in asset valuations. Households seeing their stock portfolios and real estate holdings appreciate can realize capital gains and thus have less incentive to save out of current income. The limitation of this explanation is that the normalization of the Federal Reserve's policy rates in 2004–6 did little to slow the growth of consumer demand. On the other hand, it did little to moderate the high level of asset valuations, at least in the short run, which may just be a way of saying that monetary policy works with long and variable lags.

Table 17.2 Emerging economies' external financing (billions of US dollars)

	2000	*2001*	*2002*	*2003*	*2004*	*2005*[e]	*2006*[f]
Current account balance	44.1	27.8	73.3	117.0	144.1	231.9	233.3
External financing, net:							
Private flows, net:	193.6	133.2	121.2	228.8	329.3	399.6	356.8
Equity investment, net	151.6	149.9	111.1	134.7	182.1	219.6	240.3
Direct investment, net	137.6	140.8	112.1	97.6	143.8	157.9	169.8
Portfolio investment, net	14.0	7.1	–0.9	37.1	38.3	61.7	70.5
Private creditors, net	42.0	–16.8	10.1	94.0	147.2	180.0	116.5
Commercial banks, net	0.0	–26.6	–5.7	26.9	63.9	88.7	51.6
Nonbanks, net	42.0	9.8	15.7	67.2	83.2	91.3	64.9
Official flows, net	–7.1	11.1	–3.2	–20.1	–24.8	–66.8	–25.9
IFIs	3.3	22.8	10.1	–6.4	–16.2	–40.2	–12.5
Bilateral creditors	–10.4	–11.6	–13.3	–13.8	–8.7	–26.6	–13.4
Resident lending/other, net*	–159.7	–84.6	–42.1	–57.7	–51.4	–148.5	–164.2
Reserves (– = increase)	–70.9	–85.7	–149.1	–267.9	–397.1	–416.2	–400.0

Notes: [e] = estimate.
[f] = forecast.
* = Including net lending, monetary gold, and errors and omissions.

Sources: Institute of International Finance (2003) and Institute of International Finance (30 March 2006).

Tax policy is commonly cited as the source of the decline in US public saving. Between 2001 and 2005, there was a swing in the fiscal balance from +2.5 percent of GDP to –3.5 percent of GDP. To a large extent this reflected a decline in federal tax revenues as a share of GDP, rather than any increase in federal spending, and that decline in tax take was in turn a function of the discretionary tax cuts pushed through by the Bush administration toward the beginning of the decade. This deterioration in the fiscal balance would have led to a matching decline in national saving and a matching deterioration in the country's current account balance, other things equal.

That other things are not always equal has been a theme of writings by US Treasury officials (some of which have appeared in the press under headlines like "Don't Blame Just Us").[19] Historically, the links between the fiscal balance and current account balance have been weak. It is not hard to find periods like the mid-1990s when the US budget balance and current account balance moved in opposite directions.[20] A deterioration in the fiscal balance that raises interest rates will discourage private spending and result in a significantly less than commensurate deterioration in the current account balance. Ricardian equivalence points in the same direction. But neither the observation that other things are not always equal nor evidence that the link from budget deficits to current account deficits is less than one to one justifies dismissing this variable as irrelevant. Only extreme versions of the argument suggest that fiscal policy does not matter for the current account.

For every article emphasizing declining national saving as the proximate source of the US current account deficit, there is another pointing to buoyant investment.[21] This is the view that foreign funds are attracted to the United States by the flexibility of its markets and by the country's facility in developing and applying new technologies, which together boost the profitability of new investment. This view is buttressed by the literature on the "new economy" and evidence of accelerating US productivity growth centered on information-technology-using sectors like retailing, wholesaling, and financial services. America's current account is in deficit, in this view, because the articulation of global financial markets facilitates the flow of investment finance toward the national destination, the United States, offering the highest returns.[22]

The most fundamental objection to this argument is that little increase in US investment is visible in the data. The aggregate US investment rate rose by only 1 percent of GDP between 1991 and 2004, a fraction of the contemporaneous rise in the current account deficit.[23] (See Table 17.3.) While private capital inflows financed the US external deficit in the second half of the 1990s, during the Nasdaq "bubble," in the first half of the present decade net private capital flows to the United States tapered off and the bulk of the finance for the US current account has been provided by foreign central banks, whose motives are not easily characterized in terms of profit maximization. The destination of those flows has rotated away from the equity market, which is where one would expect foreign investors attracted by the

Table 17.3 Global savings and investment trends (as a percentage of GDP)

	Average 1990–99	*Average 2000–02*	*2003*	*2004*
World saving	22.9	23.4	23.9	24.9
Advanced economies	21.3	20.6	19.1	19.4
United States	16.3	16.2	13.5	13.7
Euro area	21.5	21.3	20.3	20.9
Japan	31.6	27.8	27.1	27.6
Emerging economies	25.3	27.2	29.8	31.5
Developing Asia	31.0	32.6	36.5	38.2
China	40.3	39.9	45.5	48.0
Latin America	18.3	17.8	20.0	21.0
Central and Eastern Europe	20.6	18.8	18.6	19.1
World investment	24.0	23.2	23.5	24.6
Advanced economies	21.8	21.0	20.0	20.7
United States	18.7	19.4	18.4	19.7
Euro area	21.1	20.9	19.5	20.2
Japan	29.3	25.3	23.9	23.9
Emerging economies	27.2	26.1	27.9	29.2
Developing Asia	32.2	30.8	33.6	35.5
China	38.5	37.9	42.4	43.9
Latin America	20.9	19.8	19.0	19.8
Central and Eastern Europe	23.3	23.1	23.2	23.8

Source: BIS Annual Report (2005).

siren song of the new economy would place their funds, and toward US government and agency securities.

The third school of thought (e.g. Bernanke 2005; Hubbard 2005) points to a glut of savings outside the United States. Gross world savings rose from 22.9 percent in the 1990s to 23.4 percent in 2000–2, 23.9 percent in 2003, and 24.9 percent in 2004. All these savings have to go somewhere. China is notable for its extraordinarily high gross savings rates (as high as 45 percent of gross national product if the official statistics are to be believed), and for their sharp rise (by as much as 10 percentage points of GDP) between 1991 and 2004. But the phenomenon is more general, as it must be if it is to help explain global capital flows.[24] In fact, gross savings rates rose by the same amount, 10 percent of GDP, in the rest of developing Asia over this period. They rose by 2 percentage points of GDP in Latin America.

The final school of thought emphasizes that, in contrast to this gradual rise in gross world savings, gross world investment has been essentially flat. With investment up slightly in the United States, the implication is that it must have fallen in the rest of the world. Table 17.3 shows that the investment strike was centered in the euro area, Central and Eastern Europe, and East Asia ex China, with East Asia accounting for the bulk of the shift. Japanese investment was depressed by the decade-long slump that set in after 1992, while investment in the newly industrializing economies ex China fell in the wake of the 1997–98 crisis and never recovered fully. These observations are consonant with the view that the global imbalance is primarily a trans-Pacific phenomenon.

The role of financial markets

To what extent can these facts be explained by developments in global financial markets? As noted above, there are few places where the impact of new information and communications technologies has been more pronounced than in the financial sphere. Their impact, combined with that of the relaxation of regulatory restrictions on foreign financial investment, has been profound. Falling transactions and information costs have led to a reduction in home bias and to an increasing volume of two-way capital flows. The results are evident in a rise since 1990 in the share of residents' holdings of foreign bonds and equity relative to domestic bonds and equity in countries like Canada, Germany, Japan, and the United Kingdom.[25]

It is important to recognize the relatively recent vintage of this phenomenon. While the securitization of financial claims has been underway since at least the 1970s, most extensively in the United States, the relaxation and removal of capital controls is relatively recent. In the advanced-industrial countries other than the United States, it dates only from the 1980s. In emerging markets, the trend is more recent still (Eichengreen and Mussa *et al.* 1998).

Be this as it may, the effects are undeniable. One consequence has been that the share of portfolios devoted to foreign financial assets has risen in both advanced countries and emerging markets. Two corollaries of the increased willingness of foreigners to adjust their portfolio shares in response to changes in expected rates of return are that the size of current account balances has risen on average and that their dispersion across countries has widened. On both counts, then, external deficits have become easier to finance. While the evidence of increased dispersion of current account balances is less pronounced in emerging markets than in the advanced countries, recent replications of the analysis in Feldstein and Horioka (1980) suggest that even in the developing world the trend has been in the same direction.

But increased capital mobility can be a mixed blessing. One can readily imagine how the decline of obstacles to capital flows and the greater elasticity of external finance with respect to changes in rate of return differentials can moderate the pressure for countries to address current account and fiscal imbalances. The United States has been able to finance its twin deficits more cheaply, limiting the pressure to adjust. This phenomenon, known as the Greenspan Conundrum, is plausibly attributable to the influence of capital inflows.[26] As a result of the single market and the euro, there has been an increase in capital mobility among European countries (Blanchard and Giavazzi 2002), to which the big ones have responded by relaxing budgetary discipline. Developing countries enjoyed a sharp compression of bond spreads in the first half of the decade, and in response to this increase in investor demand for their debt securities they allowed their public debt ratios to rise further.[27]

Financial innovation has also figured in the substitution of the bond market for syndicated bank loans as the mechanism through which emerging markets can meet their international financial needs. Bonds, recent experience suggests, have superior risk-sharing characteristics. For lenders, it is easier to build and manage diversified asset portfolios and easier to close out positions, assuming of course that there exists a liquid secondary market. For borrowers, bonds have the advantage of longer maturity. These favorable risk-sharing characteristics are enhanced by efforts to provide for contingencies in the design of bond covenants, for example by including collective action clauses and trustee provisions to facilitate negotiation in the event that there is the need for restructuring, and by indexing returns to the rate of growth (as in the case of Argentina's GDP warrants) so that both lenders and borrowers share the fruits of policy reform. These are further enhanced by the development of credit default swap markets and their extension to additional developing countries, allowing investors to protect themselves against default risks.

These observations render it somewhat perplexing that bank credit dominated bond finance in the first half of the 1990s. Here it is important to recall that bond markets are not created out of thin air. Purchasing bonds is attractive only if there is a critical mass of other purchasers; it took the Brady Plan to ignite the growth of the market, and time to develop its liquidity. The informational prerequisites for a deep and liquid bond market are even more demanding than those for bank intermediation, banks being in the business of bridging information gaps. Finally, banks under the impression that they were too big to fail may have been encouraged to lend to emerging markets by the expectation that if things went wrong they would be bailed out by the national authorities and multinational financial institutions. The harder line taken by the authorities subsequently thus may have accelerated the shift toward the bond market.

Historically, emerging markets have accessed bond finance by issuing foreign-currency-denominated debt securities on international markets. These bonds address the maturity-mismatch problem, since their term to maturity is longer than that of the typical bank credit, but not the currency mismatch problem, since the government and many private-sector borrowers accrue revenues in the domestic currency but pay interest and amortization on international bonds in dollars. Only recently have emerging markets had success at issuing domestic-currency-denominated debt securities on international markets and in attracting foreign investors to their local markets, where fixed-income securities tend to be denominated in the domestic currency. Starting in 2003, a number of Latin American governments, Brazil, Colombia, and Uruguay among them, placed domestic-currency-denominated government bonds on foreign markets for the first time. These bonds are reasonably long term: they mature between 2010 and 2016. They thus pass the maturity and currency risk on to the borrower and in this way are consistent with recent concern with the double-mismatch problem.[28] They are attractive to international investors because they bear higher real yields than comparable foreign currency issues. This is tolerable for the issuing governments because global interest rates have been exceptionally low by historical standards.

Some, like Tovar (2005), question the permanence of this new form of market access. Ample liquidity has made it easy for emerging markets to issue all kinds of innovative debt securities; if central banks drain liquidity from global markets and there is a flight to quality, it is not clear that investors' appetite for bonds denominated in Latin American currencies will survive.[29] Since the turn of the century, both economic policies and exchange rates have been strong in Latin America, leading international investors to bet on further currency appreciation. But Latin American currencies cannot appreciate forever. Sooner or later, extrapolative expectations will be disappointed. Investor enthusiasm for international bonds denominated in pesos may have been a passing phase.

The most widely commented-upon aspect of this trend is the rapid growth of local markets, which more than doubled in size between 1998 and 2005, and the rising participation of foreign investors. The share of foreign investors in total domestic issuance rose from less than 6 percent at the turn of the century to more than 12 percent in 2005. The growth of the institutional investor community has been important in this connection, with hedge funds, mutual funds, pension funds, and insurance companies all adding local currency bonds of emerging markets to their portfolios. So too have been stable macroeconomic policies, strong growth outturns which have enhanced the issuers' capacity to service debt, improvements in the provision of market-relevant information (as more countries adopt internationally recognized accounting standards and subscribe to the IMF's data dissemination standards and systems), and measures to strengthen market infrastructure and regulation. In addition to fostering investor confidence, strong policies and growth have delivered credit-rating upgrades that have made possible the participation of institutional investors whose covenants permit them to take positions only in investment-grade securities.[30]

At the same time, unusually high levels of global liquidity have further enhanced the attractions of these markets, while the privatization of pension funds in emerging markets has augmented the demand for local-currency bonds by creating a natural constituency of domestic investors with an interest in purchasing such bonds in order to match the maturity and currency composition of their liabilities.[31] Here, too, the question is how much of this enthusiasm is permanent and how much is a passing phase reflecting the unusually low level of yields on the mature markets and the ample supplies of liquidity. And it is important to bear in mind that, as the IMF has put it, "foreign investors still provide only a small share of total domestic financing . . ."[32]

Emerging markets are making hay while the sun shines. Countries like Brazil have sought to capitalize on investor enthusiasm to insulate themselves from currency mismatches. They have bought back dollar-denominated and dollar-linked debt (not just their Brady bonds but other dollar-denominated and dollar-linked bonds as well), issuing local currency debt in its stead. Having been hammered by adverse balance-sheet effects when the exchange rate depreciates, governments have evidently concluded that the currency mismatch problem is the weak link in the financial chain. But, especially in Latin America, much of this local currency debt is short term, bears a floating interest rate, or is indexed to inflation, investors evidently retaining doubts about the stability of inflation and interest rates. (See Figure 17.1.) In effect, then, the authorities are trading currency risk for interest rate risk. At a time when the exchange rates of many emerging markets are strong relative to historical norms, protection against future depreciation is worth having. But given that global interest rates have also been low, taking on additional interest-rate exposure might not be the most prudent crisis-prevention strategy.

Finally, financial factors play a role in facilitating the FDI that remains the single most important component of net capital flows. Firms require liquidity for both greenfield investment and cross-border mergers and acquisitions. The development of financial markets on which those funds can be mobilized

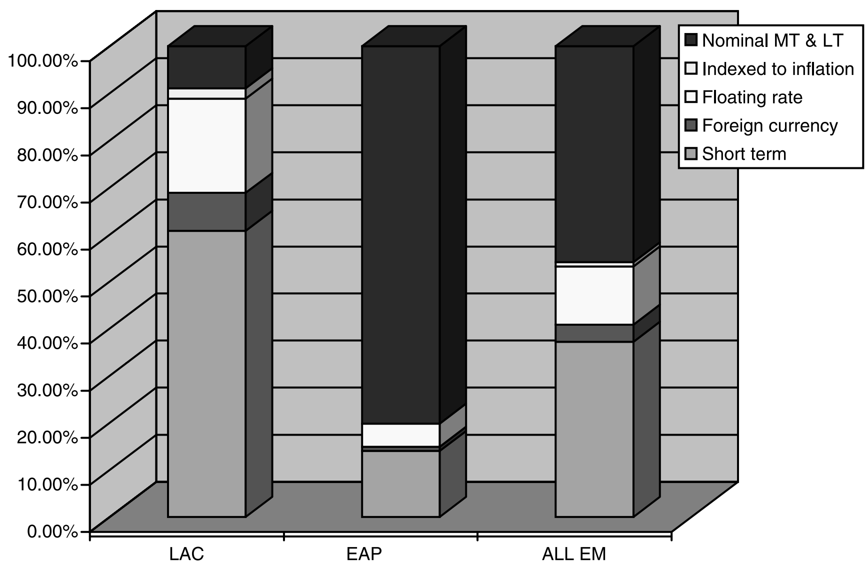

Figure 17.1 Composition of bonds issued over 2000–2005.

Source: Author's calculations based on EMWARE data.

and transferred has been an important factor in the growth of foreign-direct-investment transactions. To be sure, the growth of FDI has more than one cause. It has been supported by enterprise privatization that has augmented the population of target firms available for acquisition. It has been facilitated by high natural resource prices, the resource sector being the principal destination for FDI in the poorest countries. It reflects the development of global and regional supply chains and the emergence of China, now the single largest destination for FDI, as the assembly platform for East Asia and the rest of the world. It has been encouraged by improvements in the institutional and policy environment in the developing world. And it has been facilitated by the European Union's single market, which on paper has eliminated statutory barriers to intra-European M&As. Still, it is hard to imagine that there would have been a ten-fold increase in the volume of cross-border mergers and acquisitions in the 1990s had there not also been explosive growth in the liquidity of global financial markets (di Giovanni 2005). It is widely argued that countries should encourage FDI as a relatively stable form of foreign investment in part by regulating other cross-border financial transactions. This evidence suggests that the answer is not so easy, since there are complementarities between FDI and other capital account transactions that foster financial development.

In practice, whether to remove restrictions on international financial transactions, which was the debate in the 1990s, has given way to the question of how quickly to remove such restrictions and how to sequence capital account liberalization with other reforms. Academics continue to debate the merits of capital account liberalization, but policy makers in emerging markets share few of their reservations.[33] They see that the advanced industrial countries no longer limit the participation of foreign investors in domestic financial markets or the ability of residents to take positions in financial markets abroad. Policy-makers in emerging markets thus see capital account liberalization as part of the larger process of economic and financial development. They appreciate how globalization reinforces the fundamental argument for liberalizing international financial transactions: as a country is more deeply integrated into the global economy, it has an incentive to specialize further in order to capitalize on its comparative advantage, in turn making financial diversification more valuable as a risk-sharing device.

