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A B C D E

Annual World Bank Conference on  
Development Economics  
Europe

**Are We on Track to  
Achieve the Millennium  
Development Goals?**

*Edited by*

**François Bourguignon  
Boris Pleskovic  
André Sapir**



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## Introduction and Summary

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FRANÇOIS BOURGUIGNON, BORIS PLESKOVIC,  
AND ANDRÉ SAPIR

The Annual World Bank Conference on Development Economics is one of the world's best-known series of conferences for the presentation and discussion of new knowledge on development. It is an opportunity for many of the world's finest development thinkers to present perspectives and ideas. In 1999, in recognition of Europe's pivotal role in the provision of development assistance and in order to bring the World Bank's research on development into close contact with European perspectives, the World Bank created a distinctively European platform for debate on development issues.

The sixth Annual World Bank Conference on Development Economics in Europe was held in Brussels, Belgium, on May 10–11, 2004. The conference was co-organized by the Office of the Prime Minister of Belgium and the Ministry of Development Cooperation of Belgium. The theme of the conference was “Doha, Monterrey, and Johannesburg: Are We on Track?”

The conference opened with addresses given by Jean-François Rischard, the World Bank's Vice President for Europe; Guy Verhofstadt, Prime Minister, Belgium; and Marc Verwilghen, Minister for Development Cooperation, Belgium. Their remarks were followed by an opening speech by François Bourguignon, Chief Economist and Senior Vice President, World Bank, and a keynote address by Joseph E. Stiglitz, Nobel Laureate and Professor, Columbia University. Four papers were presented on trade flows, human capital flows, capital flows, and aid flows. The conference ended with closing addresses made by Hilde F. Johnson, Minister of International Development, Norway; Guy Verhofstadt, Prime Minister, Belgium; Romano Prodi, President of the European Commission; and James D. Wolfensohn, President of the World Bank. The rest of this introduction summarizes the opening addresses, opening speech, keynote address, papers discussed during the conference, and closing addresses.

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François Bourguignon is Senior Vice President, Development Economics, and Chief Economist of the World Bank. Boris Pleskovic is Research Manager, Development Economics, at the World Bank. André Sapir is Economic Advisor, Group of Policy Advisors, European Commission.

## Opening Addresses

**Jean-François Rischard** thanks the Government of Belgium, and especially the Office of the Prime Minister and the Ministry of Development Cooperation, for hosting the conference and notes that the World Bank has been overwhelmed this year by the level of interest in participating in the event. No fewer than 400 specialists in development registered to attend, coming from 26 developed and 45 developing countries, with well over half the attendance coming from the developing world. Rischard attributes this success to the conference's very special personality and reputation: (1) it is not a World Bank conference, (2) it is not a traditional academic conference, and (3) it is not a routine aid agency meeting. Instead, it's a unique hybrid that has academic research at its heart but that also cuts across many groups, bringing together policymakers, thinkers from academia and the think-tank world, practitioners from the international development community, and other actors in development, including nongovernmental organizations and the private sector.

Rischard introduces the theme of this year's conference, "Doha, Monterrey, and Johannesburg: Are We on Track?" explaining that it has been designed to look at how four flows (flows of people, capital, aid, and trade) link developed and developing countries. He notes that the discussions will show not only where some of the main opportunities are in each of these four areas, but also where the main blockages are and what the real risks are—both when flows accelerate and when flows dry up.

Rischard emphasizes that, when looking at the program, it is clear that we haven't shied away from including today's most controversial issues. In organizing the conference, there was a concerted effort to make sure that the participants in the sessions were representatives of the corners that need to square off in order for progress to be made on these issues.

**Guy Verhofstadt** expresses his delight with the impressive list of participants at the conference in Belgium. He confirms his country's commitment to fulfilling its responsibilities in the debate on globalization and development, both by listening to others and by actively taking part in the debate.

Verhofstadt argues that developed countries should have the courage to push globalization further. He believes that Europe, like the United States, is protectionist, and as long as it stays that way, there can be no real free trade on the global level. He proposes a political counterpart to what exists on the economic level, and that would be to replace the G-8 of rich countries with a G-8 of local and regional groups. Such a G-8 would grant a legitimate place to the South and could serve as a forum for consultation among various continental structures, such as the African Union, Mercosur, the European Union, the Association of Southeast Asian Nations, and the North American Free Trade Agreement. Such a G-8 would not only contribute to improved relations between various parties, but would also encourage various regions to intensify their cooperation.

Verhofstadt emphasizes that the conference should result in ethical solutions that are realizable and suited to today's needs. Additionally, following the conference, the attendees should make the changes necessary to transform the proposed solutions into reality.

**Marc Verwilghen** welcomes participants and expresses his concerns on matters surrounding globalization, poverty, the environment, and terrorism. He outlines recent decisions made by the Belgian Government regarding globalization. First, on international governance, the Belgian Government has included the following goal in its government declaration: “the creation within the United Nations of an Economic, Social, and Environmental Security Council which will form the new framework for globalization, will monitor implementation of conclusions from large conferences, and coordinate the major international institutions such as the World Trade Organization, International Labour Organization, International Monetary Fund, and World Bank.”

Second, regarding trade flows to less developed countries, Belgium has always supported the rapid setting up of all Doha development agenda instruments. Technical assistance would allow producers in less developed countries to provide products for export in accordance with European standards. Third, regarding the migratory flows or the flow of human capital, Verwilghen asserts that there is a need to recognize what the diaspora of a developing country can contribute, as well as a need to organize technical and financial contributions by migrants to their countries of origin. Effective and transparent systems are needed that encourage people who have been trained to return to their countries, for example, to set up a business.

Fourth, regarding the flow of capital, it won't be possible to achieve the Millennium Development Goals (MDGs) without productive investment by the private sector. The private sector will have to be accepted as the fourth pillar for development cooperation. In recent months, a special organization was set up by Belgian entrepreneurs, with 50 percent participation by the cooperation budget, to encourage small and medium enterprises to invest in least developed countries.

As to the flow of public aid to development, Belgium has committed itself to the goal of allocating 0.7 percent of gross national product to public development aid (the current allocation is 0.61 percent). Furthermore, Belgium will publish its first report on specific efforts it has made to achieve the eight objectives of the MDGs. Regarding the concept of sustainable debt, Belgium took initiatives in Monterrey and in the Organisation for Economic Co-operation and Development (OECD) to better define and measure the sustainability of debts and to possibly go beyond the system of Heavily Indebted Poor Countries.

Verwilghen concludes by emphasizing that Belgium has taken the goals of Doha, Monterrey, and Johannesburg seriously. Belgium has started on this road, and as Minister for Development Cooperation, Verwilghen will plead with his European colleagues to step up their efforts not only as regards their budgetary means but also in terms of coherence in European policies, in particular in the field of trade and agriculture.

## Opening Speech

**François Bourguignon** opens by thanking Belgium and its government for hosting this World Bank Conference on Development Economics. He notes that there are

many reasons why the conference should be taking place in Brussels, one of which is the dynamic approach and the international reputation of Belgian economists in the field of development and elsewhere.

Bourguignon discusses two issues. The first is the global distribution of income and its evolution over time: is the global distribution improving or worsening? It is well known that the degree of inequality in the world is very high, certainly higher than within most countries. According to some people, this distribution is worsening over time, and many people blame the globalization process for this trend. According to others, the distribution is improving over time, and globalization is responsible for that evolution.

The second issue is the kind of redistribution taking place in the world. There is a lot of inequality. If the world were a single country, a community mechanism would probably push for redistribution. What kind of redistribution is taking place in the world? For his analysis, Bourguignon identifies four kinds of flows as potentially able to redistribute income: official development assistance, merchandise and services trade flows, foreign direct investment, and migration.

Bourguignon describes the evolution of the income per capita across countries over the last decade and the distribution of that income in both population-weighted and unweighted terms. He also presents the results of simulations on the impact of aid, remittance flows, and trade barriers across the deciles of the distribution of global income.

The data and simulations presented support three main conclusions. First, there has not been an unambiguous evolution in the world distribution of income. If one weighs countries by their populations, there has been a positive evolution over the past two decades. Absolute poverty has been declining, and therefore in a certain sense, inequality has fallen. But if one views the world distribution in another way, looking at the evolution of specific countries in comparison to others (particularly of countries in Sub-Saharan Africa relative to high- or middle-income countries), the situation is getting worse. So when people say the distribution has worsened or the distribution has improved, keep in mind this double perspective.

Second, redistribution through official development assistance is extremely limited, and it is cancelled out by rich countries' restrictions that limit poor countries' market access.

Third, it can be argued that the objective of aid is not to redistribute income today in order to increase immediate consumption; the objective is to transfer growth potential from rich countries to poor countries. Official development assistance should be aimed at improving the conditions for growth, in particular by helping poor countries meet the MDGs. Trade flows, capital flows, and migration flows could also be seen as influencing the growth potential of the poorest countries. Maximizing this potential is essential for a future unambiguous improvement in the world distribution of income.

## Keynote Address

Joseph E. Stiglitz argues (based on a joint paper with Andrew Charlton) that in the aftermath of the failure of Cancun, there is a need to reassess the direction of global trade negotiations. In Doha, the nations of the world agreed to a new round of trade negotiations, which would redress some of the imbalances of the past. He states that previous trade rounds had benefited the advanced industrial countries at the expense of developing countries. Many of the participants at the Cancun meeting felt that Europe and the United States had reneged on the promises made at Doha, as emblemized by the lack of progress in agriculture. While there was concern about the lack of progress in dealing with the grievances of the past, there was also concern that new demands were about to be imposed upon the developing countries.

There were mutual recriminations about who was to blame for the failure at Cancun. There was even disagreement about who would suffer the most. The United States and Europe were quick to assert that it was the developing countries who were the ultimate losers. But many developing countries had taken the view that no agreement was better than a bad agreement, and that the Doha round was rushing headlong into an agreement that, rather than redressing the imbalances of the past, would actually make them worse.

Stiglitz then presents his paper by saying that it takes a step back from these disputes. It asks, what *should* a Development Round of trade negotiations look like? What would an agreement that was based on principles of economic analysis and social justice—not on economic power and special interests—look like? The analysis concludes that the agenda would look markedly different from that which has been at the center of discussions for the past two years, and that developing countries' fears that the Doha round of trade negotiations would disadvantage them were, in fact, justified.

Stiglitz presents an alternative way forward for the Doha Round based on the principles of social justice and economic analysis. The World Trade Organization (WTO) needs to establish a source of impartial and publicly available analysis of the effects of various initiatives on different countries. Based on this type of analysis, any agreement that differentially hurts developing countries or provides disproportionate benefits to developed countries should be presumptively viewed as unfair. The agreements must enshrine both *de jure* and *de facto* fairness. This means ensuring that developing countries are not prevented from unlocking the benefits of free trade because of a lack of institutional capacity.

Stiglitz discusses ten pro-development priorities that should form the core of the Doha Round agreements. Primary attention should be given to market access for goods produced by developing countries. There is an urgent need to reduce protection on labor-intensive manufactures (textiles and food processing), agricultural goods, and unskilled services. Priority should also be given to the development of schemes to increase labor mobility, particularly the facilitation of temporary migra-

tion for unskilled workers. Instead of imposing uniformity across countries, there should be general agreement that different circumstances in developing countries warrant special and differential treatment. Significant change in the outcomes of multilateral trade agreements must be supported by institutional reforms. Reform of the procedures of the WTO would facilitate the achievement of fair and pro-development agreements.

## Trade Flows

**Thierry Verdier** argues that economists tend to agree that international trade liberalization results in significant gains for the countries involved. Public opinion, however, is much less optimistic, and there is widespread concern that the current sharing of trade gains is unfair and unevenly distributed across and within countries. Verdier emphasizes that, in order to understand the position of globalization skeptics and to respond adequately to their complaints, it is necessary to move beyond the existence of the gains from trade (static and dynamic) and pay more attention to the “pains from trade” and, more generally, the distributive dimensions of trade integration. In particular, a critical dimension that needs to be addressed is the redistribution (or nonredistribution) of the gains from trade and the interaction between trade openness and domestic redistributive policy. Simply looking at the growth induced by trade openness and the implied beneficial aspects for some part of the population (even a majority *ex post*) is not going to be enough to make trade acceptable in the eyes of trade integration critics. It is necessary to think about a set of social compensatory arrangements that make the deal politically acceptable.

After reviewing briefly what we know about the distributive impacts of trade openness, Verdier considers the political economy feedbacks of trade integration on domestic redistribution and identifies the economic and political feasibility of a “trade regime with redistribution.” First, the form of support inside the welfare state may matter as much as the size. Policy support may have to be increasingly “worker-owned”—less and less attached to a worker’s current employer, industry, or community. Second, the political feasibility of a “socially responsible” open trade regime is affected by two other economic dimensions of globalization: labor and capital mobility.

Taking then a normative perspective, Verdier explores the conditions necessary for the existence of a “socially responsible” open trade regime and discusses some of the policy tradeoffs associated with its implementation. First, with trade integration occurring at the regional level, it may be necessary to consider credible broad compensation or adjustment facilitating mechanisms engineered at the regional level. The typical example is the regional trade liberalization experience of the European Union. The Treaty of Rome clearly recognized that the abolition between member states of obstacles to the freedom of movement of goods, services, and factors of production should be accompanied by an adapted regional social policy. Second, in poor developing countries lacking strong social and political institutions, a necessary condition for enjoying the gains from trade rests on world market access in sectors where

these countries have a comparative advantage. In this respect, the emergence of a “socially responsible open trade regime” in the rich countries is clearly crucial.

Economists have long been fascinated by the provision of static and dynamic gains from trade because of the logic of “specialization according to comparative advantage.” They should perhaps now spend more time and effort investigating how to make the distribution and redistribution of these gains from trade socially acceptable to a majority of people. Trade integration needs to be socially responsible, or it risks becoming the political victim of its own economic success.

## Human Capital Flows

**Robert E. B. Lucas** looks at the two-way connection between international migration from developing regions to high-income countries and economic development in migrants’ home countries. Contrary to common perceptions, contemporary evidence indicates that economic development at home diminishes emigration pressures, especially when development strategies lead to tighter labor markets, and no migration hump is apparent. Three interlinked effects of international migration on economic development at origin are examined: remittances, the brain drain, and return migration. Although the effects on domestic production continue to be disputed, the more tenable evidence suggests that remittance receipts have an expansionary effect and are poverty alleviating. Certainly many governments seek to maximize remittance receipts from their diaspora, though the understanding of policy influence on these transfers remains poor.

The drain of highly skilled people is largest to the United States, which draws disproportionately on highly educated people from lower income countries where the costs of tertiary education are the highest relative to income. A majority of college-educated foreigners in the United States have been educated in the United States. Moreover, while virtually every country in the OECD now has programs in place to facilitate the entry of highly skilled persons, economists face difficulties in evaluating the gains to the high-income countries and the losses to the countries of origin from such movements. Lucas outlines these difficulties, reviews the evidence for an offsetting brain gain process, and examines three permanent aspects of temporary migration schemes: turnover and return migration, adjustments to shocks in host countries, and long-run termination. While focusing on migration from the developing and transition economies to high-income countries, Lucas attempts to reveal what we know and what we still need to understand, thereby identifying some of the more pressing issues.

## Capital Flows

**John Sutton** examines the extent to which Chinese and Indian automobile component producers have advanced toward international best practice levels of produc-

tivity and quality. The report is based on a survey of nine car manufacturers in China and six in India, a range of general component suppliers in both countries, and a detailed benchmarking study of six seat producers and six exhaust suppliers in each country.

The first issue examined relates to the degree of development of the local supply chain. A study of outsourcing patterns for a broad set of key components and sub-assemblies indicates a similar pattern in both countries, with about half of these items being outsourced in both cases. A second issue relates to the quality of components supplied. By looking at the pattern of defect rates for incoming components at twinned pairs of firms in the two countries, Sutton finds that, for new generation carmakers (that is, multinational joint ventures established in the 1990s), supplier quality is close to international best practice in both countries. But as he moves down the supply chain to second tier suppliers of typical components, there is an extremely sharp deterioration in quality in both countries.

A third strand of the study relates to the benchmarking of seat and exhaust producers, in terms of both quality and productivity. The six seat producers together supply all leading carmakers in each country. Their methods of production are, in most cases, similar to those used in Europe, Japan, and the United States. Productivity and quality levels (as measured by external defect rates) are fully in line with international best practice. For exhausts, on the other hand, three types (generations) of production techniques are possible, with differing levels of capital intensity (hand-held welding torches, semiautomated jigs and fixtures, robot production). All three generations are in use among firms supplying leading carmakers. Quality levels are similar in both countries, but the median level is somewhat lower than international best practice and there is a “tail” of low performers.

Levels of labor productivity are low compared with international best practice, but the gap is small compared with the relevant wage ratio, so the unit labor costs per part produced are relatively low. Interestingly, some Chinese firms, but no Indian firms, have moved to high levels of capital intensity, using robot welding for key welds while choosing to use a higher level of manning on robots than is customary in high-wage countries. By so doing, they can achieve major cost savings by attaining levels of scrap losses that are extremely low relative to international best practice.

Sutton emphasizes that a key question is whether, following WTO entry, multinational carmakers will continue to source locally to the same degree that they do now. The answer appears to be a clear “yes”; the supply chain, the development of which was fostered by local content rules in the pre-WTO period, has achieved levels of quality and productivity that will ensure a continuation of the present pattern of domestic sourcing.

## Aid Flows

Zia M. Qureshi argues that, on current trends, most MDGs will not be met by most developing countries. The income poverty goal is likely to be met at the global level,

but Africa will fall well short. For the human development goals, the risks are much more pervasive across the regions. Likely shortfalls are especially serious with respect to the health and environmental goals: child and maternal mortality, and access to safe drinking water and basic sanitation. Few, if any, regions will achieve the mortality goals. The implication of these prospects is clear. There is an urgent need to scale up action on the part of both developing and developed countries based on the Monterrey partnership. Policies and governance in developing countries are improving, but progress needs to be accelerated and deepened to achieve stronger economic growth and improve the delivery of basic human services. Developed country actions, to date, have fallen well short of the Monterrey commitments.

Two of the highest priorities are to ensure a timely and pro-development outcome to the Doha Round and to increase aid in amounts that are sufficient and in forms that are responsive to needs. It is particularly important to improve market access and reduce agricultural subsidies. Additionally, aid flows need to rise well above current levels. Aid needs to be provided in forms that can flexibly meet the incremental costs of achieving the MDGs, and good policy performance needs to be supported by predictable and long-term aid commitments. There is also substantial scope for increasing the quality and effectiveness of aid by improving the allocation of aid across countries, aligning aid with country-owned strategies and priorities, and harmonizing donor policies and practices. To ensure debt sustainability in heavily indebted poor countries that are pursuing good policies, a larger proportion of additional aid should be provided in the form of grants.

Qureshi concludes that cutting across these areas for action is the need to improve the overall coherence of policies in rich countries in terms of their development impact.

## Closing Addresses

**Hilde F. Johnson**, the chairperson for the closing session, begins by thanking Belgium for organizing the conference and for inviting her to chair the closing roundtable. She notes that this is her third time to do so and takes a moment to review the recent history of the conference: cancellation of the 2001 conference in Barcelona because of potential demonstrations, many peaceful demonstrations in Oslo in 2002, almost no demonstrations in Paris in 2003, and no demonstrations during the 2004 conference.

Johnson then welcomes each member of the panel: Guy Verhofstadt, Romano Prodi, and James D. Wolfensohn. She urges them to address the question, “Are We on Track?” using Doha, Monterrey, and Johannesburg as reference points.

**Guy Verhofstadt** describes progress thus far as being very uneven, with the rich becoming richer, and the poor poorer. He argues that, to address current injustices, old structures designed to protect the West’s power and prosperity need to be broken open, and a G-8 or G-10 of regions that would promote cooperation should be developed.

Verhofstadt says that fresh socioeconomic initiatives are also needed, such as a stronger Economic, Social, and Environmental Council within the United Nations, or a World Social Organization that would be the social counterpart of the WTO. He emphasizes that these ideas are not utopian. Verhofstadt also underscores that every country and organization must make the necessary changes and take the required initiative to move things forward. For instance, Belgium has more than doubled its development aid in the past five years.

**Romano Prodi** discusses the effects of the European Union enlargement on financial assistance. He points out that what can bring about substantial change is the fact of being able to attract foreign investment and of being part of the European market. He emphasizes that, nonetheless, enlargement will not diminish the level of the European Union's aid. On the contrary, increasing the level of aid is a priority.

Prodi also addresses the importance of peace in Africa. The European Commission is working to help all of the interregional structures in Africa and is supporting the African Union's peacekeeping efforts. In answering the question, "Are We on Track?" he emphasizes the importance of aid and points out that the average aid allocation is still 0.35 percent of gross national product. The goal for 2006 was 0.39 percent. He closes by describing three areas in which the European Union is ready to move forward: a special package for the poorest countries, resolution of Singapore issues, and reduction of agriculture subsidies in the European Union countries.

**James D. Wolfensohn** argues that enough analysis has been done on what is needed to achieve the MDGs. The responsibilities of both developing and developed countries have been clearly laid out. However, he notes difficulties with the overriding issues of the situation in Iraq and Palestine and terrorism. It is hard to move beyond these issues when developed countries are preoccupied with them rather than the fact that 2 billion more people will populate the planet in the next 25–30 years, all but 50 million of them in developing countries.

Wolfensohn emphasizes that it is necessary to think a step beyond institutional reorganization in order to reach the MDGs. For progress to be made, poor people need to be enfranchised and made a part of the solution, and young people need to be given hope and opportunity. Within developing countries, Wolfensohn notes that corruption can be a problem, and he emphasizes the importance of buttressing reformers within these countries. He concludes that, while we're not entirely on track, we're not entirely off track either. We need to follow the track and act now to reach the desired goal.



## Opening Address

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JEAN-FRANÇOIS RISCHARD

Mr. Ministers, Excellencies, ladies and gentlemen, friends and colleagues, my name is Jean-François Rischard, and I am the World Bank's Vice President for Europe. As such it gives me great pleasure to be among those welcoming you to this year's Annual Bank Conference on Development Economics in Brussels, which we also call ABCDE Europe.

Let me express our thanks to the Government of Belgium and especially the Office of the Prime Minister and the Ministry of Development Cooperation for hosting this conference. We are glad to have had the chance to develop a deep and lasting partnership with Belgium through this conference—a partnership that will continue in the future.

My colleagues and I at the World Bank have been overwhelmed by the level of interest in participating in this event. No fewer than 400 specialists in development are registered to attend, and they come from 26 developed and 45 developing countries. Well over half of the participants come from the developing world.

One reason for this success is that this conference has acquired a very special personality and reputation, because it is not a World Bank conference, a traditional academic conference, or a routine aid agency meeting. It is a unique hybrid that has academic research at its heart but that cuts across many groups by bringing together policymakers, thinkers from academia and think tanks, practitioners from the international development community, and other actors in development, including NGOs and the private sector.

This hybrid nature is reflected in the way the conference is designed and organized every year, under the guidance of an independent steering committee. This year's committee included specialists from the European Commission, the European Policy Center, Belgium's Ministry of Development Cooperation, the Office of the Prime Minister of Belgium, the Ministry of Foreign Affairs of Sweden, the International Confederation of Free Trade Unions, the University of Namur, the University of

Rome Tor Vergata, the Agence Française de Développement, and the World Bank, among others.

The ABCDE Europe is a unique hybrid, with a unique governance structure and a unique objective. From the very beginning, we have tried to design these conferences so that they could become a locus for action and innovation, not just academic debate. Our purpose here is not only—or not even primarily—to advance research but rather to advance practice. Our deep belief is that by bringing people and ideas together in crosscutting and unexpected ways, we will be able to catalyze action in the fight against poverty.

We are meeting at a moment of particular gravity. Over the past years, developed and developing countries together have come up with catchwords and targets related to the fight against poverty. The main catchword is the Millennium Development Goals, whose targets include the following:

- Cut extreme income poverty in half by 2015.
- Ensure that all the world's children complete primary school by 2015.
- Eliminate gender discrimination by 2005.
- Reverse the progress of the HIV/AIDS epidemic and other communicable diseases by 2015.
- Increase access to safe water and sanitation to 1 billion people who currently lack it by 2015.
- Slash maternal and infant mortality rates by two-thirds or more by 2015.

The world community has come up with ideas about what it would take to reach these targets:

- Much more global growth, spurred partly by much freer world trade
- At least a doubling of development aid, from just \$52 billion a year today to more than \$100 billion a year
- Much greater efforts to improve governance and public policy in developing countries
- Much greater efforts to improve the effectiveness, coordination, and harmonization of aid from developed countries

But we are stumbling, and we still do not seem to know how to move in most areas, much less how to move fast enough and at a large enough scale:

- Global trade talks seem to be stymied by conflicting and special interests. A particular problem is the politically complex question of the level and form of agricultural subsidies in OECD countries.
- Aid seems to be increasing slightly—by 2006 it may reach \$65–\$70 billion a year if we are lucky, and a few donors are willing to make commitments beyond that date—but it has not come close to the more than \$100 billion needed.
- Good governance is now a well-established catchword—and indeed a field that has witnessed an explosion in efforts and initiatives. But despite promising initiatives like the New African Partnership for Development and much research on

the benefits of governance improvements, we are far from the big and urgent push that is needed.

- Discourse on aid harmonization is also well established, and there has been tremendous progress. We have developed poverty reduction strategies as concrete frameworks, generated new ideas about the benefits of sector and budget support, and made serious efforts at providing aid that is less tied and better coordinated. But there is still a long way to go, as transpired at the recent Harmonization Conference in Rome.

So the question is no longer *what* needs to be done but *how* and *how quickly*. In this context, as one of the founding fathers of the ABCDE Europe, I truly hope that this year's conference will help us not only get thinking but help us get moving.

This year's conference has been organized around the theme of "Doha, Monterrey, and Johannesburg: Are We on Track?" It has been designed to look at the four flows that link developed and developing countries: flows of people, flows of capital, flows of aid, and flows of trade. We hope that the discussions will identify some of the main opportunities each of these four areas presents, as well as the main blockages and the real risks, both when flows accelerate and when flows dry up.

When you look at the program, you will see that we have not shied away from including today's most controversial issues. There will be a lot of discussion about the impact that subsidies in OECD countries have on developing countries. Intellectual property rights—one of the trickiest issues—are on the agenda. One workshop will look at the ongoing debate over the sustainability of developing countries' debt. Another will look at how natural resources feed armed conflict in poor countries. This is just a small sampling. In organizing all this, we have tried to make sure that the participants in the sessions are representative of the corners that need to square off if we are going to make any progress on these issues.

So before I give the floor to Belgium's Minister of Development Cooperation, Marc Verwilghen, and to my colleague François Bourguignon, the World Bank's Chief Economist, I'd like to exhort you to do everything you can not only to mark your corners but also to make progress. There is little more than a decade between now and 2015, and we all need to move very rapidly.





## Opening Address

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GUY VERHOFSTADT

Ladies and gentlemen, on behalf of the Belgian Government, I would like to begin by offering you a warm welcome to the Annual World Bank Conference on Development Economics. As Prime Minister I am proud to see a conference with such an impressive list of participants taking place here in Belgium.

Our country has, I think, always fulfilled its responsibility in the debate on globalization and development. And we did so right from the outset, by not only listening as a government to what, for example, the antiglobalist movement had to say but also by actively taking part in the current debate. Through listening and eventually taking part in the debate, I personally gained a better understanding of the various viewpoints being expressed, including those of the so-called antiglobalists. For when I take a close look at their analysis, I dare to say that I agree with the questions they raise. I also dare to say that I agree with the issues they challenge. For it is true that globalization in its present form can indeed very quickly degenerate into what some have called unbridled selfishness.

It is also true that for the North, free trade is self-evident—except for those products that could damage our own economies (no sugar from developing countries, not too much textiles or clothing from North Africa). World trade today does indeed consist primarily of one-way traffic, from North to South. However, the problems and injustices that exist today will be solved not by less globalization, I think, but by more and different globalization. We must not hold globalization in check. On the contrary, we should have the courage to push it further. Let me give you a few examples of what I mean.

There are those who say that free trade doesn't work. That's true. But the reason why it doesn't work is that we do not have real free trade operating in a real free market. We Europeans are protecting our markets by providing a great many subsidies for agriculture, for example. That may be good news for some European farmers, but by doing so we are making it impossible for Southern countries to compete

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Guy Verhofstadt is the Prime Minister of Belgium.

with us. Europe, like the United States, is protectionist. As long as we stay that way, there can be no real free trade on a world level.

We can also promote globalization at another level, through our representation in international organizations and bodies. A well-organized international policy can, I believe, lead to the necessary compromises. We need to supply a global political answer that can compete with and rival the globalized world we live in and its markets. One way to achieve that objective would be to create the political counterpart to what exists on the economic level: replacing the G-8 of rich countries with a G-8 of local and regional groups. Such a G-8 would grant an important place, a legitimate place, to the South. It would draw globalization away from mere economics.

Such a group could serve as a forum that favors without discrimination consultation among various regional structures, such as the African Union, Mercosur, the European Union, the Association of Southeast Asian Nations (ASEAN), and the North American Free Trade Agreement (NAFTA). Such a G-8 would not only help improve relations between various parties, it would also encourage various regions to intensify their cooperation. I think the European Union is an example that's well worth following.

Much has been said and written about globalization, and many, many conferences have been dedicated to the subject. This conference does not mean to reopen an old debate. We have another mission: to go into more depth and to draw up specific recommendations, generate many ideas, and put forth different proposals. Our role, and the role of this conference, is to look for ethical solutions that are realizable and suited to today's needs.

I think this conference has a second mission, which is even more important. This conference brings together very influential people. Many of you, I believe, wield some power to bring about the changes that will be necessary after this conference. I think you can transform the proposals that will emerge from this conference into reality. Don't miss this opportunity. Thank you very much, and I wish you the very best in the next two days.



## Opening Address

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MARC VERWILGHEN

Thank you, Mr. Vice President and Your Excellency, dear colleagues, ladies and gentlemen. As Minister for Development Cooperation among countries that are more and more concerned with globalization, poverty, environment, and terrorism, I am happy to welcome you here in Brussels to the Annual Bank Conference of Development Economics.

Many politicians would be tempted to use the concept of globalization lightly. But I am convinced that globalization is a serious phenomenon. It's a sort of irreversible breach in history and in our civilization. The worst problems in the world are known: poverty, environment, terrorism. In this context of interdependence, the answer must be innovative but realistic.

We need to look beyond this breach and reflect not on what we know but on what is coming over the horizon. The World Bank was set up after World War II, and it met the major needs and problems of the time. But the world has changed. Today we must provide the means to deal with global problems.

The problems are well known. All you need do is look at the level of progress toward realizing the Millennium Development Goals. Progress has been made, undoubtedly, but it has been too slow—maybe too slow to reach the objectives by 2015.

Moreover, progress doesn't seem to have reached the poorest segments of the population. And due to armed conflict and HIV/AIDS, human development has stagnated in many countries, or even regressed. As Minister for Development Cooperation, that is where I think the challenge is.

In Monterrey, Doha, and Johannesburg, policymakers provided an action plan to launch progress and to reach a fairer distribution of opportunities. The plan was drawn up in the form of a partnership contract. Northern countries committed to orienting financial and commercial flows toward developing countries, and Southern countries committed to increasing their budgets, focusing on human develop-

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Marc Verwilghen is Belgium's Minister for Development Cooperation.

ment, and setting up more effective management and more participatory management of resources. This meeting of the World Bank is an opportunity to look at the intermediate results of this partnership.

I think it would be useful to briefly look at some recent decisions made by our government regarding globalization. First, the Belgian Government, in its government declaration, has committed itself to “the creation within the United Nations of an Economic, Social, and Environmental Security Council, which will form the new framework for globalization, monitor implementation of conclusions from large conferences, and coordinate the major international institutions, such as the World Trade Organization, the International Labour Organization, the International Monetary Fund, and the World Bank.”

Such a council would be a venue for dialogue between governments in seeking possible solutions to the problem of social and economic governance. This Security Council, at the same level as the existing Security Council, with the same status and authority, is not utopian. The Charter of the United Nations mentions it, and the present Economic and Social Council mandate is quite broad. But we’ll have to revise its working methods. I am thinking of an Economic, Social, and Environmental Security Council that is more incisive than it has been so far.

On trade flows to developing countries, Belgium, like its European partners, has always supported the rapid implementation of all Doha development agenda instruments. But that endorses the “everything but arms” position of the European Union toward developing countries. And we want to think about the technical assistance that would allow producers in developing countries to provide products for export in accordance with European standards. At the same time, our Ministry is working with NGOs to spread the idea of fair trade among consumers, giving more revenue to producers in developing countries. The concept has made a lot of progress in recent years. Now consumers seem to be willing to pay a bit more for it.

On the flow of human capital, we need to recognize what the diaspora of a developing country can contribute, and we need to organize technical and financial contributions by migrants to their countries of origin. The colloquy at the African Museum yesterday showed what migration can do for the country of departure. The African diaspora shows how such contributions can be encouraged in the future. We need effective and transparent systems that allow trained people to return to their countries, to set up businesses, for example.

On the flow of capital, as the Secretary-General of the United Nations, Kofi Annan, has said, it will not be possible to achieve the Millennium Development Goals without productive investment by the private sector. That investment is missing in countries that lack investment climates that are friendly to private enterprises. The private sector will have to be accepted as the fourth pillar for development cooperation. So far it has been sadly neglected by many cooperation institutions. Real public-private partnerships, which have been talked about for a long time, should finally be established. The Bank has been thinking about this problem for a long time; it needs to be looked at it in more depth here.

In recent months the Belgian Government has done its best to implement more programs in developing countries—and to involve the private sector more in doing

so—by improving the guarantee system and especially by encouraging small and medium enterprises in Belgium to forge partnerships with firms in these countries. The government has recently approved new proposals, and Belgian entrepreneurs set up a special organization, with 50 percent participation by the cooperation budget, to allow small and medium enterprises to invest in the least developed countries.

As to the flow of public aid to development, Belgium is one of the only donor countries that has committed to meeting the objective of providing 0.7 percent of GNP in public development aid. And it's with great pride that I can tell you that we've made a leap forward, increasing aid from 0.43 percent of GNP to 0.61 percent. In the next few weeks, Belgium will publish its first report on specific efforts it has made to help the world achieve the eight objectives of the Millennium Development Goals.

I'd like to say something about the concept of sustainable debt. Belgium took initiatives in Monterrey and in the OECD to better define and measure debt sustainability and to possibly go beyond the system of Heavily Indebted Poor Countries. We would like to continue in this way by using the new analysis developed by the Bank to measure such sustainability. We also want to continue to look at alternative criteria for measuring the capacity for reimbursement.

In conclusion, our country, like many others, has taken the Doha goals and those of Monterrey and Johannesburg seriously. We are happy with the impetus given by the major international meetings, and we must continue to work with perseverance to realize the promises made there.

Belgium has started on this road, and as Minister for Development Cooperation, I shall plead with my European colleagues to step up their efforts, not only in terms of budgetary means but also in terms of coherence in European policies, in particular in the field of trade and agriculture.

I hope this conference will come up with specific proposals to achieve better coherence in our relations with developing countries. They certainly deserve it.





OPENING SPEECH

## Global Distribution and Redistribution: A Preliminary View

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FRANÇOIS BOURGUIGNON

Thank you, Prime Minister and Minister, ladies and gentlemen. I would like to thank Belgium and its government for hosting this World Bank Conference on Development Economics. There are many reasons why this conference should be taking place here in Brussels. We heard the Belgian Government restating its commitment to development. Not many countries have reached the target of providing 0.6 percent of their gross national income in development aid, and I think that this needs to be welcomed.

One of the reasons why this conference is taking place in Belgium is the dynamism and the international reputation of Belgian economics. Several Belgian economists have been involved in setting the program for this conference. I would like to thank them for that. And I think that the quality of the program reflects their own quality.

I would like to talk about two issues. The first is the global distribution of income and its evolution over time. We know that the degree of inequality in the world is very high, certainly higher than within most countries. According to some people, this distribution is worsening over time, and many people blame the globalization process for this trend. According to others, the distribution is improving over time, and globalization is responsible for that evolution. So the first theme I would like to touch on is, is the global distribution improving or worsening? I want to show that the two points of view are equally valid in the sense that each is based on a different perspective. There are favorable evolutions in the world, but there are also unfavorable ones. We have to be aware of this double feature of the global distribution of income.

The second theme is the kind of redistribution taking place in the world. There is very much inequality. If we were in a single country, a community mechanism would probably push for redistribution. What kind of redistribution is taking place in the world? We can think of four kinds of flows as potential forms of redistribution: official development assistance, merchandise and services trade flows, foreign direct investment, and migration. Overall, however, not enough redistribution is taking

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François Bourguignon is Senior Vice President, Development Economics, and Chief Economist of the World Bank.

place, and to some extent, the redistribution that is taking place may be regressive, mainly because of the market protection taking place in Northern countries.

## World Distribution

Let me begin by discussing the international distribution of income. To simplify things, I ignore within-country inequality. For the sample of 138 countries I will be working with, I assume that within each country everybody is absolutely alike in terms of standard of living. This assumption allows me to focus on the distribution across countries.

The assumption that everyone in a country receives an equal share of the country's income is obviously a strong one. But previous work by several people, including me, has shown that the most important component of world inequality is differences across countries. In the evolution of the world distribution of income, moreover, the evolution in the distribution between countries matters much more than the evolution within countries. So I know that this is a rough assumption, but it is a very convenient first approximation. And as you will see, there are several conclusions that flow very clearly from that analysis.

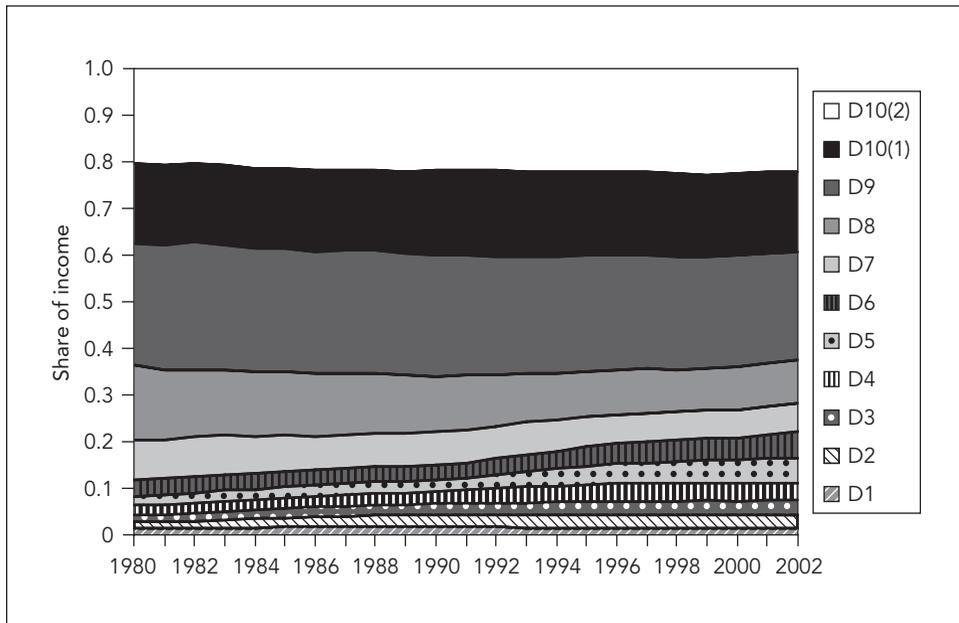
There are two ways of looking at the international distribution of income. One is to weigh every country by its population, to take account of the fact that there are many more inhabitants in China than in Benin or Togo. Another way of looking at the distribution is to consider that all countries in the world have exactly the same weight. The two points of view lead to quite different conclusions.

Figure 1 shows the evolution of the international distribution of income by income decile between 1980 and 2002, a period that begins roughly with the onset of the present globalization process. The first decile, at the bottom of the figure, corresponds to the poorest 10 percent of the world's inhabitants. The share of world income earned by this decile is extremely small, which is why it is hardly visible on this chart. At the other extreme, the top two sections of the figure show the top two vintiles (5 percent segments) of the population. The top 10 percent of the world's population earns 40 percent of total income. At the other end of the distribution, it takes 80 percent of the population to earn the same share of income. So there is very much inequality, even when we disregard within-country inequality.

If we look at the evolution of world income distribution, we see that there has been a very slight increase in the share of income earned by the top 5 percent. The shares of deciles 2, 3, 4, 5, and 6 have increased over time, quite substantially, while the shares of deciles 7 and 8 have decreased. On that basis, we can say that what is really dominating the evolution of world income distribution is a redistribution from the upper-middle part of the distribution toward the lower part of the distribution. Improvement in the distribution of world income stems from the fact that the shares of deciles 2, 3, 4, 5, 6 are increasing, while the share of decile 1 is remaining constant.

We see this improvement more clearly in figure 2, which shows the annual percentage change in the real purchasing power parity-adjusted per capita gross

**FIGURE 1.**  
**International Distribution of Gross National Income, by Income Decile, 1980–2002**  
 (weighted by population)



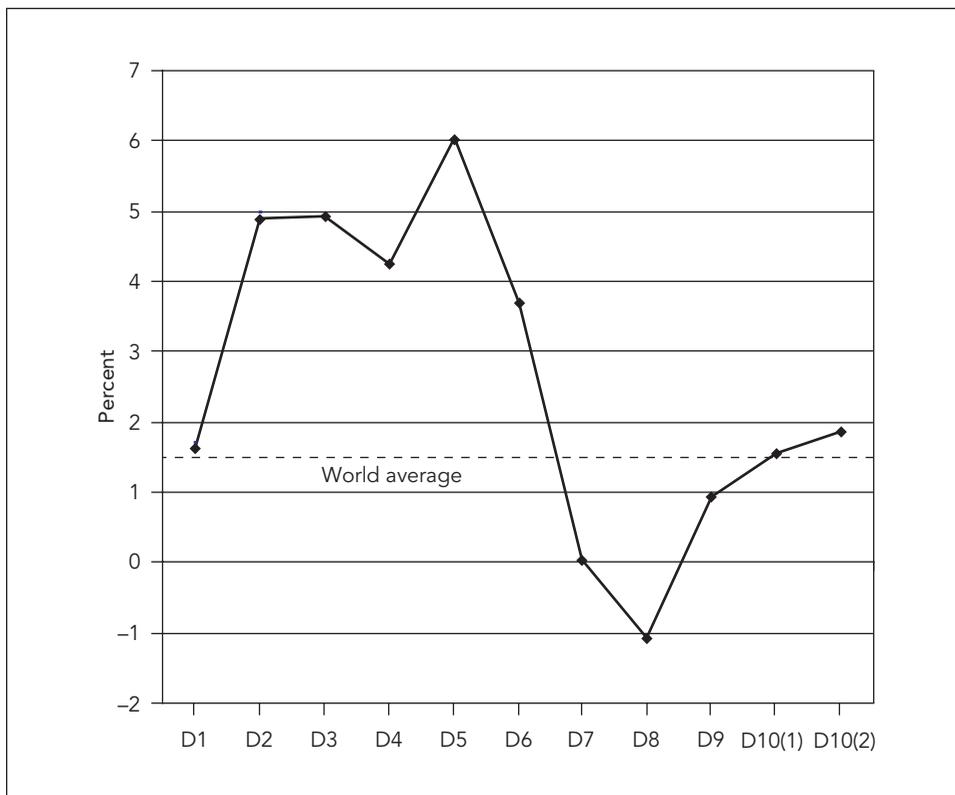
Note: D = decile. Figures are in 1995 purchasing power parity dollars. The top two bands show vintiles (5 percent segments).

national income for each decile and the two top vintiles. The dotted line shows the world average. The fact that deciles 7 and 8 are not doing very well corresponds to the fact that there was a recession for those deciles between 1980 and 2002. Most of the countries in these deciles are the transition economies, the old Soviet Union and the countries it dominated. The first stage of the transition caused a severe drop in per capita gross national income. Deciles 2 through 6 grew very rapidly during this period. What is behind this growth is the very successful performance of China and India.

The latest World Bank figures on world poverty estimate that the absolute number of people living on less than \$1 a day has fallen over the past two decades. Today there are 400 million fewer very poor people than there were in 1980, and this is due essentially to changes in China and India. Overall, both figures 1 and 2 convey a favorable view of the evolution of the world distribution.

But we must be aware that behind those figures are phenomena that are not easy to understand. The composition of bottom world deciles has been drastically modified. China and India left the bottom deciles during the past two decades, but they were replaced by other countries (table 1). Initially, the bottom decile included Burundi, Chad, Guinea-Bissau, Malawi, Mozambique, the Republic of the Congo, and part of the Chinese population. As a result of rapid income growth, by 2002 China had left this decile. Part of the Chinese population was replaced by countries that have done poorly over time, including 19 countries with negative annual per

**FIGURE 2.**  
**Average Annual per Capita Change in Gross National Income, by Income Decile, 1980–2002**  
 (weighted by population)



Note: Figures are in 1995 purchasing power parity dollars.

capita growth rates and other countries that had positive growth but slower than China's or India's. The growth of China and India is thus hiding another part of the story, in particular the worsening of the situation in Africa.

The worsening of poverty in many low-income countries appears very clearly when we consider the world distribution with each country with the same weight (figure 3). The growth curve shows that the 30 percent of countries at the bottom have done very badly over time. The richest countries have done much better. The result is a widening in income disparities.

So when we look at the population-weighted distribution, we have a drop in inequality, a drop in poverty, and a very favorable view. But behind that drop in inequality, the situation of many countries has worsened. Looking at an equal-weight distribution shows very clearly that the world is becoming more unequal, in the sense that many poor countries experienced negative growth over the past two decades.

What can be done about this? I would now like to look at the kind of redistribution taking place in the world.

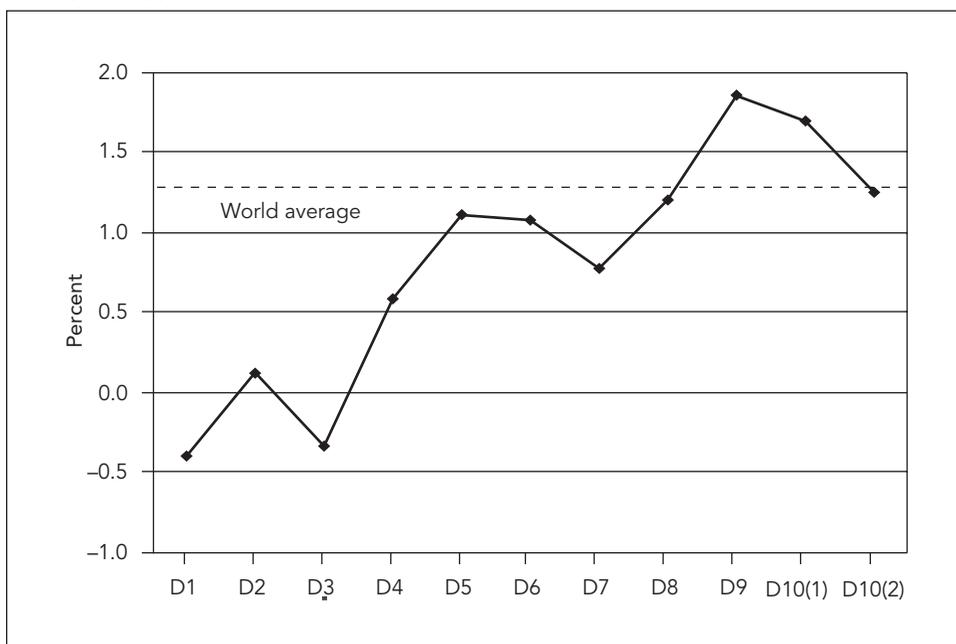
**TABLE 1.**  
**Winners and Losers: Annual Growth Rates of Countries in the Lowest Income Deciles, 1980 and 2002**

Country	Annual growth rate (percent)
<b>1980</b>	
Burundi	-0.94
Chad	1.26
China	8.20
Congo, Rep. of	-0.07
Guinea-Bissau	-0.19
Malawi	-0.10
Mozambique	1.52
Population-weighted average for lowest income decile	7.86
<b>2002</b>	
Same countries as in 1980 except for China	0.72
26 additional countries	-0.85
19 countries with negative growth	-2.26
7 countries with positive growth	1.77
Population-weighted average for lowest income decile	-0.76

Source: Author's calculations based on data from *World Development Indicators* (World Bank 2004).

**FIGURE 3.**  
**Average Annual per Capita Change in Gross National Income, by Income Decile, 1980–2002**

(unweighted by population)



Note: Figures are in 1995 purchasing power parity dollars.

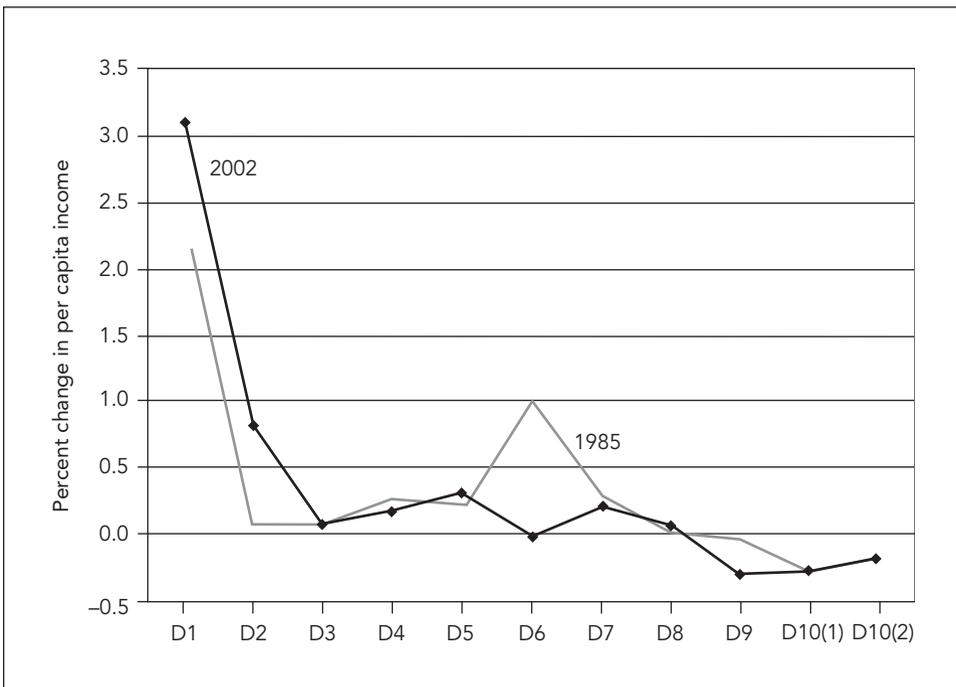
## World Redistribution

When we talk about redistribution, we may have in mind the kind of welfare system we have in many countries, such as Belgium, France, and Germany, where in the interest of solidarity, substantial income transfers are made toward the poorest segment of the population. In the world we don't have this kind of solidarity transfer, but there is something called official development assistance, which seeks to increase growth in poor countries. And this is what I consider the main vehicle for world redistribution.

I consider this redistribution in two ways. In the first I assume that this redistribution is in the form of pure income transfers. In the second I assume that this redistribution represents the transfer of assets from rich countries to poor countries, which accelerates growth and increases future rather than current incomes. I will not insist too much on this distinction, because both assumptions lead to essentially the same conclusion.

Figure 4 shows the redistribution that is taking place through official development assistance. It shows something very similar to the preceding growth curves. If we

**FIGURE 4.**  
**Effect of Official Development Assistance on per Capita Income, by Income Decile, 1985 and 2002**  
 (weighted by population)



Note: Figures are in 1995 purchasing power parity dollars.

consider development assistance as an income transfer or take into account the fact that it is an investment that could increase income growth in the receiving countries, then figure 4 shows the kind of change in per capita income that would occur. You can see that indeed the poorest decile is benefiting from this redistribution. But their per capita income is increasing by only 3 percent a year. The second decile is also benefiting but with less than a 1 percent increase. The middle deciles are marginally but positively affected, and the top two deciles are negatively affected (because they are the donors).

What we notice in this figure is that world redistribution is extremely limited. Approximately 0.15 percent of world income is redistributed. The income of the poorest increases by only 3 percent. Much more is needed to significantly improve the world distribution of income.

The second conclusion is that redistribution is well targeted to poor countries. Comparing assistance given in 2002 with that given in 1985, when much assistance was given for geopolitical reasons, you see that end of the Cold War improved the targeting of official development assistance.

What dominates, however, is the fact that the volume of official development assistance is limited. If we really want to improve things, this assistance must increase and all donors must follow the example of Belgium. We must also make sure that this aid is used productively and efficiently in order to increase developing countries' growth rates as much as possible.

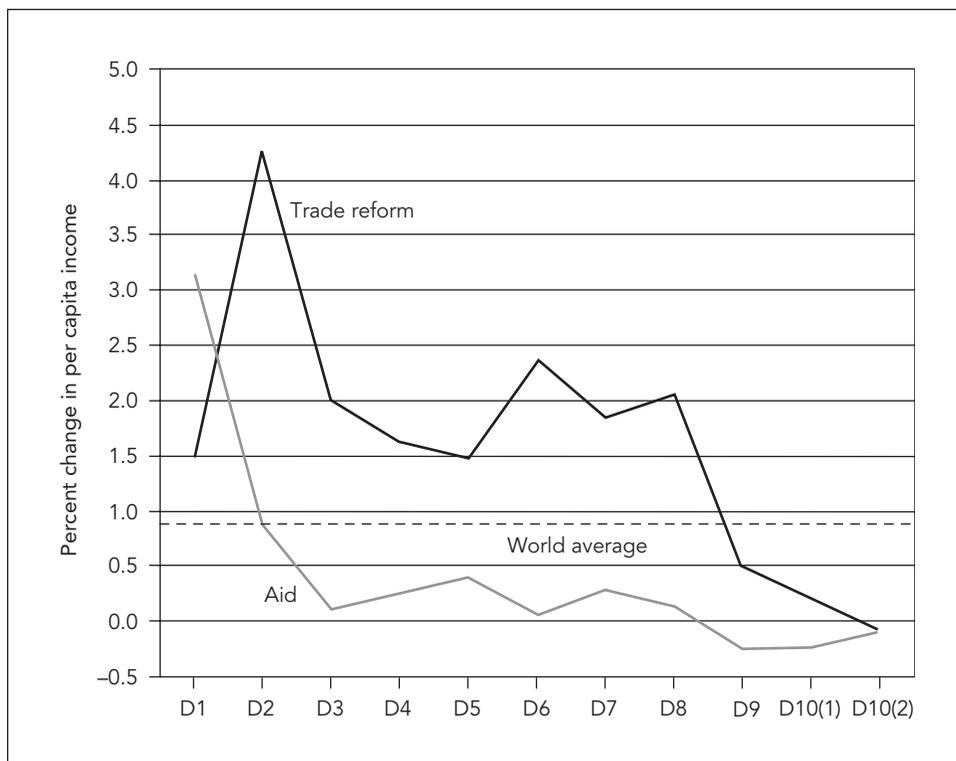
Is more redistribution taking place through trade and other international flows? Because of time constraints, I will look only at trade and market access. My comments will echo what Mr. Werwilghen said about the problems poor countries have gaining access to markets in rich countries.

To study this issue, we used a large model of the world economy available at the World Bank—the World Bank Linkage Model, based on the GTAP database. We ran the model to see what the change in welfare and the income equivalent of the change in welfare would be if tomorrow we eliminated all protection on trade in goods. We are talking only about goods, and we are looking only at static gains. We are not looking at the possible impact on growth that trade may have, simply because estimates of the impact of trade on growth are too imprecise.

Figure 5 shows the effect on world income distribution of eliminating trade protection. The total effects are not that large. But the second decile is benefiting disproportionately, increasing per capita income by 4 percent. The bottom part of the distribution gains more than average, while the richest countries benefit less than other deciles from liberalizing trade because terms of trade then move slightly against them.

Today this curve is working in the opposite direction: as a result of current protection, the bottom deciles are losing income. The bottom decile is losing 1 percent; the second decile is losing 4 percent. Superimposing figure 4 allows you to see the joint effects of aid and trade. Looking at the two curves, you can see that except for the first decile, developing countries are negatively affected by the combination of trade flows and aid. The first decile benefits from aid and loses little from trade pro-

**FIGURE 5.**  
**Changes in per Capita Income Generated by Official Development Assistance**  
**and Trade Reform**  
 (weighted by population)



Note: Figures are in 1995 purchasing power parity dollars. Aid impact is for 2002. Trade impact is based on a model of the world economy for 1997.

tection, because the poorest countries would find it difficult to exploit the facilities of world trade liberalization. The opposite is true of higher deciles.

So this is the picture we have today. It echoes the diagnosis made by Belgium's Minister of Development, which is that as of today, the kind of redistribution taking place in the world has regressive components. There is not enough official development assistance, or the aid that is given is not effective enough, to promote growth. On the other hand, trade or protection of markets in Northern countries has a regressive impact on the world distribution of income.

This is a static picture. Because of a lack of time, I will not get into a dynamic picture. That picture is more interesting, but the orders of magnitude are more or less the same, and the same conclusion holds: the redistribution taking place in the world today is limited and has regressive elements.

What about other flows? What about migration? What about foreign direct investment? I will not get into these issues, and as a matter of fact, we are not yet at

the end of the calculation needed to complete the analysis. But we are not expecting these factors to strongly affect the results.

Let me conclude with a summary of the ideas I put forward. First, there has not been an unambiguous evolution in the world distribution of income. If we weight countries by their populations, there has been a positive evolution over the past two decades. Absolute poverty has been declining, and therefore in a certain sense inequality has fallen. But if we look at the world distribution in another way, if we look at the evolution of specific countries, particularly countries in Sub-Saharan Africa, the situation is getting worse. So when people say the distribution has worsened or the distribution has improved, keep in mind this double perspective.

Second, redistribution through official development assistance is extremely limited, and it is cancelled out by rich countries' restrictions that limit poor countries' market access.

Third, the income redistribution framework adopted in the preceding analysis does not reflect what is to be expected from world redistribution. We are not so much interested in redistributing income today in order to increase immediate consumption; we are interested in transferring growth potential from rich countries to poor countries. Official development assistance should be aimed at improving those conditions, in particular by helping them meet the Millennium Development Goals. Trade flows, capital flows, and migration flows should also be organized so that they will maximize the growth potential of the poorest countries. It is only under such conditions that we may hope that an unambiguous improvement in the world distribution of income will take place in the future.

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## KEYNOTE ADDRESS

# A Development Round of Trade Negotiations?

JOSEPH E. STIGLITZ AND ANDREW CHARLTON

*The development focus of the Doha Round emerged from a renewed spirit of responsibility for the challenges faced by poor countries and the perceived inequities generated by previous rounds of trade negotiations. This study presents an alternative way forward for the Doha Round based on principles of social justice and economic analysis. It looks at the trade negotiation agenda from the perspective of first principles, presenting pro-development priorities that should form the core of the Doha Round agreements if there is to be widespread support for the continuing agenda for trade reform and liberalization.*

In the aftermath of the failure of Cancun, there is a need to reassess the direction of global trade negotiations. In Doha the nations of the world agreed to a new round of trade negotiations that would redress some of the imbalances of the past. It was widely felt that previous trade rounds had benefited the advanced industrial countries at the expense of developing countries. There was some basis for developing countries' complaints, in terms of both the manner in which trade negotiations had been conducted in the past<sup>1</sup> and the outcomes.<sup>2</sup> Many of the participants at the Cancun meeting felt that Europe and the United States had reneged on the promises made at Doha, emblemized by the lack of progress in agriculture. In addition to concern about the lack of progress in dealing with the grievances of the past, there was concern that new demands were about to be imposed on the developing countries. And though some progress had been made in addressing concerns about the manner in which the negotiations were conducted, the failure to address these concerns fully generated concerns that the developing countries would somehow be strong-armed in the end into an agreement that was disadvantageous to them.<sup>3</sup>

There were mutual recriminations about who was to blame for the failure at Cancun and even disagreement about who would suffer most. The United States and

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Europe were quick to assert that it was the developing countries who were the ultimate losers (Zoellick 2003). But many developing countries took the view that no agreement was better than a bad agreement and that the Doha round was rushing headlong (if any trade agreement can be described as “rushing”) into one that, rather than redressing the imbalances of the past, would actually leave them worse off. The United States threatened to effectively abandon the multilateral approach, adopting a bilateral approach instead. It differentiated between the “can do” countries and others and suggested that the “can do” countries would benefit from a series of bilateral agreements.

This article takes a step back from these disputes. It asks, what *should* a development round of trade negotiations look like? What would an agreement based on principles of economic analysis and social justice, not economic power and special interests, look like? The analysis concludes that the agenda would look markedly different from that which has been at the center of discussions for the past two years and that the fears of the developing countries that the Doha round of trade negotiations would disadvantage them (were the developed countries’ demands acceded to) were justified.

The next section addresses the need for a development round. It examines some elements of the experience of developing countries in previous trade negotiations and briefly reviews some of the potential gains from further liberalization. The third section briefly reviews the Doha round so far and the extent to which it has lived up to developing countries’ expectations.

The remainder of the article is what is sometimes called “blue sky” analysis: it approaches the issues from a fresh start, relatively unencumbered by concerns of politics and what has happened in the recent past. The fourth section outlines the principles of a development round of trade negotiations. The fifth section examines the priorities of such negotiations in the context of today’s international setting. The last section looks briefly at some institutional reforms that might facilitate a more transparent and democratic negotiating process, one that might more likely result in agreements that were both fair and in the general interests of the world.

## The Need for a Development Round

At Doha, in November 2001, the advanced industrial countries responded to the events at Seattle and the broader public mood for a new approach to international issues. The new round of negotiations was dubbed the “development round.” There was recognition in some quarters that the previous round had benefited the advanced industrial countries much more than the developing countries. The new round was seen as an opportunity to redress the imbalance.

### *Redressing Past Imbalances*

In June 1993 the Uruguay Round was finally brought to a close. Part of the impetus for members to conclude the round was the promise of the large welfare gains that many researchers had projected. In 1992–93 the World Bank, the Organisation

for Economic Co-operation and Development (OECD), and various other institutions projected global welfare gains on the order of \$200 billion a year.<sup>4</sup> The gain to developing countries was estimated at up to \$90 billion, or roughly one-third of the total gains (OECD 1993).

These estimates—particularly the estimates for developing countries—were overly optimistic.<sup>5</sup> One reason why the projections did not materialize was that the modeled scenarios were not fully reflected in actual events. Several reforms that were significant sources of predicted gains did not proceed as hoped early in the negotiations, the Agreement on Textiles and Clothing was structured to significantly backload liberalization, the ability of tariff-rate quotas to liberalize agricultural market access was overestimated, and the costs of implementation were almost completely ignored.

The Uruguay Round agenda reflected, in large part, the priorities of the industrial countries. Market access gains, for example, were concentrated in areas of real interest to developed countries; only marginal progress was made on the priorities of developing countries, particularly in agriculture and textiles. The result of this regressive asymmetry is that after the implementation of Uruguay Round commitments, the average OECD tariff on imports from developing countries is four times higher than the tariff on goods originating in the OECD (Laird 2002). Domestic protection (particularly agricultural subsidies) is also much higher in developed countries, amounting to more than \$300 billion in 2002. The impact of this protection is particularly regressive, since producers in the poorest developing countries are most affected by OECD policies. Only 4 percent of the exports of developed countries are subsidized by other World Trade Organization (WTO) members, but 6.4 percent of the exports of middle-income countries are subsidized. By contrast, a much larger share (29.4 percent) of the exports of the poorest countries (not including China and India) are subsidized by other WTO members.<sup>6</sup>

As well as receiving a small share of the gains from the Uruguay Round, developing countries accepted a remarkable range of obligations and responsibilities. New trade rules and domestic discipline were introduced, but they reflected the priorities and needs of developed countries more than developing countries (subsidies, for example, were permitted for agriculture but not industrial products). Many of the rules constrained developing countries' policy options, in some cases prohibiting the use of instruments that had been used by developed countries at comparable stages of their development. Many of the new obligations imposed significant burdens on developing countries. In return, the least developed countries were promised financial assistance with implementation costs and extensions of preferential market access schemes. But these commitments were nonbinding, leaving developing countries at the mercy of the goodwill of developed countries. As Finger and Schuler (2000, p. 514) aptly note, "The developing countries took bound commitments to implement in exchange for unbound commitments of assistance." Insufficient attention has been paid to the enormous demands implementing the Uruguay Round placed on developing countries, particularly with regard to intellectual property, customs valuation, technical barriers to trade, and agricultural food safety. Many developing countries have been unable to meet their Uruguay Round obligations because of these high costs.<sup>7</sup>

### *Unfinished Business*

The 1994 Agreement on Agriculture defined a framework in which agricultural protection could be negotiated in the WTO, but it did not deliver significant benefits to developing countries. Martin and Winters (1995) note that though the Agreement on Agriculture achieved a great deal in terms of defining rules for agricultural trade, it achieved little in terms of immediate market opening. Indeed, the level of OECD farm protection was not significantly reduced. In 1986–88 transfers were equivalent to 51 percent of all OECD farm production; 14 years later, after the implementation of Uruguay Round commitments, they accounted for 48 percent of all farm production (roughly \$320 billion) (OECD 2003). Trade-distorting measures of industrial nations displace the agricultural exports of developing countries. By suppressing world prices, these policies have a direct effect on farm incomes.<sup>8</sup> Moreover, there may be dynamic effects when investment is suppressed in countries whose trade is affected by OECD support.<sup>9</sup>

In nonagricultural goods there is also scope for further liberalization. The significant liberalization of manufacturing tariffs in developed countries over the past two decades might suggest that there is little to gain from further negotiations on industrial products. However, if this is true to some extent for developed countries, it is certainly not the case for developing countries. While average tariff rates in developed countries are low, these countries maintain high import barriers on many of the goods exported most intensively by developing countries. When weighted by import volumes, developing countries face average manufacturing tariffs of 3.4 percent on their exports to developed countries—more than four times the 0.8 percent average tariff they impose on goods imported from developed countries (Hertel and Martin 2000). Moreover, aggregate data hide tariff peaks. In the United States post-Uruguay Round tariff rates on more than half of textile and clothing imports are 15–35 percent; in Japan 22 percent of textile imports face tariffs of 10–15 percent (UNCTAD 1996). Tariffs on fully processed food are 65 percent in Japan, 42 percent in Canada, and 24 percent in the European Union. By contrast, tariffs on the least processed products are just 3 percent in Canada, 15 percent in the European Union, and 35 percent in Japan (World Bank 2002). Such tariff peaks are manifestly unfair and have a particularly pernicious effect on development by restricting industrial diversification in the poorest countries.

After the Uruguay Round there was a widely held view that the TRIPS agreement needed to be reviewed, particularly in its application to public health.<sup>10</sup> Many developing countries felt that the agreement as it stood primarily reflected intellectual property rights protection suitable for developed countries, largely disregarding important factors in developing countries.

### *New Areas of Importance*

Services represent an increasingly large share of GDP in both developed and developing countries.<sup>11</sup> Liberalizing services could yield much larger welfare gains than liberalizing agricultural or manufactured goods, because protection levels are high

in the service sector and services make up a large (and growing) share of world trade.<sup>12</sup> Services are also key inputs into the production of almost all goods.<sup>13</sup>

The Uruguay Round focused on the liberalization of service industries of primary interest to firms in OECD countries, such as financial services. Much less attention was given to low-skilled, labor-intensive services, in which developing countries have a comparative advantage.<sup>14</sup> Developing countries have increased their exports of services by more than 400 percent since 1990, despite the large trade barriers facing many of their most promising industries, such as construction, shipping services, and health services (OECD 2002). In these industries developing countries have a legitimate and substantial interest in the outcome of a new round of liberalization. These labor-intensive services are not the ones that have been given priority in the Doha Round so far.

More work needs to be done to establish the rules and definitions governing intellectual property rights. International rules in this area have potentially huge public health effects and global distributional consequences. They are also a crucial element of innovation policy and efforts to close the North-South “knowledge gap.” Additionally, the WTO has responsibility for protecting indigenous knowledge. While there have been a few dramatic biopiracy cases, the full impact of expanded patentability remains uncertain. Patent laws need to be changed so that the onus of proof is reversed and companies are required to show that the patent they are seeking is not based on traditional wisdom.<sup>15</sup>

## **Doha’s Development Record So Far**

Despite the expressions of goodwill at Doha, progress on the development round has been slow and marred by disagreement over whether the evolving agenda reflects the real concerns and interests of developing countries.<sup>16</sup> Throughout 2002 and 2003 it became apparent that many developing countries felt that the Doha Round was moving in the wrong direction on many key issues. They felt that the new round offered them few immediate benefits but carried the risk of additional obligations. As a consequence, developing countries walked away from the Cancun Ministerial in September 2003.

Up to that point Doha had achieved little progress on many critical development issues. One of the key disappointments has been agricultural reform, which many developing countries<sup>17</sup> and nongovernmental organizations<sup>18</sup> view as the primary objective of the round. The March 2003 deadline for agreement on agricultural modalities was missed. When the United States and the European Community (EC) finally presented a joint paper on agriculture modalities in August, many developing countries criticized its framework and substance for ignoring their interests.<sup>19</sup> On the key issues of market access, domestic support, and export subsidies, the text was perceived to fall short of the Doha mandate.<sup>20</sup>

At the same time, agricultural initiatives within OECD countries seemed to be undermining multilateral efforts. The 2002 U.S. Farm Bill increased the level of sup-

port to U.S. farmers and strengthened the link between subsidies and production decisions.<sup>21</sup>

The European Community's 2003 Luxembourg reform of the common agricultural policy was also disappointing. The reform shifts support from the "blue box" (production limiting) to the "green box" (deemed to be less trade distorting). However, the level of producer support remains virtually constant, projected to fall from 57 percent to 56 percent (OECD 2004). Moreover, the reform has little impact on export subsidies or import barriers.

Both of these initiatives fell far short of expectations and signaled the limited commitment of the United States and the European Community to agricultural reform. Both plans had a depressing effect on the mood of multilateral agricultural negotiations.

After the Uruguay Round there was a clear understanding that agriculture would be further liberalized. There is now a strong sense that the United States has reneged on that commitment. Whether or not the huge increase in agricultural subsidies is an explicit violation of earlier agreements, it violates the spirit of the agreement (or at least what developing countries perceived as the spirit of the agreement). A development round agreement has to be viewed in the context of the unbalanced agreements that preceded it.

In addition to their disappointment over agriculture, developing countries are skeptical about the effects of the new items on the agenda. Many developing countries oppose inclusion of the so-called Singapore issues.<sup>22</sup> In June 2003, 77 developing countries, including more than half of the members of the WTO, made public statements urging that the Singapore issues not be included in the Doha Round (CAFOD 2003). Since these issues are not priorities for developing countries, their emerging centrality in the agenda is an incongruous feature of the "development" round.

Several developing countries see the Singapore issues as incursions into their national sovereignty that are not justified by the benefits they bring. Multilateral regulatory discipline raises the specter of repeating the worst elements of Uruguay by restricting the options for individual governments to pursue development policies based on their own national priorities and problems.

In addition, there are concerns that the initiatives based on the Singapore issues may impose a large burden on the administrative capacity of developing countries. Significant costs are associated with both creating and enforcing new regimes in competition policy, investment regulations, and trade and customs procedures.<sup>23</sup> Many developing countries have been unable to meet their Uruguay Round obligations because of these high costs.

Another area in which achievements have lagged behind rhetoric is in the delivery of nonreciprocal trade preferences. Recent initiatives in OECD countries, most notably the European Union's Everything But Arms initiative and the United States' African Growth and Opportunity Act (AGOA), favor least developed countries. The European Union has argued that Everything But Arms will "significantly enhance export opportunities and hence potential income and growth" for these countries (EC 2002). But analysis of preferential schemes on exports by least developed countries

shows only limited impact. Brenton (2003) concludes that trade in goods given preference for the first time under Everything But Arms in 2001 amounted to just 0.02 percent of exports by least developed countries to the European Union in 2001.<sup>24</sup>

Least developed countries are often not able to realize much of the benefits promised by market access preferences—as the low degree of utilization of preference schemes suggests. Up to half of exports by non-ACP (African, Caribbean, Pacific) countries to the European Community did not receive preferential access and paid the most favored nation tariff (Brenton 2003). Overall, with the exception of African apparel exports to the United States under AGOA, the impact of these schemes has not yet been significant (World Bank 2003).

In summary, the agenda for the “development round” has evolved in a disappointing manner for developing countries. It has done little to address their concerns in agriculture and little to address problems posed by nontariff barriers. It has not prioritized a developing country service sector agenda, and it has done nothing to reform basic procedures.

In addition, the proposed agenda’s new issues may have made life worse for developing countries. The United States wanted capital market liberalization as part of the investment agreement, even though the weight of evidence showed that capital market liberalization did not promote growth but did increase instability. Rather than creating a true competitive environment—hindering use of dumping duties as protectionist devices—there was fear that the new items on the agenda might restrict the opportunity of nations to pursue their own development policies.

In the South there is a tendency to see actions by the North as coordinated, driven by their own economic interests. While developing countries may see more coordination than actually exists, the impacts are often close to what they would have been had actions been coordinated. The high interest rates, tax policies, and trade liberalization policies demanded by the International Monetary Fund (IMF) exacerbate the effects on developing countries of whatever trade liberalization measures they agree to within the WTO. The two sets of policies cannot be viewed in isolation.

## Principles for a Development Round

What would a development agenda look like? It seems self-evident that any agreement should be assessed in terms of its impact on development (that is, items with a negative effect on development should not be on the agenda); fair; fairly arrived at; and limited in scope. While these principles may be widely agreed to, there may be important differences about both the meaning of terms and how to respond to conflicts among the principles.

### *Impact Assessment*

Any agreement should be carefully designed to promote, not hinder, development. There is surprisingly little economic analysis of the precise consequences of various

potential trade agreements on participant countries. Where analytical studies have been conducted, they have not penetrated into the core of negotiations and do not seem to play a central role in setting the agenda. The absence of this type of analysis begs the question of what is driving the prioritization of trade issues on the WTO agenda, other than a mélange of prevailing orthodoxies and the momentum of special interest groups.

The WTO Secretariat should be responsible for producing a general equilibrium incidence analysis, analogous to that conducted when taxes are imposed, that attempts to assess different proposals affect different countries. Publicly available analysis would benefit developing countries and consumer groups, many of which are at an information disadvantage relative to developed countries and producer lobbies.

The interpretation of general equilibrium analysis must recognize that models are sensitive to their assumptions. Much of the analysis of the impacts relies on a particular model of the economy—the neoclassical model—which assumes full employment of resources, perfect competition, perfect information, and well-functioning markets. These assumptions are of questionable validity for any country, and they are particularly problematic for developing countries. Under full employment, general equilibrium models often predict significant welfare gains from trade liberalization, because it enables resources to be redirected from low-productivity, protected sectors to more productive sectors as the economy specializes in its areas of comparative advantage. However, if there is unemployment, trade liberalization may simply move workers from low-productivity, protected sectors into unemployment. This reduces the country’s national income and increases poverty.

A complete incidence analysis must also include adjustment costs. Most of the tools used to analyze the general equilibrium effects of trade liberalization are static models. They describe the movement from one “steady state” to another but do not incorporate the costs associated with transition or the consequences for economies that are initially out of steady state. Even if trade liberalization has no impact on the equilibrium level of unemployment, it may take the economy considerable time to adjust, and the costs of adjustments—lost income and increased poverty—may be considerable. The fact that implementation and adjustment costs are likely to be greater in developing countries, unemployment rates higher, safety nets weaker, and risk markets poor are all facts that have to be taken into account in conducting a relative incidence analysis.

It is important that any incidence analysis take into account other pre-existing distortions. For instance, tax policies (often advocated by international institutions) that effectively tax the informal sector less than the formal sector distort production in favor of the informal sector. In this context, trade regimes that reduce the international price of agricultural goods, typically produced by the informal sector, have a larger adverse effect than they would if tax policy were more neutral.

### *A Fair Outcome*

Previous rounds of multilateral trade negotiations did not contain a principle of fairness. Arguably one was not necessary, because agreements were produced by a

process of negotiation by self-interested governments. Beginning in the Uruguay Round, the consensual voting system combined with the “Single Undertaking” provided a constraint that ensured that any agreement would make every nation better off. But this was true only if all countries had perfect information and if powerful countries did not try to affect the bargain with conditionality on outside issues.

A process of self-interest is patently unable to deliver the kind of progressive outcome envisaged by the launch of a development round. Instead, any agreement should be subject to a commonly agreed on “fairness constraint.” In a development round it should be essential that any agreement be progressive, that is, that a larger share of the benefits accrue to the poorer countries. Thus any agreement that differentially hurts developing countries more or benefits the developed countries more, measured by the net gains as a percentage of GDP, should be presumptively viewed as unfair.

There are several difficulties in interpreting this requirement. One is that many of the costs of, say, agricultural subsidies, are borne by the developed countries. Not only are there huge budgetary costs associated with the subsidies, but the subsidies distort production and thus create a deadweight loss. Were developed countries to eliminate their subsidies, they (as a whole) would be among the main beneficiaries. Thus a refinement of the above criterion would look at the benefits net of domestic efficiency effects. In competitive markets it would be reflected in the general equilibrium terms of trade effects enjoyed by producers or paid by consumers; in noncompetitive markets (or markets with quota restrictions) it would be the value of access granted.

The other side of “fairness” is the initial condition. Currently, tariffs are higher in developing countries than in developed countries.<sup>25</sup> The United States might claim that it is only fair that developing countries cut their tariffs proportionately. But this would entail greater tariff reduction by—and therefore higher costs to—developing countries. Balancing these concerns are those dealing with historical inequities. A country’s relative weakness may be partly due to a colonial heritage, or more pertinently, to earlier unfair trade agreements (such as the agreement resulting from the Opium War in the nineteenth century in China). To what extent does fairness and equity demand that current agreements reflect these past injustices? Trade negotiators from the North would like to pretend that such inequities never occurred. Those from the South might argue that one cannot separate events today from the historical context.

The nature of trade agreements is, of course, that not every provision in the agreement is “fair.” Some are intended to give more to one party, others give more to another party. It is the package as a whole that should be viewed as fair. But each trade agreement is forward-looking and backward-looking; there are implicit and explicit understandings about the effects of past agreements and the direction of future agreements.

Tax policies that distort production toward the informal sector increase the adverse effect on developing countries of subsidization of agriculture in the North. In talking about the inequities of the trade regime, should we assess its fairness coming on top of distortions imposed or encouraged by the North, or should we look at

what the incidence would have been had a more neutral tax system been imposed? Should we view the two actions together, assessing the incidence of the two policies in conjunction, or should we assess only the fairness of the trading regime itself?

With such disparate views of fairness, it is no wonder that the South may feel that a trade agreement proposal is grossly unfair while the North feels no pangs of conscience. Some might conclude from this that we should simply drop the criterion of equity among the desiderata of a development round agreement. That would be a mistake. In a democracy any trade agreement must be freely entered into, and the citizens of the country must be persuaded that the agreement is essentially fair. Moreover, there are several widely accepted philosophical frameworks—in particular that of Rawls—which provide some guidance for thinking about whether any agreement is fair.<sup>26</sup>

Alternatively, we could think of a different framework involving an egalitarian social welfare function. A minimal condition of a fair agreement is that it improve welfare under such a function and that the distribution of welfare after a reform not be stochastically dominated by the distribution before reform (Dasgupta, Sen, and Starret 1973; Rothschild and Stiglitz 1973).

### *Procedural Fairness*

Procedural fairness becomes an important complement to the kind of fairness discussed in the preceding section when there is some ambiguity about what is meant by “outcome fairness.” Procedural fairness focuses on the openness and transparency of the negotiation process and the manner in which the discussions are conducted. A large literature establishes that setting the agenda may have a large effect on the outcome. Having voice in the setting of the agenda is thus essential. A fair agreement is unlikely to result from an unfair process. Since the bargaining process affects the outcome of the bargain, the WTO needs to ensure that the process includes clear rules that ensure the participation of the weakest players. The agenda in previous trade negotiations has been unbalanced. Issues of benefit to the developed countries have been at the center of the discussion: issues such as liberalization of unskilled labor intensive services have been off the agenda, while liberalization of skilled labor-intensive services has been on the agenda.

Transparency is essential, because it enables more voices to be heard in the negotiating process and limits abuses by the powerful. This is particularly important for developing countries, because of the limited size of their negotiating teams. Of particular concern is the lack of transparency of the “green room” negotiations, in which only a few chosen countries from the developing world engage in negotiations with the United States and Europe. The “green room” process limits outside scrutiny and places the developing countries at a disadvantage because of the complexity of the negotiations and these country’s limited staffs.<sup>27</sup> Procedural fairness needs to deal with the asymmetry of power and information among WTO members. While the effect of power disparities is difficult to reduce, the informational disadvantage can be remedied, through increased transparency and the provision of (impact assessment) information.

The WTO's dispute settlement system lacks procedural fairness in some important ways. In trade disputes the system favors developed countries, both *de jure* and *de facto*. The costs to a developing country of attacking a claim of intellectual property by a Western company in a case involving biopiracy are likely to be very high, for example; even if the two sides of the dispute had equal access to legal resources, in practice the developing country would be at a disadvantage in a process entailing complicated and expensive legal proceedings.

The WTO dispute system thus favors rich countries with the resources to use it effectively for their own interests. The European Community, Japan, and the United States were complainants in almost half (143 of 305) of all bilateral disputes in the WTO Dispute Settlement system between 1995 and 2002. By contrast, the 49 members classified by the UN as less developed countries did not bring a single challenge in that period (Horn and Mavroidis 2003).

Even if a developing country were to prevail in a WTO tribunal against the United States or Europe, the asymmetric and consequently unfair enforcement system could make it difficult for it to enforce the ruling. The sanction for violating a WTO agreement is the imposition of duties. If Ecuador, say, were to impose duties on goods it imports from the United States, it would have a negligible effect on the U.S. producer. In contrast, if the United States were to impose a duty on goods produced by Ecuador, the economic impact is more likely to be devastating. In practice, the WTO system has no effective way of enforcing an unfair trade action, the main impact of which is on small developing countries.<sup>28</sup>

### *Limited Policy Space*

Defining the policy space appropriate for attention within the WTO is a difficult task. There has been a tendency to expand the WTO's agenda to include all manner of international problems, from intellectual property rights to protection for foreign investors. The international community has found that bringing formerly intractable international issues within the ambit of trade provides both a convenient negotiating forum and a ready mechanism for enforcement of agreements. If the only test of inclusion in the agenda is that a policy must affect trade flows, then the boundaries of WTO activity are very hard to define, because almost all international problems can be linked to trade flows in some way. In this regard, policymakers have liberally employed the prefix "trade-related aspects of" to expand the WTO's mandate.

The growth of the WTO's policy space comes at a price. First, developing countries have limited capacity to analyze and negotiate over a large range of issues. Second, the experience of the Singapore issues suggests that larger agendas burden the negotiations. Third, the expansion creates room for developed countries to use their superior bargaining power in trade negotiations to exploit developing countries over a larger range of issues. For instance, when the agenda was extended to competition policy, the issues relevant to the foreign business interests of developed countries became the main focus of negotiations, while insufficient attention was given to key areas of concern for developing countries, such as rules against predation and the development of global antitrust enforcement. Similarly, the pharmaceutical industry

in the industrial world has determined the focus of intellectual property negotiations. Almost inevitably, the determination of these issues will reflect the consequences of the exercise of power.

For these reasons a “principle of conservatism” needs to be introduced to guide the growth of the WTO’s mandate beyond market access reform. Other issues should be included in the agenda only if they score high on three criteria that seem sensible to impose on a development round of trade negotiations: the relevance of the issue to trade flows, its development friendliness, and the existence of a rationale for collective action.

This existence of a rationale for collective action reflects a general presumption in favor of national sovereignty. There is no reason to force nations to undertake certain actions unless their actions have effects on the trade of others that require collective action to resolve. In some areas a trade agreement is absolutely essential. These include an international rule of law (procedures) for dealing with trade disputes and agreements to prevent beggar-thy-neighbor trade policies. In other areas international agreements would be beneficial to manage cross-border externalities or global public goods.<sup>29</sup> But modern trade agreements have been extended into areas that intrude into national sovereignty with no justification based on the need for collective action and without clearly identified and fairly distributed global benefits.<sup>30</sup> The presumption of consumer sovereignty is based on the premise that society should interfere with individual choices only when those choices have consequences for others, when there is a need for collective action. The same is true in trade.

## Ten Priorities for a Development Round

Much of the recent discussion has focused on agriculture, but there is much more to a true development round. Primary attention should be given to market access for goods produced by developing countries. There is an urgent need to reduce protection on labor-intensive manufactures (such as textiles and food processing) and unskilled services (such as maritime and construction services). Priority should also be given to the development of schemes to increase labor mobility, particularly the facilitation of temporary migration for unskilled workers. In addition, the new round needs to effectively circumscribe the rise in nontariff barriers that has accompanied reductions in tariffs.

### *Liberalize Labor Flows and Labor-Intensive Services*

The General Agreement on Trade in Services (GATS) recognizes four modes of service delivery. The temporary movement of natural persons (mode 4) has received by far the least attention in terms of the volume of scheduled concessions. Yet differences in factor payments across countries provide evidence that factor movements would increase global productivity. If factor payments equal marginal products, the largest discrepancies are associated with the payments to unskilled labor and the

smallest are associated with payments to capital.<sup>31</sup> Accordingly, agreements that provide for the mobility of unskilled labor would do most to increase global efficiency.

Such agreements would also significantly improve living standards in developing countries—through the remittances they would generate, through the accumulation of capital that would be repatriated when migrants returned to their country of origin, and through the general equilibrium effects on relative factor supplies in developing countries.<sup>32</sup> The temporary movement of less-skilled workers from developing countries (where they are in oversupply) to developed countries (where they are undersupplied) is estimated to increase world welfare by hundreds of billions of dollars, even if the scale of the labor flow is modest.<sup>33</sup> Walmsley and Winters (2002) estimate that a flow of workers to developed countries equivalent to 3 percent of their labor forces would generate a global welfare gain of \$156 billion.<sup>34</sup> For these reasons a development round of trade negotiations should focus on what can be done to facilitate migration of unskilled labor and surrogates for unskilled labor, trade in commodities and services that are intensive in unskilled labor.

Despite the tremendous development potential of this reform, the limited progress that has been made has been associated largely with the intracorporate movement of skilled personnel—an issue of interest to developed countries. Mode 4 has not progressed in a way that allows developing countries to use their comparative advantage in low- and medium-skill labor-intensive services. Nor has enough attention been given to proposals to facilitate remittances. Governments have a role to play in maximizing both the value of remittances and their impact on development. For example, governments could ensure migrants access to secure and low-cost financial services and regulate remittance-handling intermediaries to prevent malpractices. The development of new financial instruments, such as remittance-backed bonds and the facilitation of transfers from migrants using employer's payroll deduction schemes, would also increase the ease with which remittances flow to developing countries.

As well as facilitating the movement of natural persons, there is scope for liberalization of other service industries of importance to developing countries. On average services account for 50 percent of developing countries' GDP, but developing countries account for only 25 percent of the world's services exports. While the last decade saw considerable liberalization of high-skill services (which has in general benefited developed and developing countries alike), less progress was made in unskilled labor-intensive services of interest to developing countries.

A large portion of the benefits from the liberalization of services derives not from better market access abroad but from the increased competitiveness and efficiency of the domestic market. However, in addition to these "efficiency gains," developing countries have important export interests in further liberalization of services (OECD 2004). Many developing countries have capitalized on their comparative advantage in low-skill services to develop competent and highly specialized industries. Examples are maritime services, including port services and the shipping industry; construction services; and back-office services, including data processing, call centers, and financial services.

### *Carefully Reform Agricultural Market to Limit Adverse Consumption Effects*

The levels of agricultural protection in the OECD have been consistently high.<sup>35</sup> The effect on developing countries is severe, as agriculture represents almost 40 percent of their GDP, 35 percent of exports, and 70 percent of employment.

Because agriculture is such an important part of both national economic development and daily livelihoods in developing countries, agricultural reform must proceed carefully. Agricultural liberalization presents developing countries with the benefits of increased market access but also the (potential) costs of higher prices for domestic consumers. Agricultural subsidies by the North benefit consumers and hurt producers in developing countries. The net effect of wide-ranging agricultural reform varies across developing countries, depending on the composition of their exports and imports of different commodities and the price sensitivity of those commodities to liberalization. The potential for losses highlights the need for a more fine-grained approach, which would differentiate among crops and countries.

Instead of seeking blanket reform, the WTO should focus on liberalizing those commodities that have the largest positive effect on producers and the smallest adverse consumption effects. One important determinant of the net effect of this kind of reform is the level of protection for each commodity and the consequent impact of liberalization on prices.

Another important determinant of the welfare effects of liberalization is the agricultural trade balance across countries. There is a division between temperate products (program crops and livestock), in which developing countries are largely net importers, and tropical products, in which developing countries are largely net exporters. Most developing countries are net importers of program crops, which are precisely the commodities that have the highest domestic support and stand to experience the largest price increases.<sup>36</sup> It is therefore not surprising that most studies predict that most developing countries are worse off as a result of the terms of trade effects following this kind of reform. Indeed, Dimaranan, Hertel, and Keeney (2003) find that gains accrue primarily to developed countries in the Cairns group, as well as the two largest developing country exporters, Argentina and Brazil.<sup>37</sup> These countries are the strongest advocates for the existing agricultural reform agenda.

The existence of net losses for developing countries in some areas of reform should not imply that no reform is required—rather it suggests that a selective approach is needed. The most important subsidies to eliminate would be those for which the consumption benefits are small relative to the production costs. Developing countries should focus their attention on eliminating tariffs and quotas on tropical products, processed foods, and other commodities they export or for which they have high export elasticities with respect to price. Elimination of cotton subsidies would raise producer prices for cotton but have a small effect on standards of living in developing countries as a result of the small increase in the price of cloth. Similarly, subsidies for crops that are disproportionately consumed by the nonpoor will have the least adverse distributional effects. Soy beans, for instance, may largely go into the production of animals (beef and chicken).