But policy-makers in emerging markets also absorbed the lesson of the 1990s that financial opening should proceed gradually and be carefully sequenced with other policy reforms. A one-sentence summary of the lessons of the Asian crisis is that capital account liberalization in advance of measures to strengthen domestic financial markets, reform corporate governance and adapt the macroeconomic policy regime to the imperatives of open capital markets can be a recipe for disaster. Taking these lessons to heart, emerging markets have moved away from pegged exchange rates, adopted flexible inflation targeting as a framework for monetary policy, and strengthened their budgetary institutions. They have recapitalized their banking systems, strengthened supervision and regulation, and reformed corporate governance to pave the way to life with an open capital account. The question is whether these reforms have proceeded fast enough, given the growing exposure of their economies to international capital flows.

China epitomizes the dilemma. By standard measures of investor protection, corporate governance remains weak. Estimates of the value of nonperforming loans in the banking system range upward of 40 percent of GDP. Despite having announced a new, more flexible exchange rate regime in the summer of 2005, the authorities display a reluctance to countenance significantly greater currency flexibility. But, like it or not, the Chinese economy is becoming more open to capital flows. As foreign manufacturing firms gain a greater presence in China, and Chinese firms set up abroad, both open additional channels through which funds can flow. The same is true of financial firms: as foreign financial institutions are allowed to take stakes in Chinese banks as part of the authorities' strategy for upgrading the financial system, it becomes easier to move funds in and out of the country. The monetary authorities are anxious to foster the development of hedging markets so that banks and firms can protect themselves from exchange rate volatility, and to encourage the supply of hedging instruments they have been liberalizing requirements for participation in the foreign exchange market.[34] Some observers warn that the Chinese authorities are moving too quickly on capital account liberalization and that the further removal of restrictions on international financial transactions should wait on other reforms.[35] But there is no doubt that the Chinese authorities, seeing their East Asian neighbors having been burned by premature capital account liberalization, are duly aware of the risks.

Crisis management and reform

This brings us finally to financial instability and its management. Conventional wisdom is that crisis risk has declined since the 1990s. Emerging markets have been running current account surpluses rather than deficits, as noted. They have accumulated international reserves far in excess of six months' worth of imports, the standard benchmark for prudence. They have strengthened financial regulation and macroeconomic policies and have been rewarded with upgrades from the credit-rating agencies. As the result of buybacks and debt exchanges, the share of foreign-currency-denominated obligations in total sovereign debt has declined. The share of external sovereign debt maturing in under a year has also declined, albeit more slowly.

Meanwhile, the contagious spread of instability appears to have receded, reflecting declining leverage in the hedge fund community, broadening of the investor base, and weakening of the common-creditor channel emphasized by Calvo (1999). Improvements in information dissemination have made it easier for investors to discriminate between good and bad credit risks. Didier, Mauro, and Schmukler (2006) show that the average six-month correlation of daily returns across countries was significantly lower in 2000–5 than 1994–99. Whereas the volatility of daily returns on J. P. Morgan's global emerging market bond index (EMBIG), an indicator of the general level of instability in emerging markets, spiked up to 35 percent at the time of Mexico's crisis, there was only a small increase in volatility, from 5 to 10 percent, when Argentina defaulted in 2001. Where other countries, from Croatia, Colombia, and Malaysia to Brazil, Venezuela, and Ecuador, saw their returns dragged down to negative territory in 1998, the year of Russia's default, no other member of the EMBIG experienced negative returns in 2001, the year of Argentina's default.[36] None of this rules out the possibility that individual countries will still get into trouble. But because policies are stronger, trouble will occur less frequently. And the likelihood of systemic crises where a number of consequential countries are simultaneously engulfed is now less than in the 1990s.

Or so it is said. Economics being the dismal science, it is the role of economists to suggest that all this optimism may be overdone. Reassuring statements that crisis risk and contagion have declined significantly, as in IMF (2006a), were issued in an exceptionally favorable period for emerging markets. Global growth in 2006 was forecast to run at the highest level in 35 years. High commodity prices boosted the terms of trade and export earnings of exporters of energy and raw materials. Interest rates were unusually low given the stage of the business cycle, reflecting aggressive cuts in policy rates at the start of the decade and the measured pace at which the Federal Reserve, European Central Bank, and Bank of Japan were prepared to back them out. Financial markets being awash with liquidity, spreads on sub-investment grade paper, not just speculative emerging market debt but also the junk bonds of corporations in advanced-industrial countries, fell to extraordinarily low levels. It is not hard to imagine the dangers of generalizing from exceptional circumstances that will not last forever.

At the country level, external debt was simply being replaced by domestic debt, and currency mismatches by maturity mismatches, without reducing overall levels of indebtedness. Rollover risk (the danger that maturing debts cannot be re-funded) had been reduced more by pre-funding future borrowing in what was an exceptionally favorable financial environment than by reducing indebtedness and lengthening its maturity. In cases like Hungary and Turkey, observers could still point to large external deficits and evidence of real overvaluation. Nor was it hard to imagine how a disorderly correction of global imbalances (a decline in foreign finance for the US current account deficit, a sharp fall in the dollar and US import demands, and a rise in global interest rates) could significantly aggravate the problems of these countries and then spill over to other markets.

Does the international policy community, spearheaded by the IMF, have the capacity to limit such dangers? Since the breakdown of the Bretton Woods System that the institution was created to oversee, observers have questioned whether the Fund still has a mission and tools appropriate to its task. Recently, however, reform discussions assumed a new sense of urgency. It seemed as if developing countries, flush with dollars, no longer needed the Fund. Argentina and Brazil repaid the IMF ahead of schedule. Asian governments, having suffered embarrassment from having to accept onerous conditionality in 1997–98, promised their constituents that they would never put themselves in this position again. As of mid-2006, the IMF had only six arrangements under which it lent money, down from twenty-one in 1998. Since the institution derives income from lending, this created the delicious prospect that it might have to undergo the kind of structural adjustment that it typically demands of its clients. In addition, the IMF found itself with little leverage over the problem of global imbalances that constitutes the main threat to international financial and economic stability. All this created the specter, according to King (2006), that the Fund might slide into obscurity.

The IMF's response had three elements.[37] One was to create a new facility through which substantial amounts of assistance could be automatically disbursed to countries whose policies were fundamentally sound but that were nevertheless at risk from contagion. Second was a selective increase in quotas to provide the institution with additional resources and correct the under-representation of fast-growing emerging economies. Third was the reform of surveillance to enhance the IMF's capacity to address the cross-country spill-overs and systemic financial implications of situations like the twin deficits of the United States.

It is possible to change how the IMF goes about its business only if there exists a broad coalition of countries favoring a particular reform, since no one entity possesses the broad executive powers necessary to unilaterally implement new procedures. In the present instance, reform presupposes agreement on the desirability of a new facility for which countries with sound policies would be automatically prequalified. There are academic arguments for such a facility (for example, Cohen and Portes 2003 and Cordella and Levy-Yeyati 2005). But there are also objections. No single criterion (neither the debt ratio nor the soundness of the banking system, for instance) provides an adequate basis for deciding whether a country's policies are sufficiently sound for it to receive assistance without being subject to additional conditions. If the decision of who qualifies inevitably involves judgment and discretion, then the idea that prequalification can be automatic is a pipedream.

Moreover, if policies deteriorate, a previously prequalified country may have to be disqualified, potentially precipitating a crisis. Emerging markets are understandably reluctant to accept any automatic procedure that exposes them to this risk. They insist on retaining the option of deciding whether to apply for assistance. This suggests that the result of the latest round of discussions may only replicate experience with the abortive Contingent Credit Line facility that was allowed to lapse earlier this decade, to which no country applied for fear of signaling the existence of underlying weaknesses. All this implies that the IMF's future lies not in some high-tech, automatic-disbursing facility but in more business as usual. Eligibility for assistance will have to be decided case by case, on the basis of judgment and discretion, just as in the past. Reform, in this view, should focus instead on streamlining the procedures through which such decisions are reached.

Quota increases to enhance the representation of fast-growing emerging markets would enhance the legitimacy of the Fund by making its governance more representative of its membership and give the institution additional resources to lend to members seeking to navigate increasingly liquid global financial markets. In the spring of 2006, the United States indicated that it was prepared to support limited quota reform so long as other generously represented regions (read Europe) similarly agreed to a reduction of their voting shares. Evidently, American officials had come to appreciate the advantages of working through the IMF to address certain global problems, at least. But they also saw that their emerging-market counterparts, including China, would be reluctant to do so as long as they were inadequately represented in the institution. However, significantly enhancing their representation would require not simply an incremental increase in quotas for emerging market economies and a marginal reduction in US and European voting shares, but a sharp cut in the European share and a reduction in the number of chairs on the Executive Board occupied by European countries (Europe occupying as many as nine of the twenty-four chairs depending on rotation).

Another argument in support of such reform is that balance of payments problems between euro area states are no more possible with the advent of the single currency than are balance of payments problems between New York and California. This is a rationale for ignoring intra-European flows in quota calculations (just as they ignore flows among US states), which would work to significantly reduce the voting shares of euro area countries. The latter might be prepared to countenance this if at the same time their votes were consolidated in a single chair. Leech and Leech (2005) and Bini-Smaghi (2005) calculate that if the euro area voted as a bloc it would become the critical swing voter in the IMF, even with a reduced voting share. In addition to freeing up Executive Board seats for emerging markets, such reform might permit the board to be downsized, streamlining decision-making. The creation of a single euro area chair is contingent, however, on the willingness of euro area countries to speak with one voice, something that they so far have been unable to do in the IMF.

The third dimension of reform involved efforts to multilateralize IMF surveillance. At their spring 2006 meetings the International Monetary and Financial Committee of treasury and central bank officials who serve as the IMF's steering committee agreed that the Fund should adopt "a new focus of surveillance on multilateral issues, including global financial issues, and especially spillovers from one economy on others" (IMF 2006c). Evidently, the committee had in mind problems like global imbalances, whose disorderly correction could be more disruptive for other countries than for the United

States itself, and whose smooth adjustment requires coordinated policy initiatives by several countries. The standard package includes measures to slow the rate of growth of absorption in the United States together with initiatives to stimulate the rate of growth of absorption in other regions, notably Asia, so that global demand remains unchanged, all accompanied by depreciation of the dollar against other currencies to accommodate this change in the balance of spending (see e.g. Cline 2005). This would seem to be a *prima facie* case where reviews and surveillance organized on a country-by-country basis are inadequate to the task.

The multilateralization of surveillance (some would say the re-multilateralization of surveillance) is consistent with the IMF's original mandate, the Fund having been created to discourage policies that threatened the stability of the international monetary system.[38] The question is what a multilateral approach would mean when the rubber hits the road. The IMF already publishes simulations of its global economic model.[39] These scenarios, designed to draw out the implications of national policies for financial conditions and to highlight cross-border spillovers and implications for the global system, are discussed in the Executive Board prior to publication. In other words, the consciousness-raising part of the process is already in place. Bringing together treasury secretaries and finance ministers rather than simply their delegates (members of the Executive Board) might add value, but there already exist other talking-shops and opportunities for bilateral discussion. Unless IMF management was prepared to be blunter in warning of global risks, and to do so publicly as well as privately, it is not clear how this fillip on its mandate would change anything. As always, IMF staff and management have an incentive to mince their words in order to avoid being accused of precipitating a crisis. And when countries like the US and China, who are among the Fund's principal shareholders, stand to be on the receiving end of its unwelcome advice, it is hard to imagine that they would encourage the institution to speak out and let the chips fall as they may.

This is the problem of global governance in a nutshell. The IMF is a creature of its shareholders. Countries, especially large countries unlikely to find themselves in the position of having to borrow from the Fund, will delegate sovereign prerogatives only when they see doing so as in their self interest. Thus, the US Treasury has traditionally maintained a hands-on policy toward the institution designed to ensure that its lending decisions and conditionality further the American interest. Recently, however, the Treasury appears to have gained an awareness of problems that arise when the IMF is seen as an agent of the US government and an appreciation of the advantages of delegating certain controversial decisions—over emergency lending, for example—to a truly multilateral Executive Board. British officials have similarly made the case that a more independent IMF would be a more efficient steward of global financial stability.[40]

A more independent IMF would be better able to speak out. Blunt speech is the only instrument possessed by Fund and by the global economic and financial community to encourage policy adjustment by large countries.[41] Until the United States, China, and the institution's other large shareholders recognize that it is in their own interest to strengthen this instrument, it is hard to imagine that the multilateralization of surveillance will amount to much.

Conclusion

It is tempting to conclude that global capital markets have reached the point of no return. Capital flows across borders have risen to new heights. This is true first and foremost of foreign direct investment, which has been stimulated by enterprise privatization, the development of global production networks, and the ready availability of finance for mergers and acquisitions. It is hard to imagine a return to significantly lower levels of FDI, since many of the facilitating conditions—the advent of the Internet, for example, which facilitates cheap communication with foreign branch plants, and instantaneous data transfer between cash registers at retail outlets and foreign production facilities—are permanent. The same is true of foreign portfolio investment. All of the advanced countries and a number of developing countries have relaxed or removed their most significant capital controls, and in neither world do policy-makers show any interest in going back. At the same time, policy-makers display more awareness of the dangers of excessive reliance on portfolio capital. Prudential supervision and regulation, corporate governance, and macroeconomic policies have been strengthened to accommodate these changes in the financial environment. Countries have accumulated reserves as protection against capital account reversals. They are more successfully resisting the temptation to expand public spending and acquiesce in a significant increase in private spending in periods when a large volume of foreign finance is flowing in. It is hard to imagine that what has been learned, often at considerable cost, will now be forgotten.

All this makes it important to recall that this is not the first time that financial markets are significantly globalized; this was also true before World War I. What many contemporaries regarded as a permanent condition was, in the end, only a passing phase. Global financial markets shut down in the 1930s and then took two generations to recover. This resulted from an unfortunate confluence of factors: perverse macroeconomic policies, nationalistic trade policies, poorly regulated financial markets, and the absence of a framework for international cooperation, all against the backdrop of escalating diplomatic and political conflicts.[42] Optimists will say that there have been significant improvements in the conceptualization and implementation of macroeconomic policies in the interim. The multilateral trading system is more deeply entrenched; it is institutionalized courtesy of the World Trade Organization. Financial markets and institutions are better regulated. We possess a stronger multilateral framework, starting with the IMF, to facilitate cooperation on the regulation of financial markets and the conduct of macroeconomic policies.

Pessimists will respond that a nationalist backlash is still possible. The United States, seeing its bilateral trade deficit with China explode, continues to threaten unilateral action. In Latin America, where the benefits of globalization have been slow to trickle down to the poor, populism is alive and well. The privatization of public enterprise that has supported foreign direct investment has uncertain prospects in the wake of Bolivia's re-nationalization of its energy sector in 2006. The disorderly correction of global imbalances, if it involves sharp shifts in exchange rates and significant increases in interest rates, could again place global financial stability at risk.

Kurt Vonnegut might have had this set of issues in mind when he wrote that "History is merely a list of surprises. It only prepares us to be surprised yet again." It will be interesting to revisit this chapter in, say, fifteen years in order to see what the surprises turned out to be.

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Notes

1 An earlier version of this chapter was prepared for the Conference on the Future of Globalization held at Yale University in the fall of 2003. This version is updated to reflect developments through the spring of 2006.

2 See, for example, Bulow and Rogoff (1989).

3 Announced by US Treasury Secretary Nicholas Brady in March 1989 and thereafter associated with his name, the Brady Plan encouraged bank creditors to grant debt relief in return for greater collectability and liquidity of their remaining claims, linked that relief to policy reform, and provided for the conversion of nonperforming bank loans into more liquid claims (Brady bonds). Typically, a country would issue both "par bonds" (equal to the full value of a tranche of loans but at a concessionary interest rate) and "discount bonds" (which bore market rates of interest but whose face value equaled only a fraction of the corresponding tranche of loans). Both classes of bonds were of a thirty-year maturity.

4 At the time of writing (spring 2006), the IMF had four stand-by and two extended arrangements under which disbursements are made, down from twenty-one such programs at the end of 1998. (I discuss the implications later.) Meanwhile, the stock of Brady bonds had declined from a peak of some \$150 billion in 1996 to little more than \$10 billion (where all bonds are taken at face value).

5 Historically, recovery rates on defaulted foreign bonds have been of the order of 60 percent (Eichengreen and Werley 2000). The recovery rate for investors in Argentine bonds is an outlier in this regard; Byun and Oswald (2006) put it at 28 percent through the spring of 2006. This could change, however, as a function of future negotiations with holdouts—if any—and of the performance of

Argentina's GDP warrants, the rate of return on which varies with the country's growth (see also below).

6 25 percent is the typical cutoff between portfolio investment and FDI used by international organizations and national statistical agencies when doing such tabulations.

7 To be sure, there was a sharp increase in syndicated bank lending to developing countries in 2005 (up by nearly 75 percent over the previous year). Much of this reflected high energy prices (financing for oil and gas projects and oil import financing, with Emerging Europe and Central Asia accounting for nearly 40 percent of transactions, and the Russian Federation accounting for half of that, in turn). Petroleum companies were also the major borrowers through this channel in Latin America. More generally, poor countries with sub-investment-grade ratings are disproportionately dependent on bank credit for their financing needs—exposing them to the cyclicality emphasized in the text. See World Bank (2006).

8 The markets' reaction to the normalization of policy rates in the money centers will presumably tell the tale.

9 This is a well-known historical phenomenon emphasized by, *inter alia*, Fishlow (1986). It was then brought to the attention of policy-makers in the 1990s by Calvo, Liederman, and Reinhart (1994).

10 At least in the aggregate.

11 The picture is basically the same if we consider all developing countries (as in World Bank 2005) instead of just emerging markets. Low-income countries have historically run slightly larger deficits/small surpluses. Interestingly, an exception is the beginning of the present decade, when they in fact ran somewhat larger surpluses.

12 One might add the qualification "for better or for worse," the "for worse" aspect being that emerging economies—the emerging economies of East Asia in particular—have not contributed as much as otherwise to the growth of global demand. The result is that the United States was responsible in an arithmetic sense for the majority of the growth of global demand in the first half of the decade and incurred a large current account deficit, whose implications are explored momentarily.

13 That is, they are in neither substantial surplus nor deficit as a group.

14 Or for that matter, in the history of the early twentieth century, net capital flows from high- to middle-income countries having reached historic highs in the period 1900–13. A systematic comparison, subperiod by subperiod, is Obstfeld and Taylor (2003).