The WTO makes a clear distinction between explicit export subsidies and other forms of domestic subsidies, yet both types of payment can increase production and exports and depress world prices.<sup>38</sup> Since the WTO treats domestic subsidies more permissively, several OECD countries have reduced their export subsidies and increased their direct domestic support payments to comply with their WTO commitments. In the United States and the European Union, the annual values of export subsidies for cereals and beef declined \$4.1 billion between 1990 and 1998. In the same period, domestic support in the form of exempt direct payments for those commodities rose an estimated \$18.9 billion a year in the European Union alone (ABARE 2001).

The trade effects of various types of domestic subsidies are often understated. While the impact of export support on developing countries per dollar of subsidy is greater than production-based support, the difference is small if the elasticity of demand is small, as it is for many agricultural commodities. Even nonproduction-based support (“decoupled” payments, primarily in the “green box”) has an impact on output and prices. These payments benefit OECD producers by providing them with cheap (or free) credit to potentially use for investment and expansion of production.

Finally, developing countries should reflect on the items that are missing from the Doha Declaration. First, the Declaration does not foreshadow further attempts to reduce export dumping. Second, the “development box,” which would allow poor countries to shape their farming and food policies to maximize development, is absent.

### *Liberalize Industrial Goods*

While developed countries have low average tariff rates, they maintain high barriers to many of the goods exported most intensively by developing countries. When weighted by import volumes, developing countries face average manufacturing tariffs of 3.4 percent on their exports to developed countries, more than four times the average rate faced by goods from developed countries (0.8 percent) (Hertel and Martin 2000).

Moreover, aggregate data hide tariff peaks. OECD tariffs are particularly high for goods of importance to poor countries, such as low-skill manufactures (especially textiles) and processed foods. Such tariff peaks retard development by restricting industrial diversification in the poorest countries.

A second reason why developing countries should be pushing to have industrial tariffs prioritized in the Doha Agenda is that barriers to South-South trade are quite high. The average import-weighted tariff on the exports of manufactured goods from developing countries to developing countries is 12.8 percent (Hertel and Martin 2000). Anderson and others (2000) estimate the welfare gains to developing countries from liberalizing trade in manufactures by other developing countries at \$31 billion.

### *Reduce Nontariff Barriers*

There are four important categories of nontariff barriers: dumping duties, which are imposed when a country sells products below costs; countervailing duties, which can

be imposed when a country subsidizes a commodity; safeguards, which can be imposed temporarily when a country faces a surge in imports; and restrictions to maintain food safety or avoid, say, an infestation of fruit flies. The advanced industrial countries have used all of these nontariff barriers to restrict imports from developing countries when they have achieved a degree of competitiveness that allows them to enter their markets. Many of these measures are described as ensuring “fair trade,” but from the perspective of developing countries they ensure “unfair trade.” They are evidence of the hypocrisy of the North. Increasingly, however, developing countries are using such measures against each other and against the advanced industrial countries. In this sense, they represent a hidden threat to a trade liberalization scheme.

The number of antidumping claims has risen significantly in the past seven years.<sup>39</sup> Part of the problem with the schemes is how they have been implemented. With dumping duties, for instance, the accused must respond in a short period of time to a long demand for information (in English); when the accused is unable to do so, the U.S. government acts on the “best information available,” usually the information provided by the American company trying to keep out its rivals. High initial duties are imposed, which regularly get revised downward when better information becomes available. Meanwhile, however, long-term damage has been done, as U.S. buyers will not purchase the commodity given the uncertainty over the level of tariffs they may have to pay.

### *Explicitly Recognize Developing Countries’ Rights to Use Industrial and Other Development Policies*

The economics literature has long recognized that there may be important learning benefits from protection. While economists have typically argued in favor of open subsidies or government loan programs rather than the hidden subsidies protection provides, for a variety of reasons direct subsidies may be difficult or impossible to implement. In a second-best world, some protection may be efficient.<sup>40</sup> There is a broader risk that the provisions for special and differential treatment will not be sufficient to ensure that developing countries at different stages of development are able to respond to their idiosyncratic development challenges with appropriately tailored second-best solutions.

The problems are emblemized by demands (included in the recent bilateral trade agreements between the United States and Chile and the United States and Singapore) for capital market liberalization. Capital market liberalization increases economic volatility, and the increased economic volatility increases the risk premium that investors demand, effectively increasing the interest rate charged (see Stiglitz 2000).

Is it fair to impose countervailing duties on a developing country that has “subsidized” interest payments by bringing them down from the usurious levels insisted upon by the IMF to levels still slightly higher than those in international capital markets? Or should the government be viewed as undoing a distortion? It seems unfair to force developing countries to accept provisions that effectively increase the inter-

est rates they have to pay and then slap them with a countervailing duty when the government tries to undo the consequences.

### *Restrict Tax Competition to Attract Investments*

One arena in which an international agreement might be of immense benefit to developing countries concerns their competition for investment through concessionary tax rates and financial subsidies (Charlton 2003). The main beneficiary of this competition is international business. Just as international agreements circumscribe subsidies in general, there should be a strong proscription on firm-specific competition—through the granting of differential tax treatment or special infrastructure, for example. Since the countries harmed by such tax competition are not necessarily trading partners of the country engaging in these practices, new enforcement mechanisms need to be found, so that a suit against the multinational company receiving the benefit may be filed in any country in which that company operates and has assets, with fines proportional to the value of the subsidy levied.

### *Rebalance Intellectual Property Rights*

Whether within the WTO or through an alternative forum (such as, perhaps, the World Intellectual Property Organization), a new intellectual property regime needs to be created that balances more carefully the interests of users (in both developed and less developed countries) and producers of knowledge. There is a clear need to revise the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement to ensure that the objective of fostering the transfer and dissemination of technology (Article 7) is effectively realized.

Closing the North-South knowledge gap will require the revision of several elements of TRIPS.<sup>41</sup> Article 27.1 (which requires universal novelty as a condition for patentability) should be strengthened to protect traditional knowledge. This could be done by amending TRIPS to comply with the UN Convention on Biodiversity, signed by 170 countries in 1993. The Convention on Biodiversity recognizes the collective rights of village communities over those of individuals or companies and decrees that a rich country's demand for patent rights should not come at the expense of the conservation of plant diversity. This should be reflected in all the provisions, including the tests of novelty, as well as the breadth and scope of the patent.<sup>42</sup>

### *Extend Unilateral Disarmament*

With the exception of the positive effect of the African Growth and Opportunity Act on African textiles, nonreciprocal agreements have delivered only limited benefits to developing countries. Preferential tariffs for least developed countries have formed an important part of the global trade architecture since the inception of the Generalized System of Preferences in 1968 and should continue to play an expanded role in the development round.

To be meaningful, preferences should be made more widely available to developing countries other than least developed countries. In addition, restrictions that have led to low utilization rates should be eased.<sup>43</sup> One reason for underutilization is the stringent rules of origin, which are designed to prevent trade deflection, whereby products from nonbeneficiary countries are routed through least developed countries to exploit the preferences. One reason why take-up has been limited is that it can often be difficult or costly to acquire the required documentation to satisfy rules of origin.

### *Create Fairer Mechanisms for Enforcement*

An enforcement mechanism that relies on the threat of small countries imposing trade sanctions against large countries is only asymmetrically effective. As discussed above, the sanction for violating a WTO agreement is the imposition of duties. But since the imposition of duties by a small country on goods it imports from the United States has only a negligible effect on the U.S. producer, the WTO system has no effective way of enforcing an unfair trade action stemming from the action of a large industrial country against a small or poor country. This seriously weakens the bargaining position of some WTO members.

One solution to this asymmetry would be to require noncompliance with WTO rulings to be punished by all WTO members. There has been considerable resistance to this kind of proposal. A classic problem with enforcement through retaliatory protectionism is that it is not in the interests of the enforcing country. An alternative proposal would be to require that trade losses be compensated for with financial payments, either as reparations from the responsible country or from the proceeds of an international auction of the right to retaliate (Bagwell, Mavroidis, and Staiger 2003).

### *Craft Anticorruption Policies*

One particularly insidious interaction between foreign firms and developing countries is rampant corruption: it is often less expensive to bribe government officials to obtain, say, a concession, than to pay the full market price. International non-bribery agreements (such as the United States' Foreign Corrupt Practices Act) should be made part of an international agreement. Full disclosure should be required of all payments made to foreign companies (publish where you pay), and only disclosed payments should be tax deductible. But even stronger enforcement measures should be adopted.

Secret bank accounts facilitate corruption, by providing a safe haven for funds stolen from a country. They gravely hurt developing countries. There should be an international agreement proscribing bank secrecy (the importance of which has recently been recognized in the case of terrorism.) This, too, could easily be enforced. No bank should be allowed to deal with any bank in a country that does not conform to the agreed upon transparency standards. Any country that does not enforce

such a sanction could be sued (under provisions similar to those discussed above under fair competition, for example)

## **Institutional Reforms**

Institutional reforms will be required to facilitate a more transparent and democratic negotiating process—and one that might more likely result in agreements that are both fair and in the general interests of the world. A fair agreement is unlikely to be produced through an unfair process.

### *Procedures*

There is widespread dissatisfaction with the way trade agreements are made, stemming partly from the belief that current procedures put developing countries at a disadvantage. This is particularly important given the increasing role trade agreements have. Trade agreements define a wide set of rights and obligations, yet they are arrived at in a manner that is distinctly different from the way that other kinds of legislation are adopted. The terms are often negotiated behind closed doors, with little public debate about specific provisions. The legislative process is often truncated. The result is agreements, such as Chapter 11 of the North American Free Trade Agreement (NAFTA) or the TRIPS agreement, that contain provisions that would never have been accepted by a democratic parliament with open discussion in a deliberative process.<sup>44</sup>

The hallmark of earlier trade agreements is that they were conducted in secret, with many of the terms not fully disclosed until the end of the negotiations. Governments then faced an “all or nothing” choice. Because they could have no effect on the outcome, parliamentarians had little incentive to understand the intricacies. Given the extent to which trade issues overlap with other issues, including those touching on the environment, procedural reforms are crucial to make deliberations about trade issues more open and more like other deliberative processes.

Trade has become too important to be left to trade ministers alone. Part of the deliberative process must entail the active involvement of others (meeting together, not just through trade ministers). Thus when intellectual property matters are being discussed (if they are to be discussed at all), science ministers must be involved. There must be some mechanisms for environmental ministers’ voices to be heard. They might insist, for instance, that provisions be inserted that prevent a race to the bottom, that low environmental standards (those associated with allowing pollution of the world’s atmosphere, for example) be viewed as a form of subsidy to be prohibited.

The fairness of the international regime should be judged not only in terms of outcomes but also in terms of the processes. A large literature documents the deficiencies in procedures, and for reasons already noted these procedural deficiencies disadvantage developing countries. For this reason procedural reforms—

particularly relating to transparency and representation—should have a high priority.<sup>45</sup>

The developed countries should continue the kind of support they have provided to help developing countries participate more effectively in these deliberations. Trade negotiations involve complex issues, including economic issues in which even experts are not in agreement. Meaningful participation in these discussions requires understanding these complexities, understanding the full import of each provision, and recognizing how provisions might affect countries in different situations differently.

### *Structures and Representation*

As the number of WTO members has grown, and the demands for a more inclusive bargaining process increased, the current system appears to many as increasingly unwieldy. It is not the intent of this paper to provide a detailed analysis of alternative proposals for institutional reform but rather to highlight its importance and to emphasize why such reforms should be viewed as a priority in current discussions.

The opening up of the WTO to so many members makes negotiations cumbersome and difficult. But the arbitrary and capricious nature of the “green room” procedures needs to be replaced. In other areas of democratic decisionmaking—especially those based on consensual processes, as trade negotiations are supposed to be—the principle of representativeness is well accepted: a small group of countries is chosen to reflect various interests and constituencies—say, the largest trading countries, the United States, the European Union, Japan, and China; a representative or two of the middle-income countries, say Brazil and one other country; a couple if representatives of the least developed countries; a representative of the Cairns Group; and so forth. Each would then consult with those they are representing on a regular basis. An open and transparent process would ensure that the views and voices of all were heard.

Another requirement is a new body within the WTO responsible for assessing the impacts of proposed trade provisions on development and developing countries and assessing the “trade diversion” versus “trade creation” effects of bilateral and regional agreements. Its purpose would be to look objectively at the consequences of alternative proposals for all the countries of the world, recognizing that economic science is not at a stage where there is agreement about the “right” model. Thus the body might attempt to assess the impact of agricultural subsidies that allegedly do not distort trade in a world in which there are capital constraints. An expanded WTO secretariat might also include an independent body that would assess countries in crisis, adjudicate and approve the imposition of trade restrictions (“safeguard measures”), and investigate dumping charges, countervailing duties, and phytosanitary conditions.

There is a need to address the scope of technical assistance and the capacity of the WTO to adequately provide it within existing structures. Helping low-income countries strengthen their institutional capacity in order to permit them to meet WTO agreements will require not only technical assistance but also significant finan-

cial assistance. The costs of implementing WTO commitments are very substantial (Finger and Schuler 2000).

While a limited assistance program may help developing countries implement reform, technical assistance is not sufficient to deal with the economywide adjustment costs associated with structural change. These costs, which generate domestic opposition to trade liberalization, are no less important barriers to progress than the lack of institutional capacity.

Lack of institutional capacity limits access of developing countries to justice within the dispute system. Developing countries are at a disadvantage in complex and expensive legal proceedings. Expansion of existing legal assistance schemes is an important prerequisite for institutional fairness.

The bulk of technical assistance has fallen on international organizations. Both the World Bank and the WTO have increased their technical cooperation activities. But as much as 90 percent of financing of these activities is provided by trust funds provided by two or three bilateral donors; the WTO itself has typically allocated less than 1 percent of its total annual budget—less than \$500,000—for technical cooperation activities (Michalopoulos 2000).

## Conclusion

The international community should resolve to have a true development round based on a spirit of collective responsibility for the challenges faced by poor countries and recognition of the perceived inequities generated by previous rounds of trade negotiations. The round of trade negotiations that began in Doha does not yet deserve the epithet of a “development round.” Indeed, once again the agenda reflected the interests of the advanced industrial countries. The new issues that have been added to the agenda are not priorities for developing countries; indeed some of their provisions would have been harmful to them.

This paper presents an alternative way forward for the Doha Round based on principles of social justice and economic analysis. Toward that end, the WTO needs to establish a source of impartial and publicly available analysis of the effects of different initiatives on different countries. Based on this type of analysis, any agreement that differentially hurts developing countries or provides disproportionate benefits to developed countries should be presumptively viewed as unfair. The agreements must enshrine both *de jure* and *de facto* fairness. This means ensuring that developing countries are not prevented from unlocking the benefits of free trade because of a lack of institutional capacity.

This paper presents 10 pro-development priorities that should form the core of the Doha Round agreements. Primary attention should be given to increasing market access for goods produced by developing countries. There is an urgent need to reduce protection of labor-intensive manufactures (textiles and food processing), agricultural goods, and unskilled services. Priority should also be given to developing schemes to increase labor mobility, particularly the facilitation of temporary

migration for unskilled workers. Instead of imposing uniformity across countries, there should be general agreement that different circumstances in developing countries warrant special and differential treatment. Significant change in the outcomes of multilateral trade agreements must be supported by institutional reforms. Reform of the procedures of the WTO would facilitate the achievement of fair and pro-development agreements.

## Notes

1. Of particular concern was the lack of transparency (including “green room” negotiations, in which only a few chosen countries from the developing world engaged in negotiations with the United States and Europe) and the disadvantageous position these negotiations put developing countries in simply because of the complexity of the negotiations and these countries’ limited staffs. See the open letter, dated November 6, 1999, sent by 11 developing countries to the chair of the World Trade Organization (WTO), Ambassador Ali Mchumo of Tanzania, expressing their concern over the lack of transparency in the WTO “green room” process.
2. The United Nations Development Programme (UNDP) estimates that under the WTO regime, between 1995 and 2004 the 48 least developed countries will be worse off by \$600 million a year, with Sub-Saharan Africa worse off by \$1.2 billion (UNDP 1997).
3. Most notable in this regard were the requests by a number of developing countries that the Cancun draft be prepared on the basis of views and inputs at open-ended consultations and that where there was no consensus the differing positions or views be clearly indicated. A coalition of industrial countries rejected the proposal.
4. Indeed, after Marrakech the General Agreement on Tariffs and Trade (GATT) Secretariat put forward a larger estimate of the minimum gain of \$500 billion a year. For a discussion of the projections, see Safadi and Laird (1996). For a survey of the various estimates, see Rodrik (1994). See Martin and Winters (1996) and Srinivasan (1998) for comprehensive surveys and assessment of the effects of the Uruguay Round on developing countries.
5. UNDP found that 70 percent of the gains of the Uruguay Round would go to industrial countries, with most of the rest going to a relatively few large export-oriented developing countries. It also found that the round would leave many of the poorest countries in the world worse off (UNDP 1997).
6. If developing countries’ exports are more concentrated in agricultural products that attract subsidies, these figures may underestimate the effects of subsidies.
7. By January 2000 up to 90 of the WTO’s 109 developing country members were in violation of sanitary and phytosanitary standards, customs valuation, and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). Estimates of the cost of complying with the Uruguay agreements vary widely, depending on the quality of each country’s existing systems and the strength of its institutions. Hungary spent more than \$40 million upgrading sanitary conditions in its slaughterhouses. Mexico spent more than \$30 million upgrading its intellectual property laws. Finger (2000) suggests that for many of the least developed countries in the WTO, compliance with these agreements is a less attractive investment than expenditure on basic development goals, such as education.
8. Estimates of the downward impact on world prices caused by OECD domestic support are 3.5–5.0 percent for many agricultural commodities, including wheat and other coarse grains and oilseeds (Dimaranan, Hertel, and Keeney 2003).

9. Diao, Diaz-Bonilla, and Robinson (2003) report that protectionism and subsidies by industrial nations cost developing countries about \$24 billion a year in lost agricultural and agro-industrial income. Latin America and the Caribbean lose about \$8.3 billion a year from agriculture, Asia loses some \$6.6 billion, and Sub-Saharan Africa loses close to \$2 billion. These estimates do not include dynamic effects.
10. Article 71.1 provides for a review of the implementation of the agreement after 2000 and for possible reviews “in the light of any relevant new developments which might warrant modification or amendment.”
11. Developing countries increased their exports of services nearly fourfold between the mid-1980s and mid-1990s (faster than goods exports), increasing their share of the global marketplace from 14 percent in 1985–1989 to 18 percent in 1995–98 (World Bank 2002).
12. Derived estimates of barriers to services trade are large (Brown, Deardorff, and Stern 2001), but they may overstate the size of the policy variable if many of these barriers are exogenous.
13. Some estimates of the global gains from service liberalization are as high as \$400 billion (Brown, Deardorff, and Stern 2001).
14. More than one-quarter of the world’s top 40 service exporters in 2002 were developing countries.
15. In May 1995 the U.S. Patent Office Trademark Office granted a patent to the University of Mississippi Medical Center for “use of turmeric in wound healing.” It revoked the patent after dozens of references to the procedure were found in Indian texts.
16. Part of the problem is identifying the interest of developing countries. Developing countries are heterogeneous, have different trade policy interests, and thus do not have a unified position on many issues.
17. Section 7 of the June 6, 2003, communication from Argentina, Bolivia, Botswana, Brazil, Chile, China, Colombia, Cuba, the Dominican Republic, Ecuador, El Salvador, Gabon, Guatemala, Honduras, India, Malaysia, Mexico, Morocco, Nicaragua, Pakistan, Paraguay, Peru, Thailand, Uruguay, Venezuela, and Zimbabwe (WTO 2003) makes it clear that “reform of agricultural trade is of central importance for many developing countries” and is “*an essential ingredient of the negotiation and its outcome*” (emphasis in original).
18. Oxfam (2003, p. 1) argues that “agriculture is the key to unlocking the Doha development agenda, and without constructive steps on this issue, the broader negotiations cannot really restart.”
19. See the statements by the Indian ambassador, K.M. Chandrasekhar; Brazil’s ambassador, Luis Felipe de Seixas Correa; and China’s ambassador, Sun Zhenyu (TWN 2003).
20. On domestic support, no specific figures were given for reducing most trade-distorting support. The text potentially widened the scope for the use of “blue box” support—a step backward in terms of liberalization. It did not focus on trade-distorting elements of “green box” measures. See the critical response by Kenya’s ambassador, Amina Chawahir Mohamed, who said that the EC–US text falls short of our expectations and as such we find it difficult to accept it as a basis of our further work (TWN 2003).
21. The 2002 U.S. Farm Security and Rural Investment Act (FSRIA) will cost about \$190 billion over 10 years, about \$83 billion more than previous programs. It sets target prices that are lower than the pre-1996 levels, but total effective support is larger, because average world commodity prices have declined and the range of commodities included in FSRIA is larger than in the 1996 Federal Agriculture Improvement and Reform Act (FAIR). FSRIA provides countercyclical payments to U.S. farmers. This type of measure has allowed the United States to dump its farm surplus on world markets, exporting corn at 20 percent below the production cost and wheat at 46 percent below cost (see Cassel 2002).

22. The 1996 Singapore Ministerial Declaration mandated the establishment of working groups to analyze issues related to investment, competition policy, and transparency in government procurement.
23. Finger (2000) estimates the cost of implementing three of the Uruguay Round's six agreements that required regulatory change—customs reform, intellectual property rights, and sanitary and phytosanitary measures. His analysis suggests that the average cost of restructuring domestic regulations in the 12 developing countries considered could be as much as \$150 million. In eight of these countries, this figure is larger than the entire annual development budget.
24. Part of the reason why Everything But Arms has had such a limited effect is that almost all EC imports from least developed countries (more than 99 percent in 2001) were already eligible for preferences under other schemes (Brenton 2003). The Everything But Arms initiative granted least developed countries duty-free access to imports of all products except arms and munitions. Total exports from these countries to the European Union increased by 9.6 percent in 2001. In practice, however, Everything But Arms affected only 919 products (of the European Union's 10,200 tariff lines) that had not previously been granted duty-free status under either the Generalized System of Preferences or the Cononou Agreement. Of these 919 products, least developed countries exported just 80 products to the European Community in 2001. Brenton (2003) notes that total exports of these products actually fell, from €3.5 million in 2000 to €2.9 million in 2001. Thus it appears that the short-term direct impact of Everything But Arms has not been significant; given the low volume of trade in affected products, the effect is not likely to be large in the medium term.
25. For manufactured goods average tariff rates are 1.5 percent for developed countries and 11.5 percent for developing countries. For agriculture average tariff rates are 15.6 percent for developed countries and 20.1 for developing countries (Hertel and others 2000).
26. Adopting Rawls' (1971) framework, we should assess whether a particular change in the trade regime would be agreed to from behind a "veil of ignorance," in which the participants in the discussion did not know whether they were to be born in a less developed or a more developed country. For alternative frameworks (which in the current context arrive at similar views), see Sen (1999).
27. See, for example, the open letter sent on November 6, 1999, by Ambassador Ali Mchumo of Tanzania on behalf of 11 developing countries to the WTO chairman, expressing their concern over the lack of transparency in the WTO "green room" process.
28. When, of course, a major industrial country takes a global action—such as the United States' imposition of tariffs on steel—there can be a global response, which can induce a response (as we have seen.)
29. For a discussion of the concept of global public goods, see Kaul and others (2003) and Stiglitz (1995).
30. Trade agreements might also be useful as a mechanism with which governments could overcome domestic political opposition to trade reform.
31. Factor payments may not equal marginal products, and the disparity may differ across countries, if the degree of market imperfections differs.
32. In 2002 the Inter-American Development Bank reported that \$32 billion in remittances was sent to Latin America and the Caribbean. This was far greater than total official development assistance and only slightly less than foreign direct investment (Ellerman 2003).
33. Foreign workers can be an important source of labor in developed countries. London's catering industry depends on migrants for 70 percent of its labor force, and a large proportion of seasonal agricultural workers are foreign (Home Office 2001).

34. Computable general equilibrium analysis based on the GTAP model and database.
35. The OECD spends more than on \$300 billion a year on agricultural subsidies. This is almost six times the total aid from OECD countries to all developing countries (\$50–\$60 billion a year).
36. Net importers include China, Indonesia, Mexico, the Republic of Korea, “Rest of South America” (a regional average that excludes Argentina and Brazil), “Rest of South Asia” (a regional average that excludes India), “Rest of Sub-Saharan Africa” (a regional average that excludes Tanzania and Zambia), Tanzania, Zambia, and the average for the Middle East and North Africa. Argentina, Brazil, India, and Vietnam are net exporters (Dimaranan, Hertel, and Keeney 2003).
37. The Cairns Group consists of 17 agricultural exporting countries. It was formed in 1986 to lobby for agricultural liberalization in multilateral trade negotiations.
38. The WTO classifies domestic subsidies according to their distortionary effect on trade: amber subsidies are directly trade distorting, blue subsidies are production payments that indirectly distort trade, green subsidies are subsidies that do not distort trade.
39. There were 2,063 dumping cases initiated between 1995 and 2002. The three leading initiators were the United States (279), India (273), and the European Community (255) (Finger and Zlate 2003).
40. For a historical argument, see Chang (2002). More recent theoretical analysis includes that of Dasgupta and Stiglitz (1985).
41. Article 31(b) should be extended to allow compulsory licensing beyond national emergencies to broader “refusal to deal” scenarios. Article 40 should extend the right of WTO members to provide in their national legislation for the prevention of anticompetitive licensing practices in respect of intellectual property rights. New measures need to be developed in Article 66.2 to ensure the transfer of technology from developed countries to least developed countries (see WTO 1994).
42. Patents could not, for instance, be granted for traditional medicines or goods or slight variants of those traditional medicines when the usefulness of those commodities has already been recognized within the developing country.
43. Use by least developed countries of Quad Generalized System of Preferences schemes varies enormously across countries and markets, but in a significant number of cases it is low (UNCTAD 2001).
44. Chapter 11 is NAFTA’s investment chapter, which granted expansive new rights and privileges for foreign investors operating in the United States., Canada, and Mexico.
45. See Blackhurst, Lyakurwa, and Oyejide (2000) on participation; Francois (2001) on transparency; and Winters (2001) on representation.

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# Trade Flows

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# “Socially Responsible” Trade Integration: A Political Economy Perspective

THIERRY VERDIER

*Most economists believe that the liberalization of international trade produces significant gains. Public opinion is much less optimistic, concerned that the current division of the gains from trade is unfair, unevenly distributed both across and within countries. To understand the position of globalization skeptics and respond to their complaints, economists and policymakers need to move beyond the fact that trade produces static and dynamic gains. They need to pay more attention to the “pains from trade,” the distributive dimensions of trade integration, and the interactions between trade openness and domestic redistributive policies. After briefly reviewing what is known about the distributive impacts of trade openness, this paper examines the political economy feedbacks of trade integration on domestic redistribution and identifies the economic and political feasibility constraints of a “trade regime with redistribution.” Taking a normative perspective, it explores the conditions for the existence of a “socially responsible” open trade regime and discusses some of the policy tradeoffs associated with implementing such a regime.*

There is enough in the world for everybody’s need, but there cannot be enough for everybody’s greed.

—Mahatma Gandhi

When asked by a physicist colleague to provide a proposition in economics that is both true and not trivial, Nobel laureate Paul Samuelson cited the fact that gains accrue from specialization based on comparative advantage. This idea is at the heart of one of the few ideas on which most mainstream economists agree, namely, that of trade between nations is desirable. Economic theory posits that international trade is beneficial to countries because specialization according to comparative advantage (and its associated division of labor) leads to a more efficient allo-

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cation of resources across sectors and regions, generating a higher level of output, larger productivity gains, and more rapid economic growth. These gains from trade are then expected to contribute to social welfare, general development, and poverty reduction.

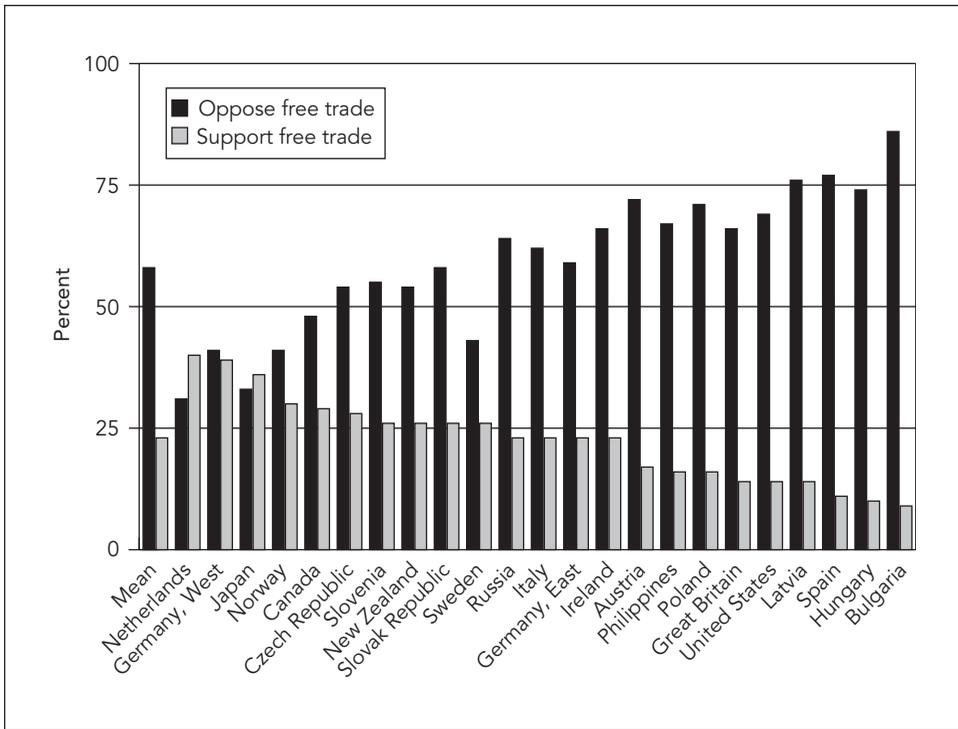
While openness brings gains from trade, it also brings “pains from trade” (the term is borrowed from Sapir 2000): trade liberalization inevitably creates winners and losers within nations. The strong presumption, however, is that losers can be compensated through the use of appropriate redistributive mechanisms (lump-sum transfers) and that trade-related efficiency considerations can therefore be analyzed separately from their associated direct distributive implications. It is no surprise that much of the international trade literature has concentrated on showing the extent and importance of the gains from trade (or alternatively, the welfare costs of protectionism), briefly mentioning in a last paragraph the fact that the use of appropriate transfers is necessary to make everybody better off after the opening of the border to foreign goods.

It is striking how little this consensus in mainstream economics resonates with the public. To get a sense of what the man in the street thinks about trade, Mayda and Rodrik (2002) analyzed data from 28,456 respondents from 23 countries collected by the International Social Survey Programme. The question asked was “How much do you agree or disagree with the following statement? [Respondent’s country] should limit the imports of foreign products in order to protect its national economy: 1. Agree strongly, 2. Agree, 3. Neither Agree nor Disagree, 4. Disagree, 5. Disagree Strongly.”

In most countries more than half of respondents agreed with the proposition that trade should be restricted, while less than 25 percent disagreed (figure 1). While survey responses are highly sensitive to framing, ample evidence from the United States suggests that the phrasing of the question on imports does not greatly affect the responses provided (Scheve and Slaughter 2001b).

These opinions are consistent with some of the views articulated in the past decades by various segments of civil society, which believe that the current sharing of the gains from trade is “unfair,” unevenly distributed across and within countries. For a recent report published by the International Labour Organization, *A Fair Globalization: Creating Opportunities for All* (2004), the World Commission on the Social Dimension of Globalization launched a wide-ranging program of dialogues and consultations at the global, national, and regional levels. These consultations canvassed more than 2,000 decisionmakers and social actors involved in globalization issues. A common feature expressed by many participants is the fact that the current process of globalization (and trade integration in particular) has not produced beneficial, legitimate, or fair outcomes. While most people tended to favor more openness and interconnections between societies, they were much less positive about the impact on their jobs and incomes. Many cited the difficulties faced by the small and the poor left at the margins of globalization, the loss of jobs, and the downward pressures on work conditions implied by competitive global markets. There was also a widespread perception that the logic of the current international trade regime (multilateral or bilateral) was increasingly intruding into the function-

**FIGURE 1.**  
**Public Support of and Opposition to Free Trade**



Source: Data from 1995 International Social Survey Programme National Identity, cited in Mayda and Rodrick (2002).

ing of domestic political institutions and domestic policies and generating outcomes biased in favor of the rich and powerful.

The gap between the views expounded by mainstream economists and those expressed by public opinion is worrisome. It indicates the potential for political backlash in many countries, threatening the dynamics of worldwide trade integration. In the long term, the effects could be detrimental for developing countries.

In a celebrated paper, “Crises and the Poor: ‘Socially Responsible’ Macroeconomics,” Nora Lustig (2000) discusses the effects of macroeconomic crises on poverty and inequality in Latin America. She argues that policymakers need to be concerned not just with macroeconomic stabilization but also with the distributive impacts of macroeconomic adjustment, creating adequate safety nets and fiscal instruments to protect the incomes of the poor during the process.

In a similar vein, this paper emphasizes that in order to understand the concerns of globalization skeptics and respond adequately to their complaints, one should move beyond the existence of the (potential) static and dynamic gains from trade to pay more attention to the “pains from trade” and the distributive dimensions of trade integration.

Trade economists have been quick to acknowledge the distributive dimension of the gains and pains from trade. But the *redistribution* of the gains from trade and

the interactions between trade openness and domestic redistributive and social policy have not received the attention they deserve.<sup>1</sup> These issues seem to be critical in understanding the concerns of public opinion about globalization.

Trade economists often tend to view the distributive impacts of trade policy separately from other redistributive tools in society. As both are ways to affect the distribution of resources across individuals, there is a priori no reason why they should be viewed independently from each other. Trade integration can be expected to affect the redistributive capacity of governments in several ways. From an economic perspective, it may change the structural parameters of the economy (typically elasticities of prices and the tax base), rendering domestic redistribution more or less difficult. From a political perspective, trade integration may affect the pattern of political power and coalitions, preventing or promoting compensation and the redistribution of resources inside the economy. The capacity and willingness for domestic redistribution and compensation cannot therefore be analyzed separately from the decision to open the country to trade and foreign direct investment flows.

When discussing redistribution and trade integration, two important dimensions have to be distinguished conceptually. On the positive side, one needs to focus on the economic, administrative, and political feasibility of a particular trade regime with redistribution and compensation. Which kind of coalitions and circumstances tend to induce the emergence of a trade with compensation regime in which winners accept compensating losers in exchange for support for a liberal trade policy?

From a normative perspective, the issue concerns the kind of trade regime with redistribution that should be favored from a given ethical and social justice point of view. Of course, to discuss this aspect, one needs to define a set of ethical and social values, in order to derive a particular social welfare point of view from which the different possibilities can be evaluated.

Consistent with Lustig (2001), ILO (2004), and Sen (2002), the normative perspective taken here is that trade integration with redistribution is “socially responsible” if it helps the people at the bottom of the income distribution maintain adequate levels of living standards and economic security, provides real benefits and equal opportunities to an increasing number of individuals, and reduces disparities that impair economic and social development. While ignoring many environmental, social, cultural, and political aspects of globalization, this definition seems to be a good starting point from which to identify normative elements that can be reasonably defined as “pro-poor” and “socially fair.”<sup>2</sup>

From such a normative perspective, a set of questions comes to mind: What conditions promote the emergence of a “socially responsible” trade regime with compensation that is also politically feasible? What are the elements and tradeoffs of such deals? How can policy promote such conditions? This paper explores some of these dimensions, in the belief that it will stimulate more research in these areas and help provide responses to public demands for a more equitable sharing of the gains from trade in a way that is socially responsible, politically credible, and compatible with trade adjustment.

Consider the real disposable income of individual  $i$  in a country. This income can be written as  $Y(i) = s(i)Y + T(i)$ , where  $Y$  is the average real income in the economy,  $s(i)$  is the share of that income accruing to individual  $i$ , and  $T(i)$  is the net transfer or benefit (positive or negative) received by individual  $i$  after "fiscal redistribution" by the government. The  $s(i)Y$  term reflects the "market" income of individual  $i$  before any government intervention. It depends on a variety of elements, including relative prices (commodity prices, wages, factor returns) and the quantity of assets the individual owns (labor, skills, capital, land, financial assets).

Trade integration is likely to affect the real disposable income of individual  $i$  through three channels. First, international trade changes  $Y$ , the average real income of the country. Trade economists have spent a good deal of effort showing that the effect on  $Y$  is likely to be positive. Second, by changing relative prices, factor returns, and employment, trade is also likely to affect the income of individual  $i$  by changing  $s(i)$ , the market share of income. This is the "first-round" distributive impact of trade integration. Finally, trade openness may affect,  $T(i)$ . This is the "second-round" distributive impact of trade, reflecting the net transfers individual  $i$  receives after the government's intervention.

To concentrate on the distributive and redistributive issues related to trade, take for granted the widely shared view in mainstream economics that international trade is a source of economic gains. This may not appear obvious or true in every instance. Indeed, a classical result from trade theory is that unilateral free trade is not an optimal trade regime for a country large enough to affect its terms of trade with the rest of the world. Moreover, in the presence of global or domestic market imperfections, second-best theory suggests that trade integration may not be completely efficient. Assuming that the gains from trade are positive, however, seems natural for at least two reasons. First, there is ample evidence that openness brings at least some aggregate gains and increases in average real income (see Irwin 2002) for a good non-technical discussion of this issue). Second, this view seems to be the minimal one for starting a meaningful discussion about "socially responsible" trade liberalization, since if trade is perceived as productively inefficient, there is no point in discussing how to make it socially responsible.

The next two sections consider the first-round distributive impacts of trade integration. The first briefly reviews the conceptual tools economists use to analyze the distributive impacts of trade liberalization. The second summarizes what is known empirically about the distributive effects of trade openness. The consensus one can draw from the economic literature is that trade openness is thought to be socially benign: trade openness reduces poverty (though not in every instance), and it is not systematically biased toward inequality.

The third section of the paper contrasts this view of mainstream economics with the pessimistic perspective of globalization critics. It examines the role of economic insecurity linked to global production and trade openness and the importance of fairness and perceptions of polarization in the distribution of the gains from trade.

The fourth section, the core of the paper, examines the domestic redistributive implications of trade openness. It discusses the political economy feedbacks of

trade integration on domestic redistribution and the positive aspects of a trade regime with redistribution. Building on the economic theory of optimal taxation and the political science literature on small corporatist states, it argues that trade policy and domestic redistribution should be viewed jointly in terms of their political determination inside a country. It emphasizes that a crucial aspect of the political feasibility of trade liberalization with redistribution hinges on how to build a credible coalition between pro-trade interests and a large enough number of actual or potential losers.

Taking a normative perspective, the fifth section explores the conditions for the existence of a “socially responsible” trade integration regime with redistribution and discusses some of the tradeoffs the political feasibility constraints identified in the previous section require. The paper concludes that an important policy element for addressing the current opposition to trade integration and preventing a political backlash in civil society is promoting the development of commitment mechanisms and political institutions allowing the credibility and political sustainability of a social contract associating trade reforms with internal redistribution.

Two caveats about the paper are warranted. First, the discussion focuses mainly on redistributive and compensation issues occurring within countries. From a political economy point of view, this is justified by the fact that, despite the alleged demise of the nation-state, most policy decisions that affect redistribution are still made at the national level. This does not deny the policy relevance of redistribution or transfers between countries. On the contrary, for many poor developing economies, this issue is a very salient one. While the policy section tangentially touches on this topic, proper discussion of this dimension is beyond the scope of this paper and is best left to future work.

Second, globalization is a multifaceted phenomenon that affects various dimensions of social development. This paper considers trade integration in the restricted economic sense of a move toward further integration of international markets for goods and services; it does not address “deep integration,” which involves international convergence and coordination of domestic social and regulatory policies. Given the strong complementarity between multinationalization, trade in intermediate inputs, and foreign direct investment, trade integration will include foreign direct investment flows and firm mobility but leave aside labor flows (except in the conclusion) and financial portfolio flows.

## **The Distributive Impact of Trade Integration: Old and New Tools**

Economists traditionally analyze the distributive consequences of international trade in two ways. The first approach, based on the so-called Samuelson-Stolper Theorem, takes a long-term view. It assumes factors of production to be perfectly mobile across sectors and emphasizes distributive issues across factorial incomes. The second per-

spective takes a shorter time horizon. It keeps factors of production sector specific and focuses on sector-specific distributive conflicts.

### *The Samuelson-Stolper Theorem*

The Samuelson-Stolper Theorem elegantly links trade-induced changes in commodity prices to changes in domestic factor returns. In its simplest form, it says that an increase in the price of a good using intensively one factor of production (say, unskilled labor) raises the real return of that factor and reduces the real return to the factor (say, skilled labor) used less intensively in production of the good.<sup>3</sup> The distributive implications of the Samuelson-Stolper Theorem can best be described in a North-South trade context. The North has a comparative advantage in the production of a skilled labor-intensive commodity, while the South has a comparative advantage in an unskilled labor-intensive good. The North exports the skilled labor-intensive good, while the South exports the unskilled labor-intensive commodity. With trade integration between the two regions, the relative price of the skilled labor-intensive commodity increases in the North and falls in the South. According to the Samuelson-Stolper Theorem, in the North skilled workers gain and unskilled workers lose, while the opposite occurs in the South. Wage inequality increases in the North and declines in the South.

How useful is the Samuelson-Stolper Theorem for understanding the distributive impacts of trade in an economy? First, the Samuelson-Stolper Theorem applies to the functional distribution of income, not the personal distribution of income. As the two are not necessarily identical, the Samuelson-Stolper Theorem results have to be viewed as only indicative of a channel through which trade flows influence income distribution within an economy. Second, like any theory, the Samuelson-Stolper Theorem and its associated framework (the Heckscher-Ohlin model of trade) is built on a set of specific assumptions (Winters 2000).<sup>4</sup> Some of its predictions are weakened (or even reversed) when one or more of these assumptions is relaxed.

### *The Specific Factor Model of Trade*

Trade analysts often question the assumption that factors of production are perfectly mobile across sectors. In the short run this is unlikely, and some factors may remain sector specific. In such a context, an increase in the price of a good is likely to increase the incentive to produce it. This, in turn, raises the real return of the factors specific to the production of the good (sector-specific skills, fixed capital, land). To the extent that production is expanding, this price movement is likely to affect the return to nonspecific and mobile factors that are complementary to the fixed factors (Jones 1979). The return to at least one factor rises, while the return to at least one other factor declines. According to this view of the world, what matters for the distributive impact of international trade is how much a factor of production is "stuck"

in a given industry. Factors specific to the expanding export sectors gain, while factors specific to contracting import-competing sectors lose.

### *Implications of the Approaches to the Distributive Consequences of International Trade*

The two approaches (particularly the Samuelson-Stolper Theorem) generate four important implications:

- The distributive impacts on factor prices have to come from changes in commodity prices induced by international trade. The larger the change in commodity prices, the larger the impact on relative factor returns.
- The impact of trade on factor markets is accompanied by a reallocation of resources across sectors. Mobile factors move from the contracting import-competing sector to the expanding export sector.
- Within sectors there is a shift in production methods away from the factor of production that becomes relatively more expensive.<sup>5</sup>
- Samuelson-Stolper Theorem effects predict an asymmetric change in wage inequality in developed and developing countries.<sup>6</sup>

While useful, the Samuelson-Stolper Theorem and specific factor approaches tend to overlook three important dimensions of the current process of globalization. First, global production-sharing and production-matching have increased. This trend has been accompanied by increasing trade in intermediate inputs and complementarity with foreign direct investment. Second, the distinction between trade and technology is somewhat blurred; trade and technological change may simply be two facets of increased global competition. Third, the reorganization of global production affects workers and firms not only through a shift in the relative demands for factors but also through a change in the elasticity of these demand functions. This has significant implications in the presence of noncompetitive rent-sharing between firms and workers.

Each of these dimensions appears to be relevant to the debate on the distributive impacts of trade in developed and developing countries. Accordingly, economists have supplemented the traditional Samuelson-Stolper Theorem approach with new conceptual tools that take these dimensions into account.

### *Production Sharing and Fragmentation*

In a series of influential papers, Feenstra and Hanson (1996a, 1996b, 1997) present an alternative framework. They suggest that trade flows combined with foreign direct investment could contribute significantly to the dynamics of income inequality. The starting point is the recognition that in the past few decades trade flows have increasingly involved trade in intermediate products, due to production-sharing and fragmentation across countries (Feenstra 1998; Arndt and Kierkowsky 2001; Hummels, Ishii, and Yi 2001). Rather than focusing on final goods industries of various skill intensities, Feenstra and Hanson (1996a, 1996b) therefore emphasize the role

of intermediate activities with different factor intensities within each industry. These activities are modeled as intermediate inputs that are traded between countries and combined into a final commodity. In the North-South framework, the South produces and exports a range of inputs using unskilled labor relatively more intensively, while the North specializes in skilled labor-intensive inputs (research and development, marketing). Foreign direct investment that is complementary to the intermediate activities and flows from the North to the South induces a shift of the location of activities across regions. Indeed, activities transferred from the North to the South are more skilled labor intensive than those formerly produced in the South, but less skilled labor intensive than those now produced in the North. This shift of activities increases the relative demand for skilled labor in both countries, increasing both the wage premium and inequality in both regions. Changes in production methods occur within sectors (along the production chain of the final good sector). Hence as outsourcing increases the demand for skilled labor in both countries, it may be perceived from the outside as a kind of "endogenous technical change" biased in favor of skilled workers.<sup>7, 8</sup>

Consistent with the view of global production sharing and fragmentation, Kremer and Maskin (2003) propose a stylized framework of trade integration based on matching and joint production by workers across the world.<sup>9</sup> The North (rich) country is populated by highly skilled and skilled workers. The South (poor) country is populated by workers with intermediate skills and very low skills. Output is obtained by matching workers. As long as the difference in skills between workers is not too large, production is assumed to be more efficient if there is cross-matching between a higher-skill worker and a lower-skill worker than if there is self-matching. In autarky workers can match only within their own country. Trade integration means that workers from different countries can work together in the same firm. This opens up increased possibilities of matching for some skilled workers but not necessarily for all of them. More specifically, when the difference in average skills between the rich and the poor country is large, there is no possibility of cross-matching between a very low-skilled worker in the South and a higher-skilled worker in the North. Very low-skilled workers in the South therefore remain at the margin of globalization. The model is compatible with the trend of reduced global inequality and increased inequality within both rich and poor regions.

### *The Blurred Distinction between Trade and Technology*

In order to explain the increase in the skill premium in the United States during the 1970s and 1980s, the so-called empirical literature on trade and wages has traditionally opposed a Samuelson-Stolper Theorem trade-based explanation to one based on technological change. Two main stylized facts induced several researchers to argue that both the shift away from unskilled workers and their reduced relative wage was inconsistent with the trade explanation (Lawrence and Slaughter 1993) and suggested a different cause, among which biased technological change and computerization seemed most likely. First, there was much more within-sector than between-sector labor reallocation in the United States during that period (Bernard and Jensen

1997). Second, the wage and employment pattern was characterized by a decreasing relative intensity of unskilled labor within industries (Bound and Johnson 1992; Berman, Bound, and Griliches 1994).

While much of this literature treats changes in technology as exogenous to international trade, Wood (1994, 1995, 1997) notes that the distinction between trade and technology can be blurred, as trade may well have been a driving force behind technology. Indeed, in a skilled labor-rich country (the North), trade could induce firms in the import-competing sectors to save on unskilled labor by adopting skilled labor-biased technologies as a “defensive innovation” strategy. In an unskilled labor-rich economy, trade may also be skill enhancing when domestic firms gain greater access to imported superior technologies—by importing skilled labor-biased technologies embodied into better-quality capital goods or by “learning by exporting” (Robbins 1995).

A difficulty with this argument was the fact that it did not explain why trade-induced technological change needed to be skill biased. Recent work by, among others, Acemoglu (2002) and Thoenig and Verdier (2003) has reconsidered this issue, allowing the bias of technological change to be endogenous to the decisions made by economic agents.<sup>10</sup>

In Acemoglu (2002) two types of technologies can be discovered. Some are complementary to skilled labor, others are complementary to unskilled labor. Whether research and development (and consequently the direction of technical change) is directed toward one type of technology or the other depends on two effects, the price effect and the market size effect. Technologies producing more expensive goods will be upgraded faster; a larger potential market leads to more innovation. Within a North-South context in which innovations can be made only in the North with protected intellectual property rights, international trade tends to increase the relative price of the skilled labor-intensive good in the North. Through this price effect, innovation is stimulated toward skilled labor and trade induces skill-biased technical change.

Thoenig and Verdier (2003) investigate a different mechanism that also leads to trade-induced skill-biased technological change. The starting point is that protection of intellectual property rights is never perfect and that firms can change and influence the rate of diffusion of specific knowledge embodied in their production process. To reduce informational leakages and the threat of imitation and technological leapfrogging, firms increase the share of tacit knowledge and noncodified know-how embedded in their production process. They do so at the cost of a larger share of skilled labor in their workforce. In this context, trade openness, by intensifying international technological competition, triggers a race to imitation and innovation. As a consequence, firms tend to develop less imitable and endogenously more skill-intensive innovations.

The interaction between trade flows and technological change generates predictions that differ from the standard Samuelson-Stolper Theorem results. Wage inequality may increase in both skilled-labor rich and skilled-labor poor regions. Within sectors methods of production may shift toward skilled labor. Trade may have distributive impacts without significant changes in relative prices between

skilled labor–intensive and unskilled labor–intensive goods, a feature noted in the empirical “trade and wage” literature.

### *Own-Price Elasticity of Labor Demand and Rent-Sharing*

The last “nontraditional” channel through which trade flows may have distributive impacts on labor markets is the elasticity of labor demand (Rodrik 1998). The price elasticity of a firm’s demand for labor is defined as the percentage decline in the quantity of labor demanded in response to a 1 percent increase in the price of labor. This elasticity consists of two parts. The first is the substitution effect—how much the firm substitutes away from labor toward other factors of production when wages rise. The second part is the scale effect—the extent to which labor demand changes as a result of changes in the level of output. When the wage rate increases, both effects tend to reduce the amount of labor demanded.

International trade, foreign direct investment, and outsourcing by multinationals are likely to make labor demands more elastic, through both substitution and scale effects. Consider first the substitution channel for a firm that is vertically integrated across several production stages. Trade integration gives the firm access to foreign factors of production directly (through foreign direct investment and outsourcing) and indirectly (through trade in intermediate inputs). When domestic wages increase, this new access expands possibilities for the firm to substitute away from domestic labor beyond just domestic nonlabor factors. Trade therefore raises the sensitivity of labor demands to domestic wages.

The scale effect channel works in a similar way. To the extent that trade integration makes market structures more competitive, an increase in wages (and thus the cost of production) translates into a larger decline in output and therefore a larger fall in demand for all factors, implying a rise in the elasticity of labor demand by a firm competing in that market. As Rodrik (1998) notes, three main implications can be derived about the distributive impact of trade on labor markets. First, higher elasticities shift the wage and employment incidence of nonwage labor costs (payroll taxes, labor standards) toward labor and away from firms. Second, higher elasticities increase the volatility of wages or employment responses to exogenous shocks on labor demand. Third, to the extent that markets are not perfectly competitive and there is rent-sharing between workers and the firm, higher elasticities may shift the bargaining power over rent distribution from workers toward firms. The increased possibilities for outsourcing and foreign direct investment also affect the outside options of the firm at the expense of immobile workers, affecting the pattern of profit-sharing between the two groups.

### **What Do We Know about the Distributive Impact of Trade Integration?**

What do we know now about the distributive impact of trade integration across and within countries? How do the approaches described above help us understand any

impacts that may occur? A starting point may be to consider the evolution of global inequality and poverty in the world and then ask how much of this evolution is related to trade integration.

### *The Evolution of Global Inequality and Poverty*

In recent years a growing literature has emerged on the evolution of income distribution and poverty in the world economy (Bhalla 2003; Sala-i-Martin 2002; Bourguignon and Morrisson 2003; Chen and Ravallion 2002). Much effort has gone into the collection and analysis of income distribution data (Deaton 2004). Still, the literature is characterized by contradicting claims and controversies. According to some observers, for example, the proportion of people living in extreme poverty in the developing world (that is, the number of people living below the \$1 a day poverty line, as defined by the World Bank) has fallen sharply (Bhalla 2003; Sala-i-Martin 2002). Others suggest more modest improvements (Chen and Ravallion 2002); question the validity of international poverty measures (Reddy and Pogge 2002; Wade 2002); or claim that poverty has actually increased (International Forum on Globalization 2001).

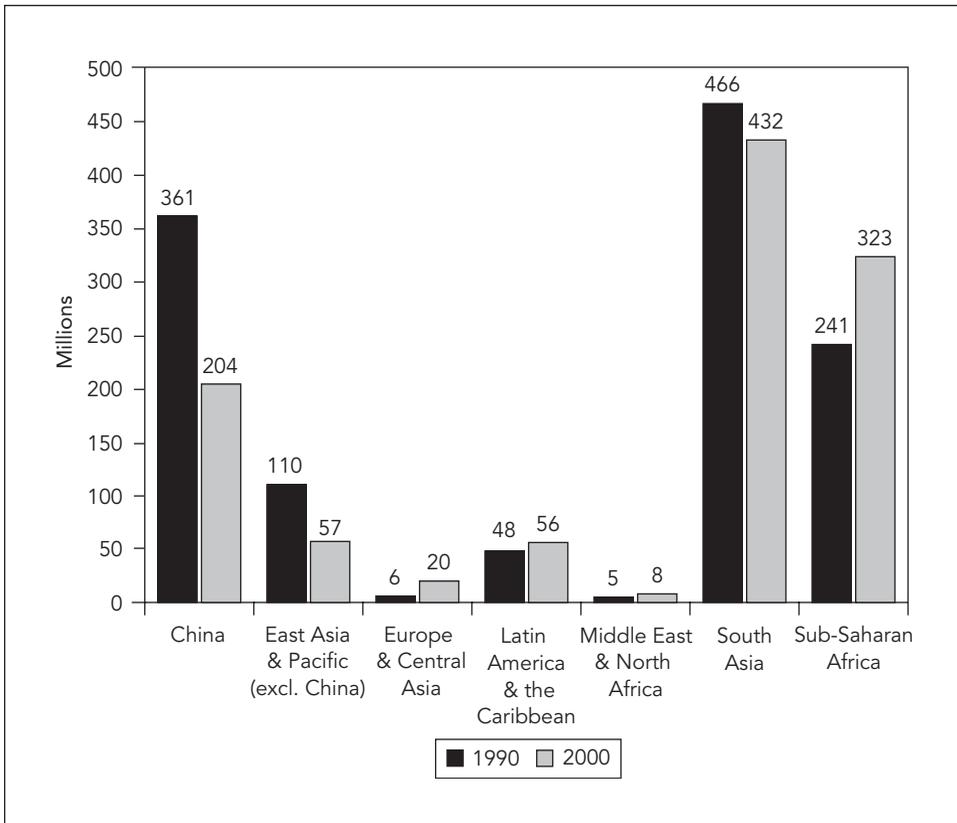
Contradictory claims have also been made for the trend in global income inequality. Some (Galbraith 2002; Wade 2002) claim that inequality has increased; others claim that it has been falling (Bhalla 2003; Sala-i-Martin 2002), though not continuously.

Researchers have tried to identify the sources of the differences between the conflicting assessments (Aisbett 2003). The variety of concepts used to describe poverty and inequality measures (Ravallion 2003); the intrinsic difficulties in defining time-consistent and cross-country consistent measures of standard of living (Reddy and Pogges 2002; Wade 2002; Ravallion 2003); the different methodologies used to estimate the incomes of different groups within the same country (national accounts versus household-level survey data estimates (Bhalla 2003; Sala-i-Martin 2002; Deaton 2004; Ravallion 2003)—all these features create scope for disagreement on the best assessment of the evolution of the global income distribution.

Taking these limitations into consideration, figures 2, 3, and 4 present a reasonable consensus. Global poverty declined in absolute and relative terms during the 1990s. (Bhalla 2003; Bourguignon and Morrisson 2002) (figure 2). The impact varies across continents, however.

The picture for global inequality is more ambiguous. Total inequality can be thought of as having two components: inequality between countries and inequality within countries. Controlling for population size (that is, weighting by population), there is evidence that between-country inequality has fallen (Schultz 1998; Bhalla 2003), due mainly to the strong performance of the two largest countries, China and India (figure 2). At the same time, inequality has risen within many countries, including China and India (Cornia and Kiiski 2001; Ravallion 2001; Milanovic 2003a). Putting the two components together, there is no convincing evidence that overall inequality has risen or has fallen in the past two decades.

**FIGURE 2.**  
**Number of People Living on Less Than US\$1 a Day, by Region, 1990 and 2000**



Source: World Bank 2004.

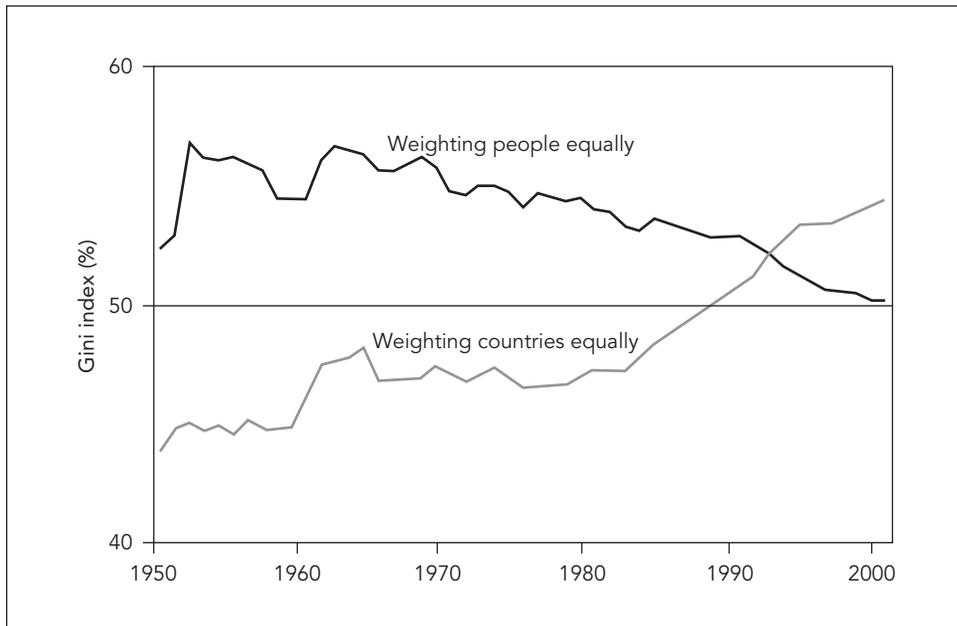
On average there is no systematic relationship between changes in income and within-country inequality. Among growing economies, inequality tends to fall about as often as it rises (Ravallion 2001).

### *Trade Integration and Its Distributive Impact*

How much of these trends in global income distribution is related to globalization and, more specifically, to international trade flows? This issue has been fiercely debated in academic and public circles. Skeptics consider the competition of international trade and foreign direct investment as a major source of the loss of jobs, wages, and income of the poor or are concerned about the unequalizing effects of trade integration on domestic economies. In contrast, many trade economists welcome trade flows as an important source of the gains that contribute to improving conditions for the vast majority of people in the world.

A popular way to assess the distributive impact of trade liberalization has been cross-country regression analyses, which relate levels of measured inequality or

**FIGURE 3.**  
**Gini Indices of per Capita GDP across Countries under Alternative Weighting Schemes, 1950–2000**

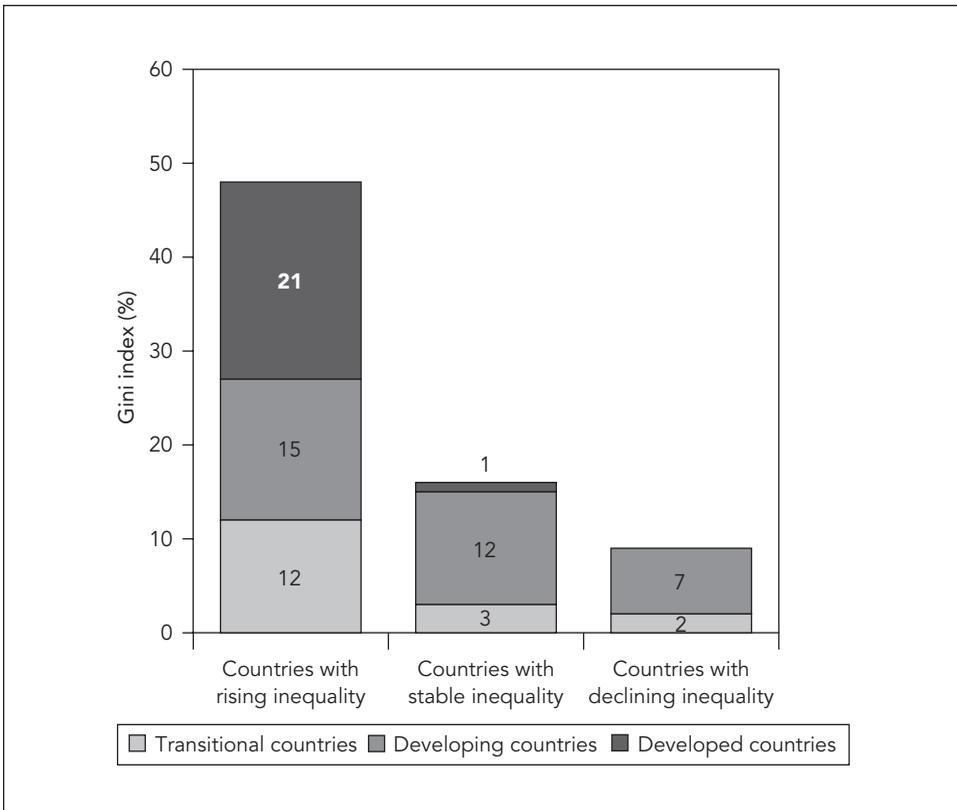


Source: Milanovic 2004, cited in Ravallion 2004.

changes over time in measured inequality or poverty to data on trade openness and other control variables. Dollar and Kraay (2001, 2002a, 2002b) find that increased international trade integration has no systematic impact on inequality. As trade openness is also shown to be positively associated with growth (Frankel and Romer 1999), the effect of trade integration is concluded to be the same across all income groups (in the sense that each decile's gain is proportional to its initial income) (Berg and Krueger 2003). Other panel data analyses have found trade liberalization to be positively associated with inequality, at least for poor countries (Lundberg and Squire 1999; Barro 2000; Ravallion 2001; and Milanovic 2003b).

Cross-country regressions on the trade-growth-poverty nexus have been heavily criticized (Rodriguez and Rodrik 2000; Baldwin 2003; Bhagwati and Srinivasan 2002; Bardhan 2003; Ravallion 2003). Beyond the obvious concerns about cross-country comparability of data and methods on inequality measures (Aktinkson and Brandolini 2001) are questions about how to measure trade integration. Which variable is used to capture the impact of trade liberalization (trade instrument or trade flows) matters a lot for the significance of the correlations. And difficulties arise in teasing out the causality links running from genuine trade policy variables and growth performances at the cross-country level. More fundamentally, aggregate inequality or poverty measures may not change with trade liberalization, even though there are both losers and winners from trade integration at all income levels. A given change in trade policy may help some people escape poverty while forc-

**FIGURE 4.**  
**Income Inequality in 73 Countries, 1960s to 1990s**



Source: Cornia and Kiiski 2001.

ing others into poverty, even though the aggregate poverty rate may not change significantly. Looking only at aggregate levels can thus conceal the distributive impact of trade flows.

Given the limitations of the cross-country evidence, analysts have turned to detailed analysis of country case episodes of trade liberalization and microeconomic studies of specific channels through which trade integration can have distributive impacts.<sup>11</sup> Bhagwati and Srinivasan (2002) and Panagariya (2002) have argued that country case studies are more likely to reveal the effects of trade liberalization than cross-country econometric analyses. Country case studies provide useful information on particular experiences and provide a rich institutional description of the trade liberalization episode. They are, however, subject to limitations. First, there are many countries, many liberalizing cases, and many different contexts. Drawing general relationships based on one country or one time period may be difficult and even hazardous, as one can never completely control for the specific factors of the case study. Second, several other aspects often occur at the same time as trade policy changes. Ascribing causality through a case approach requires great care and contextual

knowledge, some of which is difficult to formalize and therefore always subject to some degree of interpretation.<sup>12</sup>

What, then, do micro-studies teach us about the linkages between trade and inequality or poverty? Because labor earnings are a major component of income, not surprisingly much of the literature has concentrated on the impact of trade flows and trade reforms on labor markets and wage dispersion between skilled and unskilled workers.

In the case of developed economies, this has given rise to the huge “trade and wage” literature, which investigates the cause of rising wage inequality in the United States and related employment phenomena in other countries.<sup>13</sup> Although some methodological issues remain unresolved, researchers using a variety of approaches (product price-wages effects, factor content computations, cross-industry and time series analyses) have demonstrated that international trade accounts for no more than 20–30 percent of the rise in the wage premium in the United States (Feenstra and Hanson 1996a; Borgas, Freeman, and Katz 1997; Baldwin and Cain 2000). The bottom line, therefore, is that international trade explains a positive and significant but relatively small share of the increase in wage inequality or unemployment witnessed in developed countries in recent decades (Slaughter 1998; Dewatripont, Sapir, and Sekkat 1999). A caveat about this literature is that it has been framed mainly within the context of North-South trade. The findings therefore fail to take account of intraindustrial trade, intrafirm trade, and trade-related technological change, probably the most significant drivers of changes in distribution (Francois and Nelson 2000).

There is no dispute about the sign of the effect of trade flows on labor markets in the North; the empirical evidence in developing countries is less clear. Rama (2003) provides a useful survey of the literature. First, there is evidence that wages tend to grow faster in economies that integrate with the rest of the world: while trade may have a negative impact in the short run, the effect becomes positive within a few years. The impact of foreign direct investment is highly positive even in the short run.

Second, the benefits from trade integration are not evenly distributed across workers. A variety of studies reveals an increase in the wage premium to skills, particularly in Latin America.<sup>14</sup> The increase in this wage gap seems to be associated with skilled-biased technological change triggered in part by increased foreign competition (that is, trade-induced technical change) (see Attanasios, Goldberg, and Pavnick 2003 for Columbia; Pavnick and others 2002 for Brazil; and Sanchez-Paramo and Schady 2003 for a comparative study of five Latin American countries). Overall, however, these effects cannot fully explain the increase in wage inequality observed over the period, suggesting that the impact of trade liberalization on the labor market may not be very sizable.

Third, there seems to be a “continental divide.” Controlling for changes in domestic factor supply, Robbins (1995, 1996) finds that greater openness has led to decreasing inequality between skilled and unskilled workers in most of the East Asian countries in his sample. In contrast, in the five Latin America countries studied, trade

liberalization has been associated with increased wage inequality. Wood (1997) argues that the difference stems from the difference in timing between the two liberalization experiences: East Asian countries liberalized in the 1960s–1970s, whereas Latin American countries did so in the 1980–1990s. The entry of large low-income countries (like China) into world markets coinciding with Latin American liberalization could explain the difference of outcomes along conventional Samuelson-Stolper Theorem lines.

Finally, many micro-studies reveal that trade liberalization has far smaller effects on intersectoral reallocation than predicted by the conventional mechanism of the Samuelson-Stolper Theorem.<sup>15</sup> In a recent article that examines 25 trade liberalization experiences in developing countries using internationally comparable sectoral labor data, Seddon and Wacziarg (2003) conclude that trade liberalization has little sectoral reallocation across sectors, even at the three-digit level within manufacturing. Looking at the reallocation of labor from import-competing sectors to export-oriented sectors in China, India, Indonesia, Malaysia, the Philippines, and Taiwan (China) in the 1980s and 1990s, Ghose (2000) finds evidence that trade liberalization accelerated employment growth in both export- and import-competing sectors for most of the countries in the sample.

The micro-studies have attributed this intersectoral “sluggishness” of the labor market to broad market rigidities (Seddon and Wacziarg 2002), to labor regulations, or to various adjustment processes by firms that can reduce margins or increase productivity rather than lay off workers (Currie and Harrison 1997). Erdem and Tybout (2003) confirm this pattern of adjustment to trade liberalization by firms through productivity gains, summarizing work that uses microenterprise or firm data to examine the effects of five trade-liberalizing experiences in developing countries (Brazil 1991–94, Chile 1973–79, Côte d’Ivoire 1985–87, India 1991, and Mexico 1984–89). Virtually all of the studies find productivity rises in import-competing sectors. These gains are attributed to exit by less efficient producers, investment by firms in capital and new technologies, and reduction of inefficiencies in their production process.

Significant effort has also been made to assess the impact of trade liberalization on the bottom of the income distribution, that is, the link between trade and poverty. McKay, Winters, and Kedir (2000) and Bannister and Thugge (2001) provide recent surveys of the literature, which shows that trade liberalization can affect poverty through many links. While there is a general presumption that trade reforms enhance the static and dynamic opportunities of the poor and have done so in a number of cases (China and India, for instance), the impact of trade integration on poverty is very country specific and depends on the initial local conditions before liberalization. While it is not possible to make a general statement about the effect of trade on poverty, a few observations can be made:

- Trade liberalization that promotes agriculture is more likely to reduce poverty.
- The existence of efficient distribution channels helps ensure that the poor receive the benefits of increased incentives and access to imported inputs.

- Access by the poor to assets (human and social capital) is critical to enable them to adopt effective supply responses.
- Safety nets are needed to shelter agents who may inevitably become losers and pushed into poverty after trade liberalization.

### *What Can We Conclude about the Distributive Impact of Trade Integration?*

Although each approach has its own limitations, put together they point to the following set of statements about the effects of trade on poverty and inequality:

- Absolute global poverty has decreased, and the reduction is related to growth in some large poor countries. As there is a positive correlation between growth and trade openness, trade does not seem to be systematically biased against the poor, although the local impact of trade on poverty is very country specific.
- There is mixed evidence on the relationship between trade integration and within-country inequality. While North-South trade integration contributed a significant but small part of the increase in wage inequality in developed countries, the impact of trade liberalization in developing countries is mixed and depends on the continent, the timing, and the pattern of specialization.
- The channels through which trade integration affects income distribution have less to do with the conventional Samuelson-Stolper Theorem logic than is conventionally assumed. Some channels have to do more with changes in rent-sharing arrangements between workers and firms, trade-induced technological change, technology or technology catch-up, and increased internationalization of production and outsourcing.

### **Perceptions and the Potential for a Political Backlash against Globalization**

These conclusions lead many economists and policymakers to think of trade integration as a rather socially benign phenomenon. Some economists, such as Freeman (2003), go so far as to conclude that international trade flows are having such a small global impact on labor markets that one can wonder why there is so much ado about nothing.

These rather positive, or at least neutral, positions are at odds with the perceptions shared by demonstrators in the streets and critics of the process of globalization. As Mayda and Rodrik (2002), Scheve and Slaughter (2001a, 2001b), and O'Rourke and Snotty (2001) show, public opinion is generally more skeptical about the benign impact of trade flows than most trade economists are. Given the intensity of the debate (and demonstrations in the street), substantial research effort has been devoted recently to assess and understand these alternative positions (Deardorff 2003; Aisbett 2003; Bardhan 2003; Elliot, Kar, and Richardson 2003).

### *Different Perspectives on the Distributive Dimensions of Trade Integration*

The way people in the street and civil society more generally conceive the distributive impact of trade flows is very different from the way economists tend to discuss the same distributive issues. Kanbur (2001) emphasizes four dimensions on which conceptions tend to vary: the level of aggregation, the time horizon, monetary versus multidimensional measures, and relative versus absolute measures.

Concerning the level of aggregation, the standard economic approach tends to consider measures at the global, national, or regional level, focusing on average effects. In contrast, critics of trade integration are more sensitive to individual and local trajectories. For instance, while economists might be content with a situation in which the total number of poor decreases, critics may not be satisfied if some of the poor are made poorer. As Aisbett (2003) argues, economists tend implicitly to assume a utilitarian social welfare function in which tradeoffs across individual destinies are possible. The alternative approach may be viewed as applying some sort of Rawlsian social criterion by which the position of people who are already poor should be improved.

Implicit differences in time horizon also explain differences in perceptions. Economic analyses tend to take a medium-term perspective, in which markets have time to adjust to changes in the environment. Hence the view, for instance, that after a trade shock, export sectors will expand, creating new job opportunities and allowing a smooth reallocation of resources from import-competing sectors. A shorter-term view would emphasize the immediate loss of income and adjustment costs of displaced workers due to more intense foreign competition. Related to the time horizon issue is concern about time irreversibility effects and the associated lack of capacity for mobility. Some losers from trade integration may remain permanent losers when their specific skills are rendered obsolete by the trade shock and their ability for retraining is limited (due to age or geographic immobility).

A third issue is whether measures for poverty should be reduced to monetary dimensions. There is by now a large consensus among analysts that dimensions such as health and education have to be integrated in policy assessments on poverty outcomes (Kanbur 2001). Other dimensions, such as empowerment, participation, and vulnerability to shocks, are also gaining acceptance as important aspects of poverty. These dimensions are harder to quantify, however, and despite the growing consensus about the appropriateness of using multidimensional poverty measures, they are not applied in empirical analyses of trade integration and poverty (Kanji and Barrientos 2002).

Finally, economists tend to favor relative measures, such as the incidence of poverty (the percentage of people considered poor in the population) or the use of Gini coefficients to describe income distribution. In contrast, critics tend to emphasize absolute measures of poverty or inequality (such as the total number of poor or absolute differences in incomes).<sup>16</sup>

Differences in perceptions may be due to differences in emphasis in terms of what inequality or poverty means. Opposition to free trade may also reveal more funda-

mental cleavages in terms of the distribution of the gains and costs from trade.<sup>17</sup> Economists tend to overlook three issues in their analyses of the distributive impacts of trade integration. The first is the perceived feeling of insecurity and stress generated by trade liberalization. The second is the fact that people care about social status, relative income positions, and fairness in the distribution of income. The third is the fact that many concerns have to do with the domestic political economy feedbacks of trade liberalization and the implied consequences for redistribution by national governments.

### *Insecurity, Anxiety, and Trade Integration*

The link between economic integration and worker insecurity fuels public opposition to policies aimed at liberalizing international trade and foreign direct investment flows. Indeed, beyond the impact of trade integration on average income levels, individuals care about market risks and the implied volatility for their income. Trade openness may increase the economic risk borne by economic agents in several ways. First, exposure to international trade may increase economic volatility in domestic prices (Rodrik 1997). Second, trade may induce increased specialization in productive activities away from optimal diversification. Trade integration may also increase the price elasticity of labor demand and render workers more vulnerable to other shocks in the economy. These effects may be felt by workers without any actual observed change in prices or trade flows.

The nature of trade may also affect perceptions about economic insecurity. It is generally thought that intraindustry trade flows based on economies of scale generate fewer distributive conflicts than interindustry trade flows based on differences in endowments. In the first case, both scarce and abundant factors tend to gain (Helpman and Krugman 1985), while the usual Samuelson-Stolper Theorem conclusions imply that scarce factors automatically lose. The adjustment process is thought to be more costly when resources have to move across sectors than when they have to be shifted across firms within the same sector. One aspect somehow overlooked, though, is the fact that with intraindustry trade, there is also increased ex ante uncertainty about who bears the adjustment cost. From an individual point of view, anybody can be hit within a particular sector, and the identity of losers is not as well defined as when trade is based on endowment differences. The number of people who might be affected (even temporarily) by trade openness increases, which may increase feelings of insecurity.<sup>18</sup>

The empirical evidence on the impact of international trade flows on economic insecurity is mixed. Rodrik (1997) presents evidence that exposure to external risk from trade—as measured by the standard deviation of a country's terms of trade interacted with its degree of trade openness—is positively related to growth volatility. In contrast, Iversen and Cusack (2000) present evidence suggesting no correlation between trade openness and volatility in output or employment, at least in developed countries.

There is mild empirical evidence of a trade-increasing effect on the elasticity of labor demand (see Slaughter 2001 for the United States; Fajnzylber, Maloney, and

Ribeiro 2001 for developing countries). Results on foreign direct investment and the globalization of production by multinational firms are stronger (Fabbri, Haskel, and Slaughter 2003). Consistent with this finding, Scheve and Slaughter (2003) present evidence, based on analysis of individual-level panel data from the United Kingdom for 1991–99 that foreign direct investment in the industries in which individuals work is positively correlated with individuals’ perceptions of economic insecurity.

To understand how this dimension may create a discrepancy between public opinion and the views shared by many economists, it should be recognized that these vulnerability effects may have strong effects at the individual level without being detected at a more aggregate level. Aggregate inequality measures such as the Gini coefficient, which are static snapshots of countries’ income distributions, mask a great deal of movement up and down the income ladder. Moreover, although microstudies suggest that trade liberalization does not induce major labor reallocation effects across sectors, churning occurs across firms and plants within sectors (Seddon and Wacziarg 2003; Levinsohn 1999).

### *Relative Losers and Fairness in the Distribution of the Gains of Trade*

It is well established that, beyond a certain level of absolute income, individuals’ satisfaction is partly determined by how they compare themselves with others in their reference group and by concerns about fairness and reciprocity (Fehr and Schmidt 2000). As a result of this phenomenon, situations that would appear as “win-win” from the point of view of standard economic analysis may not appear so once individuals share a concern for their relative position and fairness in the distribution of the gains from trade (Aisbett 2003).

Indeed, the fact that the gains from trade are distributed unevenly may enter negatively into some people’s preferences. Even if they receive something positive in absolute terms, individuals may be upset about receiving less than others. If they have a concern for social status and relative positions, they may suffer from the new situation if it occurs within their reference group. Graham (2001) argues that inequality in the distribution of the gains from trade may be an important element explaining the negative perceptions of globalization among the poor and lower middle class in developing countries. By providing an ever-higher benchmark for comparison, top-driven inequality induces people to underestimate their own positive gains.<sup>19</sup>

When the gains are perceived as a windfall, a very unequal distribution is perceived as unfair. This has been shown repeatedly in the experimental and behavioral economic literature (as illustrated, for instance, by the “divide-the dollar” game modeled by Fehr and Schmidt 2000). The distribution of the gains from trade may well be perceived as being very much independent of one’s own efforts. Gaining from trade can be viewed as the result of having had the luck to be in the right (or wrong) sector, in the right (or wrong) firm, with the right or (wrong) timing when trade liberalization occurs. In this case, gains and costs will be considered largely as windfalls, to be shared equally.<sup>20</sup>

## Trade Integration and the Redistribution of the Gains from Trade

Many concerns about trade integration are related to the capacity and willingness of governments to affect their redistribution of income and resources domestically. This is first manifested in a fear of decreased capacity or autonomy of national governments and the perceived loss of democratic process associated with it. The competitiveness constraints imposed by external competition on domestic firms and workers are perceived as reducing the ability of governments to manage their domestic redistributive policies or regulations, although regulations may reflect legitimate national preferences (on cultural and social cohesion, the environment, health, ethical goods). This is reinforced by the feeling that international trading rules, imposed through the World Trade Organization (WTO), increasingly determine these policies. An often-cited variant of this position is the idea that trade and the international organization of production by multinationals generate outcomes that are naturally biased toward the interests of mobile economic factors (capital, skilled labor) and prevent governments from redistributing the gains in favor of immobile or less mobile factors (land and unskilled labor).

An important and key aspect stems from political economy considerations and the link between economic resources and political power. The more polarized is the distribution of the gains from trade across domestic residents, the more concentrated is political power and influence inside the economy. This, in turn, is expected to feed back on the nature of the domestic equilibrium of redistribution (Bardhan 2003) and to induce the implementation of policies further biased toward narrow political interests.

Political feedback effects need not be limited to redistribution within countries. When agents have multinational activities and can successfully pressure their own governments to obtain concessions from foreign governments, this induces further distributive consequences between countries. Deardoff (2003) and Aisbett (2003) present a good case of the influence of “big business” at the WTO in the design of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) or the North American Free Trade Agreement (NAFTA), with its notorious chapter 11, which gives foreign direct investors a private right of action against host country governments.

These views clearly differ from the broad consensus among trade economists that trade openness is not systematically biased against the poor and that a relevant redistribution from winners to losers can make everyone better off. Public opposition is fed by the fear that the relevant redistributive arrangements will not be realized and that trade integration is affecting the capacity or willingness of governments to provide these compensation mechanisms.

Does this fear make sense? What do we know about the economic and political feasibility of an open trade regime with compensation? To explore these positive dimensions, this section starts with some conceptual considerations in the economic literature on the government’s capacity to redistribute gains from trade in an economy open to international trade. It then turns to political economy feedbacks of trade

integration and briefly reviews what is known about the relationship between trade integration and the political willingness and ability of governments to implement domestic redistribution. This discussion paves the way for the last part of the paper, which takes a more normative stance and considers the likelihood of adopting a "socially responsible" trade policy regime with compensation.

### *Economic Feasibility: Why Is It Difficult to Redistribute the Gains from Trade?*

An obvious reason why it might be difficult to redistribute the gains from trade is the lack of resources to do so. Raising taxes requires a minimum fiscal infrastructure, and it involves administrative costs. Even with an efficient system and no corruption, these costs can be significant. Some instruments may be less costly than others. A classic argument is that trade taxes are less costly to administer than other instruments, such as value-added or income taxes. For poor economies in which tariff revenues account for a sizable fraction of their fiscal revenues, trade liberalization may render redistribution and compensation difficult or impossible. The initial tariff structure may, however, be such that tariff revenues are not maximized. In such a case, a trade reform rationalizing the country's tariff structure may actually increase the size of the tax base, thereby increasing revenues available to the government (Ebrill, Stotsky, and Gropp 2002).

More fundamentally, the "technical" assumption underlying the idea that the gains from trade can be redistributed without causing problems within an economy is the existence of nondistortionary (lump-sum) transfers that can be freely used by governments to tax winners and compensate losers. In reality, there is no such thing as a lump-sum tax. Still, the consensus in the optimal taxation literature is that if the government has enough tax instruments to redistribute income across individuals, it is optimal to keep production efficient, implying that the government should not use tariffs, production subsidies, or taxes in a small open economy. In such a case there is complete separation between production efficiency (what trade economists are often most concerned with) and domestic redistribution.

Dixit and Norman (1980) were among the first to show that a free trade regime could be made superior to autarky for everyone in society, even without lump-sum transfers. The gains from trade could be redistributed by using appropriate commodity taxes and taxes contingent on the various factors of production. Diamond and Mirrlees (1971) show that for a government using commodity taxes and perfect contingent factor taxes, production efficiency is optimal, even when the government is concerned with optimal income redistribution. In a small open economy, the production efficiency result implies that domestic production prices have to be equal to international prices, precluding the use of trade taxes or restrictions.

The problem with the Dixit and Norman and Diamond and Mirrlees taxation schemes is that they require relatively strong informational assumptions on what the government needs to know about the characteristics of the agents. For instance, if production involves different types of workers differentiated by skills, taxes contin-

gent on factors require that the government implement different tax rates for different skill levels. Since, however, the government cannot have full information and verify and differentiate the skill levels of workers because of asymmetric information problems, this kind of factor taxes would not be feasible.<sup>21</sup>

When weaker informational requirements are made on the corrective or redistributive instruments available to the government, it is difficult to separate production efficiency from redistributive and equity aspects. It is also likely that trade liberalization has implications for the capacity of the government to redistribute resources, in particular the gains from trade generated by openness. Naito (1998), Guesnerie (1998), and Spector (2001) explore this issue more systematically.<sup>22</sup>

To understand the basic forces through which trade integration may affect the redistributive capacity of the government, consider the initial situation of an economy with skilled workers and unskilled workers producing different goods. This economy is initially closed to the rest of the world. The government has a distributive objective of transferring income from skilled to unskilled workers. However, it lacks information on individual skills and makes redistribution based only on observable income levels. Because of this lack of information on individual characteristics, the amount of possible redistribution is constrained by incentive compatibility conditions related to the labor supply decisions of agents. In order to relax these constraints on income redistribution, it is optimal for the government to use as many instruments as it can. Therefore the optimal solution involves affecting factor prices and reducing the wage gap between skilled and unskilled workers (manipulating production prices). When the economy opens to international trade, the demand elasticity for its goods—and therefore for the different types of labor—tends to increase. In the extreme case of free trade in a small economy with homogenous commodities, domestic production prices are pinned down by international prices, and wages are also fixed. It is no longer possible for the government to affect domestic wages, and one of the two redistributive tools available in the closed economy context becomes ineffective. Two implications follow from this conclusion. First, if the government can distinguish domestic production prices from international prices through the use of a tariff, it will be welfare improving to do so (Naito 1998). Second, if international agreements or fear of capture by protectionist interests makes doing so impossible, the capacity to redistribute income domestically is limited. When the gains from trade are not large enough, the losers from free trade cannot be fully compensated, even if policymakers want to do so (Spector 2001; Guesnerie 1988).

While expressed in a very stylized framework, this line of research emphasizes a force underlying the concerns expressed by critics of trade liberalization. Trade openness may reduce the capacity of governments to undertake the domestic redistribution they wish, because the tools available for domestic redistribution are not powerful enough. There is no way to separate the issue of internal redistribution from the issue of opening up the economy to trade flows.<sup>23</sup>

The idea that governments are impeded from redistributing domestic income after openness because factor prices are less sensitive to local interactions underlies the

usual argument that openness tends to bias redistribution in favor of mobile agents and factors of production, at the expense of immobile agents or factors (Rodrik 1997). When one factor of production can move across borders without significant cost, its price is fixed by international market conditions. When domestic taxation is imposed on that factor, the adjustment process tends to occur by the mobile factor moving outside the country in order to get the same domestic after-tax return as the international return. Remaining immobile factors inside the economy must then bear the full burden of the tax-induced adjustment, and there is no capacity to redistribute income from the mobile factor toward the immobile ones. This effect underlies all of the literature on tax competition with capital mobility, foreign direct investment, and firm delocalizations.

### *Political Feasibility I: The Political Economy Feedbacks of Trade Integration on Redistribution*

The preceding arguments help us understand why the capacity of national governments for domestic redistribution may be affected by trade liberalization. Several observers have also pointed out that trade openness can interact with the willingness of governments to provide domestic redistribution and fiscal policy. In other words, international trade may affect the domestic political equilibrium of internal redistribution (Bardhan 2003; Boix 2002) and induce various types of political economy feedbacks, positively or negatively affecting the redistribution of resources inside the economy.<sup>24</sup>

A well-established tradition in political sciences studies how trade openness shapes the structure of the economy in a way that facilitates the formation of organizations and interests imposing high redistributive demands on the state (Cameron 1978; Katzenstein 1985). Cameron (1978) argues that small open economies are characterized by a high degree of industrial concentration, with a small number of large firms holding a large share of production and employment. Because of small domestic markets and external competition, these countries specialize in a small number of sectors. The high domestic level of industrial concentration and the low level of fragmentation of the labor force facilitate the emergence of employers' associations and strong centralized labor unions. Two elements promote the implementation of intensive domestic redistribution through an expansion of the public sector: unions contribute to the formation of strong social democratic and labor parties pursuing an intensive redistributive agenda, and centralized wage bargaining at the national level leads to nationwide corporatist arrangements. These "social pacts" moderate wages to maintain external competitiveness in exchange for expansion of public expenditures in areas such as unemployment benefits, health, pensions, and education.

Katzenstein (1985) expands this view in his analysis of small corporatist European states by acknowledging that small open economies are at the mercy of external economic fluctuations. This, in turn, implies public demand for social insurance, which policymakers satisfy through extensive arrangements with unions and employers.

Workers accept wage moderation and flexible procedures to allow for adaptations to fluctuations in the world demand, in exchange for which losers are compensated through generous unemployment coverage. The state also undertakes full-fledged public programs in education and physical capital formation to secure the competitiveness of the economy. Rodrik (1998) presents a formal illustration of Katzenstein's argument. In his model, trade openness tends to increase the extent of domestic redistribution in small open countries in order to satisfy the domestic demand for social insurance associated with the risks faced in the international economy.

Trade openness may have positive political economy feedbacks on the domestic demand for insurance and redistribution. As expressed by some critics of globalization, trade integration may also trigger negative feedbacks on the domestic political equilibrium of redistribution.

One channel is related to the "first-round" distributive impact of trade integration in the economy and the possible redistributive responses of the political system to this impact. To see this, consider that trade liberalization induces an increase in income inequality in a country. If the country is a perfect democracy, in which domestic redistribution is decided by majority voting, this increased inequality is likely to increase the social demand for redistribution among the lower-middle class. As these people are politically influential, their demands will be satisfied by political parties competing for votes.<sup>25</sup> If, however, political competition is far from perfect or political outcomes are determined largely by influence and money, then an increase in inequality may render the rich relatively more politically influential than the lower classes. Consequently, the resulting political equilibrium may well end up with less income redistribution. Polarization in the distribution of the gains from trade would induce polarization in domestic political power, which in turn would feed back into further income or welfare polarization after government intervention. This view is quite consistent with the concern that polarization of the gains from trade may lead to regressive outcomes in domestic redistribution in countries with weak political governance structures.

What does the empirical evidence tell us about the redistributive impacts of trade integration? Several cross-country analyses have shown that higher levels of trade are systematically associated with a larger public sector, both for developed and developing countries. Cameron (1978), looking at OECD (Organisation for Economic Co-operation and Development) countries between 1960 and 1975, observed that the best predictor of an increase on the size of the public sector as a share of GDP was the degree of trade openness, as measured by the sum of exports plus imports over GDP. Rodrik (1998) has extended the result of a positive association between government consumption and trade openness to a larger set of countries, including developing economies. Other empirical research by political scientists tends to confirm the robustness of the relationship (Garrett and Nickerson 2001; Adserà and Boix 2001), with the added twist that the positive relationship is more likely to hold for democracies than for nondemocratic governments.