15 Here, as is conventional in the textbooks, a deficit is a negative balance, and asterisks denote foreign variables.

16 I have used this approach to analyze the controversy over global imbalances in more detail in Eichengreen (2006).

17 "Conventionally measured" alludes to the fact that the national income accounts do not include in national saving unrealized capital gains on residents' asset portfolios—a point to which I return momentarily.

18 The difficulty of explaining variations in savings rates across households and over time has given rise to a literature in behavioral economics where nonstandard variables are invoked to explain these variations. See, for example, Choi, Laibson, Madrian, and Metrick (2001).

19 See US Treasury (2006) and Snow (2006).

20 The budget strengthening, the current account weakening.

21 See e.g. Cooper (2004), Clarida (2005), and Backus and Lambert (2005).

22 In this vein, the 2006 Economic Report of the President referred to the external imbalance as "the capital account surplus" rather than "the current account deficit" (United States Council of Economic Advisors 2006).

23 Data are from BIS (2005).

24 Since China is still too small to play a large role in producing global outcomes when its national income is valued at market exchange rates—which is the relevant measure for understanding international financial transactions.
25 See the data in Milesi-Ferretti and Lane (2005).
26 For evidence, see Warnock and Warnock (2005).
27 This is compatible with the emphasis in the previous section on how developing countries have exercised more spending restraint than in previous lending booms. The point here is that such restraint and the primary surpluses associated with it have still not been sufficient to prevent debt ratios from continuing to rise.
28 On the other hand, the investor is largely free of convertibility risk because the coupon and/or principal is paid in dollars (computed at current exchange rates).
29 Thus, Argentina was able to issue a global bond, a eurobond, and a private placement all in pesos in the mid-1990s, but the flight to quality that followed the Russia-LTCM crisis closed off this incipient form of access to international markets.
30 Thus, in 2005 the average rating of countries included in J. P. Morgan's global index for the bonds of emerging market economies (the EMBIG) rose above BB for the first time since its advent. Hedge funds are not subject to such restrictions, and many of them thus specialize in exotic sub-investment-grade fixed-income securities, but they are only one member of the growing class of foreign investors in local markets.
31 Some observers will insist that the prominence of pension and provident funds in the local markets of many developing countries is a mixed blessing, since pension funds are buy-and-hold investors and this buy-and-hold behavior is not conducive to market liquidity.
32 IMF (2006a), p.99.
33 With good reason: since this is one of those topics where context is critical for conditioning the effects, neither theory nor econometrics suggest unconditional answers. For a sampling of scholarly work on this subject, see Eichengreen (2001).
34 In August 2005, they expanded the forward market by allowing all banks, including foreign banks, with licenses to trade in the interbank foreign exchange market to transact renminbi forward and swap contracts with clients as well as in the interbank market, and it allowed the banks to determine forward rates independently. Trading in renminbi-denominated interest-rate swaps began in February 2006, when the People's Bank of China published a list of eighteen banks approved to deal in such swaps.
35 See e.g. Prasad, Rumbaugh, and Wang (2005), and Eichengreen (2005).
36 Details are in Byun and Oswald (2006).
37 See IMF (2006b).
38 Thus, provisions in the original Articles of Agreement like the "scarce currency clause," under which other countries could restrict transactions with a country whose chronic surpluses threatened to place dangerously deflationary pressure on the international monetary and commercial system, were applied precisely in acknowledgment of this multilateral responsibility.
39 In its *World Economic Outlook*, which appears twice a year.
40 Again, see King (2006).
41 The US Treasury has a process by which other countries may be declared currency manipulators in the event that it judges their exchange rate policies to be contrary to the international interest, in which case import duties and other sanctions can be imposed. A review of this mechanism is in Frankel (2006). But this being the decision of one national government, it lacks legitimacy internationally. And there is a sense in which the initiating country only ends up shooting itself in the foot.
42 The story is nicely told, with these same implications in mind, by James (2002).

18 Globalization and exchange rate policy

Jeffry Frieden

Exchange rates powerfully affect cross-border economic transactions. Trade, investment, finance, tourism, migration, and more are all profoundly influenced by international monetary policies. Many developing-country governments have searched for alternatives to the uncertainty that can prevail on international currency markets. Policy entrepreneurs have rushed to peddle currency nostrums, urging a turn toward dollarization, managed floating, nominal anchors, target bands, or other options.

There are both theoretical and empirical reasons to expect globalization to heighten the importance of the exchange rate. Theoretically, open-economy macroeconomic principles imply that capital mobility profoundly affects exchange rate policy choices. As Robert Mundell showed more than forty years ago, the government of a financially integrated economy faces a choice between monetary policy autonomy and a fixed exchange rate (Mundell 1963). If the government opts for a fixed rate, capital mobility makes impossible a monetary stance different from that of the anchor currency; alternatively, if the government opts to sustain an independent monetary policy, it must allow the currency to move. These constraints mean that the economics and politics of monetary and exchange rate policy are likely to be very different in an economy that is financially open than in an economy that is not. By the same token, inasmuch as international economic integration involves increased exposure to international financial and commercial flows, it heightens the concerns of those involved in or exposed to international trade and finance. In a relatively closed economy, few economic actors care about currency movements. But as economies become "globalized" more firms, investors, and workers find their fortunes linked to the exchange rate, and to its impact on trade and financial flows. This concentrates attention on the exchange rate.

Empirically, the impact of "globalization" on exchange rate politics can be seen both over time and across countries. The exchange rate was an important policy problem in the previous era of high globalization. Between 1870 and 1914, the gold standard was one of the major political controversies of the era. In the economies that first approximated globalized conditions today—the small open economies of Western Europe—the exchange rate was so prominent an issue that monetary unification became the top priority of many Europeans over a twenty-year period. And, in the many economies that have now liberalized commercial and financial relations with the rest of the world, currency policy has similarly become central.

The policy advice that governments receive on exchange rates has typically been presented as technical solutions to technical economic problems. Yet exchange rate policy is highly political. It is chosen by policy-makers often concerned about the impact of currency policy on electoral conditions, and pressures from special interests and mass public opinion can affect its course profoundly. The gap between exchange-rate policy advice and the actual policy environment resembles the gap often found in discussions of policy towards the rule of law, investor protection, and corruption: the recommendations assume away interest groups, mass public opinion, and electoral coalitions—in a word, politics. And this is more than an academic concern. Recommendations that ignore the political economy of policy implementation can have disastrous outcomes. A first-best policy whose implementation is subverted by political realities may well be far worse than a feasible second-best solution.

In this chapter, I set out a rudimentary picture of the political economy of exchange-rate policy in developing countries.[1] I start by outlining prevailing approaches to the analysis of currency policy, highlighting the argument that ignoring politics leads to poor policy advice. I then discuss the choices policy-makers face with regard to exchange rate regimes and exchange rate levels, and the tradeoffs among different values that these choices entail. I analyze the political-economy pressures—special-interest, mass political, electoral—faced by policy-makers, with evidence drawn from recent Latin American experiences, before reaching my conclusion.

Politics and the exchange rate

The events of the past twenty years demonstrate the importance of understanding the political economy of currency policy. The European Monetary Union, debates over dollarization in Latin America, currency crises in Mexico, East Asia, Russia, Brazil, Turkey, and Argentina—all are impossible to understand without incorporating the role of pressures from interest groups, from mass publics, and from politicians concerned about their re-election. (The same, of course, is true of the gold standard in the nineteenth and early twentieth centuries.)

Currency policy is made in an intensely political environment. Even apparently apolitical observations often embody political assumptions or assertions. For example, allusions to the unsustainability of a particular exchange rate must be based on some model of political constraints on policy. Technically, no exchange rate is unsustainable; the real economy can be made to fit any nominal exchange rate.[2] Analysts who refer to an unsustainable exchange rate must have in mind that local political conditions will not allow the government to defend the level of the currency. These conditions might include opposition from exporters or import competitors clamoring for a devaluation, or more general concern that a devaluation might reduce local purchasing power in unpopular ways. Whatever the reality, allegations of unsustainability presume something about the political system and the structure of interests within it.

These presumptions are worth making explicit. Yet prevailing analyses of currency policy largely ignore politics, with the result that practical policy discussions tend to abstract from the real and powerful pressures that are brought to bear on exchange rate policy choices.

Two common explanations of exchange rate policy choice focus on optimal currency area criteria and on the currency as an anchor for inflation expectations. The former approach goes back to the work of Mundell (1961) and others, and its arguments are well known: currency union between two countries is welfare-improving where factors are mobile between them, or when the countries are subject to correlated exogenous shocks, or when their economic structures are very similar. This reasoning has been extended to explain the choice of a fixed exchange rate, on the principle that currency union is simply an extreme form of fixing.

The second broad category of currency policy explanations emphasizes the use of the exchange rate as a way of overcoming the time-inconsistency of monetary authorities' anti-inflationary commitments.[3] A government attempting to signal its seriousness about non-inflationary policy can peg the exchange rate to a nominal anchor currency.[4] When a government commits to a peg it makes an easily verifiable promise: either it follows macroeconomic policies consistent with the peg, or it does not, in which case the peg collapses. Most contemporary supporters of fixed rates, including dollarization, point to the disciplining characteristics of this policy stance as its main attraction.

There are both theoretical and empirical problems with these two approaches. Theoretically, they presuppose that policy is made on welfare grounds. A welfare-driven policy could be the result of many things, such as that:

- policy-makers do not depend on support from domestic political actors;
- the relevant political pressures are for improvements in aggregate social welfare; or that
- domestic political actors do not have preferences over exchange rate policies other than that they enhance aggregate social welfare.

Needless to say, these theoretical propositions are at odds with decades of theoretical work in political economy.

There is also little or no empirical support for the supposition that policy follows normative welfare principles. For example, there is little evidence that existing currency unions—from Europe's Economic and Monetary Union to dollarized countries—met optimal currency area criteria when they were created. And most empirical work indicates that, except in the extreme case of hyperinflation, it is rare for countries to use nominal anchors for anti-inflationary credibility.

Exchange rate policy motivates the same sorts of special and mass, particularistic and electoral, interests that are to be found in every other realm of economic policy. Recent analyses incorporate the role of interest group and partisan pressures, political institutions, and the electoral incentives of politicians.[5]

Choices and tradeoffs

The first analytical task is to understand the tradeoffs faced by politicians and their constituents as they consider national currency policies. Governments making currency policy face decisions on two basic dimensions: on the *regime* by which the currency is managed (fixed or floating, for example), and on the *level* of the currency (strong or weak). In the first instance, policy-makers have to decide whether to float or fix the exchange rate—and if to float, in which of the many possible ways.[6] In the second instance, assuming the currency is not fixed, they need to determine what the preferred level of the exchange rate is.[7] They can, of course, decide to let the currency float completely freely, but in developing countries policy-makers have shown themselves reluctant to do this. Policy-makers often act to avoid a substantial appreciation or depreciation of the currency, which implies that they have preferences over the currency's level.

Regime

Fixed or floating: stability and credibility or policy flexibility?

The traditional case for stable exchange rates hinges on the benefits of economic integration. In an open economy, the main advantage of a fixed rate regime is to lower exchange rate risk and transaction costs that can impede international trade and investment.[8] Volatile exchange rates create uncertainty about international transactions, adding a risk premium to the costs of goods and assets traded across borders. By stabilizing the currency, a government can encourage greater trade and investment. More recent analyses emphasize the possibility that an exchange rate peg can enhance monetary-policy credibility, as mentioned above. Both theory and evidence suggest that fixing the exchange rate to the currency of a low-inflation country both promotes international trade and investment and disciplines monetary policy by providing an observable nominal anchor.[9]

But fixing the exchange rate has costs. To gain the benefits of greater economic integration through fixing, governments must sacrifice their capacity to run an independent monetary policy. The "impossible trinity" principle explains that governments must choose two of three goals: capital mobility, exchange rate stability, or monetary independence (Mundell 1962, 1963). In a financially integrated economy, domestic interest rates cannot long differ from world interest rates (capital flows induced by arbitrage opportunities quickly eliminate the differential). There is strong evidence that financial integration has progressed so far that capital mobility can be taken more or less as given—which reduces the choice to sacrificing exchange rate stability versus sacrificing monetary independence. Fixed rates require the subordination of domestic monetary policy to currency and balance of payments considerations.

A floating exchange rate, on the other hand, has the great advantage of allowing a government to pursue its own independent monetary policy. This independence is valuable because it provides flexibility to accommodate foreign and domestic shocks, including changes in the terms of trade and world financial conditions. Floating allows the exchange rate to be used as a policy tool: for example, policy-makers can adjust the nominal exchange rate to affect the competitiveness of the tradeable goods sector. In some countries, especially those with a history of high and variable inflation, policy-makers may place an overriding value on monetary stability. But for other countries, achieving monetary stability at the cost of flexibility may involve too great a sacrifice; an autonomous monetary policy might be the best way to cope with the external shocks they face.

In an open economy, then, policy-makers face a tradeoff between two competing sets of values. On the one hand, a fixed rate brings *stability and credibility*; on the other hand, it sacrifices *flexibility*. A fixed rate makes for more currency and monetary stability; a floating rate makes for more policy flexibility. Each set of values is desirable; obtaining each requires forgoing at least some of the other.

Level

High or low: consumers or producers?

Policy-makers face another set of tradeoffs, and that is on the *level* of the exchange rate. The level of the real exchange rate affects the relative price of traded goods in both local and foreign markets. There is no clear economic-efficiency argument for or against any particular level. A strong (appreciated) currency gives residents greater purchasing power, but the fact that it makes foreign products relatively cheaper also subjects national producers of tradeable products to more foreign competition. When a real appreciation makes domestic goods more expensive relative to foreign, consumers of imports benefit while producers of goods that compete with imports (and exporters) lose. The result is a loss of competitiveness for tradeables producers.

A real depreciation has the opposite effects: it stimulates demand for locally produced tradeable products, which is good for their producers; but it makes consumers worse off by raising the prices they pay for foreign goods and services. In broader macroeconomic terms, a real depreciation can encourage exports, switch expenditures away from imports into domestic goods, invigorate the tradable sectors of the economy, and boost aggregate output. But a real depreciation can also be contractionary, because real money balances shrink as the result of the higher price level. And if a nation relies on imports for many vital items, such as oil, food, or capital goods, depreciation can reduce living standards, retard economic growth, and increase inflation.

Thus, the level of the exchange rate confronts policy-makers with two desirable but mutually exclusive goals—stimulating local tradeables producers, and raising local purchasing power. The benefit of increasing the competitiveness of national producers comes at the cost of reducing the real income of national consumers, and vice versa. To paraphrase Abraham Lincoln, you cannot please all of the people all of the time.

In some instances, especially in developing countries, the tradeoffs discussed above can be collapsed into one dimension. The strongest supporters of exchange rate flexibility and a depreciated currency are typically those producers concerned about their competitiveness in import and export markets. The strongest supporters of a fixed exchange rate are typically those concerned about currency stability and monetary credibility. So in many cases, the principal conflict can be expressed as one between *competitiveness* and *credibility*.

Political factors in the determination of currency policy

Selecting an exchange rate regime is a highly political decision: governments must make tradeoffs among values that are given different importance by different sociopolitical actors. With regard to the regime (fixed or floating), the choice is monetary stability and credibility versus monetary flexibility. With regard to the level (depreciated or appreciated), the choice is between competitiveness and purchasing power. Governments must weigh the relative importance of the stability of nominal macroeconomic variables, the competitiveness of producers of tradable products, and the purchasing power of consumers.

The decisions they make have domestic distributional consequences—a fact that is not lost on interest groups or electorates at large. Governments face pressures:

- for reduced volatility, from those who are internationally exposed, including export producers and those with foreign exchange liabilities, such as firms with dollar debts (suggesting a desire for a fixed exchange rate);
- for favorable relative price effects, especially from tradeables producers (suggesting a desire for a depreciated currency, hence floating);
- for purchasing power, from consumers (suggesting a desire for an appreciated currency).

Below I discuss the pressures exacted by interest groups and by electorates with regard to currency policy, and offer some evidence from Latin America about how governments have responded.

Special interest groups

As regards the *exchange rate regime*, we can array groups along a continuum that measures the extent to which they are involved in international or domestic economic activity (Frieden 1991; Hefeker 1997). Groups that are heavily involved in foreign trade and investment—typically including the commercial and financial sectors and foreign currency debtors—should favor exchange rate stability, since currency volatility is an everyday concern that makes their business riskier and more costly. By the same token, these groups care less about a loss of national monetary autonomy, since they typically do business in several countries, and can shift their business or assets abroad if domestic conditions become unfavorable.

By contrast, groups whose economic activity is confined to the domestic economy benefit from a floating regime. The nontradeables sector (for example, services, construction, transport) and import-competing producers of tradeable goods belong in this camp. They are not required to deal in foreign exchange and so are free of the risks and costs of currency volatility. They are highly sensitive to domestic macroeconomic conditions and thus favor the national autonomy made possible by floating.

Tradeables producers are also likely to oppose a fixed rate, for two reasons. First, the adoption of a fixed rate in inflationary conditions—such as have characterized much of Latin America—usually leads to a transitional real appreciation, with detrimental effects on tradeables producers. This has been the experience of most exchange-rate-based stabilization programs. Second, a fixed rate eliminates the possibility of a depreciation to maintain or restore the competitiveness of tradeables producers.

The domestic interest group politics of the *level of the exchange rate* can also be represented simply, separating exporting and import-competing industries that lose, on the one hand, from domestically oriented (nontradeable) industries that gain from a currency appreciation, on the other (Frieden 1991). Domestic consumers also gain from an appreciation as the domestic currency prices of imported goods fall, lowering the cost of living. Currency depreciations have the opposite effects, helping exporting and import-competing industries at the expense of domestic consumers and producers of nontraded goods and services.

Among tradeables producers, the degree of concern about currency movements depends upon how directly they are affected by changes in the exchange rate. If import-competing firms that face an appreciation of the home currency are able to keep their prices high—as will happen if foreign producers do not pass the expected price decline through to local consumers—they will be less concerned about the appreciation.[10] Generally, tradeables industries with high pass-through are more sensitive to the relative price effects of currency movements than those with low pass-through, since their prices respond more directly to changes in exchange rates. And by extension, the level of the exchange rate is likely to be more politicized in developing than in developed countries, since the former tend to produce standardized goods and primary commodities, for which pass-through is high. Capturing an industry's sensitivity to exchange rate changes involves measuring the extent to which it sells products to foreign markets, uses foreign-made inputs, and, more directly, competes with foreign manufacturers on the basis of price (Frieden 1991).