Cross-country analyses have their limitations, and their conclusions should be accepted with caution. In particular, the macroeconomic variables used as proxies

of government redistribution may hide different aspects in different countries with different ways and modes of redistribution. Mahler (2001) tries to compensate for these aspects by employing measures of post-government disposable incomes and market incomes that have been calculated for OECD countries from household-level income surveys available in the 1980–90 Luxembourg Income Study. The advantage of the Luxembourg Income Study is that it provides information that is comparable across countries and provides comprehensive dimensions of sources of income at the household level. By comparing the Gini coefficient of the market income distribution to that of the income distribution after taxes and transfers, one can construct a country measure of direct fiscal redistribution. The evidence Mahler presents suggests that trade openness is negatively associated with his measure of fiscal redistribution, while the opposite holds for outbound foreign direct investment. These results thus offer only mixed support to the preceding cross-country analyses. Those analyses may be partly reconciled with the political science literature on small open corporatist countries by recognizing that part of the redistributive dimensions negotiated within these economies may not be well captured by direct fiscal redistribution. In OECD countries, public education, active labor market policies, regulations, and the provision of public goods may also have important indirect distributive consequences, for example.

### *Political Feasibility II: Trade with Compensation or Protectionism? That Is the Question*

In the literature discussed above, the level of trade exposure is considered exogenous to the political decisions of domestic actors. To understand the potential for a political backlash against trade integration and to draw some policy implications from such a potential, it is also important to take into account the fact that the decision to open up the economy to foreign goods is determined by domestic political forces. As Adserà and Boix (2001) note, scholars trying to explain trade policy with political economy considerations too often tend to disconnect the choice of trade policy from the choice of other redistributive instruments. As both trade policy and fiscal policy are means of redistributing income across economic agents, it is important to adopt a framework in which both types of instruments can be jointly determined by the political process. Such a framework could then provide insights into when protectionism without other forms of compensation is likely to occur and when trade with compensation emerges as a political equilibrium.<sup>26</sup>

Several reasons have been suggested to explain the use of trade policy to redistribute income in a country rather than some other domestic instrument. One explanation has to do with the fact the total excess burden of trade policy may be lower than alternative, more economically efficient instruments once the resource costs involved in the political process (such as those generated by competition for political influence) are taken into account.

Another set of reasons has to do with the existence of incomplete or asymmetric information. As the public finance literature shows, when the power of fiscal instru-

ments to redistribute income is weak because of asymmetric information and poor incentives, it may be optimal for the government to introduce trade restrictions. A more political dimension concerns the existence of asymmetric information between voters and politicians. In such a context, choosing a less transparent instrument (such as a tariff or a rule of origin), even at the cost of economic efficiency, may help politicians disguise the fact that they are redistributing income to specific groups, something that voters might penalize if they knew (Coates and Morris 1995). Finally, when there is uncertainty about who will enjoy the gains from trade after liberalization, there is a status quo bias against reforms, even when welfare is known to increase *ex post* for a majority of individuals (Fernandez and Rodrik 1991).

Adserà and Boix (2001) emphasize an important dimension that helps explain the emergence of protectionism instead of trade with fiscal compensation: the capacity for winners to fully compensate losers once the reform is done. Take, for instance, the case in which winners are well identified but a minority. Suppose also that trade integration generates global gains but also increases the capacity of the winners to escape domestic taxation (because openness increases their trading or productive opportunities, their mobility, or both). If these winners can commit *ex ante* to redistribute part of the gains of trade to the losers, trade integration with compensation is possible. If however, such commitment is not made or is not credible, then the majority is likely to oppose resistance to trade openness.<sup>27</sup> An interesting implication of such reasoning is the fact that protectionism is less likely to occur in countries that have good political commitment technology, that is, strong parties and well-functioning institutions through which politicians can be bound by their promises.

The time inconsistency issue is also useful for explaining why losers prefer protectionist policies over trade liberalization with efficient income compensation. Once protection such as a tariff is granted, losers have no incentive to change occupation and relocate into expanding export-led sectors. This policy-induced persistence of their sector, and therefore their political capacity to obtain compensation by the government, may be viewed as a political commitment technology against the previously discussed problems of time inconsistency about compensation.<sup>28</sup>

A vivid example of this kind of situation in Europe is the policy of price support to farmers. For them, obtaining tariff protection and price support mechanisms is a much better way to receive compensation for competition from developing countries than accepting a free trade regime associated with a transfer in the form of lump-sum compensation and retraining subsidies (to help them move into other sectors). Even if they could be exactly compensated and left indifferent in terms of economic welfare between the two options, they are more likely to prefer the first one. Given lump-sum compensation and retraining subsidies, farmers would leave their farms, get involved in other activities, and lose their size and identity as members of a particular sector. Their political base and capacity to organize politically would be eroded, as would their ability to sustain compensatory policies. Eventually, the government would be able to implement a free trade regime with no compensation at little political cost. Getting a tariff or a price support that allows the sector to endure is a much better way to ensure that compensation will be paid over time.

Critical to making an open trade regime politically viable in the long run is ensuring that losers are adequately compensated after the change of policy. Under what circumstances is an open trade regime with compensation likely to be politically sustainable? Which kind of mechanism can make winners commit to redistribute the gains to the losers (absolute and relative) under the constraint that the losers do not prevent economic restructuring associated with trade integration? Is it possible to do so?

Boix (2002) examines an instructive set of historical examples to uncover the circumstances under which a free trade regime with compensation may emerge. He contrasts the trade policy regime adopted by the two self-governing colonies of Victoria and New South Wales at the end of the nineteenth century (1890–1900), before the formation of the Australian Commonwealth. The two regions represent a kind of laboratory experiment in the sense that they shared similar population sizes, living conditions, economic structures, endowments, and political institutions (both were parliamentary democracies with a two-chamber parliament, the upper house representing the propertied interests, the lower house elected through universal male suffrage). In New South Wales a free trade regime was supported by a coalition of free trade interests, the lower-middle class, and the urban working class. Under this regime tariffs were kept low in exchange for the introduction of land taxes, progressive income taxes, and generous public expenditures. In contrast, in Victoria protection was imposed by a coalition of protectionist interests and labor, in which workers supported high tariffs in exchange for wage legislation and regulations, ensuring that part of the gains of protection were passed directly to workers through high wages.

That a free trade policy regime can emerge as a politically sustainable outcome when sufficient fiscal redistribution is imposed domestically is also illustrated by the case of Britain at the beginning of the twentieth century. The Liberal Party won the 1906 elections with a vigorous position on state intervention, in order to defend Britain's commitment to free trade. In response to the economic downturn of 1907–08 and stagnant real wages, which created popular pressure for protection, the Liberal government created an old-age pension program, raised land taxes, and introduced trade boards establishing national insurance for sickness, disability, and unemployment. This combination of free trade and broad compensation schemes pushed Conservatives, even those initially opposed to tariff protection, onto the protectionist side (Blewett 1972).

In a similar vein, Cameron (1978), Katzenstein (1985), and Baldwin (1990) have described how a trade openness strategy was possible in small open economies, such as the Scandinavian countries, when it was associated with fiscal redistribution and universalist compensatory policies.

These historical examples suggest the importance of the political credibility of the instrument used to redistribute income to workers. When export interests had the capacity to organize a coalition based on domestic fiscal redistribution, an open trade regime was sustainable. When income redistribution to workers was obtained by manipulating factor prices linking the level of wages to domestic commodities' prices, a political alliance was forged between labor and protectionist sectors.

What determines the political credibility of one type of redistribution rather than another is not obvious from the examples presented by Boix (2002). Certainly, idiosyncratic circumstances about the feasibility of particular political coalitions mattered. Building, however, on the previous conceptual discussion of the redistribution of the gains from trade, a number of structural factors promoting one outcome rather than another can be suggested.

First, when the government has powerful enough fiscal instruments, the need for redistribution through wages and prices is reduced. This is likely to promote the credibility of an open trade regime with compensation. The efficiency of the fiscal instruments in turn depends on two aspects. One is related to the elasticity of the tax base, which is determined by informational and mobility characteristics of the factors to be taxed. The second relates to the political capacity of these factors to oppose redistribution through taxation. The less elastic and less politically influential is the targeted tax base, the more likely a free trade and compensation regime is.

Second, the existence of political institutions able to sustain credible intertemporal political deals facilitates a political commitment in which winners compensate losers. As Cameron (1978), Katzenstein (1985), and other political scientists have noted, a low degree of political fragmentation and the existence of centralized economic associations reflecting trade and labor interests promote the capacity of politicians to devise such political arrangements.

Third, the broader the type of compensation proposed in the deal, the more politically sustainable trade with compensation is. First, in order to fully capture the gains from trade openness, compensation should not prevent the adjustment and reallocation of resources across sectors and regions. Compensation should therefore be made on dimensions that facilitate (or at least appear as neutral to) this process of adjustment. Second, public expenditures and redistribution on broader areas, such as education, health, and social insurance, help exploit the potential for multidimensional political tradeoffs. As these programs affect a broad set of individuals, they are more difficult to reverse politically. Potential losers may accept the risks of being hurt by trade integration if in exchange they obtain other types of compensation, such as insurance and social benefits. Trade interests and identified winners may be less reluctant to pay for compensation when redistribution improves their *ex post* efficiency (an example would be training, which increases the skill pool of workers they may need to employ) and promotes social peace and a stable investment climate. In other words, redistribution that gives losers access to social assets that complement the interests of the trade-oriented sectors is likely to facilitate an open trade regime with compensation in a politically credible way.

Fourth, the virtue of economic transparency on redistributive instruments may, to some extent, conflict with the political credibility and sustainability of compensation mechanisms. This case is particularly acute when losers have veto power on the decision to open the economy to trade but are not politically influential about decision-making for less distortive compensation schemes. Too much transparency weakens the commitment capacity for compensation after openness, making the current losers reluctant to abandon their veto power on trade liberalization. A delicate trade-off may be faced under such circumstances.

### “Socially Responsible” Trade Integration with Compensation

The preceding section examined the economic and political feasibility constraints of an open trade regime with compensation. This section considers the normative perspective, described in the introduction.

Trade integration is “socially responsible” if it is pro-poor, in the sense that it helps those at the bottom (or nearly so) of the income distribution maintain adequate standards of living and economic security, provides real benefits and equal opportunities to an increasing number of people, and reduces disparities impairing economic and social development. What conditions promote the emergence of a trade regime with compensation that is socially responsible?

Figure 5 depicts, in a very stylized way, a two-by-two matrix that helps organize the discussion. The horizontal dimension shows the two basic economic outcomes for the poor as a result of trade liberalization (win or lose). These are the first-round distributive effects. The vertical dimension shows whether the poor are politically able to affect the redistribution of the gains from trade. These are the second-round distributive effects.

Whether the poor win or lose from trade liberalization depends on several economic factors, some of which are directly related to the nature of trade and foreign direct investment flows (interindustry trade versus intraindustry trade, outsourcing, global production networks) and the structure of technologies and factor endowments of the country. Samuelson-Stolper Theorem results usually suggest that the poor are likely to win in low-income countries having a comparative advantage in agriculture or unskilled labor-intensive sectors. Conversely, in developed economies poor unskilled workers are likely to lose from trade integration.

The situation is likely to be more complex than this stylized dichotomy suggests. First, some poor people may be winners while other poor may be losers (trade liberalization could help rural poor peasants, for example, while hurting poor urban

**FIGURE 5.**  
Political Feasibility and Social Responsibility of a Trade Regime

Status of the poor	Poor win from trade liberalization	Poor lose from trade liberalization
Politically influential	<b>A</b> “Globalization dream”	<b>B</b> • “Socially responsible” open trade regime • “Social protectionism”
Not politically influential	<b>C</b> • “Socially regressive” open trade regime • “Fat cat” protectionism	<b>D</b> “Liberal order nightmare”

unskilled workers). Second, whether poor individuals win or lose may not be completely known *ex ante*. There is, then, significant uncertainty about how trade integration affects the poor. Multinationalization and global production sharing may be a source of increased individual uncertainty, negatively affecting the welfare of relatively poor unskilled workers, for example.

Whether or not the poor (or the relatively poor) are able to affect redistribution depends on a host of factors (political institutions and coalitions, patterns and culture of political participation, information structure, rent-seeking, access to political resources, the organization of civil society). Everything else equal, one would expect the poor to express more voice in a democratic society than in an authoritarian regime. Often, however, the poor and the disadvantaged lack access to political power. A vibrant and well-organized civil society may sometimes compensate for this lack of access. Access to information and transparency on policy outcomes may also be important. Often the poor are not politically influential because they are ill informed or do not perceive the exact consequences of policy measures. This may be particularly true in trade policy, which is often characterized by a lack of transparency.

The two dimensions on figure 5 generate four stylized outcomes, reflecting different tradeoffs in terms of political feasibility and social responsibility of a trade regime. Cell A depicts the “globalization dream” situation, in which there is no tradeoff between political feasibility and social responsibility: the poor win directly from trade liberalization and are politically influential about redistribution. In this case, losers (the rich or nearly so) need not be compensated to implement an open trade regime, which by definition is also socially responsible. Given the current public complaints against globalization and trade liberalization, this outcome does not seem to reflect the real world today.

The second possible situation, cell B, is one in which the poor lose from trade liberalization but are politically influential. In this situation, the final outcome depends crucially on the economic and political capacity to redistribute the gains from trade. The previous section suggests two possible outcomes. If there are powerful enough redistributive instruments (that is, instruments that do not distort relative prices too much) and if openness does not destroy the political credibility of redistribution, the outcome is likely to be “socially responsible” trade integration with compensation. If, however, nondistortive redistributive instruments cannot be implemented or trade openness significantly decreases the political capacity of losers to be compensated, then those at the bottom of the income distribution will oppose trade liberalization. The result is likely to be a restricted trade regime that prevents redistributive outcomes that would hurt the poor. This outcome is called “social protectionism.”

In the third possibility, cell C, the poor win directly from trade openness but are not politically effective at influencing the domestic pattern of redistribution. In this case the losers from trade liberalization are likely to be “fat cats,” a privileged elite that enjoys economic and political rents from a trade restrictive regime.<sup>29</sup> The outcome depends on the capacity for compensation within the country. If the fat cats can capture part of the gains from trade through redistribution from the poor and

openness does not threaten their future political power, an open trade regime with compensation is possible. Such an open trade regime with compensation will not be perceived as “socially responsible,” as it is accompanied by regressive transfers from the poor to the rich. In this “socially regressive trade integration with compensation,” social responsibility and political feasibility considerations are to some extent in conflict.<sup>30</sup> In the alternative case, in which compensation is not possible, the elite will oppose trade liberalization, creating “fat cat protectionism.”

In the fourth outcome, cell D, the poor lose from trade integration and have no political power over redistribution. The likely outcome here is trade liberalization with no compensation. This regime is clearly not “socially responsible” and can be described as the “liberal order nightmare” of all those opposed to “wild” globalization.

Two features should be mentioned about this framework. First, the dichotomy between winners and losers may be oversimplified. For a given pattern of trade liberalization, some poor may lose while others win. There may also be ex ante uncertainty about who at the bottom of the income distribution (for the same identifiable individual characteristics) wins and who loses. Redistribution need not mean only pure ex post compensation; it can include insurance schemes and adjustment facilitating mechanisms (training, education) that eventually transform losers into winners.

Second, the two dimensions of the matrix have to be considered within a dynamic perspective that takes into account the impact of trade openness and redistribution on economic growth and political change. Economic change (growth) and political evolution (institutional change, empowerment) may weaken or strengthen the capacity for compensation in a “socially responsible” way and implies additional intertemporal economic and political tradeoffs.<sup>31</sup>

A clear issue from a policy point of view is how to move from social protectionism, socially regressive trade integration, fat cat protectionism, or the liberal order nightmare toward the globalization dream—or more realistically, to the “socially responsible” trade integration regime? In other words, what can be done to promote a socially sensitive, credible, and broad-based pro-trade coalition and avoid political backlash against globalization?

### *Moving from Social Protectionism to “Socially Responsible” Trade Integration*

Moving from social protectionism toward a “socially responsible” open trade regime involves improving the economic capacity or political credibility of the redistribution of the gains from trade. The discussion above suggests several simple policy implications:

- When opposition to openness comes from the public perception of insecurity and anxiety generated by trade integration in all its forms (trade, foreign direct investment, outsourcing), in addition to compensating identified losers, policymakers

should provide insurance mechanisms to people who view themselves as potential losers. Doing so can shift the balance toward an open trade regime that appears socially fair to a majority of the people.<sup>32</sup>

- The mechanisms for compensation should be broad based in order to make political reversal difficult and increase the set of dimensions on which mutually beneficial pro-trade deals can be exploited.<sup>33</sup>
- Manipulation of relative factor prices and goods prices should be minimized. From an economic point of view, for the gains from trade liberalization to be realized, compensation should not prevent trade adjustment and the associated reallocation of resources to proceed. From a political economy perspective, avoiding linking compensation and changes in producer prices reduces the capacity for forging a protectionist coalition.
- Asset-based redistribution or access to social assets delivered by the government is more credible politically than redistribution through transfers and income flows. In the same spirit, the mechanism should try to tie the interests of some losers to those of the winners from trade integration. Obvious examples include educational and training programs and various types of public investments that enhance the productivity of unskilled workers and thereby the profitability of trade-oriented sectors. These policies may also transform actual (and potential) poor unskilled losers into winners.
- A more speculative avenue that may be worth exploring is the distribution of shares of stock from sectors typically gaining from trade liberalization (where the economy has a clear comparative advantage). The shares could be given to and administered by a public agency with an appropriate governance structure involving unions, employers' associations, and the state and used to finance social benefits and training to displaced lower-income workers. In this way, their interests could be made partly congruent with those of trade-oriented sectors. This might be a fair price for these sectors to pay to obtain support for an open trade regime with social stability.

A necessary (but by no means sufficient) condition for arrangements of this sort to work is the existence of strong political institutions of conflict management (Rodrik 1998) and encompassing social associations. For the emergence of credible intertemporal political deals and coalitions, pro-trade interests and potential winners should be able to commit and internalize politically the return they get from investing in the human or social assets of present (or potential) poor losers. Such an institutional setting is likely to exist in developed democracies equipped with welfare state institutions. It is not clear how such mechanisms should be designed and developed when the institutional context is weak or polarized, as it often is in developing economies.

In such a context, a purely within-country arrangement of the sort described above is unlikely to emerge. One possible (albeit partial) way to explore a solution to this problem is to use foreign aid as a commitment device. Consider, for example, a country with weak political institutions and polarized social groups. Pro-trade and openness interests have no way to commit to broad-based compensation schemes,

and they cannot implement a regime of free trade without compensation. To help sustain a "socially responsible" trade regime with compensation, the external institution can commit to provide foreign aid to the country conditional on its liberalizing trade and using the transfer to finance a compensation system targeting a large enough base of poor (potential) losers. Under this situation, foreign aid becomes an asset to the poor losers from trade liberalization that is provided in exchange for their support for trade openness.

For this mechanism to work, two conditions need to be satisfied. First, the leverage of the external institution must be great enough to ensure that the (potential) losers believe the deal is worth making. Second, the external institution should have greater capacity for political commitment than local interests. The first condition depends on the amount of aid the external institution is ready to provide, its monitoring capacity, and the structure of the local coalition necessary to sustain trade liberalization. The second condition depends on the institutional setting in which the external institution is operating, the political willingness of the donors acting through that institution to create institutions of commitment.<sup>34</sup>

### *Moving from Fat Cat Protectionism to "Socially Responsible" Trade Integration*

People at the bottom of the income distribution in a country do not influence the pattern of redistribution determined by fiscal and trade policy, although they would be net winners from trade liberalization. Conceptually, the crucial issue therefore is to try to move them toward the globalization dream regime by giving them opportunities to become empowered.

In a democratic regime, the problem is often related to effective political participation and the information structure available to voters. Disadvantaged individuals may not perceive that they are actual net winners, or they may fail to get organized politically. Increasing transparency about policy outcomes may then transform the degree of political participation and shift the political equilibrium toward the disadvantaged and more generally toward those that lose from the current situation.

In nondemocratic regimes a "socially responsible" arrangement is unlikely to emerge without external help. External intervention providing adequate compensation to the elite in place may shift the outcome from fat cat protectionism toward a socially regressive trade integration outcome. The drawback of such intervention is that it is not socially responsible, at least in the short run. In the long run, however, by providing additional resources, trade liberalization may trigger political empowerment of the poor. Domestic growth (particularly pro-poor growth) may have the same effect, transforming a zero-sum distributive problem between the elite and the poor into a "win-win" situation. While international institutions should press for the implementation of pro-poor growth policies, depending on how forward-looking the elite are, a socially regressive compensation may be the price to be paid to satisfy the domestic political feasibility constraints of the initial situation.

### *Moving from the Liberal Order Nightmare to “Socially Responsible” Trade Integration*

For the globalization skeptic, this last scenario seems to be the most difficult from which to move to a “socially responsible” open trade regime. It requires both empowering the poor and providing them with feasible and credible compensation or opportunities. For the globalization proponent, this may be only a short-term difficulty. Indeed, as in the preceding case, growth may be viewed as the solution to the problem. Indeed, if trade liberalization favors growth and if growth trickles down to the poor, then in the medium to long run, the poor have access to more resources and are progressively transformed into net economic and political winners, moving the economy from cell D to cell A. While this rosy scenario is possible, it may take time to realize and provides cold comfort to someone who is currently socially and politically disenfranchised. Moreover, as the elite also get access to more resources and power is a relative concept, there is no guarantee that the elite will lose its initial political ability to influence the pattern of redistribution overtime.

In a democratic society in which formal mechanisms can be activated to provide a voice to the losing poor, the situation may be improved by appealing to increased information and political participation, eventually inducing a shift from cell D to cell B.<sup>35</sup> In this case, enlarging the set of policy options available for compensation may facilitate a move toward a “socially responsible” open trade regime.

In nondemocratic countries these rosy growth dynamics (if they exist) need to be supplemented by external intervention. Where the state apparatus is controlled by the local elite, external policies generating gains and opportunities accruing directly to the poor should be promoted. Initiatives favoring direct access to markets for the poor and decentralized economic activities are important, as the associated gains are more difficult for the elite to capture. To the extent that the elite can appropriate only part of these gains through internal redistribution, the poor could be expected to be economically better off and eventually, with the resulting resources, politically more effective. Nongovernmental organizations and the international community have an important role to play in stimulating the emergence of a vibrant and locally organized civil society able to reverse the pattern of political power and help the poor claim a fair share of the gains from trade.

## **Conclusion**

A large discrepancy exists between the optimistic view of trade flows held by most mainstream economists and the views of critics of globalization, who perceive the current international trade regime as generating an unfair distribution of gains and reducing the capacity of national governments to achieve their domestic distributive objectives. Even if one accepts that trade is likely to generate global gains, the distributive and redistributive dimensions of trade integration need to be taken into account if the political viability of the process is to be ensured. Simply looking at the

growth induced by trade openness and the implied beneficial aspects for some part of the population (even a majority *ex post*) will not be enough to make trade acceptable to critics of trade integration. One needs to think about a set of social compensatory arrangements that make the deal politically acceptable. Doing so involves finding ways to create pro-trade coalitions with sensible compensation.

The existence of welfare state institutions allowing multidimensional compensation schemes helps promote the conditions for openness with compensation. Current questioning about the long-run fiscal sustainability of the welfare state in rich and middle-income democratic countries imposes, however, a limit on the capacity to sustain an open trade regime that is socially acceptable to a large fraction of public society. Two considerations are worth mentioning in this respect.

First, the form of support inside the welfare state may matter as much as its size. Policy support may have to be increasingly "worker owned"—less and less attached to a worker's current employer, industry, or community. Worker empowerment could entail mobility and educational objectives that are rewarded in an increasingly globalized world (enhanced job search mechanisms, portability of health and pension benefits, and language and cultural training, for example). *Opportunity nets* may be a more accurate conception of the redistributive policies to be implemented than simply *safety nets*.

Second, the political feasibility of a "socially responsible" open trade regime interacts with the policy context with respect to the two other economic dimensions of globalization: labor and capital mobility. For instance, policies affecting capital and skilled labor flows interact with the credibility of domestic redistributive mechanisms through their effect on the domestic tax base. The impact can be positive or negative, depending on the sign of the net inflows. Similarly, a liberal migration policy that attracts poor foreign workers may be perceived as undermining the generosity of rich countries' welfare state systems in the short run. When immigrants' fertility rates are above the national average, however, such a policy may improve the long-run fiscal sustainability of the system of social benefits. These observations suggest that regulatory policies on factor mobility may act as complements or substitutes to the establishment of a "socially responsible" open trade regime and that their interactions are worth investigating in more detail when thinking about these issues.

This paper has been concerned mainly with trade-related redistributive problems within countries. The issue of redistribution between countries is, of course, of paramount importance. A full discussion of this dimension is beyond the scope of this paper, but two quick points should be mentioned.

First, with trade integration occurring at the regional level, credible broad compensation or adjustment facilitating mechanisms can be engineered at that regional level. An example is the European Union (Sapir 2000). Beyond the redistributive capacities of national welfare states, the Treaty of Rome clearly recognized that the abolition of obstacles to freedom of movement for goods, services, and factors of production should be accompanied by a regional social policy. That policy included the establishment of a European Social Fund, designed to ease workers' adaptation

to economic changes. This mechanism, used regardless of whether the cause of dislocation is trade liberalization or technological change, can be viewed as a broad element that has facilitated the political acceptability of trade integration within and outside the European Union. Whether that experience can be reproduced in other contexts is worth exploring.

Second, in poor developing countries lacking strong social and political institutions, a necessary condition to enjoy the gains from trade rests on world market access in sectors in which they have a comparative advantage. In this respect, the emergence of a “socially responsible” open trade regime in the rich countries is clearly crucial. Such a regime prevents a political backlash against trade liberalization and ensures market access by developing countries. In order to obtain the full gains from trade, these poor economies also need to undertake some trade reforms. The political sustainability and social responsibility of these reforms, however, will depend crucially on foreign aid and grants supplementing these country’s own meager resources. Hence, consistent with the view of the recent International Labour Organization report (2004), domestic social responsibility will need to be complemented for these countries by a sense of global social responsibility.

For a long time economists have focused on the static and dynamic gains from trade because of the logic of specialization according to comparative advantage. They should perhaps spend more time and effort investigating how to make the distribution and redistribution of these gains from trade socially acceptable to a majority of people. If trade integration is not socially responsible, it runs the risk of becoming the political victim of its own economic success.

## Notes

1. Many trade economists take for granted the argument that the gains from trade are always large enough to compensate the losers. But the record suggests that in practice workers are not compensated adequately. The Trade Adjustment Assistance program in the United States, for example, implemented to help workers displaced by imports competition has not provided adequate compensation or enhanced workers’ capacity to find new jobs (Kletzer 2003).
2. Many discussions of globalization turn on its impacts on cultural dimensions, environmental issues, democratic values, national security, and international political relations. Globalization here is viewed in the more restricted economic sense of increased integration of goods and factor markets. Accordingly, the criteria defining social responsibility are restricted to an individual socioeconomic welfare perspective.
3. The formal mechanism of the Stolper-Samuelson theorem can be described as follows: As the price of the unskilled labor-intensive good rises, production of that good increases, drawing factors of production away from the skilled labor-intensive sector. Since the unskilled labor-intensive sector uses more unskilled labor per unit of skilled labor than the skilled labor-intensive sector releases, this reallocation process increases the demand for and relative price of unskilled labor. This change causes both industries to switch to less unskilled labor-intensive production methods, raising the marginal productivity of unskilled labor in both sectors. In competitive labor markets, where the wage equals mar-

ginal productivity, unskilled labor receives a higher wage for each good and therefore a higher real return regardless of consumption patterns. Similar reasoning shows that the real wage of skilled labor declines.

4. The assumptions include the following: markets are perfectly competitive, factors are perfectly mobile across sectors in the economy, countries do not specialize in production after trade integration, goods are homogenous in the same industry, technologies are with constant returns to scale, there are no nontraded goods, and countries have access to the same exogenous technologies.
5. In other words, if trade integration induces the wage of skilled workers to increase relative to the wage of unskilled workers in the North, both the import-competing and the export sectors should switch to less skilled labor-intensive production methods. The reverse should hold for the South
6. This prediction may not be valid in more sophisticated versions of the Samuelson-Stolper Theorem with many countries and many goods (see Davis 1996) .
7. While unskilled workers lose relative to skilled workers in the North, they need not be worse off in real terms, as outsourcing of some activities to the South lowers the prices of goods available through trade, which may be enough to offset the wage reduction.
8. Trefler and Zhu (2003) consider a version of the Feenstra and Hanson (1996a) model without foreign direct investment but with technology catch-up by the South. They generate similar results (increased wage inequality in both regions).
9. Tang and Wood (2000) provide a related model with three types of labor: unskilled workers, skilled workers, and high skilled (so-called “knowledge”) workers. Production is based on cooperation between knowledge workers and other types of labor. Trade integration is associated with the declining costs of moving “know-how” around the world and allows high-skilled workers in the North to match more easily with unskilled workers in the South.
10. See also Epifani and Ganica (2002), Xu (2001), and Yeaple (2003) for recent analytical work on the trade-induced technical change paradigm.
11. Two alternative methods widely used to analyse the distributive impacts of trade liberalization are Computable General Equilibrium models (CGE) and micro-macro syntheses. CGE models are based on disaggregated economywide social accounting matrices. Integrating the interactions between markets, they account for commodity, terms of trade, and factor market effects on various “representative” classes of agents in the economy. (See Reimer [2002] for a thoughtful review of these methods for analyzing the impact of trade liberalization on poverty.) Micro-macro syntheses involve general equilibrium analysis coupled with some form of postsimulation analysis based on household survey data (see Bourguignon and Spadaro [2004] for a recent introduction).
12. The cases of China and the Republic of Korea illustrate how different analysts can draw different conclusions about the same countries. Proponents of trade liberalization attribute growth in these countries to the liberalization of their economies (see, for example, Panagariya [2002]). Globalization skeptics have argued that these countries have been able to take advantage of the opportunities afforded by trade liberalization because of extensive or selective government intervention, both now and in the past (Wade 1990; Rodrik 1995a).
13. In the United States the wage gap between college education and high school education increased by about 20 percent in the 1980s (Borjas and Ramey 1994). In addition, employment of unskilled workers has declined in favor of skilled workers and, in several continental European countries, increased unemployment for the less skilled has been widely observed (OECD 1993).

14. See Cragg and Epelbaum (1996), Revenga (1997), Harrison and Hanson (1999), and Feenstra and Hanson (1997) for Mexico; Beyer, Rojas, and Vergara (1999) for Chile; Goldberg and Pavnick (2003) and Attanasios, Goldberg, and Pavnick (2003) for Columbia; and Pavcnik and others (2002) for Brazil.
15. See, for instance, Goldberg and Pavnick (2003) and Attanasios, Goldberg, and Pavnick (2003) for Colombia; Pavcnik and others (2002) for Brazil; and Levinsohn (1999) for Chile.
16. Ravallion (2003) illustrates the case with a simple example. Consider two individuals, a rich one, with an endowment of \$5, and a poor one, with an endowment of \$1. Assume that both increase their incomes 100 percent increase as a result of trade liberalization. The postliberalization endowments are therefore \$10 for the rich person and \$2 for the poor one. As both gain in the same proportion, a relative inequality measure would remain invariant to the trade shock. But an absolute measure of inequality would show a 100 percent increase in income inequality, from \$4 ( $\$5 - \$1$ ) to \$8 ( $\$10 - \$2$ ). Critics of globalization focus on this increase.
17. Critics of the current trade regime object not to international trade per se but rather to the current biases of the trade liberalization process between developed and developing countries (see, for example, the 2002 Oxfam report “Rigged Rules and Double Standards”). The current international trade regime is viewed as facilitating market access of developing economies to developed countries while preventing symmetric beneficial outcomes to Southern countries in sectors in which they have a comparative advantage (agriculture, textiles and apparel, labor-intensive manufacturing), or the system is viewed as imposing restrictions on vital technology and knowledge transfer that would help developing economies develop and grow. This position is consistent with mainstream trade theory and finds sympathy and consensus among academic economists (see, for instance, Bardhan [2003] and Deardoff [2003]).
18. This aspect is well illustrated by the reactions in industrial countries to the fast-growing cross-border trade in business and electronic services and the outsourcing of back office operations to low-wage exporting countries, such as China and India. Although the phenomenon is still quantitatively small, white-collar workers who previously felt sheltered from external competition tend now to join their blue-collar brethren in their fear of job outflows caused by globalization. Reflecting these fears, legislative action in the United States has been initiated to restrict outsourcing of services in government procurement markets (Mattoo and Wunsch 2004).
19. In Peru during a 10-year period of market reforms, 44 percent of respondents with the greatest upward mobility (gains in income of more than 30 percent) reported that they were worse off (Graham and Pettinato 2001). Most of these respondents were older urban people with average incomes. Poorer respondents tended to respond that their economic conditions were the same as they had been before reform, while middle-class respondents were more likely to report that conditions had gotten worse.
20. Critics of globalization are concerned about the current polarization of the gains from trade between firms and workers. This position is particularly well articulated by the fear of “corporate globalization” of all economic and social activities, as exemplified in the best-selling books *When Corporations Rule the World*, by David Korten, and *No Logo*, by Naomi Klein).
21. A well-established literature in international trade theory has investigated the pattern of optimal trade policy in the second-best context of a small, open economy subject to domestic distortions (Bhagwati 1971). The general conclusion is that while trade instruments may improve welfare in some circumstances, they are generally not the best instruments with which to correct for domestic distortions; trade instruments dominate. This

- literature does not explicitly take into account the informational constraints that can be imposed on the domestic instruments or their redistributive consequences in the economy
22. See also Feenstra and Lewis (1991) and Feenstra, Lewis, and McMillan (1990) for a partial equilibrium discussion of the constraints that asymmetric information can impose on the capacity to redistribute the gains of trade between winners and losers.
  23. The issue is more general than internal redistribution. When, because of asymmetry of information, there are endogenously imperfect tools of regulation to correct for local market distortions, free trade may be dominated by a restricted trade regime (Martimort and Verdier 2004).
  24. For formalizations of political economy feedbacks of trade integration on redistribution, see Bourguignon and Verdier (2003) and Przeworski and Meseguer Yebra (2002).
  25. Formally, the politically determined level of income redistribution is the one desired by the median voter in a country (Metzler and Richards 1981), which is negatively related to the voter's position relative to the mean income. When trade integration leads to increased income inequality, it is likely that the relative position of the median agent deteriorates and that he or she therefore wants more redistribution.
  26. There is a vast literature on the political economy of trade policy, including several good surveys. See, for instance, Hillman (1989); Magee, Brock, and Young (1989); Rodrik (1995b); and Adserà and Boix (2001).
  27. This reasoning also holds when all winners are not identified *ex ante* but are still known to be a majority *ex post* (Fernandez and Rodrik 1991).
  28. Acemoglu and Robinson (2001) have formalized this argument of an economically inefficient but politically consistent mode of redistribution.
  29. Such a situation may occur in a country enjoying a comparative advantage in agriculture. After trade liberalization, domestic cash food prices might rise. If poor peasants sell these goods, they are better off, but urban elites and middle-upper-income workers may be hurt by the price shift.
  30. If the *ex post* level of consumption of the poor after trade openness with regressive compensation is higher than before trade openness, it could be argued that the trade regime is socially responsible. However, regressive compensation may also increase disparities inside the country, which may in turn impair economic and social development. Taking a more procedural point of view about social responsibility, one could argue that regressive transfers in such conditions are morally questionable.
  31. Trade openness with redistribution to the poor may imply a loss to the elite in the short run but may stimulate growth, which can be beneficial to the economy as a whole. This change could imply a dynamic shift of power toward the poor. See Bourguignon and Verdier (2003) for a formal analysis of this situation in the case of openness and education.
  32. The fact that people have intrinsic concerns about their relative positions in their reference group or about fairness suggests that attention should also be given to the polarization of the gains from trade. This may necessitate compensating lower-income individuals who are relative rather than absolute losers.
  33. A typical targeted compensation program directly related to trade is the Trade Adjustment Program in the United States. There is a consensus that its results are mixed in terms of compensation and retraining (Kletzer 2003).
  34. For some poor developing economies, the Poverty Reduction Strategy Paper (PRSP) process could be framed as a commitment instrument for a trade with compensation strategy.

35. The shift from cell D to cell B may occur spontaneously in a democratic society if an increasing number of politically active individuals feel less and less secure in the face of trade openness.

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## **Comment on “‘Socially Responsible’ Trade Integration: A Political Economy Perspective,” by Thierry Verdier**

JOSÉ OLIVIO OLIVEIRA

On behalf of the International Confederation of Free Trade Unions (ICFTU), I would like to thank the World Bank for the invitation to speak to this conference on behalf of the 150 million workers around the world, in 152 countries, whom we represent.

Let me say that Professor Verdier’s speech was extremely interesting and contained, I think, very much with which the trade union movement would agree. We would certainly share his conclusion that the distributive and redistributive dimensions of trade integration must be seriously taken into account if one wants to ensure the political viability of the process. Indeed, we believe that there are some very serious reasons for concern that trade integration is not bringing benefits to all people.

This issue was highlighted in the report of the World Commission on the Social Dimensions of Globalization. I would like to take a few moments to recall some of the most significant evidence cited in that report. First, the report emphasizes the vast gaps in the benefits that trade liberalization may have brought to some parts of the world. It shows how growth has been unevenly distributed across and between countries. In terms of per capita income growth, only 16 developing countries grew more than 3 percent a year between 1985 and 2000. In contrast, 55 countries grew less than 2 percent a year, and 23 suffered negative growth.

The income gap between the richest and poorest countries in the world has increased significantly over the past 40 years. And as Professor Verdier rightly notes, especially in most developing countries, redistributive mechanisms and social protection systems to protect the losers are weak or nonexistent. Hence losers from globalization will not be compensated, and they will face much lower incomes and increased poverty. Indeed, inequality within countries rose for most of the second half of the twentieth century, particularly since 1987.

The World Commission report shows that in many Latin American countries, including my own, Brazil, employment in manufacturing either failed to rise or fell during the periods of fastest trade liberalization. Real wages of most workers have tended to decline during such periods. In many countries drastic trade liberalization

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has resulted in a contraction in output and employment, accompanied by a sharp increase in imports and a rising trade deficit.

An even more striking phenomenon has been the massive increase in extreme inequalities and the share of income earned by the top 1 percent in countries such as the United States and the United Kingdom. In the United States and elsewhere, such mega earnings have typically been linked to compensation paid by multinational companies and to new businesses with a global reach. This increased concentration of wealth is increasing the market and political power of the super rich, both nationally and globally.

The World Commission report also identifies the serious gender imbalances in the social impact of globalization. Women have been concentrated in the worst of the new jobs created by the global production system, including unprotected employment in dead-end unskilled jobs in export processing zones and other parts of the global production system. And the phenomenon of export processing zones is worsening. The World Commission notes that the number of zones had risen to about 3,000, including those in China, which does not tolerate free trade unions at all. More than 50 million people now work in these zones.

My conclusion is very much in line with the arguments in Professor Verdier's paper. It is that rather than providing resources for improving living and working conditions, trade liberalization is increasingly resulting in governments reducing workers' rights and living standards in order to minimize labor costs.

The countries worst affected are not countries in the North but developing countries genuinely seeking to protect workers' human rights and raise basic living standards, for these are the countries most vulnerable at the margin to being forced out of the world market. This has been seen in Kenya, Malaysia, Mexico, Morocco, Turkey, and elsewhere. It is this sort of exploitation that is leading to the collapse of confidence in the multilateral trading system in both the developing and the industrial countries.

The ICFTU would therefore very much support the recommendations in Professor Verdier's paper.

I would like to add some further recommendations, also from the report of the World Commission. I make no apology for that, because I believe it is essential that the very important recommendations of that report should be taken up and discussed now at international meetings like this one.

First, the World Commission has called for a Globalization Policy Forum to be set up by the international institutions to address and monitor the social impact of developments and policies in the global economy. Problems such as that of today's subject for discussion—socially responsible trade integration—would be at the center of the considerations and recommendations to be made by such a forum.

Second, the World Commission calls for all international organizations to ensure that their policies and programs do not impede the realization of core labor standards. Anyone familiar with the impact of trade liberalization on workers' rights could only agree that such action is long overdue.

Third, and in line with the ICFTU's own preoccupations, the World Commission report calls for new international action to promote decent work in export process-

ing zones. It states that we need to halt the “race to the bottom” that all too often dictates working life in these zones, where competition is based on low labor standards and daily violations of fundamental rights.

Fourth, the World Commission states that the voice of workers and civil society needs to be heard in all important international institutions that exercise influence over globalization, and it makes a number of recommendations toward that end.

Finally, the World Commission calls for global rules to better recognize the need for affirmative action in favor of countries that do not have the same capabilities as those that developed earlier. Toward that end, the WTO provisions on special and differential treatment need to be significantly strengthened.

In conclusion, ladies and gentlemen, colleagues, I would like to thank Professor Verdier once again for his most timely report.

The take-home message, I believe, can be summed up by saying that we need to go beyond the status quo, that international economic and labor policies must be dealt with in a more integrated and consistent way, so that we can achieve some consensus on the best way forward to achieve lasting economic and social development. That, I believe, provides an excellent basis for our discussions here over the coming two days.





## Comment on “‘Socially Responsible’ Trade Integration: A Political Economy Perspective,” by Thierry Verdier

RAQUEL FERNÁNDEZ

This paper is a useful review of the literature on international trade liberalization and the distribution of the gains from trade. The emphasis is on *redistributing* the gains from trade—a central ingredient for ensuring that freer trade is indeed Pareto improving. The proposition that free (or freer) trade produces overall economic gains is explicitly assumed, so the paper does not attempt to shed light on whether an alternative approach to trade liberalization would be a preferable long-run development strategy. But even those who do not accept this premise but are concerned with the plight of the losers from trade will find this paper and the questions it raises a very good place to start.

What do we know about trade and inequality? The empirical literature does not find a bias of trade against the poor, and the relationship between trade integration and within-country inequality appears mixed. My own reading of this literature leads me to conclude that it may not make much sense to look for an acontextual/ ahistorical effect of trade on wage inequality, employment, or growth: the fact that trade liberalization increased equality in Asia but decreased equality in Latin America suggests that initial conditions and circumstances in the rest of the world (the degree of competition faced upon liberalizing, for example) may be responsible for a large variance in outcomes. This leads to a first conclusion: there is no general policy prescription for making trade liberalization “socially responsible.” In some cases liberalization pure and simple may be enough; in others a considerable degree of policy intervention may be required.

Whatever effect trade has on inequality, no one doubts that it creates winners and losers. Even under risk neutrality, the unequal distribution of uncertainty over who will win and who will lose means that reforms that could have been overwhelmingly approved in the absence of uncertainty may instead be rejected by the majority of the population (Fernández and Rodrik 1991). When individuals are averse to uncertainty, this negative effect is compounded.

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An equally important point is that trade may affect the capacity and willingness of a government to redistribute income. Freer trade may interfere with the capacity to distribute, because, in the absence of perfect information, production efficiency may no longer be part of a constrained-optimal solution; the government may need to distort production prices in order to achieve a better allocation. What about willingness? If inequality adversely affects the bargaining power of poorer sectors of society, they may be less able to protect themselves. The empirical evidence on this issue, however, is scarce and inconclusive.

Finally, there are the usual concerns about time inconsistency. If winners are unable to commit to compensate losers—and if the losers know that their ability to extract concessions will be diminished once trade reform is undertaken—resistance to greater openness is likely.

It is interesting to note that in several of the historical studies reviewed by Verdier successful trade reforms were linked to greater fiscal redistribution. Thus trade reform may have a greater chance of succeeding when it is accompanied by more redistributive education or health policies. Furthermore, because the gains from these policies are broadly based, the policies are more likely to be time consistent and less distortive of production efficiency.

So how does Verdier answer the big question: how can a country achieve “socially responsible” trade integration? The prescriptions are the common sense ones you may have thought about before reading the article: mechanisms should be broad based in order to be credible, distortions of prices should be minimized, programs that widen the circle of winners (such as training programs) can be positive. If, however, “a necessary condition...is the existence of strong enough political institutions of conflict management,” as Verdier states, then it is unlikely that most of the countries contemplating or engaged in trade reform will be able to reform in a socially responsible manner. Fortunately, it is not obvious that this strong conclusion is always valid: there are certainly examples of successful trade liberalization in countries with weak or contested institutions, as well as in countries in which liberalization was part of a process that led to the strengthening of institutions.