The considerable variation of currency regimes in Latin America provides opportunities for at least a preliminary investigation of interest-group pressures. Given the characteristics described above, it seems likely that the manufacturing sector will prefer more flexible currency regimes in order to maintain the competitiveness of locally produced tradeables. In empirical work reported in Frieden, Ghezzi, and Stein (2001), we found that economies with larger manufacturing sectors were more prone to adopt either floating regimes or backward-looking crawling pegs, both of which tend to deliver more competitive exchange rates. This can be seen in Table 18.1, which shows that countries with larger manufacturing sectors are less likely to have fixed exchange rates (a lower number in the table is associated with a more fixed rate).

Table 18.1 Exchange rate regimes are affected by the size of the manufacturing sector, Latin America, 1972–94

Smaller manufacturing sectors			*Larger manufacturing sectors*		
	Man/GDP	*Scale of fixed/ floating*		*Man/GDP*	*Scale of fixed/ floating*
Haiti	8.87	3.19	Dom Republic	17.33	0.96
Panama	9.33	0.00	Venezuela	17.42	2.85
Barbados	10.12	0.00	Ecuador	19.37	2.35
Guyana	12.39	5.08	El Salvador	19.48	1.24
Trinidad and Tobago	12.61	2.73	Nicaragua	19.86	1.16
Suriname	13.82	2.08	Colombia	20.31	6.75
Guatemala	15.18	3.58	Chile	21.39	5.79
Honduras	15.24	2.86	Mexico	21.85	6.04
Paraguay	15.71	3.34	Costa Rica	22.83	4.29
Bolivia	16.03	4.80	Peru	23.47	5.79
Belize	16.65	0.00	Uruguay	23.66	6.09
Jamaica	17.22	4.50	Brazil	28.63	7.06
			Argentina	29.35	2.74
Average	13.60	2.68		22.30	4.35

Scale of Fixed/Floating is a 10 point scale with 0 = Fixed for every period, 10 = Floating for every period.

Source: Derived from Frieden, Ghezzi, and Stein (2001).

The data can be examined more systematically, controlling for a wide variety of other economic factors (details are available in Frieden, Ghezzi, and Stein 2001). Table 18.2, derived from this more systematic empirical analysis, presents estimates of the impact of openness (exports plus imports as a share of GDP) and the size of the manufacturing sector on the likelihood of fixed and flexible exchange rate regimes. The more open the economy is—and thus the more important are internationally oriented economic actors—the more likely is the government to maintain a fixed rate. Specifically, a one standard-deviation increase in openness, centered on the mean—that is, a rise in a country's exports plus imports from 47 to 86 percent of GDP—is associated with a 25 percent increase in the probability that the government will adopt a fixed exchange rate.

Similarly, the larger the manufacturing sector is—indicating greater sensitivity to the competitive effects of currency movements—the less likely is a fixed rate. A one standard-deviation increase in the size of the manufacturing sector—that is, a 5.5 percent increase in a country's manufacturing/GDP ratio—is associated with an 11.3 percent *reduction* in the probability that the government will adopt a fixed exchange rate. This implies that each percentage point increase in the share of manufacturing in GDP reduces the probability of fixing by around 2 percentage points. In the closed economies of the import-substitution period, where manufacturers were mostly protected from foreign competition, this relationship was weaker or absent (see also the country studies in Frieden and Stein 2001).

It can also be seen that hyperinflationary episodes are associated with the use of a currency peg for credibility-enhancing purposes, whereas episodes of moderate inflation are not. Table 18.2 (column 1) shows that having inflation greater than 1,000 percent increases the probability of adopting a fixed rate regime by nearly 21 percentage points.

Electoral considerations

Elections are of recurrent importance in exchange rate policy-making. They may affect exchange rate policy for several reasons. As described in Frieden and Stein (2001), the income effect associated with depreciation reduces the

Table 18.2 Sources of choice of exchange rate regime, Latin America, 1972–94

	Hyper-inflation	*Openness*	*Manufacturing/ GDP*
Mean of variable	0.0254	0.665	0.1857
One standard-deviation change in variable	1.000	0.396	0.0553
Δp (fixed)	0.2076	0.250	–0.1129
Δp (flexible)	–0.1016	–0.120	0.0547

Source: Frieden, Ghezzi, and Stein (2001).

purchasing power of the population; it can make depreciation unpopular and therefore politicians may want to avoid it at election time. Devaluations may also be unpopular because they generate inflation. On the other hand, a real appreciation can deliver an electorally popular reduction in inflation and an increase in purchasing power. In line with this, governments show a strong tendency to allow or engineer a real appreciation in the run-up to elections, which is then reversed after the government changes hands (Klein and Marion 1997; Leblang 2000). An exchange rate electoral cycle boosts voters' incomes in the run-up to the election and imposes costs on voters only after the new government is in office. The delay results in a depreciation that is more costly than if it had occurred immediately, but newly elected governments appear to follow the rule of "Devalue immediately and blame it on your predecessors" (Edwards 1994).

Evidence for Latin America, from individual country studies and a cross-country study, is generally consistent with these arguments (Frieden and Stein 2001). A cross-country study reported in Frieden, Ghezzi, and Stein (2001) examines the behavior of exchange rates before and after elections. Looking at 86 episodes of electoral changes in government, we found that the real exchange rate appreciated nearly 3.5 percent in the months leading to an election and depreciated on average 6 percent during the following four months (Figure 18.1).[11]

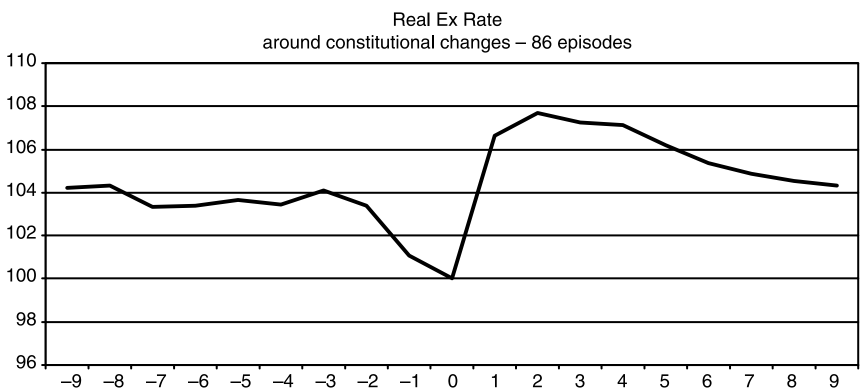

Figure 18.1. Real exchange rate movements around elections, Latin America, 1972–94.

Note: All episodes in the database are pooled together. For each a 19-month window is considered: month 0 corresponds to the month of the change in government, month –1 is the month prior to the change in government, and so on. The rate of depreciation across all episodes is then averaged for each of the 19 months in the window (–9 through 9). The authors use geometric rather than arithmetic averages in order to lessen the effects of outliers. To make the level of the exchange rate comparable across countries, the real exchange rate in each country is normalized so that the geometric average would be 100, and for purposes of this figure the month-by-month averages are normalized so that they would be 100 at time 0 (the time of the change in government). "Constitutional changes" are electoral changes in government (i.e. not including military coups), and occur at different times after the actual elections depending on national practice.

Source: Frieden, Ghezzi, and Stein (2001).

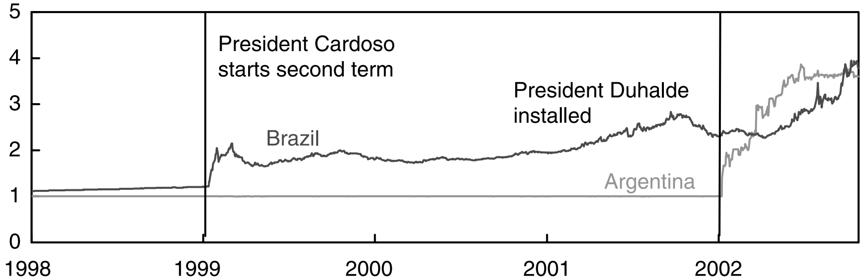

Figure 18.2. Exchange rates in Argentina and Brazil (*pesos* and *reals* per US$).

At a more anecdotal level, Latin America is a rich repository of experiences in which governments delayed devaluations until after elections: Mexico's ruling PRI party did so with some regularity between 1970 and 1994. More recent Argentine and Brazilian experiences are also expressive. As shown in Figure 18.2, each government held the exchange rate more or less constant until right after a new president (in the Brazilian case, a re-elected incumbent) took office. In pre-election months, both currencies appreciated substantially in real terms, with a powerful positive impact on the purchasing power of local residents. Immediately after taking office, each government let the currency float—more accurately, sink—to a substantially depreciated level.

The political economy of exchange rate policy is not only important for developing countries. For over thirty years the member states of the European Union have attempted, with varying degrees of success, to stabilize their currencies against one another. The eventual creation of the euro, and the continuing question of whether, when, and how other countries in and around Europe will join the euro zone, certainly respond to powerful domestic and international political pressures (see, for example, Eichengreen and Frieden 2001, Frieden 2002).

Exchange rates are critical in a wide variety of other settings in the context of an integrated world economy. Commercial and financial relations between the United States and East Asia, for example, have long implicated currency policies, sometimes sparking political conflict. In the early stages of their respective export drives, East Asian nations—first Japan, then South Korea and Taiwan, now China—have typically kept their exchange rates very weak to spur manufactured exports. The results often provoke protests from American manufacturers who press the US government to insist that East Asian governments allow or force their currencies to appreciate.

Conflict over the trade effects of currency values has most recently been played out between the United States and China. The issue has been complicated by the fact that—as was true in the early 1980s when the American target was Japan—the weakness of East Asian currencies is matched by the strength of the US dollar, which itself is in large part due to America's own fiscal policy and the resulting capital inflow. Whatever the ultimate resolution of these "global imbalances"—East Asian trade surpluses and American trade and fiscal deficits—there is little question that highly politicized currency policies played an important role in creating and propagating them. There is also little question that the unwinding of these imbalances will itself provoke political conflict over exchange rates and their effects.

Conclusion

Exchange rates are political. They affect the interests of powerful groups and of consumers. They affect elections, and are affected by them. International economic integration only heightens their impact and their political prominence. As the world economy has become more open—and especially as developing countries have become more open—exchange rates have become even more highly politicized, more controversial, and more subject to mass and special-interest political pressures.

Those who ignore the political economy of currency policy will make mistakes in developing feasible exchange rate policies. Both analysts and policy-makers would be well advised to pay concentrated attention to political economy factors in exchange rate policy-making.

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Notes

1 For more detailed analysis, the reader is referred to Broz and Frieden (2001); Frieden, Ghezzi, and Stein (2001); and Frieden and Stein (2001).

2 This is not simply a theoretical possibility: under the classical gold standard, it was common for countries to respond to a substantial real appreciation with a substantial real adjustment in prices and wages. The United States government pursued policies to put the dollar back on to gold after the Civil War, which led prices to decline by about 40 percent between 1865 and 1870, and then a further 30 percent between 1870 and 1879.

3 Kydland and Prescott (1977); Barro and Gordon (1983).

4 Giavazzi and Pagano (1988); Canavan and Tommasi (1997).

5 See, for example, Bernhard and Leblang (1999); Blomberg and Hess (1997); Eichengreen (1995); Frieden (1994, 1998); Hefeker (1997); Collins (1996); Edwards (1999); Klein and Marion (1997); Gavin and Perotti (1997); Stein and Streb (1999).

6 Obviously policy-makers have a wide choice of regime, ranging from a completely free float to a variety of managed floats, degrees of fixity ranging from a target zone to a peg, and a currency board or dollarization. This discussion focuses on the extreme—hard pegs and pure floats—however, because the analysis of intermediate cases flows from the extremes, and the tradeoffs described apply to the intermediate choices, albeit never as starkly as to the extremes.

7 Under most regimes a government must decide whether it prefers a relatively appreciated or relatively depreciated currency. Free floats are rare, and by the same token, countries that opt for a pegged regime always have the choice of abandoning the peg.

8 Mundell (1961), McKinnon (1962), Kenen (1969); a more recent survey is Tavlas (1994).

9 See, for example, the empirical results in Frankel (1995), Rose (2000), Vegh (1992), and Ghosh *et al.* (1997).

10 This is often the case in markets for highly specialized differentiated products such as automobiles.

11 See also Blomberg, Frieden, and Stein (2005).

19 The future of migration

Irresistible forces meet immovable ideas[1]

Lant Pritchett

Massive pressures—economic, demographic, and technological—are building for much larger labor mobility and migration across national boundaries. These pressures are being held back by ideas. The main reason why there is not more migration into rich countries is that the citizens of those countries, by and large, are against it.

I am no great student of the history of ideas, but it seems to me that ideas are a bit like a large dam: they can hold against tremendous pressures for decades, even centuries, but, once breached, they can be swept away in hours. For example, in 1914, nearly every European state was a monarchy—a form of government that had persisted in Europe for nearly a thousand years—but twenty years later all but a few of the European monarchies were gone. Colonialism persisted for centuries, and then essentially disappeared in the two decades from 1945 to 1965. Slavery was part of a multitude of civilizations for thousands of years, and disappeared in the blink of the historical eye.[2] The ideas that supported monarchy, colonialism, and slavery seemed impregnable in their day, and yet, even a few decades later, people wonder how such patently ludicrous, not to mention morally despicable, notions could hold otherwise rational and well-meaning people in their thrall.

It is at least possible that in the twenty-first century two key notions of the twentieth century—nationalism and restrictions on migration that hold people hostage to the place of their birth—will be seen as hopelessly wrong-headed. In this chapter, I analyze the forces that are building for a resumption of mass migration, outline the ideas that are resisting those forces, and, against this background, discuss means to bring migration issues on to the international and development agenda. My proposal is that “migration is the Millennium Development Goals plan B.” If, as seems likely, by 2015 there are countries that have not accomplished, and are not making much progress towards, the MDGs, then by that time a mechanism for promoting the international mobility of persons should be in place. The international and development communities should prepare now, so that the response can go beyond the post-World War II globalization formula of “growth, trade, and aid.”

Five irresistible forces

One recent Saturday I was reading about the historical evolution of global inequality when my neighbor Paul Baratta called me to enthuse about his new lawn mower. He had nursed his old mower along for twenty-five years but it (and he) had finally broken down and a new mower was purchased. Paul was excited that, for exactly the same nominal price of around US$400 that he paid twenty-five years ago, he had got twice the mower—almost twice the horsepower, self-propelled with variable speed transmission, and a casing designed for air flow conducive to mulching.

Paul's new lawn mower illustrates three of the five irresistible forces that are building for increased migration:

- inequalities in standards of living across countries;
- shifts in the optimal distributions of population, in response to shifts in economic and natural forces;
- demographics;
- increased connections and contact in all other dimensions—goods, capital, communications, transport;
- limits of capital-labor substitution.

I review these five forces in turn.

Inequalities and wage gaps

The gaps between rich and poor countries in incomes and wages are larger than ever before. Today's gaps are ten times those that set in motion the first modern era of mass migration. The rise in inequality is due to a gradual, but cumulatively explosive, improvement of material well-being at the top of the world distribution of income, not to a fall at the bottom.

In *material* terms, the middle classes in the West live better today than any king or duke or the wealthiest financier in 1820 or even 1870.[3] Not just lawn mowers are better than ever before. My suburban chariot—the ubiquitous Dodge Caravan mini-van—is safer, faster, more comfortable travel than the grandest carriage ever built. I can pull from my pocket a device that can communicate quickly and reliably with any corner of the globe. My house has flush toilets connected to an amazing system of waste treatment and disposal. I can summon from my stereo the greatest performers of the world performing the greatest music of all time. Most importantly, my youngest son had a genetic defect that has required two open-heart surgeries to insert artificial valves. Even had I been the most powerful person on earth, in 1870 my child would have died in infancy.

Because of the steady growth in incomes, the income differences across national boundaries are now massively higher than they were historically. Income inequality in the world, once almost exclusively due to differences among people *within* countries, is now due primarily to differences *across* countries. In 1820, it mattered little whether one was a peasant in England or in India or in Ethiopia—for all peasants, life was hard and the gap within each country between the rich and poor was substantial. Looking at income inequality among all individuals in the world, Bourguignon and Morrison (2002) estimate that in 1820 only about 10 percent of the inequality was due to differences in average incomes across countries.[4] Since then, however, this proportion has shown a steady increase, and today more than 60 percent of the income inequality in the world is attributable to differences in incomes across countries (Figure 19.1).

While it is difficult to make wage comparisons,[5] it appears the wage differentials that set in motion the mass migrations of the late nineteenth to early twentieth centuries are small compared to the current gaps in real wages between countries that are potential migration partners. Especially well recorded are the migrations from Europe to the areas of recent settlement: Argentina, Australia, Brazil, Canada, and the US. Figure 19.2 shows the ratios of purchasing-power-adjusted wages in sending countries (Ireland, Italy, Sweden, the Netherlands) and destination partners during the era of mass migration, along with the ratios of wages in potential sending and destination partners today. Today's wage ratios between Japan and Vietnam (9.1), the UK and Kenya (7.2), or the US and Guatemala (6.1) are substantially larger than the historical ratios between the mass senders and the US (Ireland, 2.3; Sweden, 4.1) in the nineteenth and early twentieth centuries.

Today's income inequalities and wage gaps are important for migration pressure, because the literature suggests that nearly all of the differences in wages of individuals are explained by earners' locations, not by their personal characteristics. Hundreds of empirical studies of the determinants of individual earnings have established that individual characteristics like education, labor market experience, physical strength, and, most recently, birth-weight

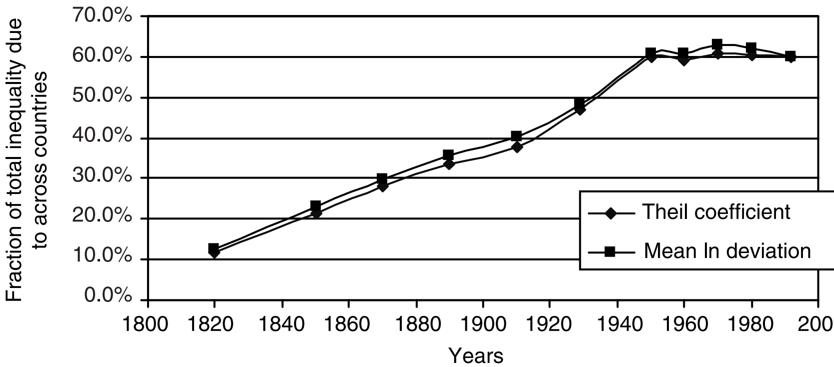

Figure 19.1 Fraction of world income inequality explained by differences across countries.