What is missing from this paper—or rather, where one would like Verdier’s next paper to begin—is an examination of whether third parties can play a more positive role by addressing some of the requirements Verdier cites, thereby making social responsibility easier to achieve. Can richer countries facilitate redistribution or compensation? Is there a role for conditional foreign aid? The European Union’s experience of successful trade integration as part of a larger package of political and economic integration (with specific targets and an important role for transfers across countries) may yield important lessons.

Maybe trade liberalization should not be pursued on its own. Can international institutions, such as the World Trade Organization or the international financial institutions, play a different role? Trade theory teaches that the gains from trade are not distributed equally across countries or individuals. The challenge, I think,

lies in finding creative ways for countries to share the burden and enhance the credibility of socially responsible trade reform.

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## **Comment on “‘Socially Responsible’ Trade Integration: A Political Economy Perspective,” by Thierry Verdier**

CHIEN YEN GOH

Good morning ladies and gentlemen, I would like to thank the World Bank for inviting me to this important conference. It is my pleasure and privilege to be here to share with you some of my thoughts from the camp of “globalization skeptics,” as we were described in Mr. Verdier’s paper. I would also like to thank Mr. Verdier for his paper, which attempts to broaden our understanding on what constitutes an appropriate and sustainable trade policy, to look beyond the perceived gains from trade in order to pay equal attention to the pains from trade liberalization. His paper has significant implications for the nature and feasibility of designing pro-poor trade policies.

The paper identifies what some of these pains are: increased inequality, a heightened sense of job insecurity, and the loss of national policy space and autonomy as a result of greater trade openness. But it does not address the main contention made by those who question the appropriateness of big-bang trade liberalization as advocated by the World Bank, the International Monetary Fund (IMF), and the developed countries in the World Trade Organization (WTO) and other trade forums. The fundamental argument posed by “globalization skeptics” is that there is no automatic positive relationship between trade openness and economic growth. Hence an appropriate and adequate trade policy is one that allows a country to strike an optimal balance between degrees of openness in accordance with its developmental stage, needs, and strategy. Mr. Verdier’s paper does not deal with this issue, since he accepts the assumption that there is a positive correlation between trade openness and growth.

This accepted wisdom among mainstream economists has to be revisited and reviewed, for several reasons. First, the supposed gains from trade have been premised on assumptions that may not be consistent with realities, such as the lack of full employment in developing countries. Second, given the distortions in international trade and the imbalances in the multilateral trading system, especially for agri-

cultural products, trade openness may not be best policy option. Third, import surges and the loss of domestic market share by local producers in developing countries can undermine national industrial and development strategies, with attendant effects on employment and poverty. Fourth, given that international trade rules are currently being negotiated in the WTO and that trade policy conditionalities are being prescribed by the World Bank and the IMF, we urgently need to understand the actual impact of trade on development, growth, and poverty, in order to ensure that trade does indeed become a genuine engine for development, as stipulated by the heads of states in the UN Monterrey Consensus. Finally, insofar as we are trying to work toward a socially—and economically—responsible model for trade integration, the relationship between trade openness and growth has to be scrutinized.

I would like to use the remainder of my presentation to flesh out this issue, which I consider to be the primary pain from trade. Since I am at a World Bank conference, I would also take this opportunity to raise the critical role the World Bank and the IMF have played and continue to play in trade policy and advice.

The trade conditionalities imposed by the World Bank and the IMF have caused many developing countries to liberalize their imports excessively and too rapidly, especially given that high subsidies and tariff protection continue to be maintained in the developed countries. For many developing countries, the potential benefits of meeting export opportunities have consequently not been fully realized, while the risks of import liberalization have become very real and have already adversely affected livelihoods and national incomes.

The combination of continued high protection (especially export and domestic subsidies) in developed countries and further liberalization in developing countries (under the loan conditionalities) has resulted in surges of imports in many developing countries. In many cases, the prices of these imports were artificially lowered by domestic or export subsidies. There have been many cases of dumping, in which the export price of the good is below the cost of production and farms or companies in developed countries are still able to make a profit because their revenues are pumped up by subsidies.

Researchers, nongovernmental organizations, the media, and international agencies have documented the impact of cheap imports. A recent Food and Agriculture Organization report (FAO 2003a) shows numerous instances of import surges in 28 countries between 1984 and 2000. For example, Kenya experienced 45 import surges—1 in wheat, 7 in vegetable oils, 6 in pig meat, 5 in maize, 5 in poultry meat, 4 in bovine meat, and 3 in rice. The Philippines had 72 import surges, Tanzania and Malawi each had 50, and Bangladesh and Peru each had 43. In some cases these import surges were accompanied by production shortfall in some of the same products in which import prices surged. In Kenya, for example, there were 11 cases of import surges in wheat and 7 cases of shortfall in production.

The FAO study cites several recent studies on import surges that trace the problem to unfair trade practices, such as export and domestic subsidies. The recent cotton case brought to the WTO by Brazil against the United States illustrates this point perfectly.

Of late the World Bank and the IMF have been vocal in criticizing the behavior of the developed countries in this respect. They recognize the distortions in the area

of international trade in agriculture, they see the artificially cheap agricultural imports being dumped into developing countries' markets. Yet they continue to advocate that developing countries should open up their markets, when the conditions are not only not right but clearly detrimental. There is no equal playing field in this area of trade. Furthermore, in this mistaken vein the Bretton Woods institutions also prevented and discouraged developing countries from protecting themselves through tariffs, subsidies, and other forms of government intervention, arguing that market principles should prevail.

According to an FAO report (2003b, p. 75), “the opening of markets in the developing countries, in the context of a global agriculture still characterized by high levels of protection in developed countries, left the reforming developing countries less able to prevent the flooding of their domestic market (import surges) with products sold on the world market at less than cost of production and the displacement of local trading capacity.” Yet another FAO study (2000, 2001) surveyed the experience of 14 developing countries (see also FAO 2003c). This two-volume study concluded that import liberalization had a significant adverse effect on small farmers and food security in many countries and that liberalization had been the result of loan conditionalities imposed by the World Bank and the IMF rather than WTO rules. In fact, the agricultural tariffs that were bound under the WTO were relatively high, but the applied rates were much lower, as a result of Bank and Fund loan conditionality. According to the study, “there was a general trend towards the consolidation of farms as competitive pressures began to build up following trade liberalization,” a phenomenon that has led to the “displacement and marginalization of farm laborers creating hardships . . . in a situation where there are few safety nets” (p. 25).

There is hence an urgent need for an independent ongoing review of the trade aspects of the current and proposed policy conditionalities of present and future loans. Developing countries currently have flexibilities within the WTO rules to adjust their applied tariffs up to and even beyond the bound rates in certain circumstances. It is paramount that this flexibility be maintained and broadened in the current negotiations.

Loan conditionality should not prevent or constrain the developing countries from making use of this flexibility. Moreover, the Bretton Woods Institutions' conditionalities should not oblige developing countries to undertake a rate and scope of liberalization that is beyond their capacity to cope or that will be damaging to the livelihoods and incomes of rural producers. The approach to liberalization in developing countries should be reoriented to be more realistic, since the developed countries are still maintaining high subsidies.

### **Trade Liberalization in Industrial Products**

The issues at stake in liberalizing trade in nonagricultural or industrial products are equally crucial to the prospects and future of the industrial sector and the developmental process in developing countries. At least three major aspects need to be con-

sidered in industrial development. The first is production and employment. Developing countries need to produce more industrial products and to employ more people in this sector in order to increase economic growth and development. Industrial output in developing countries can be geared toward the local market and the export market. There has to be a medium- and long-term program to build the capacity of the industrial sector in these countries to produce and to produce more efficiently. Without this supply capacity, we will be unable to take advantage of trade liberalization. Currently, many developing countries have relatively weak supply capacities. We have to recognize this weakness, the limitations it places on us, and the need to correct this weakness.

The second aspect is exports. It would be very good if developing countries could increase their industrial exports. For this to happen, market access, especially to the developed countries, must improve. The negotiations should result in expanded export opportunities for developing countries. But market access is not a panacea for many developing countries. Improvement in market access by itself may not have the desired positive effect, since the supply capacity in many countries is too weak, at least in the short run, to enable a significant increase in exports and production.

The third aspect is imports. Further liberalization will enable imports to enter faster and at lower prices. This would reduce consumer prices. But cheaper imports can also cause serious disruptions in the industrial sector of developing countries. Many local firms and industries are still too weak to withstand competition from a large inflow of cheaper imports resulting from the lowering of import barriers. In many developing countries that have a weak and vulnerable industrial base, rapid import liberalization has led to reduced production or even outright closure of local firms and labor retrenchment, and there has been no evidence of shifting of the displaced capital or labor to more efficient industries. In many developing countries, there has been a weakening of the industrial sector and even a process of “deindustrialization.” Moreover, the reduction in industrial tariffs has caused significant loss of government revenues, which has exacerbated the government budget situation.

What is of greater importance to developing countries is the maintenance and development of their industrial sectors, which means more industrial output, better technology, and more manufacturing jobs. Industrial output should be increased through production for local and export markets. The progress of the industrialization process is critical to overall economic and social development. The development of the industrial sector in developing countries, especially countries with weak and vulnerable industrial sectors, must be the major objective of any trade policy. Utmost care must be taken to avoid allowing inappropriate import liberalization in developing countries that will hurt local industries and the national industrialization process.

According to the United Nations Development Programme report *Making Global Trade Work for People*:

From a human development viewpoint, higher industrial tariffs in developing countries are justified for two main reasons: the first is to avoid deindustrialization and build competitiveness. . . . [I]ndustrial tariffs at low levels in developing countries—where industries do not have the capacity to withstand competition from cheaper imports—create difficulties for their manufacturing sectors. The rapid reduction in industrial tariffs in

Sub-Saharan Africa since 1980 has resulted in deindustrialization in some countries. . . . The second justification for higher industrial tariffs in developing countries is to support human development expenditures. To generate much needed tariff revenue, some developing countries . . . must have a certain threshold of tariff protection (2003, pp. 161–162).

Developing countries have been highlighting the profound implications of substantial tariff reduction for nonagriculture products in the WTO. Consequently, many have opposed indiscriminate trade liberalization in this area and proposed different approaches to tariff commitments, consistent with their developmental needs and circumstances, under the current negotiations.

Developed country members, such as the European Union, Japan, and the United States, have been pushing aggressively for a very dramatic reduction in the level of tariffs. In particular, the United States has stated that it would like to see tariffs reduced to zero. It has submitted a proposal to cut tariffs to no more than 8 percent by 2010 and to zero by 2015.

The international financial institutions have steadfastly promoted the idea that trade liberalization would benefit development. They have produced questionable simulations of potential increases in welfare gains as a result of trade liberalization. More significantly, through their trade conditionalities, they have forced many developing countries to dramatically reduce their industrial tariffs. This has led to the closing of firms in the industrial and manufacturing sectors in developing countries (Buffie 2001). Senegal experienced large job losses following liberalization in the late 1980s; by the early 1990s one-third of all manufacturing jobs had been eliminated (Buffie 2001). In Côte d’Ivoire the chemical, textile, and shoe industries virtually collapsed after tariffs were abruptly lowered by 40 percent in 1986. Similar problems have plagued liberalization attempts in Nigeria, while in Sierra Leone, Sudan, Tanzania, Uganda, and Zambia liberalization in the 1980s caused a tremendous surge in consumer imports and reductions in industrial output and employment. In Ghana industrial sector employment fell from 78,000 in 1987 to 28,000 in 1993, due mainly to the fact that “large swathes of the manufacturing sector had been devastated by import competition” (Buffie, pp. 190–191).

Similar problems were encountered in Latin America, where “liberalization in the early nineties seems to have resulted in large job losses in the formal sector and a substantial worsening in underemployment in Peru, Nicaragua, Ecuador, and Brazil” (Buffie, pp. 190–191).

The United Nations Conference on Trade and Development recently produced simulations of the effect of proposals submitted by the developed country members of the WTO. These simulations reveal stunning declines in industrial output (of up to 50 and percent) in sectors in which tariffs are targeted to fall to zero (Laird, de Cordoba, and Vanzetti 2003).

The maintenance and development of the industrial sector, which means more industrial output, better technology, and more manufacturing jobs, is of great importance to developing countries. Progress in the industrialization process, which is so critical to overall economic and human development, would be undermined by the indiscriminate and rapid liberalization pushed for by the World Bank and the IMF

and the proposals of the developed country members of the WTO. These pains from trade must be taken fully into consideration if we are to ensure that trade integration is indeed socially and economically responsible.

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# Human Capital Flows

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# International Migration to the High-Income Countries: Some Consequences for Economic Development in the Sending Countries

ROBERT E. B. LUCAS

*Most of the evidence from recent data indicates that economic development at origin diminishes pressures to emigrate, especially when tighter labor markets occur as a result of development; if there is any indication of a lower arm to a migration hump, whereby development accelerates departures, it is apparently confined to very low-income countries. The effects of migration on economic development in countries of origin vary from context to context. Much depends on the nature and composition of migration, the economic environment in the sending countries, and the experiences of the migrants while away. The brain drain, particularly to the United States, is large, but the real costs it imposes on lower-income countries are not well understood. Some evidence of a brain gain is beginning to emerge, through the effect on trade. But the largest positive impacts almost certainly come from the circular migration of unskilled and semiskilled workers and their remittances, which play a critical role in alleviating poverty in many low-income countries.*

International migration is attracting increasing attention: a Global Commission on International Migration has been established and will report to the United Nations, each new EU presidency reiterates the need to harmonize Europe's migration rules, and on January 7, 2004, President Bush proposed a new initiative that could legalize the status of some 6–8 million undocumented immigrants in the United States and establish a new guest worker program. This attention is welcome, albeit rather late. In the interim the halting struggle toward freer trade has attracted most of the attention, though simulations indicate that even small changes in international migration may have far more profound effects on global production than would a complete removal of all trade barriers (Walmsley and Winters 2003).

Meanwhile, international migration and the associated system of remittances have grown. Except when migration is forced, migrants or their families presumably gain

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from these moves, despite the high rents extracted by middlemen for accessing documents, paying to be smuggled across borders, and transferring money home.

Whether those who stay at home gain or lose from emigration is less clear and probably varies from context to context. In part, these variations depend on the nature of the migration streams: the duration or permanence of absence, the skill levels of those departing, the extent of family accompaniment. But the patterns of migration also depend on the state of economic development at origin. The links between migration and development thus run two ways: migration affects development and development affects migration. The signs of both effects remain unsettled in the literature. Some aspects of each are examined here.

A consensus seems to be emerging that economic development at origin either does nothing to affect migration outcomes or accentuates migration pressures. This issue is examined and contested first. The paper then looks at three channels through which migration is thought to influence economic development in the sending countries: remittances, the brain drain and the potential for brain gain, and the incidence and nature of return migration. This set of topics by no means exhausts the development effects of migration. Space precludes a fuller treatment (see, however, Lucas 2004). The selection of topics is in keeping with the three cornerstones of policy that “maximizes migration payoffs” identified by Martin and Straubhaar (2001), namely, remittances, recruitment, and return.

Each of these channels remains controversial: whether remittances permit expansion or cause contraction of domestic production at home remains disputed, traditional arguments about the brain drain have been joined by claims of brain gain processes, while return migration poses problems of reassimilation, particularly when large-scale return is unanticipated. The three elements are also intimately interconnected. For example, intent to return home may be a key motivation to remit; remittances from abroad and the contribution on return of freshly skilled persons may contribute to a brain gain.

The emphasis here is on what the most recent literature and data seem to tell us about these issues. In addition, some attention is given to what the evidence does not tell us— and hence some of the more pressing research issues. The focus is on migration from developing and transition economies to the higher-income countries. The paper therefore begins with a very brief sketch of these migration streams to place the subsequent discussion in context.

## **Migration to North America, Europe, Asia, and the Gulf States**

The Population Division of the United Nations (UN) estimates that in 2000, 175 million people were living outside their country of birth, a 14 percent expansion over a decade earlier and double the number from 30 years before (UN 2002a).<sup>1</sup> Yet this reflects very little change in the propensity to migrate across international borders over the past quarter of a century, the stock of migrants having remained fairly constant relative to world population. The number of refugees recognized by the UN High Commissioner for Refugees (UNHCR) rose through the 1980s but then

declined somewhat from its peak in the early 1990s. By 2000, 9 percent of international migrants were refugees, about 81 percent of whom were located in less developed regions. Overall, about 60 percent of migrants were living in developed countries, where almost 9 percent of the population were migrants.

Openness to migrants varies considerably in the OECD (Organisation for Economic Co-operation and Development) countries, both historically and currently, as does selectivity of migrant types. According to the U.S. Census Bureau, about 10 percent of the U.S. population is foreign born, the highest portion since 1930; the UN Population Division reports nearly a quarter more migrants in the United States (UN 2002a). In both Canada and the United States, migration from Asia has escalated sharply since relaxation of earlier limits. In 2000 nearly 19 percent of Canada's population were foreign born. In Australia the proportion reached almost a quarter.

According to the UN (2002a), most of the world's migrants (56 million) live in Europe. Only a few European countries report foreign-born population, making comparison difficult. However, nonnationals reported in the European Union (EU) amounted to 5 percent of the population, though nearly a third of these are nationals of other EU member states. Even if the 3 million irregular migrants estimated by the International Organization for Migration are added in, the fraction of non-EU population in the European Union would remain below 4.5 percent—much lower than the 6.3 percent nonnational figure reported for the United States in 2000 (U.S. Census Bureau 2001). The surge in asylum seekers arriving in the European Union since 1990 has been a major source of concern, but the recognition rate was very low (averaging 14.1 percent from 1992 to 2001), and by 2000 UNHCR reported that less than 0.5 percent of the EU population were refugees. How many of the rejected asylum seekers remain in the European Union as undocumented immigrants is not known.

Nonnationals in Japan and foreign-born residents in the Republic of Korea represent less than 1.5 percent of the population, despite Japan's admission of ethnic Japanese from South America and Korea's admission of ethnic Koreans from China, as well as growing use of various forms of irregular temporary workers in both. In contrast, some of the other higher-income countries in East Asia have undergone a migration transition, with substantial streams of contract and irregular workers entering Brunei, Hong Kong, Malaysia, Singapore, and Taiwan (China).

Observers who thought that the mass migrations to the Persian Gulf had passed their heyday as oil prices began to decline in the 1980s have proved wrong so far. Despite the 1991 Gulf War and avowed attempts to localize jobs, official estimates of gross migration to the six Gulf Cooperation Council states have continued to climb, and the diversity of countries of origin has increased. By 2000, 10 million foreigners reportedly worked in these countries (UN 2002a).

## **The Effects of Economic Development on Migration Outcomes**

These migration outcomes are shaped both by universal attempts to control immigration and by the desire to migrate. Controls alone fail to dictate the outcomes;

migration pressures affect applications for legal entry as well as the willingness to attempt irregular migration.

Many factors contribute to the decision to migrate, including geographical considerations, the presence of social networks to support migrants on or before arrival, and the threat of violence at home. A consensus appears to be emerging that economic development in the country of origin plays either no part or perhaps a perverse role in spurring migration. The U.S. Commission for the Study of International Migration and Cooperative Economic Development (1991, p. 241) notes that “the development process itself tends to stimulate migration in the short to medium term.” According to this view, migration pressures actually increase as development proceeds from low levels of economic development, while at higher levels of development this process is reversed.

The existence of this pattern—known as the migration hump—has become part of the conventional wisdom. Thus Massey (2003, p. 25) lists as the first of “several basic truths about international migration . . . international migration does not stem from a lack of economic growth and development, but from development itself.” (See also O’Neil 2003.)

Such perceptions of the effects of economic development raise profound questions. For instance, how should the High-Level Group on Asylum and Migration, set up in 1998 by the European General Affairs Council, view social and economic development as one of the essential instruments in drawing up action plans for the countries of concern?

Given the fairly systematic, albeit limited, evidence that migration streams respond positively and in monotonic fashion to the gap in employment opportunities between home and abroad, the emerging conventional wisdom on the role of economic development may seem surprising. In the U.S. context, Freeman (1993) summarizes the evidence on the role of employment opportunity gaps in inducing migration by noting that, allowing for the dynamics of cumulative migration effects, estimates of the elasticity of migration to the United States with respect to earnings gaps are roughly comparable in magnitude to estimates of similar elasticities for interstate migration in the United States or interprovincial migration in Japan. Unfortunately, most of the systematic estimates of international migration responses to earnings differentials are confined to the United States, though the few studies from other contexts confirm the significant role labor market opportunities play (Straubhaar 1986; Lucas 1987; Faini and Venturini 1993; Faini and de Melo 1995; Gonzalez 1995). To be sure, many factors other than the gap in earnings matter, the gap in earnings may not have the largest (normalized) effect on migration outcomes, and specific, bilateral migration streams may not be observed despite a gap in earnings. Yet it does seem fair to conclude that on average the gap in earnings opportunities indeed matters (Massey and others 1998). Why, then, might economic development have no effect on migration pressures, or even affect these pressures “perversely”?

At least five distinct ideas have been put forward as underlying a migration hump:

- Liberalization episodes lead to temporary job loss.
- Structural transformation out of agriculture may be associated with job loss.

- Rising population growth at low levels of development enhances migration pressures.
- Higher incomes ease financing of costly international migration.
- Returns on invested remittances are higher in middle-income countries.

The first two points work through labor market responses, relying on increased labor market slack, despite rising incomes, to increase migration pressures. The third may also work through labor markets, though after a couple of decades a rising birth rate also expands the young adult population, among whom the propensity to migrate is greatest. The last two points suggest that migration pressures may increase despite any tightening in home labor markets. What does the evidence show?

The mass migrations from Europe to North America in the nineteenth and early twentieth centuries clearly did rise with income levels in Europe. However, the seminal work of Hatton and Williamson (1994) represents these migration streams as rising linearly with the gap in earnings between the new and old countries, attributing rising migration largely to accelerated population growth 20 years earlier, reinforced by the cumulative effect of prior migration and, more weakly, the structural shift of the labor force out of agriculture. The combined effects of rising wages with higher incomes and a population growth rate that first rises then declines with incomes can clearly generate a migration hump, albeit one that would occur at a lower income level than the turning point with respect to population growth.

The UN (2002c, p. 22) notes that “the fertility transition . . . has become a virtually universal process.” Although population growth rates remain high in the least developed countries, the UN estimates that they are no longer rising and are projected to decline. Any potential for economic development to accelerate outward migration through rising population growth, as it did in Europe, may thus largely have passed, though a lag effect may continue for some years in the lowest-income contexts.

Reporting on estimates from several more recent data sets, Hatton and Williamson (2002) find that any tendency for emigration to rise with incomes is confined to very lower-income countries, particularly those in Sub-Saharan Africa. Indeed, several earlier studies by other authors estimate an implied turning point that is very close to, or even below, the lowest income level in their samples, rendering extrapolation of a lower arm to a migration hump quite speculative (Lucas 1999). In contrast, Adams and Page (2003) find a statistically significant quadratic pattern to migration propensities, with an estimated turning point at a GDP per capita of \$1,300 (at 1995 prices). This level is above the sample mean, since low-income countries are overrepresented. The measure of migration deployed in this study is the stock of migrants from some 70 developing countries and transition economies, derived from U.S. Census data and OECD reports for European economies, relative to home country population.

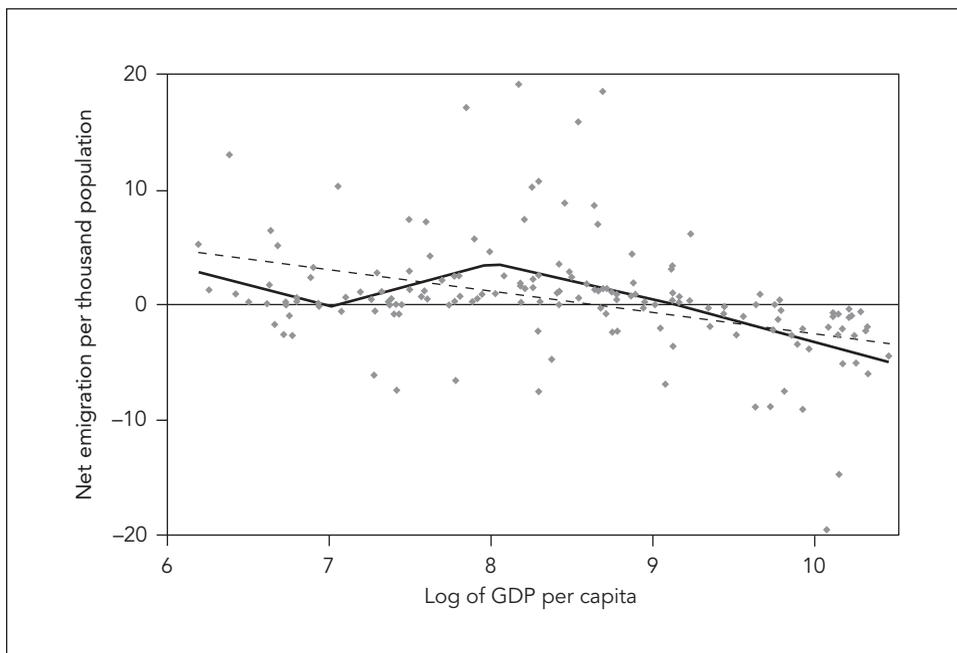
The UN estimates of net migration flows from 164 countries during 1995–2000 are an alternative measure of the propensity to migrate (figure 1). Superimposed on the data in figure 1 is a fairly parsimonious regression, estimated in piecewise linear form. Among the lowest-income countries, according to these data, the emigration

propensity actually declines as income per capita rises, and it does so in a statistically significant fashion, indicating the absence of the hypothesized lower arm of a migration hump. Moreover, the estimated function is never statistically significantly higher than at the lowest income point.

The net migration flow data do not indicate any clear migration hump, but the data on migration stock in the OECD countries of Europe and the United States do. What is the difference? Figure 2 superimposes the migration propensities for the 1990s from the World Bank study on the UN net migration flow measures among the lower-income countries. The migrant stock data report zero migration for 31 of the 72 countries for which data are available for the 1990s. It is clear from figure 2 that many of these countries are in the lowest income categories. Some of these zero-migration observations (Burkina Faso, Estonia, Lesotho, Kazakhstan, and Mali) are known to be high net out-migration cases. One difficulty with the OECD data is that stocks of foreign born (or nationals) are reported only for a few sending countries from which the absolute stocks of migrants are largest. As a result, some of the smaller countries appear to have no migration. But figure 2 may also suggest another possibility—that although migrants leave the lower-income countries, they do not move to Europe or the United States.

It is clearly not the case that migrants from the lowest-income countries tend only to move locally, though much of the flow of refugees is restricted to local migration.

**FIGURE 1.**  
**Net Migration Rates for 164 Countries, 1995–2000**



Source: United Nations 2002a.

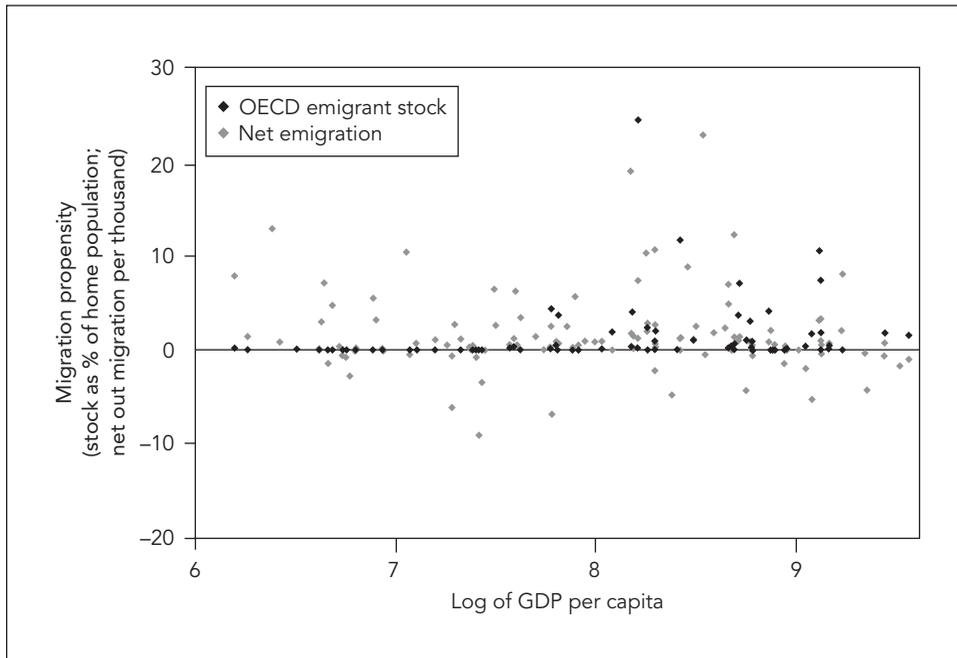
Note: Splines are included at log GDP values of 6, 7, 8, 9, and 10.5. Estimation is by ordinary least squares. Statistical tests are based on heteroskedasticity-robust standard error estimates.

Thus during 1995–2000 the UN estimated the rate of net out-migration as higher for Africa than for South America or for the less-developed regions as a whole.

Systematic data on bilateral migration flows are required to explore these issues more effectively. Unfortunately, such data do not yet exist for most countries. However, a good deal of migration can be documented from lower-income countries to the Persian Gulf, to South Africa, and to the higher-income countries of East Asia, as the authors of the World Bank study note. Moreover, as with the OECD countries, these additional streams appear to be affected by levels of economic development at origin and the gaps in incomes between sending and receiving areas.

The data on official flows of migrants from the seven principal Asian countries that send workers to the Persian Gulf (Bangladesh, India, Indonesia, Pakistan, the Philippines, Sri Lanka, and Thailand) illustrate this point. In a regression of the logarithm of these flows, relative to home country population, controlling for country fixed and time trend effects, as well as the migration propensity the previous year, the effect of the logarithm of GDP per capita in the sending countries is significantly negative. A 1 percent increase in GDP at home is estimated to be associated with about a 1 percent decline in recruiting.<sup>2</sup> Much remains to be explored in relation to these data: the roles of oil prices, the changing pattern of occupational demands in the Middle East, conflicts in the Persian Gulf, and pos-

**FIGURE 2.**  
**Emigrant Stock in the United States and OECD Countries of Europe**  
**and Net Migration Rates for Select Developing Countries**



Sources: Adams and Page 2003; United Nations 2002a.

sibly the preference to diversify country sources (a feature of the not dissimilar recruiting regime in South African mines in earlier times). Yet these preliminary results may suggest that development at origin has indeed mattered to this non-OECD flow. In a similar vein, Abella (1995) has argued that the differences in economic development patterns have contributed to the migration transition and the emergence of substantial temporary migration from low- to high-income economies within East Asia.

More generally, a transition occurs from net out-migration to net in-migration at about \$8,000 in purchasing power parity in 2000. Among countries with a GDP per capita of more than \$9,000, only Estonia and Mexico had net out-migration rates of more than 1 per 1,000 in 1995–2000. There is, of course, a good deal of variation around these simple patterns; many other factors shape migration propensities, not the least of which is the prevalence of violence. As Castles, Crawley, and Loughna (2003) point out, although the motivations of asylum seekers are frequently questioned, the flows of asylum seekers indeed follow incidents of conflict, and these incidents are not necessarily associated with low levels of development.

Economic development at origin is certainly not the only factor that shapes international migration pressures and outcomes. Moreover, not all development strategies result in tighter labor markets at home. Nonetheless, at least where economic development is correlated with tighter performance in labor markets, the evidence clearly indicates that migration pressures are indeed thereby diminished. If there is any lower arm to a migration hump, it appears to be confined to very low-income contexts. Europe's High-Level Group should probably be assured that efforts to assist social and economic development would indeed be effective in reducing migration pressures.

## The Role of Remittances in Economic Development

In 2003 the *Global Development Finance Report* included for the first time a chapter on remittances. That chapter recognizes remittances as a large, stable, and growing source of finance, noting that remittances are higher, relative to income, in the poorer countries and have an expansionary effect on the home countries' economies.

The global remittance system is bifurcated between formal and informal channels. Systematic data are available only for the formal channels, and even these data leave a great deal to be desired. Estimates of formal remittances to the developing regions have indeed grown and now exceed official development assistance, according to the International Monetary Fund (IMF 2003). In 2000 the negative cross-country association between income level and remittance receipts as a proportion of income was relatively weak. Moreover, remittances received per capita actually rose significantly with income levels across countries. But what is the role of remittances in promoting development at origin, and how effective are policy efforts to promote remittances?

### *The Effects of Remittances on Economic Development*

The effects of remittance receipts on domestic macroeconomic performance remains a subject of debate. The potential effects are well known and mixed (Russell 1986). On the positive side are expanded savings and investment, plus the multiplier stimulus effects from added spending. On the negative side is the potential for diminished labor supply and effort induced by higher transfers, together with a Dutch disease-like effect in keeping the exchange rate high and discouraging domestic production of tradable goods. This effect is well illustrated by the recent experiences of some of the Eastern European economies. For instance, although consumption levels in Albania and Moldova would surely have been far lower without the massive remittance inflows during their painful transitions in the 1990s, those remittances also helped prop up the real exchange rates in both countries, probably retarding the establishment of export-based activities for future growth. More formal testing of both this effect and the purported effect on labor supply appear to be lacking, though a number of case studies indicate withdrawals from the labor force among families supported by remittances (see, for example, Addleton 1992 on Pakistan).

Whether remittances lead to realized additional investments is highly contentious, and the evidence is mixed. Most of the evidence is based on analyses of household spending patterns. The common practices of noting whether families invest the cash remittances they receive or of relating asset accumulation to the portion of income received as remittances are hardly the point (although individual household members' control over household spending may indeed depend on income sources). Given fungibility in budgets as well as the incidence and general equilibrium impacts of remittances on nonrecipient families, perhaps the only realistic possibilities for testing the investment consequences of remittances lie at a more macro level. Even here, the problems of simultaneous determination of both remittance decisions and investment plans, together with the problems of lagged responses in investing (not to mention the lack of data on informal remittances) render testing difficult. Nonetheless, a few macro studies do indicate a significant stimulus to investments from (lagged) remittances. Gyltsos (2002b) estimates a simple dynamic, simultaneous model of aggregate investments, consumption, imports, and the feedback of these components through an income identity for each of seven Mediterranean countries from about 1969 to 1993. Simulating the direct and indirect effects of remittances on incomes—and hence on investment—through this framework, he finds that over a six-year period investment rose with remittances in six out of the seven countries, and investment rose by more than the initial amount remitted in four countries.<sup>3</sup>

As the *Global Development Finance Report* (World Bank 2003, p. 164) notes, “If remittances are invested, they contribute to output growth, and if they are consumed, then also they generate positive multiplier effects.” Using a social accounting matrix, Adelman, Taylor, and Vogel (1988) demonstrate that the multiplier effects of investment can be large locally, with each additional \$100 remitted from the United States adding about \$178 to income in a Mexican village. Generating such large expansions in production, rather than simply increasing prices or village imports, requires significant excess local capacity.

Mahmud (1989) argues that in Bangladesh any multiplier effects have been limited by supply constraints, though services appear to have responded to increased demand in high-migration areas of the country. In India the economy of Kerala went into recession in 1991, following the mass return of migrants from the Gulf following the first Gulf War and the associated loss in remittances, despite claims that much of the benefit from remittances to Kerala extended beyond the state's borders, given the high propensity to internal trade with the rest of India (Nair 1998). Indeed, the rate of growth of net domestic product in Kerala, from 1981/82 to 1997/98, is positively correlated with the growth of recruiting from India to the Gulf the previous year (perhaps half of which was from Kerala): on average a 1 percent increase in recruiting is estimated to be associated with about a 0.1 percent rise in net domestic product the following year, controlling for a trend effect. Thus there are indications supporting the notion of expansionary effects from remittance spending, and at least in some contexts they appear to be large.

Such simulations of the expansionary potential of remittance spending have become increasingly common and some testing of impacts on aggregate investment has appeared, but direct tests of the reduced-form effect of remittances on output levels and growth are rare. However, at about the same time as the release of the *Global Development Finance Report*, the IMF published a working paper asserting that, on average, larger remittances actually diminish growth performance (Chami, Fullenkamp, and Jahjah 2003). This paper examines panel data on growth across countries, controlling (among other things) for the fraction of GDP that is invested. It finds a significant negative coefficient on remittance receipts. The authors argue that this negative effect stems from diminished labor supply, given the income effect of support from remittances. This view is not tested directly in the paper, and, although the level of output would fall as a result of any induced reduction in labor effort, it is not apparent that the rate of growth in output would be affected. More important, any positive effects of remittances on growth are likely to be channeled through investments, a possibility that is largely ruled out in the IMF study by controlling for investment rates (though admittedly these do not include investments in education). Most probably, the negative association between remittances and growth reflects a reverse causality in which migrants leave and then return remittances to slower-growing economies. The authors attempt to control for this reverse causality, but the instruments used (particularly the interest rate differential) appear to be weak.

Whether remittances raise or lower GDP and its rate of growth thus remains unclear, although there are contexts in which additional investments indeed appear to be enabled by remittances and where large expansionary effects of spending from remittances have been noted. More careful macroeconomic modeling is called for to sort these issues out, although the ambiguous nature of the results may prove appropriate: investment and growth influences may well differ from context to context. If this is the case, a more fruitful approach would be to focus on the conditions under which enhanced remittance receipts accelerate growth or raise production levels.

We should also not lose sight of the fact that the debate is whether remittances raise domestic production and its growth. Unless remittances actually lower GDP by

more than the amounts remitted, total incomes available for consumption are obviously raised.

Which economic classes benefit more from this incremental income is yet another area of much dispute. It is beyond the scope of this paper, although it may be noted in parting that there is considerable evidence that the poor (if not the poorest) do benefit from remittances, particularly those sent by low-skilled workers temporarily working overseas (Adams and Page 2003).

### *Policy Influences on Remittances*

Despite ambiguities on the expansionary role of remittances and the mixed results on the effect of remittances on income inequality, policymakers in all migrant-sending countries seek to maximize remittances flows. The volume of remittances is shaped by both the extent and the composition of migration and by incentives for given migrants to remit, both of which are subject to some degree of policy influence.

#### *Remittances and the composition of migration*

The policies of both host countries and to a lesser extent sending countries that shape the nature of migration influence how much is remitted, because transfers depend on such factors as whether migrants are highly skilled or unskilled, temporary or permanent, and accompanied or unaccompanied by immediate family members. In general, information on international remittances by different classes of migrants is sketchy and inconclusive. There is no clear agreement on whether highly educated migrants remit more or less than unskilled migrants, the effects being confounded by variations in controls for the greater earning power and more permanent settlement of the highly skilled (Rodriguez 1996; Faini 2002; Jellal 2002).

Does migration for permanent settlement result in lower remittances than a temporary migration regime? With growing emphasis on temporary migration of both highly skilled and less skilled workers, this is a question of mounting policy concern. There are conflicting effects. On the one hand, the intent to return home is typically hypothesized to induce greater savings by the migrant. Being separated from one's family is also believed to increase the level of remittances (Galor and Stark 1990; Gyltsos 1997). Attachment to home may well diminish with the longer absence of more permanently settled migrants, suggesting that temporary migrants remit larger sums than more permanent ones. On the other hand, there is considerable evidence of catch-up in pay with longer duration of residence abroad (though self-selection of the less successful migrants who quit and return home may bias this picture). Perhaps in consequence the evidence relating remittances to duration of stay abroad proves mixed (Brown 1997; Elbadawi and Rocha 1992; Gyltsos 1988; Merkle and Zimmerman 1992). In combination, the two offsetting effects suggest that remittances may initially rise and then decline with duration of stay, which would suggest an optimal length of stay to maximize remittance flows, balancing greater earning power against diminishing attachment. Indeed, Dustmann (2003) describes an opti-

mal period of stay chosen by temporary migrants themselves, noting that rising wages may reduce their length of stay by enabling earlier completion of target saving. He supports this hypothesis with evidence from Germany.

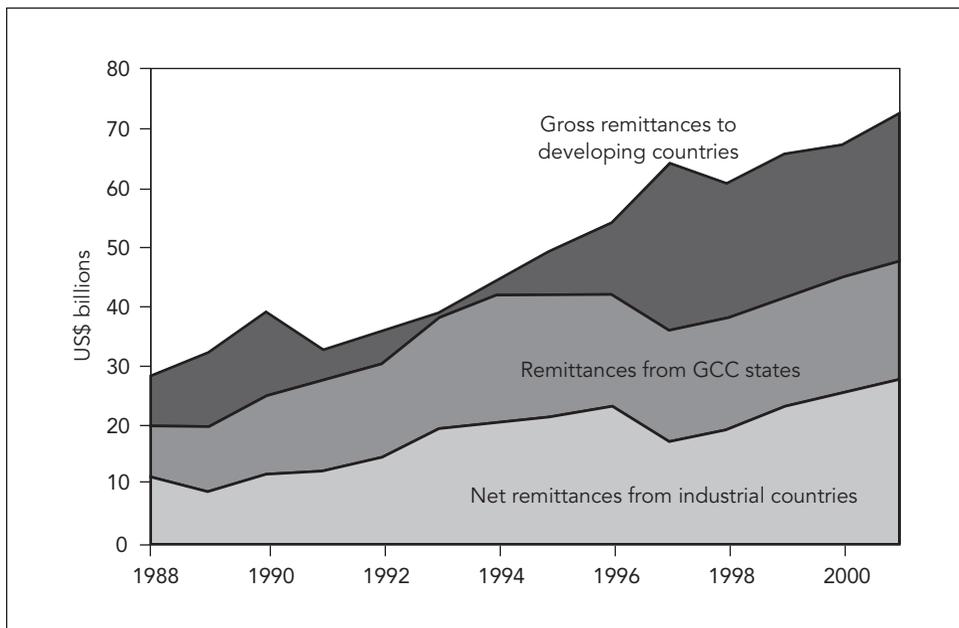
The Persian Gulf states provide some interesting insights. Visas are traded and contracts renewed prolonging residence, but very few Asian migrants stay more than 10 years, and the mean period of stay is 4–5 years. Family accompaniment is confined to an elite few with high incomes, and the income cut-off for this privilege has been raised. Acquisition of citizenship is effectively impossible. Only a small minority of Asian migrants work in professional or managerial posts.

Remittances from these temporary, largely low-skilled migrants in the Gulf have been massive, both in absolute terms and per migrant (figure 3). Most of the remittances from the Gulf go to developing countries. Between 1990 and 2001 remittances from the Gulf states amounted to 92 percent of the net remittances reported from all industrial countries combined and 35 percent of the total gross remittance receipts for developing countries. Remittances per migrant from the Gulf are much higher than remittances from other regions (figure 4).

#### *Policy efforts to induce remittances from the diaspora*

Policies that shape who migrates affect remittances. In addition, use of policies to encourage remittance flows from the existing stock of migrants is widespread,

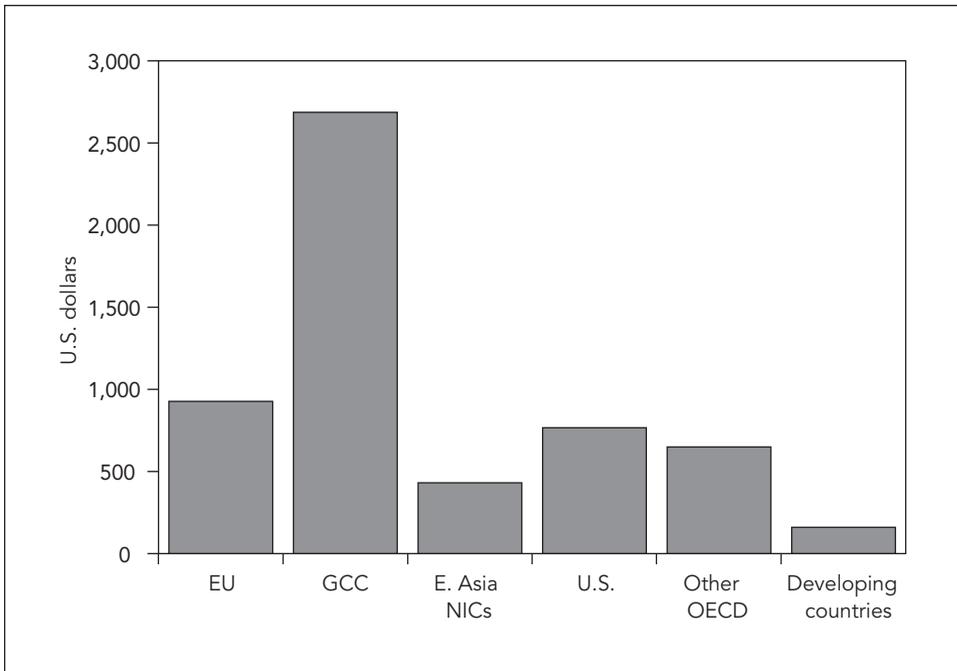
**FIGURE 3.**  
**Remittances to Developing Countries, 1988–2001**



Source: IMF 2003.

Note: GCC = Gulf Cooperation Council.

**FIGURE 4.**  
**Reported Outflow of Remittances Relative to Migrant Stock by Region, 2000**



Sources: IMF 2003; United Nations 2002.  
 Note: NICs = newly industrialized countries.

though little evaluation of the efficacy of these incentives has been done. Common elements in these incentive packages are repatriable foreign currency–denominated bonds or accounts and premium interest and exchange rates. In addition, particularly in the Americas, bilateral efforts are being made to reduce the transactions costs of remitting through formal channels. Some repatriable bond issues have proved popular, particularly among wealthier overseas subscribers, who face less pressure for immediate support of family members at home. However, it would be fallacious to view these instruments as successful merely on the grounds of receptivity: the question is how much these migrants would have remitted anyway, a question that appears not to have been asked.

With respect to the use of premium interest and exchange rates, the evidence on the macroeconomic determinants of remittances is informative. A number of studies have looked at reported remittance flows in relation to interest rate differentials between origin and host countries. Most of the estimates either indicate a very weak response or show that higher relative rates abroad result in greater flows, which is sometimes interpreted as reflecting the higher returns on business activities of migrants abroad (Chami, Fullenkamp, and Jahjah 2003; El-Sakka and McNabb 1999; Faini 1994; Katseli and Gylytsos 1989). At the very least, such results raise doubts about the efficacy of attracting more remittances by offering premium interest rates.

Two central roles have been postulated for the exchange rate in shaping remittances. One stems from thinking of a portfolio of assets denominated in alternative currencies, in which case exchange rate uncertainties play a central role (Katseli and Gyltsos 1989). The other focuses on migrants' decisions to provide consumption for family members at home rather than increase their own consumption, in which case the real exchange rate affects the relative price of these alternatives (Faini 1994; Garson 1994). Surprisingly few systematic studies have been done of the effect of market exchange rate changes on remittances; the few that have been done seem to agree that a (real) depreciation enhances reported remittances (Faini 1994; Gyltsos 1988). More studies focus on the role of the black market premium on foreign exchange, reduction of which tends to expand reported remittances. Presumably some of this effect stems from diverting informal remittances into formal channels; what happens to total remittances is not clear (Gyltsos 2001).

Diverting funds from informal to formal remittance systems is a common policy goal in its own right (Passas 1999). Moreover, international pressures to monitor and curtail the informal transfer system have become considerable since September 11, 2001, prompted in large part by fears that this system facilitates financing of terrorist activities. In practice, remitting through the informal system is usually cheaper, quicker, and more convenient than using formal banks.

In addition to concerns about funding terrorist and other criminal activities, the interest in diverting funds to the formal system stems from the additional tax base and the placing of foreign exchange in government hands. Where the informal banking system offers a route to circumvent controls on capital flight, diversion may also increase the aggregate inflow of foreign exchange. Tightening controls on the informal transfer system may well reduce overall remittances, however, particularly among poorer migrants, who commonly use the informal system; and it is unlikely that this tightening will prove effective in seriously restricting movement of funds by organized crime or terrorists.

### *A Summing Up on Remittances*

The debate over whether remittances raise or lower production levels and growth in countries of origin continues. Much of the analysis of investment effects of remittances conducted at the household level is probably inappropriate; some of the more tenable macro approaches suggest a positive influence (Gyltsos 2002b; León-Ledesma and Piracha, 2001; Lucas 1987). Several simulations of spending effects from remittances suggest large expansionary effects. Some of these simulations may be criticized for presuming an absence of capacity constraints, though there is little evidence indicating inflationary pressures from remittances (Gyltsos 2001). More systematic modeling and analyses of these macroeconomic effects is called for, though it may prove fruitful to examine the circumstances under which remittances stimulate domestic production.

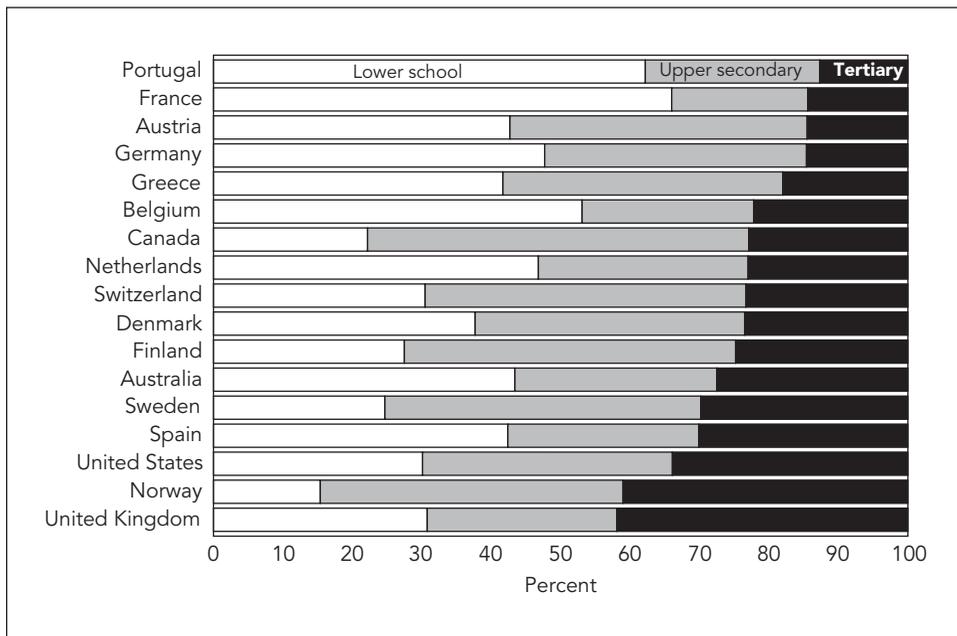
Empirical analyses of the determinants of international remittance flows remain very limited, though the evidence does suggest that temporary migrants remit more

than permanent settlers. This is of some importance for industrial countries that are concerned about the development implications of their immigration policies. It should be noted, however, that very limited periods of stay constrain migrants' earning abilities and hence their remittances. Whether any negative consequences of the brain drain are offset by higher remittances from highly educated migrants remains poorly understood. Moreover, to date there has been little effort to evaluate the common policies attempting to induce greater remittances from the diaspora. The evidence raises doubts about the efficacy of offering premium interest rates to overseas nationals; offers of premium exchange rates may be more effective. International efforts to regulate and curtail the operations of the informal banking system may do much to limit remittances, particularly remittances by the poor.

### Brain Drain and Brain Gain

Most of the OECD countries now have policies to facilitate the recruitment of highly skilled migrants. The educational profiles of the adult foreign populations (age 25–64) vary across these countries (figure 5). According to OECD estimates, 33.9 percent of the foreign-born population in the United States possess tertiary educa-

**FIGURE 5.**  
Foreign Adult Population by Education Level in Select OECD Countries, 2001–02



Source: OECD 2003.

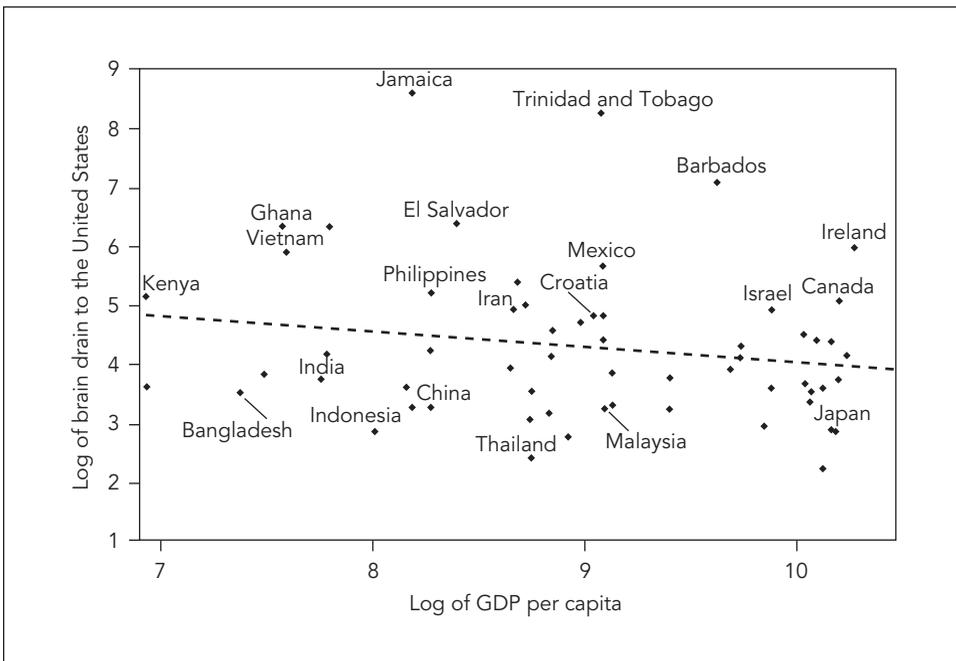
Note: Data on Australia, Canada, and the United States refer to foreign-born adults. Data on Denmark cover people ages 15 to 64.

tion (OECD 2003). The U.S. Census Bureau (2001) reports that in 2000, 42 percent of the foreign-born population 25 and over had some tertiary education and 25.8 percent possessed bachelor's degrees. Nearly a quarter of those with tertiary education in the United States possess postgraduate qualifications. Among the countries covered in figure 5, only Norway and the United Kingdom report a higher proportion of foreign-born residents with tertiary education than the United States.

Given the many differences in definitions, cross-country comparisons are difficult. Very rough estimates, based on UN migrant stock data combined with the ratios in figure 5, suggest that there are more than twice as many foreign-born adults with tertiary education in the United States than in the 12 EU countries in figure 5 combined and that the United States alone has far more foreign graduates than all of the other 16 countries combined. The dominant outlet of the brain drain clearly lies in the United States.

Three-quarters of foreign-born adults in the United States with a tertiary education were born in low-income regions or transition economies (Africa, Asia except Japan, Central America, Eastern Europe, or South America). The ratio of the stock of college-educated adults in the United States to the stock of college-educated adults in the country of origin declines at higher income levels of the countries of origin (figure 6), indicating that the burden of the brain drain to the United States falls disproportionately on lower-income countries.

**FIGURE 6.**  
**Brain Drain to the United States and GDP per Capita for Select Countries**



Sources: Stock of tertiary educated adults in the United States as in table 1. Home country education stock from Barro and Lee (1993) and [www.ksg.harvard.edu/CID](http://www.ksg.harvard.edu/CID). GDP per capita (2000 purchasing power parity) from United Nations (2002b).

Traditionally, this process of brain drain from lower-income countries has been presumed to impose costs on those remaining behind. More recently, mechanisms through which people who stay behind may actually gain from out-migration of the highly skilled—the so-called “brain gain”—have received increasing attention. Evidence on both brain drain and brain gain effects is sparse.

### *Brain Drain*

The brain drain issue centers not on whether the departure of highly skilled or particularly bright people lowers domestic production but on whether those who remain at home are hurt by these departures, given that the elite emigrants are no longer paid locally. There are two quite distinct aspects to this potential cost imposed on others. The first is the notion that the presence of highly skilled people confers an external, uncompensated benefit on others; departure of this elite thus imposes loss of these externalities on those who remain at home. The second is the loss of the public spending invested in the education of departing migrants and, more generally, the fiscal costs resulting from a brain drain.

Some of the potential externalities from higher education are articulated by the World Bank’s Task Force on Higher Education (2000). Quantifying the magnitude or even existence of such externalities is quite another matter. The potential external benefits to education may be divided into three categories: higher incomes of individuals as a result of others’ education, reflecting enhanced productivity from neighborhood or agglomeration effects; benefits derived from the influence that an educated population has on various public goods, such as civic involvement, reduced crime, a cleaner environment, and public health; and dynamic externalities from the effects of education on economic growth, either directly through human capital accumulation if there are scale economies such that others may benefit or indirectly through the rate of technical progress. Davies (2003) refers to these effects as static market, static nonmarket, and dynamic externalities. Within each of these categories, at least two major problems are encountered in estimating any external benefits.

First is the problem of discerning whether correlations between average education and growth, public good outcomes, or individuals’ earnings reflect a causal effect as opposed to either reverse causality or a spurious effect, perhaps resulting from omitted variable bias. This is well illustrated for the static market case by Acemoglu and Angrist (2000), who find no evidence that average local secondary-schooling levels affect individuals’ earnings in the United States once average schooling is instrumented on variations in compulsory schooling and child labor laws. Indeed, after reviewing both the macro and micro evidence, Davies (2003) concludes that there is no evidence to support the notion of static market external benefits operating on income or earning levels of others.

The evidence on nonmarket and dynamic effects is more mixed. As Davies (2003, p. 25) notes, “There have been a large number of studies on the nonmarket effects of education. . . . While these studies . . . experience the typical difficulties in finding adequate instruments, many believe they provide evidence of strong effects.” (See also McMahon 1999.)

On the dynamic effects of education, there is a very substantial empirical literature pointing to the positive effects of education on GDP growth. The emerging indications are that most of this contribution is routed through the effect of a higher stock of human capital on technical progress, partly in the form of technology adoption in the lower-income countries rather than a labor productivity–augmenting effect of human capital growth. These growth effects of education are not universally accepted, however; some serious doubts have been expressed about whether educational expansion causes growth or vice versa (Bils and Klenow 2000).

Even if causality from education to growth and nonmarket outcomes can be supported, a second problem remains; establishing an effect by no means establishes the existence of external benefits. To infer that all of the effects of education on growth that act through higher technical progress provide no private reward to the educated person who generates the new ideas or promotes their adoption seems excessive. The same may be said of a presumption that the benefits of education on specific nonmarket outcomes cannot be internalized by the educated individual simply because of the nature of these outcomes.

Measuring external benefits is extraordinarily difficult. We do not possess enough evidence of large positive externalities from education that emigration of the highly educated should be universally decried on these grounds. The reality may well be that departures of the highly skilled impose significant costs on others in some contexts but not in others. It is easy to imagine that emigration of trained healthcare workers can seriously endanger a public at high risk from HIV/AIDS, provided that these workers would be effectively deployed at home. Identifying any positive external benefits of keeping additional information technology workers in India could prove more challenging, though mutual learning is a possible source even here.

The other major component of potential cost to stayers as a result of the brain drain stems from the net loss of fiscal resources. The per student cost of tertiary education is far higher than the costs of primary or secondary education. Moreover, relative to income the cost of tertiary education is highest in the lower-income countries, where these costs are heavily subsidized. At the point of emigrant departure, these are already sunk costs. Nonetheless, the home state normally loses the taxes that the educated migrant would have paid in the home country. On the saving side, reductions in discretionary state spending on the migrant, and perhaps the migrant's dependants, need to be weighed, as should any tax revenues derived directly or indirectly as a result of remittances (Johnson 1967).

Desai, Kapur, and McHale (2001) report some estimates for the brain drain from India to the United States. They predict earnings that nonresident Indians in the United States could have expected in India and simulate indirect and income tax revenue losses (assuming no evasion) based on these incomes. With rapidly escalating emigration to the United States, these tax losses are estimated to have been about 9 billion rupees—some 0.04 percent of GDP—in 2001. However, assuming that public expenditures (other than defense and interest payments) are a constant proportion of income, on average the simulated savings from departure of emigrants to the United States dominated tax losses from 1990 to 2001, even assuming no tax rev-

venues accruing from remittances. These results for India are provocative, though drawing more general inferences would be inappropriate, if only because the patterns of public spending on emigrant classes may vary considerably across countries. Moreover, as the authors note, their simulation omits any other elements of gain that may result from emigration of the highly skilled.

### *Brain Gain*

At least four components of a potential brain gain have been emphasized in the recent literature. The first three refer to the influences of the diaspora, particularly the skilled members of the diaspora, in promoting trade, international capital flows, and technology transfers to the home country. The fourth element refers to the possibility that a brain drain can induce educational expansion among remaining nationals.

Overseas nationals clearly possess more complete information than do foreigners about the culture and probably also about the general rules of conducting business in their home country. Nationals may also be more aware of specific business opportunities in their homeland and are well placed to gain credible new information through contacts at home. In addition to these sources of information, social ties with friends and family at home can enable migrants to enforce contracts, while trusted foreign employees may be instrumental in lowering reputation barriers to doing business with home-country firms. Each of these channels assumes particular importance when the rules of business in the home country are opaque and recourse to contract enforcement through the law courts limited.

A growing body of evidence indicates that migrant stocks, and particularly the more highly skilled diaspora, can thus play a significant role in promoting international trade. Saxenian (1999) argues that Indian software engineers employed in Silicon Valley were instrumental in initiating the rapid growth in Indian software exports to the United States. The connections between migration and trade have also been confirmed statistically for Australia (Lloyd 1996), Canada (Head and Ries 1998), and the United States (Gould 1994). Rauch and Trindade (2002) demonstrate that greater bilateral trade occurs, particularly in differentiated goods, between countries possessing larger ethnic Chinese communities. The specific role for trade in differentiated goods suggests that information transmission may be an important part of this story, on top of any role for the diaspora in contract enforcement. Head and Ries note that the estimated effects seem too large, however, and that part of the pattern observed may be a spurious reflection of common forces promoting both migration and trade from a particular nation.

Similar analyses do not appear to exist for the influence of a diaspora on capital flows, although the analysis of information as a determinant of direct investment by Mody, Razin, and Sadka (2003) may offer an approach that helps close this gap. Meanwhile, it is worth noting that China has an extensive diaspora (35 million ethnic Chinese live outside China, according to the Overseas Chinese Affairs Commission (2003) and direct investments from this “bamboo network” have been massive.

By 1999, 48 percent of the total assets of “foreign-funded enterprises” in China were in enterprises funded by entrepreneurs from Hong Kong (China), Macao, and Taiwan (China). (See, however, Huang 2003 on measurement issues.) Some observers suggest that China’s experiences in this regard may prove unique, a reflection of the combination of opaque rules of business, large reserves of cheap labor, and the opening to foreign investments after 1978 (Lever-Tracy, Ip, and Tracy 1996). But investments by emigrants from Taiwan (China) in the United States suggests that the experience is not unique.

India also has a massive diaspora: 20 million people of Indian origin live abroad, according to the Government of India (2001). But direct investment by nonresident Indians has been much smaller. Of the \$17 billion in direct investment in India during the 1990s (the figure for China was \$318 billion), just 15 percent came from nonresident Indians. The difference is often attributed to the fact that a substantial number of Chinese emigrants are involved in business, whereas many highly educated Indians are in the professions (Guha and Ray 2000). However, some of the difference is probably attributable to the far more hostile attitude toward foreign investment in general in India.

There are, then, instances in which a diaspora undertakes major investments in the home country, perhaps especially where such investments are welcomed and actively encouraged and where the returns are high. It remains unclear, however, whether or not such instances are common.

A third channel for brain gain, which has attracted a good deal of attention recently, is knowledge networks and the transmission of technologies. These networks adopt a wide variety of forms, both formal and informal (Meyer and Brown 1999). Ample descriptive information is available on these networks but no statistical evidence on their effects on productivity levels in developing regions. Although there would appear to be some potential to extend the burgeoning literature on international technology diffusion to incorporate the role of migrating scientists and engineers, to date this appears not to have occurred.<sup>4</sup> Much of the discussion of brain gain through knowledge networks has involved high-tech industries and middle-income countries. This raises a critical, but unresolved, issue with respect to the ability of the low- (especially the lowest-) income countries to take advantage of the latest technologies from the OECD nations, even if they are transmitted by their educated nationals from overseas.

The final element of potential gain from departure of highly educated nationals is a hypothesized inducement to expand domestic education levels (Mountford 1997). The notion is that private returns to education are raised by the potential to emigrate, inducing additional investment in education, yet only a portion of the additional educated population will actually emigrate. Beine, Docquier, and Rapoport (2001) find a positive effect of the rate of migration to OECD countries on the average level of education in the home-country population among 30 lower-income countries. As Faini (2002) notes, however, this could simply reflect the withdrawal of sufficient numbers of unskilled workers to raise the average level of education among those remaining at home.

Faini (2002) relates gross enrollment rates in 51 countries to the Carrington-Detraggiache measures of brain drain to the OECD from these countries, controlling for GDP per capita at home. The association between the rate of brain drain among people with tertiary education and tertiary enrollment proves weakly negative. If the rate of brain drain to the United States shown in figure 5 is used instead of the Carrington-Detraggiache measures, a similar pattern is confirmed. In fact, this pattern proves more statistically significant than Faini's measures and is robust to inclusion of regional dummy variables to proxy for the effects of distance.

These cross-country patterns may mask some important country-specific effects. By 2000, for instance, 18 percent of all Filipino college graduates were living in the United States, and 60 percent of the Filipino graduates in the United States were female. Given the income level of the Philippines, the tertiary enrollment rate is among the highest in the world; for Filipino women this enrollment rate is 25 percent higher than for men. As of 2001, 72 percent of all students enrolled in higher education were in private institutions. Public spending on tertiary education is low per student, although the private rate of return to higher education for those who remain in the Philippines is comparatively low. It is thus difficult to believe that these high, privately financed enrollment rates are not induced by the possibility of emigration on graduation. There are even signs that the choice of major field of study among Filipino students responds to shifts in international demands. Higher education in the Philippines is almost certainly induced to a significant extent by the potential for emigration.

### *Study Abroad*

Whereas most Filipino graduates in the United States had obtained their degree before moving, this is not true generally. In 1993 almost 60 percent of foreign-born college graduates in the United States had earned their highest degree from a U.S. university (table 1). Another 13 percent had a postgraduate degree from a university outside the United States, but 39 percent of these had earned their bachelor's degree from a U.S. university.

This pattern raises two issues. First, a substantial portion of the college education costs of the foreign born in the United States is probably not borne by their home country governments. Second, studying in the United States is an important mechanism of entry for the highly skilled. Across countries there is a significant positive correlation between the rate of brain drain to the United States, as depicted in figure 5, and the number of tertiary students abroad relative to the home county population (controlling for GDP per capita in the home country).

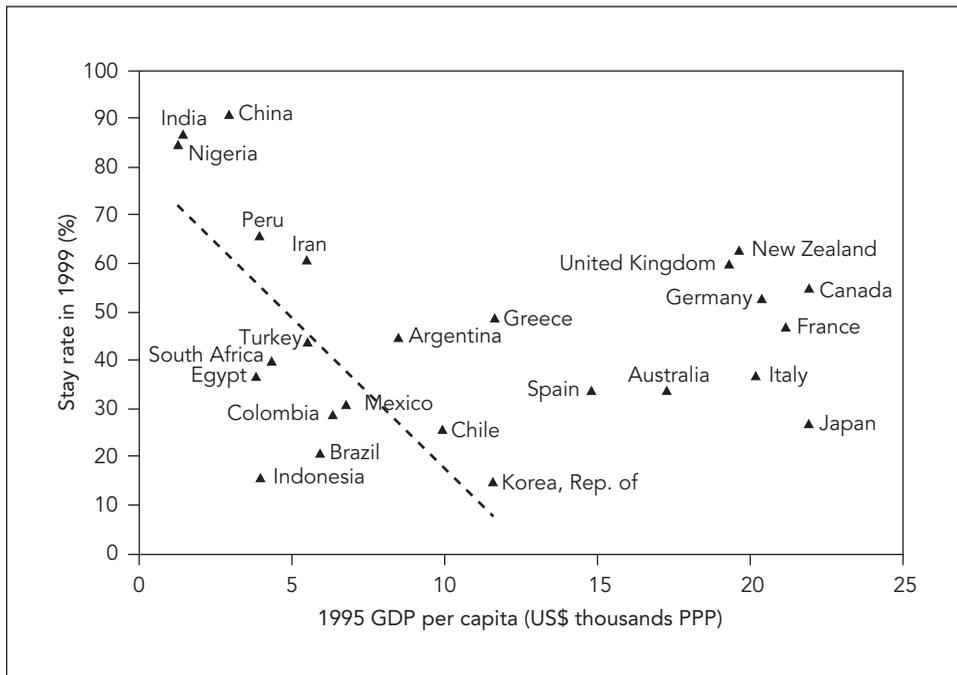
Little information is available on how many students return home from their studies. However, 51 percent of students who received doctorates in science and engineering from U.S. universities in 1994/1995 were working in the United States in 1999 (Finn 2001). Some high-income countries have high stay rates, but among developing countries a significant negative association exists between rate of stay and income level, and the lowest-income countries have the highest stay rates of all (figure 7).

**TABLE 1.**  
**Highest Degree Held and Whether U.S. or Non-U.S. Degree: U.S. Foreign-Born College Graduates, by Region of Origin, 1993**

Region	Degree type and source (percent)								Total	U.S. postgrad. Non-U.S. BA (percent)
	Non-U.S. degree				U.S. degree					
	BA	MA	Doc.	Prof.	BA	MA	Doc.	Prof.		
N. America	15.2	3.9	1.4	3.0	43.4	19.7	6.1	7.4	100.0	24.8
C. America	16.2	3.7	2.5	5.7	45.0	19.2	3.3	4.4	100.0	11.3
S. America	19.4	5.2	2.1	6.3	38.3	19.7	4.4	4.6	100.0	27.1
W. Europe	14.3	5.4	3.9	2.6	42.0	20.8	5.7	5.2	100.0	16.0
E. Europe	18.6	16.7	5.5	6.1	27.1	15.5	6.6	3.9	100.0	17.7
Former USSR	32.5	20.9	6.6	4.0	19.5	10.4	3.4	2.9	100.0	7.4
E. Asia	42.9	3.7	1.0	4.3	22.3	18.4	5.2	2.2	100.0	58.5
S. Asia	29.2	12.0	3.6	9.6	9.7	24.8	7.9	3.2	100.0	77.4
W. Asia & ME	16.0	4.8	2.2	5.8	34.9	23.9	8.0	4.4	100.0	34.8
Africa	21.6	4.3	2.3	5.7	30.6	23.0	8.2	4.2	100.0	38.7
Oceania	28.6	4.1	5.3	4.0	26.5	13.3	16.1	2.3	100.0	50.9
Total	26.7	6.0	2.5	4.9	30.4	19.9	5.7	3.8	100.0	39.1

Source: Derived from US National Survey of College Graduates 1993 at <http://srsstats.sbe.nsf.gov/>.

**FIGURE 7.**  
**Stay Rate of Scientists and Engineers in the United States and Home Country GDP**



Source: Finn 2001.

Note: PPP = purchasing power parity.

### *A Summing Up on the Brain Drain–Brain Gain*

The brain drain to the OECD countries is large, especially to the United States, which attracts a high percentage of the small number of highly skilled people from lower-income countries. Ample evidence suggests that possessing a more highly educated population is correlated with faster economic growth. Many, but not all, observers believe this correlation reflects the causal effect of education on growth and not merely a rising demand for education with higher incomes. Whether such a contribution by an educated population to growth represents a free ride for others remains unclear.

Doubts are much deeper with respect to any causality between education levels and positive outcomes in a wide variety of social, nonmarket benefits, as well as the externalities associated with these. External costs of a brain drain thus have not been effectively demonstrated, though this does not mean that such costs do not exist. Whether there are net fiscal losses from departure of the highly skilled once reductions in expenditures and not just tax losses are recognized has been questioned in the literature; clearly more evidence is required.

Some evidence of brain gain is beginning to emerge, particularly on the positive effect of an educated diaspora in stimulating trade. The effects on capital flows and technology transfer await more systematic demonstration. The evidence on whether a brain drain causes educational expansion at home is mixed and may well vary from country to country.

The association between study abroad and a brain drain seems clearer. The return rates of students are generally lowest in the lower-income countries of developing regions. For these countries, the principal policy option with respect to the brain drain appears to be reconsideration of the mechanisms of student financing to reduce the sunk public costs in students educated at home who leave and possibly never return.

### **Return Migration and “Temporary” Migrants**

Return migration, even of “permanent” settlers, is not new. However, as Hugo (2003, p. 1) notes, “In the contemporary world . . . international circular migration is occurring on an unprecedented large scale, involving a greater cross-section of groups and taking a wider variety of forms than ever before.”

The flow of migrants with temporary status has expanded fairly universally in recent years. Temporary migrant schemes exhibit a mix of advantages and disadvantages for both the host and sending countries. In particular, three concerns about the permanence of temporary migration schemes arise. One is the turnover among migrants. The second is whether the program itself proves temporary in the face of shocks to the host country. The third is whether the program proves capable of reduction in the longer run.

#### *Turnover, Settlement, and Return*

“Temporary” migrant schemes by no means rule out settlement rather than return. The guest worker programs in Europe before 1974 resulted in substantial perma-

ment settlement. Yet even at the height of these programs, turnover and return migration were high. Thereafter from 1975 to 1985 foreign population outflow from Germany reportedly exceeded the inflow (OECD 1986). A significant minority did not return, however, and were followed by their families.

Settlement is not confined to legal guest workers. Reyes and Mamaesh (2002) report that Mexican movement to urban areas of the United States often proves permanent or semipermanent. Hugo (1998) reports that among East Indonesian migrants in Sabah, in Malaysia, many of whom are irregular migrants, a quarter had been away at least 10 years, and many had essentially permanently settled in Sabah.

Rapid turnover of the stock of employees can impose significant costs on employers, depending on the context. Where specific training or trust placed in employees is critical, high turnover imposes real costs. In some situations this is compensated for through lower labor costs, either in lower wages or limited benefit contributions, for temporary migrant workers. There may be social advantages for the host country from higher turnover, such as the benefits from the net fiscal contribution of temporary employees who pay taxes but are eligible for only limited state benefits or receive fewer benefits because of lower (local) dependency rates. The other, more pernicious, perceived benefit in many host countries is the limited settlement of aliens and their families and different lifestyles; yet turnover almost guarantees continued lack of assimilation.

From the perspective of the sending countries, return migration has several attractions, though some costs are also attached. The principal argument in favor of temporary migration is the greater likelihood of contact with the home area by migrants who intend to return—and hence the tendency to remit more and perhaps to contribute in other ways as active members of a diaspora. A second purported advantage is that workers return with freshly acquired skills, or at least enriching experiences, although here the evidence is mixed.

Tan (1993) offers a spirited account of the mismatch between newly acquired skills of returning Filipino workers and the state of technology in the Philippines. De Coulon and Piracha (2002) estimate that returned migrants to Albania earn more than comparable people who never left, even though the people who stayed could potentially have earned more abroad had they left. As De Coulon and Piracha emphasize, the issue of self-selection is important in these comparisons. Thus when Azam (1991) reports that employers found superior work performance among a small sample of returned skilled workers in Pakistan relative to performance of workers who had never been overseas, it is unclear whether this reflects better work habits learned abroad or simply selection of more dynamic workers as migrants in the first place. The employees in this study reported having acquired new specific skills while abroad, but both the employees and employers reported that these new skills were of no use upon return. There is then both skepticism about the applicability of specific acquired skills and some evidence that returning migrants earn more, which may indicate that their experiences had value or that the migrants were more dynamic to begin with.

Migrants often do not re-enter work immediately on return; periods of nonemployment or open unemployment can be prolonged, supported by accumulated savings and perhaps fueled by unrealistic earnings aspirations. As Martin and Staubhaar (2001, p. 6) note, “One expectation was that returned migrants with experience in German factories would become highly productive workers in Turkish factories. This rarely happened, as returned Turkish workers reported that they were ‘tired’ after working 10 or more years in Germany.” Surveys of migrants returning from the Persian Gulf in the 1980s indicated very high rates of unemployment in Bangladesh, Pakistan, and Sri Lanka (Amjad 1989). In a 2001 survey of migrants who had returned to Kerala, India, from the Gulf, about a quarter of those of working age had dropped out of the labor force, and another 8 percent were still seeking work (Zachariah, Nair, and Rajan 2001).

Three observations can be made about this evidence. First, where unemployment or underemployment is substantial, it is not obvious that private choices of returned migrants to retire from the labor force temporarily or even permanently should be a matter for concern. Second, the dynamics of the process of reassimilation and the resultant duration of unemployment await systematic analysis, so it is unclear how to interpret the average unemployment levels reported from some of these surveys. Third, it would be of interest to examine the efficacy of some of the deliberate policy attempts to aid assimilation of returning migrants.<sup>5</sup>

Given popular concerns about the effects of the brain drain, it is not surprising that a wide range of countries, together with some international organizations, actively seek to encourage return migration, particularly of highly skilled nationals. There is some evidence from the industrial countries that migrants who return tend to be the less successful ones (see, for example, Edin, LaLonde, and Åslund [2000] on Sweden). Some countries nevertheless offer incentives for the return of highly skilled migrants. Iredale and others (2003) studied return migration of the highly skilled to four countries in Asia. They conclude that “the role of the government in facilitating return migration is as important as the economic, social and political environment of the country” (p. 85). In Taiwan (China), one of the four economies studied, the government created a wide range of incentives and mechanisms to encourage return, and return has been high. Yet Taiwan’s economy has also been remarkably successful. In the end we lack sufficient evidence to distinguish between the effects of such incentive packages and the attractions of returning to a booming economy. The lower return rate to lower-income countries of scientists and engineers trained in the United States has already been noted.

The turnaround in both the economy and migration from Ireland provides an interesting point of observation: economic success at home—or the lack thereof—does appear to be a significant factor in shaping at least some return migration. The efficacy of specific policies to induce return of the highly skilled thus seems unclear, though offering high salaries, investing in technology parks, and offering tax breaks and housing subsidies can become expensive in terms of fiscal resources, resentment, and the inducement to others to go abroad.

### *Temporary Migration and Adjustment to Shocks*

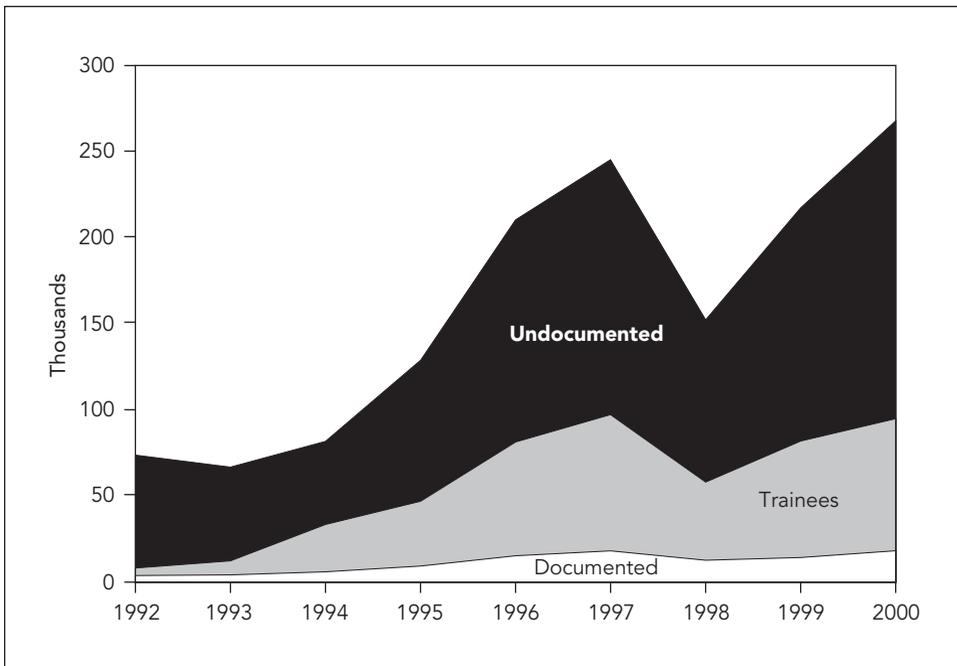
In principle, where turnover rates are high among migrant workers, it becomes easier for host states to reduce the stock of migrant workers, imposing the adjustment costs on the migrant sending nations, following economic shocks or crises. The inability of the European democracies to return guest workers in the wake of the oil price shock of 1974 is well documented. Ultimately, both France and Germany resorted to financial incentives to persuade workers and their families to return voluntarily. The level of these awards may have been inadequate to be effective, however. As Dustmann (1996) notes, it is difficult to judge their efficacy given that a significant portion of beneficiaries might have returned anyway.

The Gulf states have proved better able to cut back recruiting and enforce the compulsory return of workers in the face of various shocks, such as the drop in oil prices in the 1980s, the 1991 Gulf War, and the political determination to localize jobs after 1996. In each case, the shock caused recessionary effects in the major migrant supplying regions. Real wages of skilled construction workers in Pakistan fell in the early 1980s with increasing return migration, and Kerala's healthy growth plummeted in 1991 with the return of large numbers of worker and the loss of remittances.

Malaysia, the Republic of Korea, and Thailand, all major labor importers, were severely affected by the financial crisis of 1997–98. In Thailand arrests of illegal migrants increased sharply, and the official estimate of the stock of illegal foreign workers fell from 987,000 in 1998 to 664,000 in 1999 (Chalamwong 2002). Malaysia announced an amnesty and attempted to redirect retrenched foreign industrial workers either to the plantation sector or abroad, though it is unclear to what extent this reduced the huge number of irregular workers. More than 53,000 undocumented workers left the Republic of Korea under an amnesty program in 1998, and the rate of separation of foreign trainees increased (Yoo and Uh 2002). The stock of “temporary” workers soon rebounded, however (figure 8).

Thailand is both a major importer and a major exporter of labor. Indonesia, the Philippines, and Thailand provide much of the contract and irregular labor in East Asia. Both the Philippines and Thailand managed to sustain or even increase their outflow of contract workers to other countries in East Asia through the crisis years; the outflow from Indonesia remained well above the level for most earlier years, despite attempted cutbacks in the Republic of Korea and Malaysia. In Indonesia the picture with respect to remittances during the crisis is unclear, because reported remittances still come almost exclusively from migrants to the Middle East, though Hugo (forthcoming) notes that informal remittances to East Indonesia may actually have increased, perhaps because of the sharp depreciation of the rupiah. Falling wages in the destination countries in Asia combined with exchange rate uncertainty resulted in a sharp drop in remittances to both Thailand and the Philippines in 1998. However, the decline in remittances was far less than the precipitous drop in financial flows on capital account; the system of migration and remittance thus proved a relatively stable source of finance and employment through the shock of the East Asian crisis.

**FIGURE 8.**  
**Foreign Workers by Legal Status, 1992–2000**



Source: Yoo and Uh 2002.

### *On the Permanence of Temporary Migration*

Some observers have suggested that these patterns of continued recruiting through the crisis and rapid return to prior stock levels illustrate that the higher-income East Asian economies have now become dependent on the continued import of unskilled labor migrants and that the presence of this stock should not be seen as temporary (Debrah 2002; Manning 2002). While it may be true that demand for unskilled workers has indeed become intransigent, identifying any inelasticity in this demand during the crisis is complicated by the simultaneous shift in the supply of migrant workers as the crisis originated in Thailand, real wages plummeted in Indonesia, and weakness in the Filipino labor market deepened.

In 1997 the U.S. Commission on Immigration Reform recommended against adopting a new temporary worker program. In large part the recommendation was driven by views such as those voiced by Martin and Teitelbaum (2001, pp.119, 123), who cautioned that “virtually no low-wage ‘temporary worker’ program in a high-wage liberal democracy has ever turned out to be genuinely temporary . . . scholars largely agree that the 22 years of *bracero* employment created the conditions for the subsequent boom of unauthorized Mexican migration.” They argue that the *bracero* system (a program introduced by the United States during World War II to admit temporary agricultural laborers from Mexico) encouraged Mexicans to move into the

border regions, encouraged adoption of production methods and product lines founded on cheap unskilled labor, and eased illegal entry by allowing illegal migrants to mingle with those legally in the United States. Given the huge income gap between Mexico and the United States and the proximity of the two countries, irregular migration would certainly have taken place with or without the *bracero* program. How much larger irregular migration was because of the earlier program is difficult to tell.

Critics of temporary work programs in the United States perceive legal and irregular migration as complementary. At least some governments in Europe take the opposite view.<sup>6</sup> It would be difficult to make a sound case that ending the guest worker programs in Europe in 1974 caused the subsequent growth in irregular migration. First, the countries of origin of many of the irregular workers were never involved in the guest worker program; for these countries the programs from the 1960s could not have caused labor supply responses that ultimately led to clandestine movements. Second, before 1974 most guest workers were employed in the industrial sector, where few undocumented workers are employed today. Third, the general downward inflexibility of European wages, compared with wage flexibility in the United States, suggests that any more general tendency for the early guest worker program to have depressed wages and hence encouraged more labor-intensive alternatives outside of industry was muted.

Not all of the demands for less-skilled workers in the high-income countries exist merely because of prior legal or undocumented migration. The future of temporary migration by lower-skilled workers from the developing countries will be very much tied up with what happens to these demands. Where outputs are tradable, much will depend on what happens to protection in the high-income countries, especially to agricultural subsidies and outsourcing. But some services are also major users of fairly low-skilled workers and are more difficult to shift offshore. Unless labor-saving technologies enable firms to dispense with low-skilled workers in these service sectors, the demand for temporary migrant workers is indeed likely to prove fairly permanent.

## Conclusion

Most of the evidence from recent data indicates that economic development at origin diminishes pressures to emigrate, especially when tighter labor markets occur as a result of development. If there is any indication of a lower arm to a migration hump, whereby development accelerates departures, it is apparently confined to very low-income countries. Europe's High-Level Group should probably be assured that efforts to assist social and economic development would indeed be an effective instrument in reducing migration pressures. In contrast, protectionist policies encouraging labor-intensive agriculture and discouraging outsourcing will tend to increase migration, legally or irregularly.

The effects of migration on economic development in countries of origin vary from context to context. Much depends on the nature and composition of migra-

tion, the economic environment in the sending countries, and the experiences of the migrants while away. The debate over whether remittances raise or lower domestic production levels and growth in the countries of origin continues, though the more tenable analyses tend to indicate a positive effect of remittances on overall investment levels or a significant expansionary effect from remittance spending. More systematic modeling and analyses of these macroeconomic effects is called for, and it may prove fruitful to examine the circumstances under which remittances stimulate domestic production. Indeed, a number of observers have criticized the lack of policy effort with respect to redirecting remittance use toward more expansionary roles (Nayyar 1994). Yet it is not clear that such redirection is warranted. If investment levels are suboptimal, this is an issue for the entire economy, not merely for families receiving remittances.

Regardless of whether remittances stimulate or restrict domestic production levels, on balance total income is likely to expand. Remittances to many lower-income countries play a critical role in alleviating poverty, even if they do not always reach the poorest households and communities. The combination of income and foreign exchange availability, poverty relief, and external financing is directing a great deal of attention toward remittances and how they can be encouraged. But empirical analyses of the determinants of remittance flows remains very limited, though the evidence does suggest that temporary migration results in greater remittances than permanent migration. Moreover, little has been done to evaluate policies attempting to increase remittances from the diaspora. Meanwhile, international efforts to regulate and curtail the operations of the informal banking system may do much to limit remittances in general and probably remittances to the poor in particular.

The brain drain to the OECD countries is large, especially to the United States, which draws heavily on the small number of highly skilled people from lower-income countries. But we know little about the real costs this brain drain imposes on lower-income countries. This does not mean that such costs do not exist, though they may well be context specific; generalizing from the effects of foreign recruitment of healthcare workers from areas at high risk of HIV/AIDS to the departure of information technology workers would probably be inappropriate.

Some evidence of a brain gain is beginning to emerge, particularly evidence of the positive effect of an educated diaspora in stimulating trade. Instances of effects on capital flows and on technology transfer await more systematic demonstration. Whether these instances are typical may well be doubted.

Nonetheless, most higher-income countries act as if benefits will accrue to their natives from admitting only the highly skilled. It is unclear whether these attempts to compete for the world's brightest reflect the desire to complement capital investments with additional skilled workers, neglecting any tendencies to substitute for the less skilled and to repress the earnings of competing highly skilled natives; a belief in strong positive external benefits or a net fiscal contribution from educated migrants; or mere prejudice. Whatever the motivation, it seems unlikely that the richer nations will abandon their efforts to attract highly skilled migrants, many of whom come from lower-income countries. For the lower-income countries, the prin-

cial policy option with respect to the brain drain thus appears to be reconsideration of the mechanisms of student financing to reduce the sunk public costs in students educated at home who leave and possibly never return.

The higher-income countries are increasingly turning to temporary migration schemes, both for the highly skilled and for the less skilled, and circular migration appears to be expanding. Return is generally thought to be a positive feature of migration for the countries of origin, encouraging remittances and other contributions to the home country from the diaspora. The evidence on any gains from additional skills acquired by returning migrants is mixed. More work is necessary comparing earnings of stayers and returnees, though care needs to be taken to control for selectivity in who migrates. The tendency of returnees to withdraw from the labor market or to conduct protracted job searches has been characterized as a problem. But this is far from clear, particularly where unemployment and underemployment are high; more attention to the cost-effectiveness of policies to address this “problem” is warranted. The same may be said of policy efforts to induce the return of the highly skilled, particularly in light of the evidence that it is the relatively less successful who return on average.

The largest positive impacts on development in the countries of origin almost certainly come from the circular migration of unskilled and semiskilled workers and their remittances. In many senses it would be preferable if these jobs were developed at home rather than overseas, particularly in terms of some of the impacts such systems have in separating families. Meanwhile, these regimes offer a critical safety valve for poverty reduction. It seems inevitable that almost any such system of “temporary” migration, whether legal or irregular, will lead to some permanent settlement. An important unresolved issue is how inelastic the demand for unskilled labor will prove in the higher-income countries. If it proves fairly inelastic—as such factors as the demand for healthcare workers to care for an aging population play a growing role—“temporary” migration systems may prove indispensable and commensurate settlement may be part of the price.