Source: Bourguignon and Morrison (2002).

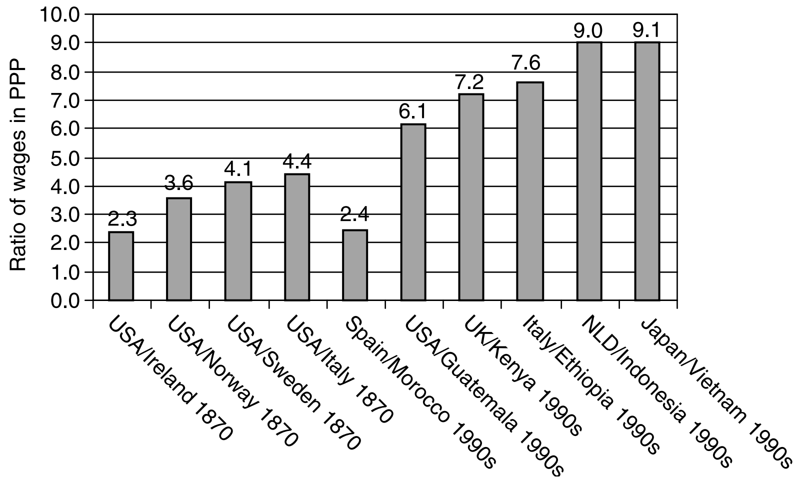

Figure 19.2 Ratios of purchasing-power-parity-adjusted wages of the United States and its migration partners in 1870 and of pairs of countries in the 1990s.

Sources: O'Rourke and Williamson 2002 (wages in 1870); Rama and Artecona 2002 (wages in 1990s).

(Behrman and Rosenzweig 2004) are correlated with earnings, but these characteristics explain only a tiny fraction of the wage gaps observed across countries. Taking the simple Mincerian earnings specification—that schooling increases a person's earnings proportionately—and using the empirical average wage increment to a year of education of something like 10 percent[6] implies that a person with 12 years of education earns 1.8 times the wage of a person with only a primary education (6 years). These differences are very small compared with the cross-country differences in earnings that we have just reviewed.

The data show that there are enormous wage gains to migrants. After migrants move, their wages are almost identical to those of workers in the country they move to and almost nothing like those in the country they left behind. Jasso, Rosenzweig, and Smith (2004), using data on workers' earnings before and after immigration to the US, show that wages nearly double, from US$17,000 to US$37,989 for the *same* worker. As another example, Salvadorians in the US earn much more than Salvadorians in El Salvador: Salvadorian male workers with a secondary school diploma earn the same in the US as do US nationals with that level of education, and 8.5 times more than workers with that level of education who are working in El Salvador (Table 19.1). Within the US, labor markets are integrated so that equivalent workers earn the same wages, but the Salvadorian and US labor markets are sharply separated by national borders, so that equivalent workers on different sides of the border earn completely different amounts.

Table 19.1 Earnings of Salvadorans with equivalent levels of education in the US and in El Salvador (unadjusted for purchasing power parity)

Level of education	*Average earnings of those employed, aged 25–26, in El Salvador, 2002*	*Average annual earnings of male workers, USA census 2000*		*Ratios of earnings*	
		Salvadorans in US	*Average in USA*	*ES in ES/ ES in USA*	*ES in USA/ Average USA*
	(US$)	*(US$)*	*(US$)*		
None	2,289	16,686	10,243	7.3	1.6
Completed primary	1,263	18,529	7,106	14.7	2.6
Completed secondary/ high school degree	2,669	22,611	22,087	8.5	1.0
University degree	9,246	27,893	38,363	3.0	0.7

Sources: Calculations from US Census 2000 and *Encuesta de Hogares de Propositos Multiples* (2002) for wages in El Salvador.

Of course, wage gaps are far from being the only determinant of migration. There may be poverty constraints on migration, so that increases in income in poorer countries might actually increase migration flows (Hatton and Williamson 2003). In any event, the gaps indicate that as poor countries' incomes grow, these countries will move into a combination of absolute income levels and relative gaps that implies pressures for migration.

Changes in the "optimal population"

A second major force for migration is the shifts in the "optimal" population of countries that take place as the result of shifts in economic forces. The notion of the equilibrium population that would result if people could move unimpeded across national boundaries—or in other words the "unconstrained desired" population of a given space—is easy to define. We can ask, "Given the existing underlying economic (policy, institutional, technological), political, and geographic circumstances, and expectations about the evolution of those factors, how many people would live in a given geographic entity in the long run if there were perfect mobility and people could choose to move elsewhere?" For example, "There are ten million people in Niger, but if there were global labor mobility and only one million lived in Niger now, how many people would move there?" Or alternatively, "Nicaragua has five million people; if there were open borders with the industrialized world, how many people would be in Nicaragua ten years from now?"

Labor mobility is not important if optimal populations do not change. Optimal populations might not change (much), either because the fundamentals do not change or because the mobility of other factors compensates. For Antarctica, for example, the fundamentals have not changed; labor mobility is not a big issue because no substantial populations have ever moved there. Alternatively, optimal populations might not vary much if the mobility of other factors compensates. Suppose a region or a town attracts population because it relies on one type of economic activity and then some natural or economic shock renders that activity no longer viable. But new activities are created, new resources flow in, and people change their activities and sustain roughly their same living standards. Certainly, this has been the story of many of the world's major cities.

But there are other possibilities. One is that new resources do not flow in and that the optimal population falls and people leave. Mining towns offer a classic example; people want to be there as long as the resource is profitable, but when the extraction of the resource loses value, and job opportunities dry up, people want to leave.[7] The other possibility is that the optimal population falls, perhaps dramatically, but that people are not allowed to leave and hence all of the adjustment to the variability in the optimal population of regions is forced on to real wages and living standards.

The current international economic system insists on the mostly arbitrary but fixed borders of sovereign states. Restrictions on movement among these states ignore the variability of optimal populations over time. This accounts for the dramatically poor economic performance of certain countries. One conjecture is that the current international system has people trapped in "ghost countries" (Pritchett 2003). Below I offer some new evidence on this neglected aspect of the discussion.

Example 1: Adjustment of regional populations in the United States

A large country where people are free to move provides a nice laboratory for examining changes in optimal populations. One can project from the historical experience of regions within the US to analyze what might happen in a fully "globalized" world, of geographic units linked by fully integrated markets for land, capital, goods, and labor.

Even though the US overall more than doubled its population in the sixty years from 1930 to 1990, this growth was far from uniform. Data at the county level reveal counties that have been essentially depopulated over these sixty years. Slope County in North Dakota has seen its population fall from 4,150 to only 907; Smith County in Kansas has shrunk from 13,545 to only 5,078; Huerfano County in Colorado from 17,062 to 6,009; and McDowell County in West Virginia from 90,479 to 35,233. These are not isolated examples.

An instructive exercise that I carried out as part of a research study is to assemble groups of counties, that may cut across state boundaries but are contiguous, and shaped such that, had history differed, a country could conceivably have been formed with their boundaries. That is, while I deliberately gerrymandered the areas to include population-losing counties, I did not simply cut out cities or make dramatic detours to include this or exclude that county. Doing this, I assembled five regions of the US, named *Texaklahoma* (Northwest Texas and Oklahoma); *Heartland* (parts of Iowa, Missouri, Kansas, Nebraska); *Deep South* (parts of Arkansas, Mississippi, Alabama); *Coal Pennsylvania*; and *Great Plains North* (parts of Kansas and South Dakota).

Even with the constraint of contiguity one can assemble large territories that have seen substantial population decline. Great Plains North is a territory larger than Great Britain; its population declined by 28 percent from 1930 to 1990 and is now a little more than a third of what it would have been, had it grown at the rate of natural increase. Texaklahoma is bigger than Bangladesh and has only 31 percent of the population it would have had in the absence of out-migration. From the few counties in the coal-producing region of Pennsylvania, we see that not all of these declines are of rural and agricultural populations—natural resource shocks also play a role.

In a fully globalized world, one could expect income levels to converge. Indeed, incomes are more than 85 percent of the national average in all our hypothetical US regions except the Deep South (Table 19.2). But even with fully integrated markets for goods and capital, we see there is wide variability in "optimal populations." It may be that because capital flowed to these regions and goods were mobile, population movements were smaller than they would otherwise have been. Even so, the population shifts within the United States have been huge. Certainly, they have been vastly larger than the population shifts one sees across the often equally arbitrary boundaries of countries in the world today.

Example 2: Adjustment of output growth and populations—comparisons within and across countries

A second way to illustrate the variability of optimal populations is to compare the variability of the growth of output per worker to the variability of the growth of population. One can imagine that with perfect mobility, workers/households will move in response to economic opportunities. In a regionally integrated labor market, therefore, regions with incipient rapid growth should gain population while regions with negative shocks (that are not offset by movements in other factors) should lose population, and hence the growth rate of population should vary substantially across regions. In contrast, if the world is segmented so that workers/households cannot move, the adjustment mechanism in response to changes in economic opportunities should be exactly the opposite: across regions one would expect very little variability in the growth rates of population (which would be largely determined by rates

Table 19.2 Population change in regions (contiguous collections of counties cutting across state borders) of the United States

Region of the United States (contiguous counties)	*Population 1930 ('000)*	*Change in population 1930–90 (%)*	*Ratio of current population to counterfactual at rate of natural increase*	*Area of the region (square miles)*	*Number of countries (of 192) with smaller area (with examples)*	*Ratio of area per capita income to national average (%)*
Texaklahoma	835.8	–36.8	0.31	58,403	117 (Nicaragua, Bangladesh)	92.2
Heartland	1,482.6	–34.0	0.33	59,708	117	85.2
Deep South	1,558.2	–27.9	0.36	36,284	96 (Jordan, Austria, Sri Lanka)	62.6
Pennsylvania Coal	1,182.9	–27.9	0.36	2,972	43 (Trinidad and Tobago, Mauritius)	84.5
Great Plains North	1,068.0	–27.7	0.36	100,920	128(Great Britain, Ghana, Ecuador)	85.4
Nation	123,202.6	101.9		3,536,278		100.0

of natural increase) and enormous variability in the growth rate of output per person (or worker).

This is precisely the natural experiment the post-war international system has run. We see that among regions *within* countries, the growth rates of population in response to mobility vary widely while the growth rates of output per capita vary very little. Across countries, by contrast, the growth rates of population vary little in response to mobility, while the growth rates of output per capita vary widely. Looking at non-OECD countries, the standard deviation of the growth rate of output per capita across countries, at 1.9, is five to six times larger than the typical standard deviation across regions within countries. In contrast, the standard deviation of the growth of population less the rate of natural increase (a proxy for the component of population growth due to mobility) is 0.40, which is half the population growth variability within regions of the US, Canada, Japan, or Spain, and roughly that of most European countries (Figure 19.3).

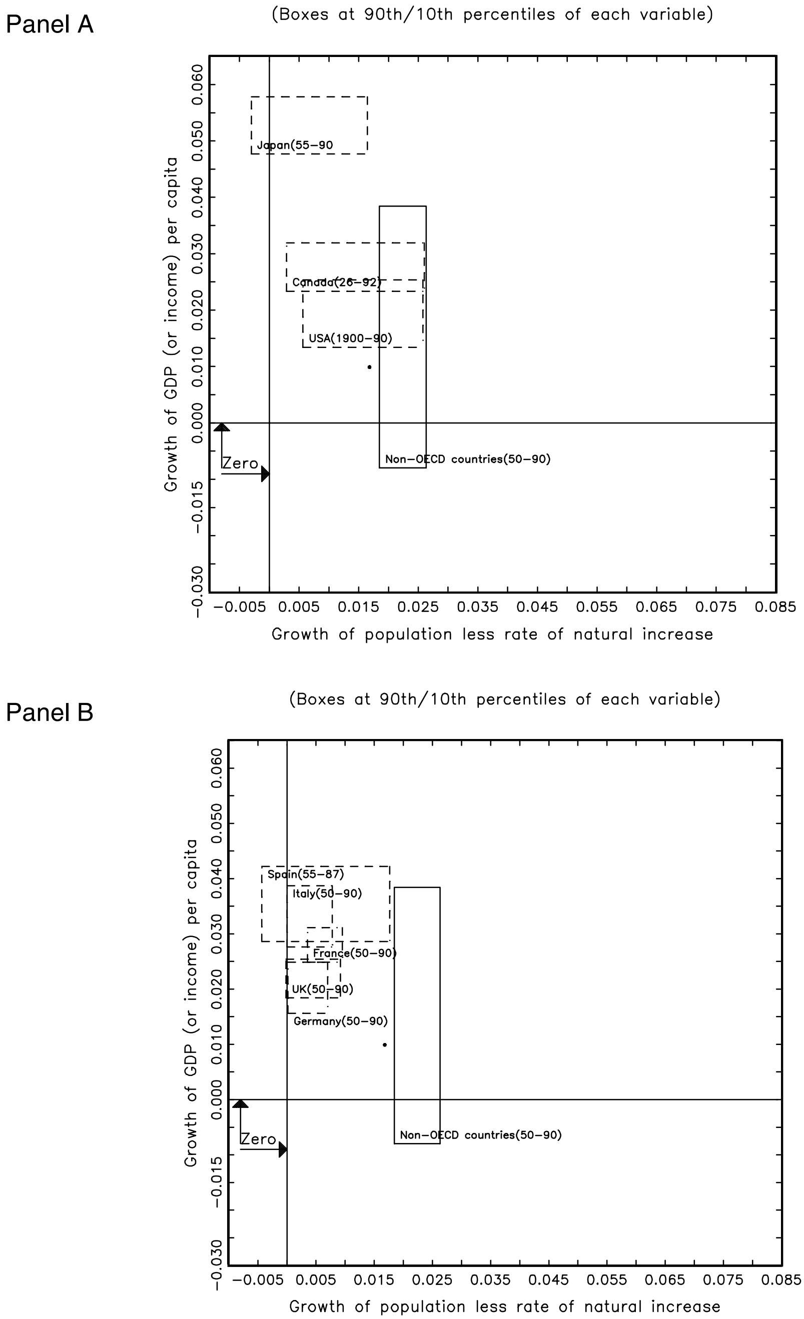

Figure 19.3 Growth rates of population and output per capita in response to mobility, comparing non-OECD countries to the USA, Canada, and Japan (Panel A) and to European countries (Panel B).

Source: Pritchett (2003).

Example 3: Wage/output and population responses to negative shocks—then and now

To explore further how output and population respond to negative shocks, it is instructive to compare the experience of Ireland in the late nineteenth century and Bolivia in the late twentieth. The nineteenth century was an "age of mass migration" (Hatton and Williamson 1998). This—the first era of globalization—was an era of rapidly falling transport costs; moves towards freer trade in goods; open capital markets; and massive flows of capital. And many of the areas of recent settlement had open borders for immigrants (at least those of certain ethnic/national origins). Hence this period is an interesting one for examining how we might expect geographic shocks to be accommodated in a globalizing world.

In Ireland during the potato famine and its aftermath, real wages never fell, but as massive numbers of families left for the New World, the population shrank to almost half its previous peak. Bolivia, accommodating negative shocks in 1970–95, displays exactly the opposite dynamics; its population grew by more than 50 percent while real wages and GDP per person declined (Figure 19.4 and Figure 19.5).

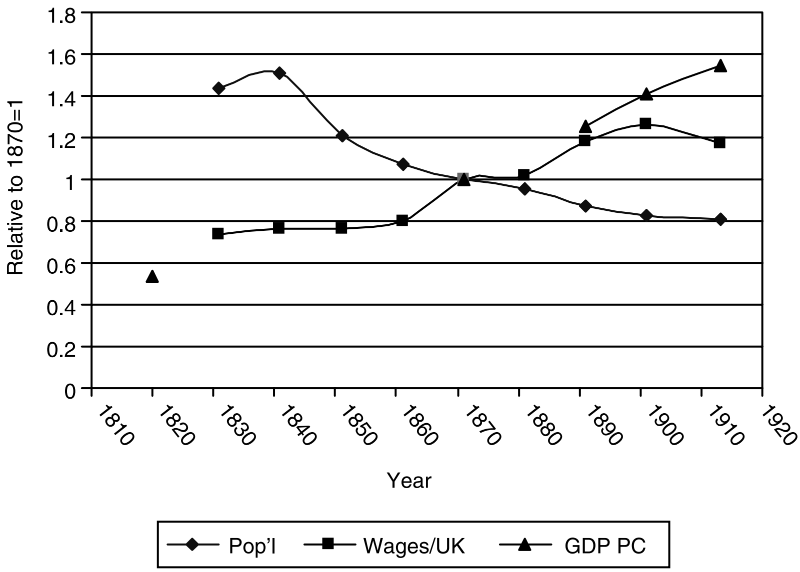

Figure 19.4 Ireland: index of population, real unskilled urban wages, and GDP per capita, (1870=1).

Source: Maddison (2002) for population and GDP per capita; O'Rourke and Williamson (1999) for real wages.

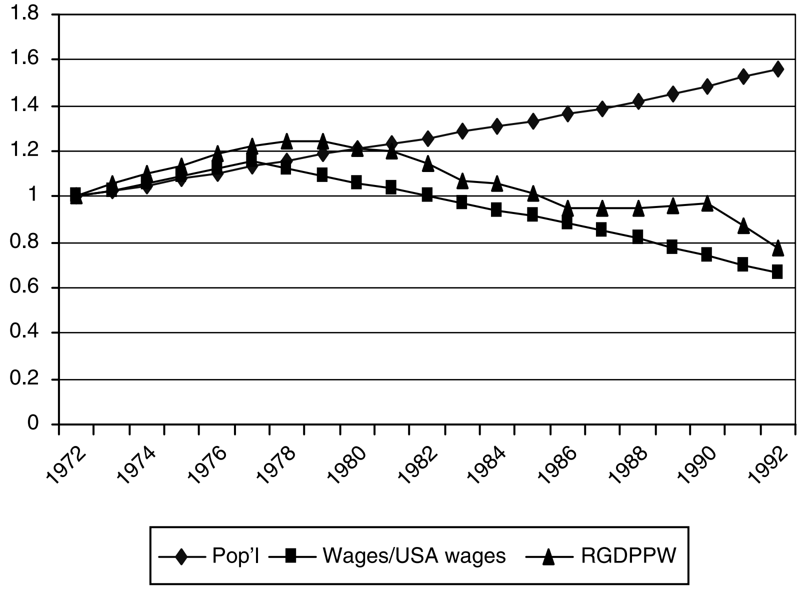

Figure 19.5 Bolivia: index of population, real industrial wages relative to the US, and GDP per capita (1972=1).

Source: Penn World Tables 6.0 for output (real GDP per worker (RGDPPW) and population; Rama and Artecona (2003) for industrial wages.

Implications

In the late twentieth century, nearly all developing countries with negative shocks have seen their populations continue to expand rapidly. By contrast, when there was freer labor mobility in the international system, countries adjusted to negative shocks through migration.

This point is simple and obvious theoretically but non-trivial empirically. Theoretically, *if* there are large, location-specific, changes in labor demand that last over the long run (after the adjustments of all other factors such as capital), then if the supply of labor is elastic, this will lead to large shifts in population and relatively small changes in real wages. If the supply of labor is inelastic, because the mobility of population is limited, then there will be small changes in population and large changes in wages.

What is not obvious from theory is that there should be large, location-specific, long-run shifts in labor demand. It is perfectly plausible to write models in which capital moves (quickly or slowly) to equalize wages, or models in which location-specific factors play no role, or (depending on what is assumed about how the shock diffuses across regions), models in which incomes converge. But the examples presented above suggest that such models miss important aspects of reality. In fact, in all three of the examples—regions within the US, regions within countries, and countries during the era of "mass migration"—we find that if labor mobility is allowed, it tends to be substantial, *even* when there is perfect mobility of capital, perfect mobility of goods, and essentially identical institutions. Moreover, where labor is not mobile, the changes in output per capita suggest that enormous and persistent shocks have taken place in labor demand, and have been accommodated through falls in real wages.[8]

We now explore further the implications of negative shocks in countries whose populations are not mobile. It is plausible that other geographic regions have experienced similarly large negative shocks that have reduced their optimal populations by similar amounts to those of the regions of the US that were shown in Table 19.2. Table 19.3 looks at several countries in which large negative shocks depressed GDP per capita by substantial margins, and compares the evolution of these countries' output to the evolution of output in comparable regions of the US. On the entirely unsupported, but illustrative, assumption that the shocks to these countries' output have caused their optimal populations to fall by an amount similar to the actual fall in the US regions, current populations in these countries are several times larger than their "optimal" levels.

Zambia is a country with a clear narrative. In part, people moved to Zambia, and to a particular region of Zambia, because they could dig a hole

Table 19.3 Countries continue to grow even as output per person collapses . . .

Country	*Year of peak GDP per capita*	*Peak GDP per capita (P$)*	*Peak to trough change (%)*	*Population 2000 ('000)*	*Change in population from year of peak GDP per capita (%)*	*Under the assumption that optimal population has fallen to 70% of population at peak GDP per capita**	
						"Optimal" population ('000)	*Ratio of current to optimal*
Zambia	1976	1,455	–38.7	10,089	101.7	3,502	2.9
Bolivia	1978	3,148	–13.5	8,329	62.6	3,585	2.3
Côte d'Ivoire	1979	3,048	–38.7	16,013	103.1	5,519	2.9
Peru	1965	5,340	–14.1	25,661	69.3	10,613	2.4
Nicaragua	1977	4,453	–60.3	5,071	90.6	1,862	2.7
Niger	1963	1,751	–50.0	10832	218.3	2,382	4.5

* The assumption of optimal population at 70 percent of peak output per capita is based on the average population decline in the US regions in Table 19.3.

Source: Penn World Tables 6.0.

in the ground and extract something valuable (copper). Now, given changes in the world economy and technological conditions, it is likely that the profitability of copper mining has been permanently reduced. Zambia is landlocked, so a development strategy based on export of manufactures is probably not viable. Zambia is not particularly "over-populated" in the absolute sense of land/labor ratios, but if Zambia were a region within a larger, integrated, geographic unit, then Zambia's population would likely be a small fraction of what it is today. The population of Pennsylvania's coal counties declined by 30 percent in absolute terms over sixty years. By contrast, Zambia's population is now *twice* what it was at the time of Zambia's peak output per person. If we assume that Zambia's optimal population has fallen by the same amount as the average for the regions in the US—30 percent—then Zambia's current population is almost three times higher than its optimal population (Table 19.3). It is hard to see how anything other than large sustained out-migration will reverse that.

Demographic shifts

The third powerful force for the future of migration is the demographic implications of current differences in birth rates. Nearly all of Europe—some parts (Italy, Germany) more rapidly and dramatically than others (France, UK)—is embarked on a truly remarkable demographic experience; fertility behavior that implies a massive and entirely voluntary contraction in national populations. Though national populations have stagnated or declined before, due to excess deaths (for example from the Black Death) or out-migration (for example from Ireland), current UN projections imply that the labor force of many European countries and Japan will shrink substantially.

This contraction has several implications, the most obvious of which is for the financial viability of pension and social transfer schemes. Even at current support ratios and program design parameters (combinations of tax rates, ages, benefits, and so forth), these schemes are financially vulnerable. But the ratio of working age (25–64) to retirement age population is projected to fall so drastically as to render pension schemes politically very contentious: to make the schemes solvent, either tax rates will need to be too high or retirement benefits will need to be very drastically curtailed.

Near to the European countries in demographic decline are countries whose populations are projected to grow very rapidly. Following the fundamental economic principle that differences create incentives for exchange, these demographic differences increasingly create incentives for labor flows.[9] The problem in confronting this pressure is that in many ways it is just too large. For example, supposing that the projections for the rate of natural increase in Italy are correct, if immigration of working age people is allowed in sufficient quantity to keep the support ratio constant, what fraction of Italy's labor force would be "foreign born" in the year 2050? The answer is 45 percent.[10]

Expanding connections in the world

The fourth powerful force behind increased migration is that the world is becoming more interconnected in every other way—trade in goods and services, movements of capital, communications, and travel. If everything else is "globalized", why not labor?

First, the success of the GATT/WTO framework for negotiating mutually beneficial reductions in trade barriers on goods and services has led to an expanded agenda for multilateral negotiation, creating pressure for discussions of international labor mobility.[11] While there are various global initiatives for discussing migration issues, they are much more tepid and have accomplished much less than discussions on trade barriers. Despite the recent discouraging experience in Cancún, the pressures for these discussions remain.[12]

Second, while labor mobility remains off the agenda it is hard to make a compelling case for further reducing barriers to markets for goods. Although the "border" effects inhibiting trade are still quite large, goods markets are quite deeply integrated, and the price differences in goods across countries are very small relative to the observed wage gaps. Since the efficiency gains rise with the square of the distortion, the benefits of further liberalizing trade just cannot compare with the benefits of liberalizing labor mobility. Winters *et al.* (2002) use a general equilibrium model to estimate the impacts of increased labor mobility. They find that an expansion in labor mobility of the magnitude of 3 percent of the labor force in host (labor-importing) countries would lead to a net gain for the world of US$156 billion. This, although a smallish fraction (0.6 percent) of world GDP, is:

- three times larger than all official development assistance;
- substantially larger than the estimated gains from *all* proposed remaining trade liberalization (US$104 billion).[13]

Even these labor mobility gains appear modest in comparison with those projected in a 1984 paper by Hamilton and Whalley, who calculate that free migration could as much as double world income.

Limits to capital-labor substitution

It has often been pointed out that research into various particular fields is distorted away from the interests of the poorer countries, but almost no one is pointing out how much research goes into coping with the consequences of the lack of international migration. Let me return to the story of the lawn mower, which illustrates three points:

- First, the very fact that my neighbor Paul still mows his own lawn. Indeed, I myself still mow my own lawn (coincidentally, I had bought the very same lawn mower the week before). Surely, on any opportunity cost calculation considered globally, this is strange behavior.

- Second, the capital/labor ratios involved in lawn mowing show how far the limits of capital-labor substitution are being pushed. The capital I deploy to mow my lawn—a truly trivial task if there ever were one—is equivalent to what billions of poor households in the world deploy to make their entire livelihood.
- Third, the fact that the lawn mower has improved so much in the last twenty-five years implies that firms have invested substantially in innovations to make lawn mowers more labor-saving.[14]

I would speculate that, contrary to all the stories about call centers in Bangalore, in general capital-labor substitution has limits. Moreover, as income rises there is an ever-increasing demand for labor-intensive services, so that the prospects for the "indirect" mobility of trade in labor services via the movement of goods are just about exhausted—which leads to increased demands for actual labor flows.

Immovable ideas: truths and myths that prevent migration

What is holding back these massive, and mounting, pressures for migration across borders?

As a proximate cause, what inhibits migration is people with guns. Nation-states apply force, subtly or blatantly, to prevent people from entering their territory.

What makes the issue of migration so difficult is that in nearly all the preferred destinations of migrants, the people with guns are completely under the control of democratic governments, which represent in some way the preferences of current citizens. The basic reason why there is not massively more migration in the world is that the citizens of the industrialized world do not want it. The barriers to increased flows of persons across national borders are not economic or geographic but are almost entirely the result of policies, and those policies are entirely the result of ideas that are widely held by citizens of the industrialized world.

Public opinion on migration

Around 1995, the International Social Survey Program asked people in many different countries their attitudes towards immigration. Fewer than 20 percent of the people surveyed favored an increase in immigration, and substantial majorities favored reductions. Nowhere in Europe did more than 10 percent favor any additional migration. Moreover, respondents who favored reductions in the level of migration were an absolute majority in every Western European country except Spain and Ireland, and were the largest category in every single country (Table 19.4).

Table 19.4 Opinions on migration, mid-1990s

	*Should immigration be . . .**		
	Reduced (either "a lot" or "a little")?	*"Remain the same"?*	*Increased (either "a lot" or "a little")?*
	Receiving Western Europe		
Germany West	77.58	19.62	2.82
Italy	75.60	20.84	3.55
Austria	56.14	39.92	3.96
Great Britain	68.22	27.65	4.12
Netherlands	61.51	33.02	5.47
Sweden	69.77	23.52	6.71
Norway	63.20	29.37	7.43
Spain	40.07	51.48	8.44
	Japan		
Japan	42.27	42.06	15.68
	Traditional recipient countries		
USA	65.78	26.17	8.05
New Zealand	62.62	25.78	11.58
Canada	42.07	37.33	20.61
	Traditional sending countries		
Ireland	21.62	59.27	19.10
Philippines	61.74	26.80	11.47

* The table shows percentages of respondents expressing an opinion, sorted by fraction in favor of "increasing" migration within regions.

Source: Mayda (2003), based on International Social Survey Program, National Identity Module, 1995.

From 1992 to 1996 in the US, the fraction of respondents who wanted immigration reduced rose from only 48.8 percent to 57.6 percent, but after 9/11 there was an understandable backlash against "lax" control of national borders. In the aftermath, it was reported that almost two-thirds of Americans were in favor of halting *all entry of any kind* from countries suspected of harboring terrorists. Even a quite recent Gallup poll (July 2003) reported that attitudes towards immigration in general are more negative than before 9/11.

In view of these public attitudes, any proposal for "open borders" is pointless. Openly advocating substantially greater flows of immigration appears to be an electoral loser, and indeed minority parties in the US and Europe are gaining a foothold with a strongly anti-immigration stance. The widespread view is that it is simply impossible for the industrial countries to absorb labor flows substantially larger than the current flows and hence that it is pointless, or worse, to even discuss such issues.

There is a story, perhaps apocryphal, but nonetheless instructive. During the waning days of South Africa's apartheid, the international condemnation was intense. To the international community it was simply intolerable that in this day and age a system would be maintained that sharply limited the mobility of people, that kept people in disadvantaged regions with no economic opportunities, that destined millions to live without hope, and that split families, merely because of the conditions of their birth. A prominent activist was to come to the United States to lecture against the evils of apartheid. But her trip was canceled because she couldn't get a visa.

The current international system of restrictions on labor mobility sustains gaps in living standards that are just as large as any in South Africa. The justification for these differences in labor market rewards is just as arbitrary. The differences are not based on an individual's effort, merit, talents, or potential economic contribution, but just on where he or she happened to be born. My conjecture is that at least some people in the industrialized world at least have a twinge of unease now and again about the huge and growing gaps in living standards between rich and poor countries. And yet there is virtually no general moral outrage and mobilization around this issue. The reason is that powerful and compelling ideas make these differences appear justified.[15]

"Nations" exist and "nation-states" are a reasonable and just foundation of an international system

The international system takes national sovereignty as paramount; it does not concern itself with any restrictions that governments care to place on the internal movement of persons—including banning entry, banning exit, banning movement within a country, or even forcing migrations and resettlements—or with national laws that restrict people from moving to other countries. Yet the governments of nation-states have, for a variety of reasons, much more interest in what happens to the incomes of the people and firms that reside within the geographic space they control than with the well being of all their "nationals."[16]

Though the idea of "nations" is imagined from start to finish (Anderson 1991), this does not make it any less powerful as an organizing principle in the international system. Recent events suggest that even where the idea of the nation-state is weakening, the idea of nationalism is stronger than ever. Indeed, the ideas of nations and nationalism are so strong that when moral philosophers such as Carens (1995) make the case that the current "best" theories of liberal moral philosophy imply an ethical obligation for open borders, it is not clear whether they are really arguing for open borders or merely presenting a *reductio ad absurdum* of the theories.

Labor mobility is bad for the poor in rich recipient countries

In destination countries, negative attitudes towards immigration are compatible with the view that unskilled immigrants will depress the wages of unskilled workers in those countries. Those workers in industrialized countries who are less skilled have been found to be more likely to oppose both freer trade and immigration (Scheve and Slaughter 2001; O'Rourke and Sinnott 2003). Timmer and Williamson (1998) argue that rising inequality was the largest single factor in making immigration policy more restrictive in the late nineteenth and early twentieth centuries.

The effect of immigration on the wages of unskilled workers in destination countries is real, and a reasonably straightforward result of supply and demand.[17] But this effect does not constitute a case for restricting migration. As Rodrik (2003) points out, imports from low-wage countries of products that embody an equivalent (relative) amount of unskilled labor should have exactly the same impact on wages as would domestic production of those goods in the destination country, because they affect the net supply/demand balance in exactly the same way. When this argument is applied to trade, economists will agree that this is a "second best" problem, and not a reason to limit imports; policies should be separated and first income should be maximized (free trade) and then optimal transfers implemented. In principle, the same argument applies to the mobility of labor (abstracting for a moment from the public cost of migrants). If governments in fact will not make the transfers, then this is a reason to oppose imports of labor-intensive goods just as much as to oppose immigration.

Another argument for migration is that the poor in richer industrialized countries are much better off than the poor, or even the middle-income group, in poor countries. So from a world welfare point of view the distributional effects of labor movements are (generally) hugely positive.

Labor movements are not "necessary" to raise living standards

The quickest and most obvious way to raise the living standards of nearly anyone is to allow them to move to a much richer country. Alternatively, one could be convinced this is not necessary, perhaps by one of the following ideas:

Supporting idea 1: "Convergence"

If one believes that income levels will naturally converge without labor mobility, then it is easier to rationalize barriers to labor mobility.

Supporting idea 2: "Trade is a substitute for labor mobility"

Trade in goods could be a substitute for movements of factors, including labor. Hence reducing trade barriers to imports from country X could be seen as the substitute for allowing immigrant workers in from country X. However, there is no evidence that trade is in fact a substitute for labor flows—and there is some historical evidence that trade has been a complement (O'Rourke and Williamson 1999).

Supporting idea 3: "Aid is a substitute for migration"

Aid is enormously more popular than labor mobility, according to the third wave of the World Values Survey, which included questions on support for international efforts and on foreign aid (Table 19.5). However, the efficacy of anything like the current levels and structure of aid in promoting greater income growth can certainly be questioned (Besley and Burgess 2003; Easterly 2003).

Supporting idea 4: "The world's poor are not so poor"

One of the most pernicious myths is that at least the richer people in poor countries are not so poor. But by any non-money indicator of well-being—child mortality, malnutrition, schooling—the richest fifth of the population in poor countries has much lower living standards than the poorest fifth in rich countries (Pritchett 2003).

All that matters for moral obligations is "proximity"

One idea that deeply influences views about migration is that presence or proximity creates ethical obligations. People in most industrialized countries

Table 19.5 Support for aid versus "open borders"

	Fraction "in favor" of aid[a]	*Fraction saying "too little" effort for poverty in less developed countries*[b]	*Fraction saying "let anyone come"*
West Germany	83.0	65.2	13.8
Spain	85.1	64.9	14.6
United States	55.5	62.4	5.1
Japan	90.4	42.8	4.2
Australia	74.7	63.5	4.6
Norway	81.6	51.6	4.9
Sweden	83.9	51.6	8.4

Notes: [a] "Some people favor, and others are against, having this country provide economic aid to poorer countries. Are you personally . . ." Options were "very much for;" "for to some extent;" "somewhat against;" and "very much against." Column 1 includes those reported as either "very much" or "to some extent" in favor.

[b] "In some economically less developed countries, many people are living in poverty. Do you think that what the other countries of the world are doing to help them is about right, too much, or too little?"; Column 2 includes those who answered "too little."

Source: World Values Survey, third wave (1995–97).

think that tolerating excessive differential treatment of people within their national boundaries is "immoral," but have few qualms about the suffering of people outside their boundaries, and think it acceptable to force people to stay outside. The level of deprivation of people in Haiti causes almost no direct concern, but if a Haitian manages to reach the US, his very physical presence creates an enormous set of obligations and political concern among Americans.

Nearly all the countries with the highest reported percentages of international migrant stock[18]—United Arab Emirates (73.8), Kuwait (57.9), Singapore (33.6), Oman (26.9), and Saudi Arabia (25.8)—have created clear legal distinctions between citizens and non-citizens, such that workers in those countries are metaphorically "second-class citizens." Such distinctions between residents of the same country would be extraordinarily difficult to manage in more democratic settings. It is notable, however, that nearly all people who migrate to work in Saudi Arabia do so willingly and stay willingly and hence, by revealed preference, are better off as a result of their migration. If some exogenous factor were to force Saudi Arabia to treat all those who lived within its borders equally, irrespective of their citizenship, then that country would certainly dramatically reduce immigration, leaving both Saudi and foreign workers worse off.

So, one way to think of border control is a dynamic pre-commitment to not creating an ethical obligation through proximity. That is, since we cannot understand how to deal with the problems of the "danger" of "second-class" citizens within national borders in a rich democracy, we insist that people remain third- or fourth-class citizens of the globe—which is a moral dodge that serves only the interests of those in rich countries.

Migration as the "Millennium Development Goals plan B"

Wise and pragmatic leaders often deliberately ignore insurmountable problems so as to surmount the surmountable. A prominent example is the treatment of slavery by the North American founding fathers. The leaders from the non-slave-dependent colonies of the North judged that it was simply impossible to attain the desired voluntary union of the thirteen colonies into a sufficiently powerful national federation and to simultaneously address the problem of ending slavery in the Southern colonies.[19] While with hindsight it is easy to criticize them for failing to achieve the ideal of racial equality, or for their lack of moral courage in addressing slavery, were they wrong? If two separate nations, one banning and one allowing slavery, had evolved, it is not obvious that this would have been more beneficial for the slaves and their descendants.

As another example, the founders of the post-World War II international political and economic structure provided the framework for perhaps the best half-century of material progress in the history of man. This framework provides for international organizations to promote the stability of the international means of payment (IMF), freer mobility of goods (GATT/WTO), capital flows (the World Bank) and, within the UN system, to cover a host of other issues from dispute resolution to education. But just as the American founding fathers made an obvious sacrifice to achieve what was perceived as a greater good, so too the post-war international system has demanded silence in two key areas: national sovereignty and migration across national boundaries.

I do not want to jeopardize the advantages of the current system in the interests of getting one issue "right." Nevertheless, the question can usefully be asked: How long must we wait? How long must only Bolivia feature on the international agenda, and not Bolivi*ans*? When does one conclude that migration can and must come on to the development agenda, and how?

Fortunately, the development community has put itself on the clock. The Millennium Development Goals are specific, measurable, and time-bound.[20] Between 1990 and 2015, they propose the halving of poverty, achievement of universal completion of primary schooling, and reduction of infant mortality by two-thirds. But we are now at the mid-point, and it is already obvious that the MDGs will not be achieved in every country.

The usual "plan B" for ambitious targets that are not achieved is evasion: either lengthening the horizon or gradually letting the movement lose steam in favor of some new agenda. My plan B is that we begin today to develop mechanisms for enhanced labor mobility, so that when in 2015 the MDGs are not achieved these mechanisms can be scaled up and integrated into an international system that is truly global.

Bhagwati (2003) calls for the creation of an international organization to deal with migration/population mobility issues. As I see it, such an organization will need to have at least four sets of mechanisms, to handle:

1 immigration that leads to permanent changes in citizenship;
2 temporary movement of "high human capital" services of professionals such as computer programmers, nurses, doctors, advertising agents;
3 temporary mobility of unskilled labor;
4 refugees.

I have developed these proposals in somewhat more depth elsewhere,[21] but here I briefly argue what I think is the most fruitful way forward for enhancing the temporary mobility of "unskilled" labor. My suggestion is to develop proposals that:

- are bilateral agreements between host and sending countries;
- allow for temporary movement of persons in a regime separate from immigration;
- have numerical quotas for specific occupational categories (and internal regions within the host country?);

- enhance the development impact of labor mobility through agreements with the sending country government;
- impose automatic penalties on the sending country (and host country employer) for laborers who overstay; and
- protect the fundamental human rights of laborers.

That is, the scheme would allocate specific numbers of workers to work in specific industries on an explicitly temporary basis. The scheme would involve the sending country in the movement of the laborers and provide some mechanism for compensating the sending country (for example, employers would pay the equivalent of the employer contribution to social security taxes into an escrow which would then be rebated to the country when the worker returned) and some mechanism for enhancing the development impact of the worker's stay. The sending country would be allocated a quota for the stock of immigrants and any failure to return would be deducted from the allowed flow.

I justify elsewhere (Pritchett 2006) why I think these are the elements of an attractive approach. In particular, I would recommend against:

- using the WTO as the primary mechanism for a multilateral agreement;
- increases in unskilled migration;
- general increases in the numbers of allowed entrants;
- using domestic country enforcement of stay;
- separating labor flows from development issues;
- linking "immigrant rights" with labor mobility.

In any case, developing some international mechanism to cope with the increased pressures for immigration is desirable to reach a fully globalized system.

Conclusion

It is hard to know for what moral failings future generations will hold us to task. If one peruses the pages of "progressive" publications in the US, my impression is that one will find several times more discussion about animal rights than about international labor mobility. Yet millions of people on the planet live less well than domestic animals in the US,[22] and these people are trapped into their present and future condition of poverty by the violence that is exerted at national borders. I hope that the future will judge us rather for the extent to which we improve the plight of our fellow human beings, even in the distant parts of the planet, than for our treatment of our pets at home.

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Notes

1 This chapter was elaborated into a longer work published in 2006, *Let Their People Come: Breaking the Gridlock on Global Labor Mobility* (Center for Global Development 2006).

2 There are many other examples of persistence followed by rapid change, ranging from the trivial—such as the disappearance of dress hats for men to the socially beneficial—attitudes about highway litter—to the controversial (and incomplete) such as the change in attitudes towards homosexuality.

3 I emphasize "material" because there are many ways in which the human condition is unchanged or has changed for the worse. I am not convinced people are nobler, braver, more moral, or imbued with a deeper artistic appreciation or sense of the humane today than historically (and I am sure I personally do not possess these, compared to persons in the past, in the relative abundance that I possess better lawn mowers). Moreover, while science has progressed, the loss of metaphysical certainty and its concomitant, a sense of personal security and social identity, has both pluses (more tolerance of deviation) and minuses.

4 Actually, for lack of data they divide the world up into groups of countries. The "across" country gap would be even larger for actual countries.

5 We are comparing the O'Rourke and Williamson (1999) real wages of unskilled laborers—often taken from data on the building trades and adjusted for prices—with the wages in all of the industrial sector in the 1990s, adjusted for purchasing

power parity using the price levels from the Penn World Tables 6. For many reasons, these two data sets are not perfectly comparable.

6 This is the near the average of the existing empirical studies. Pritchett (2003); Woessmann (2002).

7 Ghost towns—places that were once booming and attracting migrants but have subsequently declined—suggest that there is variability to desired populations. I grew up in Idaho City, which was once a thriving frontier town (the largest in Idaho territory) but whose population in 2000 was only 458 people. There used to be gold in the river nearby; and now there is no more commercially exploitable gold.

8 I want to emphasize that this line of analysis has nothing to do with "population pessimism", which argues that rapid population growth is *per se* a problem or that rapid population growth is a significant independent *cause* of slower growth in output per capita. In many ways, population pessimists get it backwards, because it is not that population growth is bad for output growth, it is that slow output growth is bad for the living standards of populations. The real "population crisis" is not the result of populations growing at 2 percent (indeed, all of the successful East Asian countries began their rapid economic growth while their populations were growing rapidly); crisis arises when optimal population collapses to or below the actual population—whether because of exogenous shocks, technological changes, or bad governments—while population continues to grow.

9 As noted in Birdsall and Pritchett (2002), the implications for the United States are less dramatic than for Europe or Japan. Fertility has not fallen as rapidly or as far in the United States, and the "natural" immigration partners of the US have lower fertility rates and hence more similar population growth than do the countries in proximity to Europe or Japan.

10 Several democracies have achieved very high levels of immigrant stocks—Switzerland, with 25.1 percent; Australia, 24.6 percent; and Canada, 18.9 percent. But these are not without tensions.

11 If the industrialized countries of the world are using the framework originally established to facilitate reductions in barriers to trade to create a system of international rules more favorable to the industries in which they have a competitive advantage—particularly "non-tradable" sectors like banking and insurance—then it will not take long for developing countries to do the same. Why not international negotiations to open up the yard care industry or the building cleaning industry or the fast food service industry or care of the aged industry or the retail services industry?

12 There are several initiatives on migration. The WTO General Agreement on Trade in Services contains a section on "movement of natural persons" in connection with the provision of services, but this is a framework for scheduling agreements, and so far there has been very little action on this front in terms of scheduled commitments, particularly with binding quantitative agreements. Other initiatives, such as the Berne Initiative and a UN commission on migration that is being created (June 2004), will definitely raise the profile of the issue but are not structured to bring about significant immediate policy change.

13 The general equilibrium effects are small relative to the direct effects. Net gains are US$156 billion; a gain of US$170 billion for those who move, offset by a loss of US$14 billion for those who do not.

14 In fact, I had to interrupt my lawn mowing to visit the local branch of a large national chain of home improvement stores. This store, which exists as a result of restrictions in the international labor market, is moving towards "self-checkout," which is a combination of quite sophisticated technical advances in order to reduce the number of workers needed.

15 In what follows I shall not address the truly ugly myths on which immigration

policies were historically based. In particular, many of the arguments put forward for the initial closing of the border were explicitly racist and explicitly eugenic. It was a widely accepted belief that peoples were of different "quality" and that this different "quality" was transmitted at least in part genetically and hence closing the border was a policy designed to protect "racial quality."

16 Thus, it is easy to find out, from a stream of data sets emanating from the international organizations, about the well-being of individuals who now live in Jamaica or El Salvador or Armenia or the Ukraine. But what is the average income of *Jamaicans* or *Salvadorians* or *Armenians* or *Ukrainians* (defined as either those born in those countries or those that self-identify by those categories)? Given that, in these small countries, a large fraction of those who self-identify do not live within national boundaries, these two numbers: the average income *in Jamaica* and the average income of *Jamaicans* need not be very close.

17 Borjas (1999) might overemphasize such impacts. For example, my perception is that he tends to emphasize the large impacts on the "less than high school"-educated native workers, who constitute a small fraction of the labor force, rather than the relatively small impacts on the "high school educated."

18 UN International Migration Report. I omit Jordan and Israel as special cases.

19 They even made explicit that for twenty years there could be no ban on slave imports. Article I, section 9, para. 1 of the US Constitution stipulates, "The Migration or Importation of Such Persons as any of the States now existing shall think proper to admit, shall not be prohibited by Congress prior to the year one thousand eight hundred and eight."

20 See http://www.developmentgoals.org

21 Pritchett (2004).

22 Even for animals used in laboratory research there are published guides on the quantity and quality of food, living conditions (space, light, temperature control), and access to healthcare (both preventive and curative).

20 Globalization and the environment

Robert Mendelsohn

As the world economy grows, it potentially consumes ever more resources and generates ever-larger pollution loads. Because trade enables the growth of the world economy, it is tempting to blame globalization for this relentless pressure on the environment. This chapter acknowledges the risks to the environment of globalization. However, it is important to also remember that economic stagnation and poverty also pose risks to the environment. Environmental protection requires extensive resources that only the richest countries in the world currently can afford. With worldwide economic growth, countries around the world will be able to afford more extensive environmental protection programs. Global economic growth will damage the environment if pollution and natural resources are not well protected. However, globalization will allow many currently impoverished regions to take active measures to protect their own environments—measures that they cannot afford today. Although development may entail an immediate loss of wildlands and an increase in pollution in some countries, it will also provide future wealth to address environmental issues in the long run. In the long run, development is necessary to finance environmental protection.

As globalization proceeds, the growth of economic activity is expected to affect virtually everyone, even the most remote villagers on the planet. Projections by the Intergovernmental Panel on Climate Change show that if globalization is successful, the world economy will increase six to eight times between 1990 and 2100 (Houghton *et al.* 1992), with faster growth taking place in developing countries than in currently industrialized countries. This growth inevitably will require inputs from the environment for food, energy, wood, and minerals. That means more mining, drilling, and, possibly, more land conversion. A six- to eight-fold increase in GDP also implies increases in local, national, and global pollution.

Although the demand for inputs and potential pollution will increase with GDP, it is not expected that either inputs or wastes will increase in proportion to GDP. First, most of the projected growth in the economy lies in sectors such as services that require people and human capital more than substantial natural resources. These sectors also involve less pollution. Manufacturing is expected to shrink as a fraction of world GDP and, as it shrinks, pollution levels per unit GDP will decline. Second, technical change has led and will continue to lead to sharp declines in the amount of natural resources required per unit of output. For example, there have been steady and dramatic improvements in energy efficiency throughout the world. That translates into a steady decline in the energy needed per unit of output. The six- to eight-fold increase in GDP expected by 2100 may require only a two- to four-fold increase in energy and minerals as inputs. Third, as these inputs decline per unit of output, pollution will also decline. Even without abatement, potential pollution is expected to increase only two- to four-fold over the next century (Houghton *et al.* 1992).

Nonetheless, even a doubling of pollution and input requirements can have a large and deleterious impact on the environment. This chapter discusses the environmental pressures on natural resources, in the first section, and on pollution, in the second. The chapter looks at how globalization will unfold into the next century and what it might mean for the environment.

It also discusses how we can and should plan to address the environment over the next century. What will actually happen over this century depends both on how economies grow and on how societies respond. As countries gain access to new technology and acquire new wealth, they will have the ability and income to protect the environment. However, for environmental protection to be realized, governments must also develop the appropriate institutional structures for this purpose. In many countries, existing governments and institutions are inadequate to protect public (shared) goods such as the environment. Globalization may well exacerbate the harm to the environment caused by weak governments and weak institutions. Global environmental protection requires a combination of economic growth and institutional reform. The environmental impacts of globalization will hinge not only on market forces but also upon government responses—upon how national governments and multinational institutions react to the increasing pressure from growth. Are the required governmental institutions in place in every country? Are international agencies empowered to protect international resources? Will governments behave efficiently? The environmental success of globalization hinges on institutions that are not yet completely in place and institutional behavior that is still not evident.

Natural resources

Environmentalists are right to be concerned that the additional inputs required to fuel economic growth come at the expense of the environment. The doubling or quadrupling of inputs for food, energy, wood, and minerals will have environmental impacts. More mining, drilling, farming, grazing, and urban activities will put pressure on renewable resources such as land, water, and fisheries, as well as nonrenewable resources such as fossil fuels. Even just a doubling of input flows will increase scarcity noticeably.

This does not necessarily spell disaster, however, as competitive markets are well designed to cope with scarcity. Nonrenewable resources such as fossil fuels will be efficiently distributed over time by market forces (Hotelling 1931). The potential to sell to future generations at high prices because of ever-scarcer resources will keep owners from squandering resources too quickly. Competitive markets will allocate private land efficiently across competing market uses. Many inputs will be managed efficiently by market forces alone. Prices will increase over time as resources become scarce, but the available nonrenewable resources on the planet can support the expected growth well beyond the next century (Manne *et al.* 1995; Swierzbinski and Mendelsohn 1989; Tilton 2001).

Renewable resources such as land will become increasingly scarce as the demand for land increases. Different private land uses, such as commercial forests, farms, and cities, will compete with each other for the remaining available land, raising land prices across the world to reflect land scarcity.

In the past, rising prices for scarce resources led to substantial clearing of wildlands for productive use. Europeans cleared substantial forests and grasslands, Americans planted their prairie, and low latitude countries converted tropical forests and savannahs to cropland and pastures (Sohngen *et al.* 1999; Turner *et al.* 1990). Prices have served as an efficient mechanism to allocate land between different private uses, and rising prices have helped guide society to protect the land uses of most value. Land has been given to high valued uses such as cropland and taken away from low valued uses such as forests. Land-intensive activities such as swidden agriculture, that were at one time efficient, are being driven out because they do not return sufficient rent per hectare (Montagnini and Mendelsohn 1997). Land-intensive communal agricultural systems are also being driven out as agriculture becomes more intensive.

In the future, the balance between forests and farms will continue to shift as some countries seek additional cropland at the expense of forest services. In Africa, Latin America, and Asia, there has been considerable forest clearing to increase farmland (Sohngen *et al.* 1999; Turner *et al.* 1990). The balance between grazing and cropland may also shift as crops replace pasture as a source of animal feed.

However, these land use changes will not be unidirectional. In most industrialized countries, rapid technological improvements in growing crops have reduced the land that is needed for cropping (Evenson and Santaniello 2004). If markets were allowed to operate efficiently, vast amounts of cropland would already have disappeared in the United States and Western Europe (Western countries have artificially supported cropping by massively subsidizing domestic farmers). Many countries in Asia have increased crop production dramatically without converting additional land to farms. The promise of new technology for growing crops is expected to make a vast difference in conserving land in the future. Although many environmentalists look upon this new technology with skepticism, advanced methods of crop production, including new genetic varieties, could well save vast acreages of wildlands from becoming marginal farmland (Mendelsohn 2000).

Higher prices have had a dramatic effect on forestry as well. The mining of the world's forests has been going on for centuries (Sohngen *et al.* 1999); standing trees were so abundant that the price of timber was too low to manage forests, and mature trees were consequently harvested without replanting. In recent years, however, we have finally begun to run out of over-mature forests. Prices for timber have risen, reflecting this scarcity and making it profitable to plant forests for timber. Timber management has consequently spread from its roots in Germany across the planet. This decade marks the beginning of a new era in forestry where the number of trees planted globally replaces the number of trees harvested globally. Forestry has finally become sustainable (Sohngen *et al.* 1999).

Markets have been efficient at allocating lands between private uses. However, markets are not effective at protecting land uses that are "public" or shared. The rising value of private land has caused ever greater intrusions into wildlands (Turner *et al.* 1990). Market forces undervalue wildlands because the shared value of this land cannot be captured in prices. Landowners cannot effectively collect payments for the jointly consumed services that wildlands provide. Thus, without government interference, wildlands are converted to more destructive but more financially rewarding private uses (Mendelsohn 1994, 1999a and b).

Globalization has the potential to destroy vast acreages of wildlands that may have very high social value but little market value (Mendelsohn 1994). Currently, national governments jealously control these resources. However, there is deep concern that governments in developing countries may not reflect the will of their own people. There are many examples of government officials collecting vast rents from resources that are technically owned by the government. Partly, this reflects a tendency to shift valuable market resources from public control to private citizens. This has happened in every country in the world. The celebrated opening of the American West to settlers was just such a transition.

There is ample evidence that market resources should be turned over to private hands for efficient *management*. However, the *ownership* of wildlands that a country values for the long term needs to be kept in government hands, because private owners do not have the incentive to protect them effectively. In some cases, private owners can create eco-tourism sites and collect some revenues from wildlands (Mendelsohn 2001; Tobias and Mendelsohn 1991). In general, however, these revenues amount to less than half of the social value of wildland services, the remainder being lost to uncollected and lost consumer surplus.

To protect wildlands efficiently requires effective governmental institutions, but many countries lack sufficiently developed governmental institutions to protect their own resources (Repetto and Gillis 1988). Globalization without effective national governments could wreak havoc on local environments through the excessive depletion of wildlands. Without effective national governments everywhere in the world, globalization can destroy habitats that nations should preserve for their own sake.

Wildlands also can have international value. Eco-tourism is a rapidly growing dimension of travel; people travel all over the world to see rare and beautiful ecosystems and species, and more than half the visitors to many of the world's most valuable ecosystem destinations are foreigners (Tobias and Mendelsohn 1991; Carr and Mendelsohn 2003). Although it is reasonable to expect that national governments will protect resources of concern to their own citizens, it is not obvious that these governments will or should protect resources that are mainly of concern to other countries. The discrepancy is especially poignant for relatively poor countries, which own many of the world's most valued ecosystems. Markets and on-site fees collect only a small fraction of the value that tourists place on these sites.

For internationally significant environmental sites to be protected, multinational mechanisms must be created to compensate the countries in which the sites are situated. The Global Environment Facility (GEF) is an example of an institution that could provide such payments.[1] The GEF could be used as a funding mechanism by which rich countries pay annual compensation for the international value of specific wildlands that are preserved in poor countries. Rich countries could identify international sites that their citizens want to protect, quantify how much their citizens will pay, and provide annual grants to the host countries through the GEF that reflect these values. In return for these payments, local governments will enforce environmental protection systems on these lands, including paying incentives to local people. However, the current funding for GEF is woefully inadequate to actually pay compensation for international values. In the environment, as in other spheres, globalization increases the need to create effective multinational organizations and fully fund them.

Government has an important role in the management of natural resources, but government policies can actually reduce environmental quality. For example, massive crop subsidies in the United States and Europe have prevented cropland from shifting back to more natural uses in these regions. Not only have these programs cost developed countries huge welfare losses, but they have clearly reduced environmental quality in the process by causing too much land to be cleared for crops. Some might blame globalization for this, as governments have created the subsidies allegedly to protect domestic farmers from imports. However, it is the developed countries (especially the US) that have created the technical change that has led to the vast increase in agricultural supply. So it is really the developed countries alone who are to blame for the low observed prices of crops and the high prices of farmland. Globalization is not to blame. In fact, institutions intended to promote globalization are working against these domestic policies. The World Trade Organization (WTO) advocates reducing crop subsidies in the US and European Union to promote free trade; if these subsidies are reduced, an indirect benefit will be an improvement in the environment in the United States and Europe. The pressure from globalization institutions, in this case, actually benefits the environment.

Increasing scarcity puts increasing pressure on governments to be more efficient. As globalization proceeds, countries need to improve the way that they manage their market resources. Water is famous for being inefficiently allocated across users; the general rule is "first come first served" rather than "delivery to the highest valued user". As water becomes scarcer because of increasing demand, this problem will worsen. It is critical that high valued future users, such as urban and industrial users, have a mechanism to buy water from low valued users. In most of the world, the lowest valued users are marginal farmers (Zilberman *et al.* 1997). In every country, new institutions need to be put in place to reallocate water away from low valued uses to high valued uses. Economists have frequently called for water markets where users must buy the water from the government, but in practice many users believe they own the water they currently use, and so avidly resist any such markets. Alternatively, governments could recognize that current users do in fact have water rights, and could allocate permits to them in proportion to existing uses. If such permits were made tradable, high valued users could buy rights from low valued users. The efficiency of the market would come forth while protecting existing water rights (Easter *et al.* 1998). With globalization, there is ever-increasing need for such institutional reforms in water.

Countries must also manage forests better. In many parts of the world, the government is the official title-holder of forestland. Local people have overlapping rights to some forest uses, such as the collection of non-timber forest products (Grimes *et al.* 1994; Peters *et al.* 1989), but the timber rights are generally federal. These overlapping rights create incentives to mismanage forests for either timber purposes alone on behalf of the government, or non-timber resources alone on behalf of local people. Quite often, opportunities to maximize joint returns are lost as owners each seek purely their own personal interest (Repetto and Gillis 1988; Houghton and Mendelsohn 1996). Property rights to forests whose primary value is market resources need to be unified in the hands of private owners. Who exactly will get these former public resources is an important question for individual countries to resolve. From an efficiency perspective, however, the critical issue is that the complete private rights for each piece of land be given to a single body and not shared. Forests that are largely public in nature should be managed by the government to protect their jointly consumed services.

Another renewable resource in vast need of reform is fisheries. Commercial fisheries suffer because many fishermen share a common pool of resources. Because the future productivity of that pool is shared but the immediate gains of catching an extra fish are not, fishermen around the world were depleting fish stocks throughout the twentieth century (Hardin 1968). This tragedy of the commons has been addressed by domestic regulations limiting aggregate fish catch out to a 200-mile limit from national seashores. However, there remain many examples of neighboring countries—including the US and Canada—being unable to share the fish that swim across national borders. Fisheries in international waters are also still at risk since the most effective regulations remain national. Despite these few remaining problems, most domestic fisheries are now protected from overfishing.

Although regulations have largely brought overfishing under control, fisheries around the world remain inefficient. Almost every fishery in the world has excess harvest capacity (Scott 1955). The common property fishery creates an incentive for fishermen to increase their harvesting capacity to try to get a larger share of the available fish. The net result is that they spend as much on harvesting capacity as the fish are worth (Dupont 1990). The excess capacity forces regulators to close fisheries prematurely. More importantly, the excess harvesting capacity wastes the entire potential value of fisheries worldwide. The biologists who regulate the world's fisheries have done a reasonably good job of protecting fish populations but not the potential wealth of fisheries. The potential value of the world's fisheries is being wasted because the common property regulations create excess harvest capacity.

Pollution

Globalization and the resulting economic growth pose real threats to the Earth's environment. Given the increase in economic activity expected from globalization, the pollution problem we already face will get substantially worse. The damage from potential pollution at all spatial scales is serious and cannot be ignored. As globalization pushes economic development into the far corners of the earth, every society faces this problem.

The expected doubling to quadrupling of physical inputs into the global economic system as it grows over the next century will increase the potential for pollution (Houghton *et al.* 1992) locally, nationally, and globally. There is every reason to expect that potential pollution will grow in every country. Virtually all countries, not only the industrialized countries, are likely to increase their potential pollution over the next century. Harmful local and regional pollutants such as sulfur dioxide, small particulates, nitrogen dioxide, and carbon monoxide will all potentially increase in the atmosphere. If they increase, they will set in motion a new wave of premature mortality, serious illness, minor health effects, loss of vision, material damage, crop loss, and ecological damage in the regions in which they are emitted. In addition, a host of fertilizers will potentially be released into the world's aquatic ecosystems, causing oxygen levels to fall enough to kill fish and damage water resources. Heavy metals and other lethal chemicals may also be released into water systems, threatening the drinking supplies, irrigation water, and fish supplies of future generations. Dangerous pollutants may be dumped in nearby soils and slowly but surely emanate across the landscape, making areas unfit for human habitation or farming. Global pollutants—emissions that damage global, not local, resources—will be released into the Earth's atmosphere, potentially destroying the upper ozone layer or blanketing the planet in greenhouse gases (Houghton *et al.* 2001).

Whether these pollution threats are realized remains distinctly in the hands of governments. If governments take no action, markets will encourage no abatement. Pollution affects many victims simultaneously, and it is simply too costly for victims to organize themselves to effectively pay for pollution as a group. In places without government regulation, no effort is made to abate.

Examining the historical role that pollution has played in industrial countries suggests a pattern that might unfold in the world as a whole. The overall historical pattern in the industrialized countries in the last century has been one of increasing and then decreasing emissions over time. Countries such as the United States, Japan, Canada, and those in Western Europe rapidly increased pollution as their economies industrialized. Academics have argued that victims have an incentive to pay firms to abate (Coase 1968). However, pollution is jointly consumed by many victims, so that no single victim is actually rewarded for paying first, and a large number of victims must coordinate their actions in order to present a payment to a firm to abate. The transaction costs of this are very high and so we observe that victims fail to pay for abatement. There is a market failure in pollution control (Baumol and Oates 1988); government regulation is required to efficiently represent victims' demand for abatement.

Effective pollution control in the industrialized countries did not really begin until the 1970s, when federal regulations were first instituted in the USA (USEPA 2001). Though individual states historically provided some meager regulation against pollution, states are too small to regulate air and interstate water pollution effectively. A great deal of the damage from pollution falls outside their boundaries, so states have only a limited incentive to abate pollution to protect their own citizens. Further, firms can easily move their plants outside state boundaries to avoid regulations, and states consequently fear that if they alone engage in stringent controls, they will lose jobs and prosperity to neighboring states. The initial federal efforts were sometimes ineffectual; notably, many old plants were exempted from installing expensive pollution controls. But federal regulations have gradually been tightened over the years so that overall emission levels in the US are actually declining, despite continued economic growth.

This same pattern could well be repeated by developing countries (World Bank 1999). At first, countries will industrialize and create polluting factories across their landscapes. They might abate pollution but only modestly—their low incomes implying that little pollution is worth abating. Minimizing abatement plus environmental costs implies that developing countries should only make modest investments in abatement at first. These investments need to be made where they will do the most good, which will be in the population centers of these countries. As countries gradually become wealthier, they can afford to spend increasing amounts on pollution control, and they will gradually tighten regulations, forcing ever more abatement. Eventually, a maximum emission level is reached and thereafter emissions fall. Pollution will follow a hill-shaped path over time, increasing at first and then declining. Ultimately, this path leads to more economic development and more pollution control. Although this is not the only feasible path that countries can take, it balances wealth and pollution protection at every moment. The hill-shaped path over time may well be the path most developing countries will want to choose.

The most effective institutions to regulate pollution have nationwide coverage. However, even nationwide regulations have the potential to be ineffectual. For example, some pollution crosses national boundaries, and following self-interest, national regulatory agencies may ignore impacts that fall outside their national boundaries. Although transboundary pollution is a potential problem, there are many examples where bilateral agreements between countries have resolved this issue. With respect to transboundary pollution, Coase's promised solutions have come to pass: victim countries do negotiate with polluting countries and encourage efficient outcomes. For example, both Canada and Mexico have negotiated with the US to reduce air and water pollution respectively. When the emitting country is wealthy, neighboring victims appear to be able to encourage the emitting country to pay for abatement. When the emitting country is relatively poor, the victim countries have sometimes volunteered to pay; Sweden has paid northern Poland to reduce pollution and Japan has paid northern China to reduce emissions.

A problem remains, however, for countries that have no effective environmental regulations or institutions (Esty and Mendelsohn 1998). Globalization could well cause highly polluting firms to congregate in countries with minimal environmental regulations. In principle, locating their operations in such "pollution havens" could save firms vast sums on abatement. Whether firms will actually congregate in pollution havens remains unclear. Governments that cannot create environmental institutions typically fail to create other conditions needed for successful business operations; they are likely to have problems ensuring the rule of law, secure property rights, and dependable services. For polluting industries, which tend to be capital intensive, the costs of operating in primitive conditions may far exceed any abatement savings. Empirical attempts to see if polluting firms are attracted to national pollution havens have consequently yielded mixed results (Jaffe *et al.* 1995). Economic development may be more closely tied to effective government than to loose regulations. The pollution haven problem may never happen.

An important problem that globalization will exacerbate is global pollutants. Increases in economic activity in any location will increase potential global emissions. Unfortunately, individual countries have little incentive to control global pollutants such as chlorofluorocarbons (CFCs) or greenhouse gases, because they must pay for the abatement costs themselves, while the benefits are shared around the globe. Global pollutants are a case where the scope of national environmental institutions is inadequate to the scale of the problem.

Despite this general limitation of national governments, substantial progress has been made in fighting CFCs, which appear to have caused the upper atmosphere ozone holes over the poles. The Montreal Protocol banning CFCs is widely recognized as very successful. Prior to this agreement, CFC emissions were visibly reducing stratospheric ozone, with serious predicted effects on the health of high latitude residents and ecosystems from increased ultraviolet light. In fact, the cost of abating CFCs turned out to be relatively modest once substitute chemicals were discovered. Given the very favorable cost/benefit ratio, countries quickly agreed to the Montreal Protocol and emissions have been dramatically reduced. There is even evidence that the ozone holes are already shrinking.

By contrast, success in controlling greenhouse gases has remained elusive. The costs of control have turned out to be quite substantial, and countries are reluctant to give up burning the cheap fossil fuels that emit these gases (Nordhaus and Boyer 2000). In turn, the benefits of controlling greenhouse gases have turned out to be murky. Further—at least initially—warming the planet may not be unequivocally harmful. Over the next few decades the emissions are expected to cause only small harm along the low latitudes and likely benefits in the higher latitudes (Mendelsohn 2003; Mendelsohn and Williams 2004). Thus, the incentive to engage in crash programs to control greenhouse gases in the near term is limited. But as emissions continue to grow, with higher world economic activity, concentrations are expected to accumulate. Eventually, further warming will become clearly harmful and efforts to control greenhouse gases must begin in earnest (Mendelsohn and Williams 2004).

Current institutional mechanisms to control greenhouse gases are too weak to be effective. Although the Kyoto Protocol gained the approval of many industrialized countries, it is not clear how effective the agreement actually is. Technically, the countries that signed the agreement will lower their emissions back to 1990 levels or more. However, the collapse of the economies of Eastern Europe and the Soviet Union created "paper reductions," because these economies are no longer producing the levels of greenhouse gases they were in 1990. Western Europe has seized the Eastern European paper credits as part of their commitment under Kyoto. The actual cutbacks in emissions that the Western European economies must make are quite small. In contrast, the US economy has grown substantially since 1990. For the US to get back to its 1990 levels would require substantial cutbacks in emissions. Adherence to the Kyoto Protocol would be very costly to Americans.

It is critical that international agreements to limit greenhouse emissions be renegotiated. Although the Kyoto Protocol is deeply flawed, this does not signify that international agreements cannot work. Starting with small promised reductions around the world, agreements need to be structured to get the entire world involved. Transfers of funds to poor countries must be negotiated so that everyone participates. As the greenhouse gas problem worsens, the nations of the world can unite and build stronger greenhouse gas emission controls. Whether the controls will work through existing national regulatory structures or require international organizations to administer them has yet to be determined. International environmental organizations may eventually be important. Alternatively, the very international organizations that encourage globalization may be called upon to address this serious environmental issue as well.

Conclusion

Globalization is a threat to the environment. The increased economic activity from globalization will create pressure for more inputs from the environment and create more waste to be emitted into the environment. A projected increase in world GDP of six to eight times by 2100 will likely double or quadruple the world's needs for inputs, and increase potential pollution by two to four times as well.

Whether the environment will actually deteriorate depends on government responses across the world. Although there will be challenges associated with increased growth, as cited above, there will also be vast resources. As the countries of the world grow wealthier, there is every reason to believe that they will want to purchase more environmental services. The benefits of protecting the environment will increase with growth. Governments in the future will be able to afford to abate pollution, control activities that damage the landscape, and conserve valuable wildlands.

The question is whether governments will be prepared to respond and deliver the desired environmental protection. Governments will need to learn how to provide environmental protection effectively and efficiently. They must not only create laws to protect the environment, but they must also enforce those laws. Protection must weigh the costs and benefits of each action. Although every country could improve the institutions that protect their environment, the greatest concern about the adequacy of governmental institutions is in developing countries. The absence of sufficient institutional support for environmental protection in developing countries is a major concern in the coming century. As incomes rise, these environmental institutions may gain the needed resources and support to become effective. But if environmental institutions in developing countries are not strengthened as economies develop, economic growth will not lead to environmental protection.

Although the bulk of the responsibilities for protecting natural resources and the environment will lie with national governments, some issues will be local and some will extend beyond national borders. Soil pollution (solid waste) tends to be a local issue because the problems associated with it tend to be spatially limited (impacting only the local area itself). Air and water pollution, however, tend to be a national issue because the impacts from these decisions tend to extend well beyond state and local boundaries. Only the national government is of sufficient spatial size that it can weigh all the costs and benefits of abatement choices. Transboundary problems where countries share a common resource are likely to be dealt with in bilateral agreements. Neighboring countries should be able to work out agreements to share natural resources that they hold in common.

But global commons—resources held in common across many nations—require special attention, whether we are concerned about the global atmosphere or the open oceans. International agreements are needed to share these resources and to manage them for the common good. Because protecting global commons can sometimes be costly, as with the control of greenhouse gases, it is critical that these agreements be efficient. Resources to protect global commons must be spent wisely so that everyone remains a party to the agreement. Such international treaties are unquestionably needed and the fate of the global commons depends upon them. This is an area where increased institutional maturing is needed.

Although there are some very real threats to the environment associated with global economic growth, the greatest risk to the environment is a stagnant world economy with extensive poverty. Without the increased income that will undoubtedly come with globalization, there is very little hope of making much progress in improving global environmental quality. If globalization were to stop, international trade shrink, and the world's economy come to a standstill, few resources would be left for environmental protection. A smaller global economy may use fewer inputs and generate less pollution, but the environment would not improve. Poor countries would have few resources to address the problems they already face. There would be little chance to improve either human or natural conditions. A hungry voter is very unlikely to want to spend new public resources to protect the environment. A stagnant world economy is very likely to decide that abatement is too expensive to take seriously, and that wildlands need to be developed. All in all, economic stagnation poses as much a risk to the environment as economic growth.

Global economic growth implies new challenges for protecting the environment. More will have to be done to reduce global inputs and increase abatement. But global economic growth also implies new opportunities. With increased wealth, countries could afford to protect their resources more carefully. All countries would have to develop effective governing structures, but with the increased wealth they could afford them. Long-term environmental protection requires economic growth. Environmentalists should focus their energy on developing effective institutions to guide globalization, not on creating chaos to stop growth.

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Note

1 The Global Environment Facility, established in 1991, helps developing countries fund projects and programs that protect the global environment. GEF grants support projects related to biodiversity, climate change, international waters, land degradation, the ozone layer, and persistent organic pollutants. http://www.gefweb.org

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