## Notes

1. In the interim, several countries, including the Soviet Union and Yugoslavia, disintegrated, causing many internal migrants to be redefined as foreigners.
2. The time trends prove indistinguishable for five of the countries. It is much higher for Indonesia, which came late to recruiting. There is no time trend for the Philippines. The role of social networks in obtaining job offers and visas is thought to be quite important in this context (Shah 1998). However, the dangers of interpreting the lagged dependent variable as simply reflecting these network effects are well recognized (Munshi 2003).
3. See also León-Ledesma and Piracha (2001) on Eastern Europe and Lucas (1987) on southern Africa. Savings may be greater where uncertainty about the continuity of remittance flows is higher (Alderman 1996; Gylysos 2002b).
4. On international technology diffusion, see Eaton and Kortum (2002). Agrawal, Cockburn, and McHale (2003) provide an interesting empirical analysis of the role of internal migration in technology diffusion.

5. A number of governments have set up incentive schemes to encourage business start-ups among returned migrants. Business failure rates are apparently high (Puri and Ritzema 1999).
6. See, for example, United Kingdom (2002) and the arguments for the establishment of the new program admitting Iranians, Turks, and certain Eastern Europeans on renewable 12-month work permits into the United Kingdom.

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## Comment on “International Migration to the High-Income Countries: Some Consequences for Economic Development in the Sending Countries,” by Robert E. B. Lucas

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Migration is a highly controversial and divisive issue. Yet at the costs of some unfor-  
givable simplifications, an emerging consensus about immigration policies could be  
described along the following lines:

- The net welfare benefits of immigration for receiving countries are relatively small; a 10 percent immigration-induced increase in the labor force would lead to a welfare gain for natives of about 0.1 percent of initial GDP.
- The distributional effects of immigration are significant: labor will lose and capital will gain. For net welfare gains to be relatively large, immigration must be associated with a significant fall in real wages.
- The public finance implications of (unskilled) migration are typically negative. Unskilled immigrants may be unduly attracted by a generous welfare state. And unlike in the case of trade liberalization, governments may be unable to compensate losers.
- The welfare, growth, and public finance effects of skilled immigration are typically positive.

Taken at face value, these propositions underlie the restrictive stance toward unskilled immigration, the adoption of new schemes designed to facilitate temporary immigration (whose impact on the welfare state is presumed to be more limited), and the increasing bias in favor of foreign skilled workers.

But what about sending countries? They may be hurt twice, first by being deprived of the possibility of relying on unskilled migration as a tool of income convergence<sup>1</sup> and second because of the loss of their most talented and entrepreneurial workers. Under these circumstances, migration pressure—what used to be called the push factors of emigration—is likely to grow. Should receiving countries therefore try to attenuate such effects by providing sending countries with a relatively large amount of foreign aid, with a view to fostering economic growth at home?

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Surprisingly, the new consensus offers a negative answer on both counts. Economic development is initially associated with an increase in migration propensities (the hump); aid policies aimed at stemming migration may therefore be self-defeating. Moreover, out-migration of skilled workers is likely to be beneficial for sending countries. The possibility of a brain gain arises because of the higher returns to education induced by skilled migration, the higher remittances of skilled workers, and return migration.

The great merit of Robert Lucas' paper is to take issue with such emerging wisdom, through a clever and careful review of both the analytical and the empirical literature. Lucas focuses largely on sending countries, but in doing so he draws some relevant implications for immigration policies as well.

The first key conclusion of the paper is that the migration hump is not found in the data. If true, this finding delivers a fatal blow to the argument for downplaying the role of foreign aid and more generally development policy as a way to limit migration.

The second conclusion concerns the brain drain. Here Lucas' argument is very nuanced. He takes issues with both the supposed costs and the supposed benefits of skilled out-migration. He argues that there is little evidence of external effects from the loss of skilled workers. More crucially, such effects may be context specific, with the migration of medical doctors in a country struck by an AIDS epidemic having a different impact from the departure of information technology workers in India. Similarly, the alleged benefits of skilled out-migration still await convincing demonstration. Return migration does not seem to bring large benefits to the home country. Still, skilled migration seems to promote trade and, in a limited number of cases, boost the incentives for education.

The third conclusion regards temporary and unskilled migration. Based on a perceptive analysis of the net benefits of temporary migration schemes for both sending and receiving countries, the author's simple but powerful conclusion is that if demand for unskilled workers is inelastic in developed countries, then unskilled migration will continue, and even with the expansion of temporary schemes, commensurate settlements will be unavoidable.

Most of these conclusions are well taken, in particularly the one on temporary migration (I have a few queries about the other two, as I explain later). Moreover, many of them, in particular the first and the third, weaken the "emerging consensus" and should prompt some reconsideration, at least at the academic level, about immigration policies, particularly when the point of view of sending countries is allowed for.

Consider first the migration hump. Lucas focuses on the ascending portion of the curve, but the descending portion also deserves attention. There is indeed a fairly strong case for arguing that economic development at home will have a very substantial effect in discouraging migration. Indeed, migration may fall following income growth at home even with unchanged wage differentials. This is simply because would-be migrants care about the loss of personal and family links, regret the need to move to a new and unfamiliar milieu, and, everything else equal, would

prefer to live at home rather than abroad. Under these conditions, income growth at home will lead potential migrants to consume more of their home country amenities and, hence, to migrate less. The propensity to migrate will fall, even with unchanged wage differentials. Development at home will therefore have a disproportionate effect in reducing the incentive for migration. In work with Alessandra Venturini (Faini and Venturini 1993), I have offered some evidence that this effect may have been at work in Southern Europe.

Regarding the brain drain, I am less optimistic than the author, for several reasons. First, even if highly skilled migrants attend foreign universities, they typically receive their secondary education at home, with real costs for the sending country. Second, it is true that skilled migrants earn more and may therefore remit more, but they also tend to stay abroad longer, thereby weakening their ties with the home country. The net impact on remittances is at best ambiguous. Third, I am unconvinced that there are real gains for those left behind from trading with migrants. Trade would have occurred even in the no-migration scenario, and there is no evidence that migration increases such trade. The opposite is more likely to be true.

Lucas' paper brings to the forefront of the debate on migration the point of view of sending countries. I fully concur with him on the need to emphasize this point of view. We keep arguing about the benefits of a globalized world for developing countries. But globalization has so far proceeded in an extremely biased manner, particularly compared with the previous episode at the end of the nineteenth century. Unskilled migration flows no longer promote convergence between rich and poor countries; on the contrary, the bias toward skilled migration is likely to exacerbate the plight of poor countries. Perhaps the time has come to rethink the international economic (not just the financial) architecture by giving a greater role to institutions, such as the International Labor Office, that could better allow migration to play a full role in a truly multilateral approach to globalization.

## Note

1. Williamson (1996) has shown how powerful this mechanism was in the nineteenth century.

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## **Comment on “International Migration to the High-Income Countries: Some Consequences for Economic Development in the Sending Countries,” by Robert E. B. Lucas**

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Against the background of increasing immigration flows to most OECD (Organisation for Economic Co-operation and Development) countries, a number of important policy questions have attracted attention. Among these the following have consistently been at the forefront of the policy debate: What are the main costs and benefits of migration for the receiving and sending countries? What are the distributional effects within receiving and sending societies? Which policy measures would help ensure that migration is a positive social and economic force for both sets of countries and for the most vulnerable sections of their societies?

Keeping these questions in mind, Prof. Lucas has chosen to review from a sending country perspective the most recent literature on a subset of fundamental issues, namely, the link between migration, income levels, and income growth; the impact effect of remittances on income levels and growth; and the brain-drain versus brain-gain debate. In addition to summarizing the evidence in a clear and coherent way, he evaluates it critically, drawing out the most relevant policy conclusions and pinpointing the ambiguities and gaps in the research. His study is of value to both researchers and policymakers.

Prof. Lucas reviews the evidence on the migration “hump” provided by econometric cross-country studies. These studies investigate the relationship between the propensity to emigrate and the per capita incomes or growth rates of sending countries. According to Hatton and Williamson (2002), the tendency for emigration to rise with per capita incomes is confined to very poor countries, most notably in Sub-Saharan Africa. Other studies seem to accept the view that “the development process itself tends to stimulate migration in the short to medium term” (U.S. Commission for the Study of International Migration 1991, p. 241). In sifting through the evidence and the conflicting results—partly accounted for by data shortcomings and differences between net migration flow and migration stock data—Lucas rejects the migration “hump” hypothesis, arguing that “at least where economic development

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is correlated with tighter performance in labor markets, the evidence clearly indicates that migration pressures are indeed thereby diminished, with a possible exception for very low-income countries.”

I am inclined to be a little more skeptical about the validity of such a conclusion, for a number of reasons. First, the correlation coefficient between growth and employment creation or labor market tightness varies widely across regions and across developing countries. In some cases, growth results in employment creation; in others it leads to job losses. Second, the sources of growth and its distributional effects within each country, especially between urban and rural areas, influence the impact of growth on labor-market tightness as well as on the propensity to migrate. For example, the enhanced integration of rural markets resulting from an increase in infrastructure investment is often accompanied by an increase in migration from rural to urban areas; once the process of internal migration has been initiated; it is usually sustained and transformed into international migration, depending on such factors as economic conditions in urban centers, expectations regarding employment opportunities there, and relocation costs. In this case, growth is likely to be positively linked to migration. The correlation coefficient can be negative, however, if growth is spurred by foreign direct investment inflows or an expansion of trade that augments employment opportunities in well-integrated regional markets.

More generally, from an analytical standpoint, it appears reasonable to split the decision to migrate into two sets of determining factors: those that account for a person’s willingness to migrate and those that determine the probability that migration will actually take place. Employment conditions at home, expected income gaps, and overall economic prospects are important determinants of overall attitudes toward migration. The act of migrating depends on a number of additional factors, most notably transportation costs or proximity to the destination area, the degree of market integration, infrastructure development, the availability of information and social networks, security considerations, and domestic policies. Even if poor people would like to migrate, they cannot do so if their incomes are too low and they are isolated. This second set of factors could explain why migration appears to be positively related to development in low-income countries. Given these considerations, one would expect the migration-development relationship to depend critically on the development paradigm adopted. Systematic differences do exist, not only across but also within regions.

In order to deepen our understanding of the drivers of change, it is important to investigate migration-development dynamics from at least a regional if not a country-specific perspective. Evidence from case studies can significantly enrich our understanding.

The need to go beyond the black box of cross-country comparative data analysis is also evident in investigating the links between remittances and growth. It comes as little surprise to me that Prof. Lucas finds the evidence on the positive effects of remittances on GDP and GDP growth to be mixed. First, explaining the remittance behavior of migrants requires more country-specific research. Data on Filipino workers in the Mediterranean countries, for example, seem to indicate that the amounts

remitted are relatively income inelastic and tied to the cost of selected services the remittances are expected to finance in the sending country, most notably private school fees. In such cases, the volume of remittances becomes an endogenous variable that depends on the cost of these services; the link between development and the cost of basic services in sending countries influences the nature of the link between remittances and sending-country growth. In contrast, where migrants decide to remit a proportion of their incomes to their origin country, the correlation between remittances and growth in the sending country will be determined, *inter alia*, by the degree of market integration between the two countries and the synchronization of economic activity between them. Under such circumstances, unless their volume is particularly high, the effect of remittances will be extremely hard to isolate.

Second, as Prof. Lucas points out, the link between remittances and growth is expected to depend on the age and gender composition of the migrants and their expected duration of stay in the host country. Filipino and Bulgarian women with children in their country of origin tend to finance their children's education through remittances, thereby contributing to pro-growth skill formation and growth. In contrast, young male migrants tend to support older family members in the country of origin, financing their current consumption. Thus the link between remittances and growth depends very much on the composition of spending by recipients and on the time horizon under consideration. As the literature on remittances and more generally on transfers suggests, these financial inflows tend to enhance the short-term incomes of recipients, thereby augmenting consumption, imports, and investment in nontradables (such as housing). Their contribution to long-term growth through enhancing domestic productivity, investment in tradables and foreign exchange-generating activities depends on the level of development and is influenced by domestic policies.

Third, an interesting but unnoticed aspect of remittances is their contribution to the risk management of net foreign exchange earnings. For example, for the French franc-zone (now euro-zone) countries in Africa, the negative effects of the euro's appreciation on their balance of payments, competitiveness, and incomes have been cushioned recently by the beneficial impact of euro-denominated remittances. The results would, of course, have been different had the remittances been denominated in depreciating currencies.

Prof. Lucas' paper highlights the limitations of our knowledge regarding these links. Three broad factors limit this knowledge. First, the quality of the data on migration is inadequate. There is an urgent need to address this issue in both recipient and sending countries; the harmonization of data collection in receiving countries and statistical capacity building in developing countries have become *sine qua non* priorities for any meaningful research. Second, the need to better understand and explain both migrants' decision-making processes and overall socioeconomic policy settings imposes methodological limitations. Cross-country econometric analyses need to be complemented by country case studies and regional studies emphasizing the differences across and within sets of countries. Third, statistical and methodological limitations accentuate the limitations in the policymaking domain.

In framing his policy recommendations, Prof. Lucas draws as much as possible from the data and analyses available. More systematic research needs to be done if we are to avoid applying erroneous recipes to little understood phenomena.

Before concluding, I would like to draw attention to the distributional effects of migration for sending countries, the role of diasporas, and the challenges for coherent policymaking by both home and host governments. All of these issues are under-researched.

The distributional effects go beyond static income effects such as those captured by Winters and others (2002). Through the use of a global general equilibrium model of South-North migration, they attempt to measure the welfare effects of a 3 percent increase in host countries' work forces. They find that whereas world welfare increases and migrants accrue significant gains, permanent residents of sending countries tend to lose because of the ensuing reduction in output. The dynamic distributional effects are less clear. They hinge on both the channels and the strength with which migration affects short-term and long-term growth, as well as on the skills acquired by migrants and their utilization upon their return to the sending country. The results also depend on the balance between positive and negative externalities created by the migration process and the capacity of a country to maximize the positive effects and minimize the negative ones. In some cases, migration has spurred technological change and with it substantial increases in productivity through, for example, the mechanization of agriculture or the adoption of labor-saving technologies. In other cases, the capacity of countries to adjust to migration has been limited, with detrimental effects on growth. The gains or losses from remittances have also varied. In some cases, remittances have been associated with "Dutch-disease" effects, that is, with harmful effects on competitiveness in the sending countries' tradable sectors. In other cases, remittances have been used to finance education, with substantial positive externalities for the domestic societies.

The role of diasporas has also received insufficient attention. Can we substantiate the claim that societies with diasporas are more open to change and policy reform? Prof. Lucas reviews some of the limited evidence. It should be clear, however, that gains are not limited to cases in which migration involves the highly skilled but pertain also to sending societies that have managed to capitalize on the positive externalities associated with labor mobility, that is, to use their diasporas as a valuable development resource.

This brings me to the challenge faced by policymakers as they seek to convert migration into a positive social and economic force. Since labor mobility can be either a substitute or a complement to trade in goods and services and investment, migration is linked to trade and foreign investment flows. As a consequence, trade, investment and migration policies are interrelated. This policy interdependence affects both sending and receiving countries. Appropriately designed migration processes could become an important driving force behind a more equitable and successful integration of developing countries and transition economies into the global economy. OECD country policies seemingly unconnected to migration policy, such as agriculture, competition, or trade policy, tend to influence to a previously under-

appreciated degree both the level and the characteristics of migration flows. Hence the positive economic and social effects of migration could be amplified were migration policies in both sending and receiving countries embedded in an integrated policy framework. The need for research on the coherence of policies for development is therefore pressing. For us at the OECD Development Centre, it constitutes the top priority of our research agenda. Based on secondary evidence, such as that so succinctly summarized by Prof. Lucas, as well as on primary evidence from regional case studies, we hope to contribute not only to a better understanding of the effects of migration on developing countries but also, and more importantly, to improving our joint capacity to design and implement coherent and effective policies.

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## **Comment on “International Migration to the High-Income Countries: Some Consequences for Economic Development in the Sending Countries,” by Robert E. B. Lucas**

ADERANTI ADEPOJU

I want to thank the organizers of this meeting for inviting me to serve as a discussant for this session. I very much enjoyed reading Dr. Lucas’ paper. It is incisive and comprehensive, and it addresses the key issues pertaining to international migration and development: remittances, brain drain and brain gain, and return migration. I congratulate him for a scholarly piece.

I would like to advance some of the arguments he has made, add some reflections from the African perspective, and examine the discourse on migration for development issues. In doing so I focus on three key areas of policy concern to Africa: Africa in the international migration space, the brain drain and brain circulation in the context of the New Partnership for Africa’s Development (NEPAD), and remittances and the role of the diaspora.

### **Africa in the International Migration Space**

Although Prof. Lucas made it clear that the focus of his paper is on migration from developing countries and transition economies to higher-income countries, there was no reference to Africa’s migration configuration. Africa demands not only a brief mention but particular attention, for many reasons. The region has experienced all types of migration configurations—unskilled and temporary contract workers, undocumented migrants, highly skilled professionals, and, of course, refugees—from within and outside the region. It is also the region most grounded in poverty and one in which emigration pressure is compounded by demographic momentum and endemic ethno-political instability. Africa is indeed a region of diverse migration circuits as the origin, destination, and transit point for migrants, but most migration configurations are confined largely to the region.

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Poverty and human deprivation; crises; worsening economic, political, and social conditions; and widespread unemployment have contributed to the sustained exodus of both skilled and unskilled workers, men and women, in regular and irregular situations on a scale not experienced before. Subregional economic unions in Africa are often dominated by the economies of a single country, and movements of people have been directed to a limited number of countries within these unions—Botswana and South Africa in the Southern African Development Community (SADC), Gabon in the Communauté Economique des Etats de l’Afrique Centrale (CEEAC), Côte d’Ivoire and Nigeria in the Economic Community of West African States (ECOWAS), and Congo in the Communauté Economique des Pays des Grands Lacs (CEPGL). Thus, for instance, 28 percent of the population of Côte d’Ivoire are foreign born and one-quarter of all workers in Gabon are foreigners, from Africa and from outside Africa. Estimates of immigrants in South Africa range from 2 to 8 million, out of a population of about 44 million.

Using UN population data sets, Zlotnik (2003) shows that that the number of international migrants in Africa rose from 9 million in 1960 to 16 million in 2000, “more than double the number of international migrants in Latin America and the Caribbean since 1980, and about one-half to one-third of the number in Asia” (p. 4). By 2000 Africa accounted for 9 percent of worldwide international migration, after a steady decrease from 14 percent in 1980. Western and Eastern Africa have higher numbers of international migrants than other parts of Africa, and more of these migrants are women. The share of women migrants has increased in Africa and is now higher than in Asia, albeit still trailing other regions.

## Brain Drain

Developed countries unilaterally select which migrants they admit. They determine the skills combination and income profile, when migrants are permitted to enter the country, and how long they can stay. The countries of origin, which incurred the human capital investment in the migrants, have no say in these matters.

At independence African countries invested heavily in education to train nationals to fill the gap created by the departing colonialists; education was regarded as the main vehicle for rapid development. Within a generation these poor countries were able to produce professionals, including information technology (IT) specialists. Others were trained abroad, building on the foundation of science and math education they received at home, even as these countries were trapped in a population explosion and sluggish economic growth and employment generation. Education expanded faster than the absorptive capacity of these countries’ economies. The small private and bloated public sectors absorbed only a fraction of graduates. Many students pursuing postgraduate studies in science and engineering abroad stayed abroad after completing their studies. Emigration of highly qualified professionals from Ghana, Senegal, Uganda, Zambia, and Zimbabwe to South Africa and outside Africa in the 1970s intensified in the 1980s, as Africans left for Europe,

North America, and the oil-rich Middle East. Between 1986 and 1990 an estimated 50,000–60,000 middle- and high-level African managers emigrated, as domestic socioeconomic and political conditions deteriorated (Adepoju 2000).

Although highly qualified professionals—specialists in IT, engineering, and medicine—represent a small proportion of emigrants, their departure has been costly to Africa in a variety of ways, including the lost opportunity for training replacement cohorts. About 600 Nigerian medical specialists work in Kuwait and Saudi Arabia, and up to 12,000 are in the United States. White doctors from South Africa have emigrated to Australia, Canada, the United Kingdom, and the United States, attracted by higher incomes, unwilling to serve in their country's rural areas, and fearful of the rise in domestic crime. In Zimbabwe about 60 percent of doctors moved to Botswana and South Africa as their country's economy collapsed (Adepoju 2003). This large exodus of doctors has affected the training of new doctors and the quality of health service delivery.

Africa's tertiary educational institutions lack experienced leaders in research for development and training of the manpower required for a variety of development activities. The vacuum accentuates poverty and creates additional migration pressures. One immediate impact is the lack of capacity to undertake cutting-edge research or to adapt findings of such research for development. In many African countries today, students are being churned out without having received rigorous training.

According to estimates by the International Organization for Migration (IOM) and the World Bank, 3.6 million Africans live in Europe and North America, including more than 100,000 professionals; about 23,000 African university graduates and 50,000 executives leave the region annually; and about 40,000 African Ph.D.s live outside Africa. At the same time, aid programs import more than 100,000 expatriate professionals with the same skills possessed by Africans in the diaspora, at a cost to the region of about \$4 billion a year. Africa thus pays the price of producing the human capital for use by rich countries while being denied the realization of development goals by the outflow of scarce skilled manpower.

Probably one-third of researchers and engineers from poor countries work in OECD (Organisation for Economic Co-operation and Development) countries—a significant number indeed and a huge human capital flow produced at great cost by poor countries (Mayer 2001). The importation of skills from poor countries is but a short-term solution to the problem of acute skill shortages in rich countries; in the long-term the solution lies in improving training and educational opportunities locally. The domination of students from North America, Africa, and Asia, including China, of the graduate schools of Europe and the market rigidities and immobility of workers should be reviewed.

What do these trends tell us from a policy and pragmatic point of view? Professionals whose skills are internationally competitive will continue to be lured to the markets of rich countries in which such skills are needed. In the short run the origin countries that initially invest in human capital stand to lose at the macro level. A major challenge facing Africa now is how to retain, effectively utilize, and attract

back the rare skills of its nationals required for national development. Remittances may help offset part of the loss, but they do not compensate for the potential contribution of the skilled emigrants through training and transfer of expertise to younger cohorts at home.

## Brain Circulation

In Africa we are witnessing the transformation of brain drain to brain circulation within the region, especially to Botswana, Côte d'Ivoire, Gabon, and South Africa. Highly skilled professionals, pressured to leave their countries by the uncertain economic conditions, have found the new Republic of South Africa and the booming economy of Botswana attractive alternatives to Europe, North America, and the Gulf states, transforming the brain drain into brain circulation within the region. Migration to South Africa has increased since the demise of the apartheid regime and the spectacular political transformation of the country. Unlike the traditional immigrants from Botswana, Lesotho, Malawi, Mozambique, and Swaziland, most of whom were unskilled mine workers and farm workers, many of the new migrants are skilled professionals (professors, doctors, lawyers, nurses, and engineers). Most migrants in Botswana are highly skilled professionals from industry, academia, and the private sector (Adepoju 2003). Even though the unemployment rate in South Africa is about 40 percent, some 300,000 posts requiring skills that nationals do not possess remain unfilled, because many white engineers, nurses, and other professionals are emigrating oblivious of the progressive policies of the postapartheid era.

Although increasingly a global phenomenon, migration in Africa is essentially intraregional and should be addressed within NEPAD's regional framework. Recent efforts to create a borderless ECOWAS should be replicated by other economic groupings—Common Market for Eastern and Southern Africa (COMESA), SADC—in the spirit of NEPAD. Subregional economic units are building blocks for the African Economic Community and hold the future for free intraregional labor migration.

## Remittances

Dr. Lucas has expertly documented how remittances to developing countries have been rising steeply and now parallel export earnings and official development assistance. Remittances are an important source of income for developing countries—in Lesotho they now account for half of GNP. The estimated \$93 billion in 2003 remitted through official channels was about three times the 1990 level. Nationals of Burkina Faso, Cape Verde, Egypt, Eritrea, Lesotho, Nigeria, Pakistan, the Philippines, and other countries remit huge sums of money to their home countries.

The use of remittances, often person-to-person flows, varies widely. Some provide lifelines to poor family members, who use them to pay for basic services, particu-

larly health care. Others are used to educate siblings and children, set up enterprises, or enhance agricultural production through improved irrigation schemes and other agricultural inputs, as in Mali and Senegal. In Lesotho remittances allow impoverished rural households to survive. Since migration in Africa is generally a household portfolio diversification strategy, pooling resources helps the poor overcome the poverty constraint to migration (Boswell and Crisp 2004).

African governments are increasingly interested in promoting migrants' remittances for investment purposes and are using their embassies to disseminate information on investment opportunities to their nationals abroad (IMP 2003). Remittances of \$1.5–\$3 billion by Ghanaians in the diaspora in 2003, up from \$400 million two years earlier, reflected the response to the favorable (tax and related) incentive-based policy environment in Ghana. These funds were invested in real estate or used to set up microenterprises and build clinics and schools, including a high-tech college. Kenya's government has expressed its readiness to explore matching funds or provide security for bank loans for its nationals in the diaspora willing to invest at home.

As we have seen in Dr. Lucas' paper, the debate on the economic (and social) impact of remittances rages on. If we refocus attention on the impact of remittances at the family (micro), community (meso), and national (macro) levels, emerging evidence in Africa shows that remittances can benefit poor households when used to pay for education, health care, and improved housing. Hometown associations' investments can improve basic infrastructural facilities that benefit all households, with local and often wider multiplier effects. Remittances are also an important source of foreign exchange to ease credit constraints (IMP 2003; Koser 2003).

Because of the high transactions costs, not all remittances are routed through official channels. Transactions costs of money transfers are exorbitant (as high as 20 percent on small transactions). These charges "are astronomical in comparison with the costs of bank transfers among industrial economies" (Ratha 2003: p. 165). Depending on their legal status abroad, migrants use a variety of channels to send money home. Irregular migrants, who are vulnerable, exploitable, and subject to uncertainty and insecurity, normally opt for informal channels for fear of apprehension and deportation (Van Doorn 2002). Senegalese emigrants have adapted the indigenous, trust-based traditional human courier system (Kara International Exchange) and network of traders, who visit family members and associates to send money home. This process is prompt, avoids exchange rate fluctuations and costly transfer charges, and overcomes the bottleneck of poor accessibility to remote rural areas.

How can we make remittances work productively for poor recipients, communities, and countries? The economist's view that remittances are used for conspicuous consumption, fuel inflation, and aggravate inequalities should be viewed in terms of the following considerations:

- Migration in Africa is essentially a household decision process and increasingly a survival strategy. Poor people often finance their migration through communal

funding, cooperative assistance, or outright loans. Remittances are designed initially to pay off such loans.

- In poor communities that lack basic services normally provided by governments, the pressing needs are for better housing, funds to pay school fees and buy textbooks and uniforms, and access to basic health services. Migrants' remittances supplement or pay for these services.
- Migrants have worked hard to earn their money and should be free to spend it to fulfil their most pressing needs.
- The composition of the investment portfolio of international migrants is not different from those of internal migrants and indeed nonmigrants.
- Many migrants harbor the ambition ultimately to return home and invest their savings in petty trading, refurbished or new buildings, and real estate.

All stakeholders—governments, financial institutions, regulatory agencies, hometown associations, migrant communities, researchers, and development institutions—should work in concert in exploring the opportunities and minimizing the obstacles for remittances. In particular, they should lobby for low-cost transfer services and less stringent regulations in order to increase their productive use at the micro, meso, and macro levels.

## The Diaspora

African emigrants rarely sever their ties with home; they hope to return home at the first opportunity. Informed by this fact, some international corporations in Europe are launching programs to recruit Africans in the diaspora to work at their firms in Africa. Building networks of scientists with their colleagues at home enables diaspora professionals to contribute to the development of their home countries without relocating, but the immigration policies of many rich countries make it difficult for many African scientists to return home without losing their residence status. Indian IT specialists are working for U.S. companies in India. Such a possibility should be encouraged for specialists in Africa. Given favorable working conditions, skilled professionals in the diaspora would prefer to return home to contribute to the development of their countries. When Germany offered to retain foreign graduates through the green card scheme, less than a third of the quota was taken up at the expiration of the scheme. Few foreign graduates of German universities, especially from Africa, Turkey, and the Gulf states, took advantage of the offer, preferring instead to go back home.

Networking should be encouraged between professionals in the diaspora and their counterparts in Africa in training, technology transfer, information exchange, and research projects, principally through the Internet. But the challenges are daunting: many poor African countries lack the requisite infrastructure, as poverty, corruption, and mismanagement artificially increase the cost of setting up and maintaining needed infrastructure. The example of Indian IT specialists-turned-entrepreneurs in the United States who established IT training institutions in India's

remote provinces and contribute to development programs should be replicated by African expatriates, some of whom are active in political advocacy, charity, and cultural exchange. The Ghanaian diaspora in the United Kingdom has pressed and received permission from the Ghanaian government to vote in national elections, and it is actively involved in modernizing the political process. African associations in the diaspora also help new arrivals adapt and insert into labor markets, reinforce cultural identity, and mobilize members' capital for community development projects at "home." Nigerians have established diaspora organizations and are conducting a skills audit in Europe, the Americas, and other African countries with large concentrations of Nigerians.

African leaders are exploring strategies to attract back their nationals to contribute to national development. Leaders of Ghana, Kenya, and Nigeria, among others, have held a series of meetings with their nationals in the diaspora, encouraging them to return home and offering incentives for them to do so. Many migrants who nurse the hope of returning home may have acquired skills and capital that can be productively invested at home, but the skills acquired by some may not match job opportunities at home. We need more evidence-based research on lessons learnt from IOM's Return and Reintegration of Qualified Nationals and similar programs in Africa to facilitate return, retention, and reintegration of nationals and promote their potential for country-of-origin development (IOM 2001).

## Trade and Migration

The debate on trade regimes is of particular importance to poor countries, in the context of migration and development interrelations. The speakers at the opening sessions reiterated this important aspect, which was missing from Prof. Lucas' paper. The World Bank estimates that high tariffs and technical barriers to trade cost Sub-Saharan African countries about \$20 billion a year in lost exports (UN 1999, p. 35). The protectionist agricultural policies of the European Union and the United States, especially farm subsidies on cotton in the United States, which artificially spur the level of local production and depress world prices, impoverish millions of Africans. In 2001 the *Economist* reported that the United States spends more subsidizing 25,000 cotton farmers than it does on its entire aid budget for Africa, paying \$4 billion of subsidies on a crop worth \$3 billion. The immediate impact was a loss of \$301 million by African exporters, with Benin, Burkina Faso, and Mali each losing about 2 percent of GDP growth. These subsidies impoverish 10 million West African farmers, who are abandoning rural areas to migrate into urban unemployment, turning several of them into potential emigrants. The clamor by African leaders to achieve mutually beneficial trade relations is understandable: deepening poverty has frustrated recent achievements in democratic and economic reform as well as efforts to improve living conditions, stimulate economic growth, and generate employment opportunities.

Bearing in mind that preferential trade between poor and rich countries can affect emigration pressure from poor countries through its indirect effects on economic activity, employment, and wages, rich countries should open their doors to labor-intensive and job-creating goods produced from poor countries, which in turn stimulate economic growth (UN 1999). Unless economic and other opportunities are created in poor countries, pressures for international migration will intensify, further stalling domestic development.

## Conclusion

The discourse on the aging population in rich countries and the possibility to resort more widely to immigration to offset potential labor shortages is becoming topical, as it may drain poor countries' professionals even as rich countries continue to tighten restrictions on unskilled workers from Africa who do the dirty, dangerous, and poorly paid work. African leaders should continue to insist that rich countries have a moral responsibility to assist programs for the orderly return and reintegration of skilled professionals, whose expertise is productively used in rich countries but the initial human capital investment was borne by their countries of origin.

Migration matters should no longer be handled bilaterally; a global approach that harmonizes migration policies supported by international organizations and governments is required to help African countries participate effectively in, and benefit appropriately from, world trade and global markets. Poverty eradication strategies should be at the forefront of the region's development agenda. They should be aligned with mechanisms for creating a stable macroeconomic environment that is favorable to growth, in order to generate employment opportunities and foster enterprise and self-sustaining livelihoods in the region. Efforts by African countries to restructure their economies and open their markets to share in the global economy have been disappointing. In this context, African countries' human and financial resources capacity needs to be reinforced to manage their demographic dynamics, generate employment, and moderate migratory pressures. To date, the emphasis on economic and political aspects and policies has ignored the crucial demographic dimension—the fact that rapid population growth intensifies poverty and emigration pressure. We should also be exploring more systematically the medium- to long-term implications of the ravaging HIV/AIDS pandemic for the supply of skilled workers—in Botswana, South Africa, Zimbabwe, Zambia, and elsewhere—and the potential to resort to immigration to offset domestic labor supply.

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# Capital Flows

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## The Globalization Process: Auto-Component Supply Chains in China and India

JOHN SUTTON

*One of the most important mechanisms underlying the globalization process is the transfer of advanced manufacturing capabilities to low-wage economies. These capabilities comprise both levels of productivity and levels of quality. This transfer of capabilities has been effective in the auto-component industries in China and India, driven by the arrival of international carmakers, often operating as joint ventures with local partners. The resulting transfer of production know-how has driven major advances in productivity and quality.*

One of the most important mechanisms underlying the globalization process lies in the transfer of advanced manufacturing capabilities to low-wage economies. These “capabilities” comprise both levels of productivity and levels of quality. Levels of quality are by far the more important element: poor productivity can be offset by low wage rates, but until firms attain some threshold level of quality, they cannot achieve any sales in global markets, however low the local wage level (for a full discussion, see Sutton, 2001).

The globalization process impinges in very different ways on different industries. Within Indian manufacturing, for example, the machine tool industry has suffered major adjustment problems, as discussed in Sutton (2000). In what follows, I look at a contrasting case: the auto-component supply chain in China and India. Here capabilities have been transferred in a relatively effective way: universally accepted norms exist throughout the international industry, and the transfer of good working

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practices is mediated not only by the activities of multinational carmakers and (first-tier) component suppliers but also by an ancillary grouping of consultancy firms that mediates such transfers.<sup>1</sup> In China and India this transfer process has been driven by the arrival of international carmakers, often operating as joint ventures with local partners. As these new-generation carmakers develop the domestic supply chain in sourcing their own needs, they interact with local suppliers (some of whom are themselves affiliates of multinational component makers). The resulting transfer of production know-how has driven major advances in productivity and quality.

The aim of this study is to examine the extent to which Chinese and Indian auto-component producers have advanced toward international best-practice levels of productivity and quality. The report is based on a survey of nine car manufacturers in China and six in India, a range of general component suppliers in both countries, and a detailed benchmarking study of six seat producers and six exhaust suppliers in each country.

## **Growth of the Automobile Industry in China and India**

The 1990s saw a remarkable transformation of the automobile industry in China and India. At the beginning of the decade, involvement of multinational firms was very limited, and total production volumes in both countries were modest. In 1991 China produced about 81,000 passenger cars, and India produced about 209,000. Foreign involvement in China, up to that date, had been very limited: an early joint venture by Chrysler to produce jeeps (Beijing Jeep) had been marked by continuing difficulties. In India, however, a linkup with Suzuki, forming the Suzuki-Maruti company (now Maruti Udyog), led to early success. The once dominant Hindustan Motors, whose Ambassador model (essentially the 1960s vintage Morris Oxford) had been India's best-selling car for decades, lost market share at a dramatic rate to the new Suzuki-Maruti model, which went on to capture 70 percent of passenger car sales by the early 1990s. The Suzuki-Maruti plant, located outside Delhi, developed a network of suppliers during the early 1990s. Some were joint ventures, in which Suzuki-Maruti held a substantial stake; others were independent domestic firms. In both cases Suzuki-Maruti worked with suppliers to establish international best practice and achieve high levels of productivity and quality.

Beginning in the early 1990s, a wave of multinational firms entered both China and India. In both countries these entrants were required to use a high level of domestic content within a specified period (typically, 70 percent within three years). For at least some of the new entrants, this was seen as an unreasonable target, as domestic suppliers could not meet the carmakers' price and quality requirements. Achieving the 70 percent target required the carmakers to switch rapidly from reliance on imported components to sourcing from local vendors; this in turn gave the carmakers a strong incentive to work closely with (first-tier) suppliers to ensure that quality standards were met, within an acceptable price.

By the end of the decade, car production had increased by a factor of two and a half in India (from 209,000 units in 1991 to 564,000 in 2001) and by a factor of

**TABLE 1.**  
**Production of Passenger Cars in China and India, 1991–2001**

Financial year	China	India
1991	81,055	209,200 <sup>a</sup>
1992	162,725	192,200 <sup>a</sup>
1993	229,697	207,658
1994	250,333	264,468
1995	325,461	348,146
1996	391,099	407,539
1997	487,695	401,002
1998	507,861	390,555
1999	566,105	574,369
2000	607,455	517,907
2001	703,525	564,113

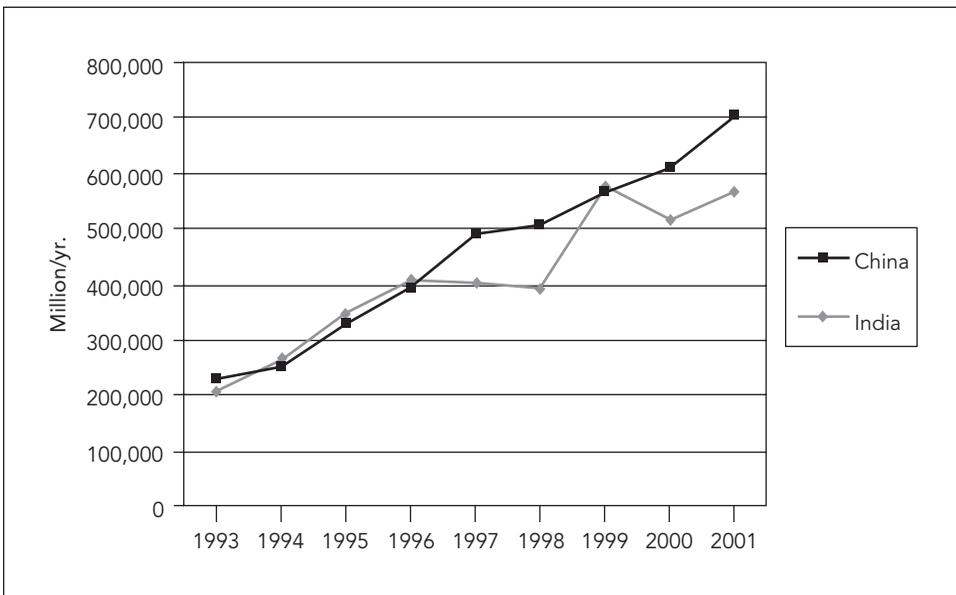
Note: Figures for India refer to financial years (for example, the 1991 figure refers to the financial year 1991/92, and so on).

a. Includes sport utility vehicles.

Sources: Automotive Component Manufacturers Association of India 2002; China Association of Automobile Manufacturers/China Automotive Technology and Research Center 2002.

almost nine in China (from 81,000 in 1991 to more than 704,000 in 2001) (table 1 and figure 1).<sup>2</sup> Over the same period, the supply chain underwent a major transformation. The new generation of multinationals worked closely with local suppliers to achieve high standards of productivity and quality. Meanwhile, domestic carmak-

**FIGURE 1.**  
**Annual Passenger Car Production in China and India, 1993–2001**



Note: Indian figures for fiscal year 1993/94 are shown as 1993, and so on.

Sources: Automotive Component Manufacturers Association of India 2002; China Association of Automobile Manufacturers/China Automotive Technology and Research Center 2002.

ers in both countries faced intense competition for market share. Their response was to upgrade productivity and quality levels in their own plants and to look for higher quality levels from their (first-tier) suppliers.

By the end of the decade, eight firms accounted for almost all production of passenger cars in India (table 2). Six of the eight were multinational joint ventures and accounted for 85 percent of units sold. In China eight carmakers accounted for 94 percent of output. Six of the eight, accounting for 84 percent of output, were international joint ventures (table 3).

**TABLE 2.**  
**Leading Automobile Manufacturers in India, 2001/02**

Company	Units produced	Market share (percent)
Maruti Udyog Ltd. (Suzuki joint venture)	351,949	62.2
Hyundai Motor India Ltd.	93,888	16.5
Tata Engineering and Locomotive Co., Ltd.	64,712	11.5
Hindustan Motors Ltd.	19,398	3.4
Ford India Ltd.	14,306	2.5
Hero Honda Motors Ltd.	10,310	1.8
General Motors India Ltd.	8,135	1.4
Daimler Chrysler India Pvt. Ltd.	1,415	0.2
Total	564,113	100.0

Note: A small number of automobiles is produced by Fiat and Daewoo. Data for these firms are not available.

Sources: Automotive Component Manufacturers Association of India 2002; China Association of Automobile Manufacturers/China Automotive Technology and Research Center 2002.

**TABLE 3.**  
**Leading Automobile Manufacturers in China, 2001**

Company	Units produced	Market share (percent)
Shanghai VW Automotive Co., Ltd.	230,281	32.7
FAW-VW Automotive Co., Ltd.	133,893	18.9
Dongfeng Motor Corporation (Citroen joint venture)	72,192	10.2
Shanghai General Motors Corporation Ltd.	58,543	8.2
Guangzhou Honda Automobile Co., Ltd.	51,146	7.2
Tianjin Automotive Xiali Co., Ltd. (Daihatsu joint venture)	51,019	7.2
Changan Automobile (Group) Liability Co., Ltd.	43,123	6.1
China FAW Group Corporation	21,488	3.0
Total production (all firms) <sup>a</sup>	661,685	100.0

a. The market share of the top eight firms is 94 percent.

Sources: Automotive Component Manufacturers Association of India 2002; China Association of Automobile Manufacturers/China Automotive Technology and Research Center 2002.

## Benchmarking the Supply Chain

The component supply chain developed rapidly in China and India during the past decade, with the value of component production almost doubling from 1997 to 2001 in both countries. By 2001 China's component output and exports exceeded India's by a factor of about three (table 4). India's top 10 component exporters (table 5),

**TABLE 4.**  
**Auto-Component Production and Exports by China and India, 1997–2001**  
(millions of dollars)

Year	China		India	
	Value of output	Value of exports	Value of output	Value of exports
1997	7,343	735	2,406	299
1998	8,441	660	2,599	314
1999	9,731	951	3,271	366
2000	10,060	1,065	3,571	541
2001	13,325	1,751	4,203	555

Note: Figures for India refer to financial years (for example, the 1997 figure refers to the financial year 1997/98).

Sources: Automotive Component Manufacturers Association of India 2002; China Association of Automobile Manufacturers/China Automotive Technology and Research Center 2002.

**TABLE 5.**  
**Leading Auto-Component Exporters in India, 2001/02**

Company	Products exported	Value of exports (millions of dollars)
Visteon Automotive Systems India Pvt. Ltd.	Starter motors, alternators, climate control systems, instrument clusters	55.4
MICO (Motor Industries Co., Ltd.) (Bosch Group)	Spark plugs, diesel fuel injection system	40.5
Bharat Forge Ltd. <sup>a</sup>	Forging, crank shafts	23.1
Brakes India Ltd. <sup>a, b</sup>	Brake systems and components	17.8
Sundaram Fasteners Ltd. <sup>a, b</sup>	Specialized fasteners and radiator caps	17.2
Delphi Automotive Systems Pvt. Ltd.	Shock absorbers, suspension systems	16.6
Phoenix Lamps (India) Ltd.	Halogen lamps	15.7
Sigma Corporation (India) Ltd.	Engine and transmission mounts	11.1
Motherson Sumi Systems Ltd.	Wiring harness	9.2
Sundaram Brake Linings Ltd. <sup>a, b</sup>	Brake lining and clutch facings	9.0
Total for top 10 firms		215.6
Total for all firms		550.0

Note: The top 10 firms account for 39 percent of exports.

a. Domestic firm.

b. Member of the TVS group.

Source: Automotive Component Manufacturers Association of India.

however, had total export sales of about two-thirds the level of their Chinese counterparts (table 6). Of the top 10 Indian exporters, 6 were multinational joint ventures and three form part of a single domestic group (the TVS group). Of China's top 10 component exporters, 4 have one or more multinational joint venture partners and 6 are domestic firms.

This study focuses on the supply chain (or component supply industry) in each country from two perspectives. The first is the depth and stability of the chain. The aim of the domestic content rules imposed on the new arrivals was to bring about the development of high-quality domestically based suppliers. To what extent did the rules succeed? Will suppliers retain their role in the wake of entry by China and India into the World Trade Organization, which bans such restrictions?

The second perspective, and the paper's main focus, relates to the quality of the chain. To what degree has international best practice been transferred to domestically based suppliers (whether independent domestic firms or joint ventures with multinational component producers)? The paper addresses this issue from two

**TABLE 6.**  
**Leading Auto-Component Exporters in China, 2001**

Company	Products exported	Value of exports (millions of dollars)
China FAW Group Corporation <sup>a</sup>	Various	44.3
Kunshan Liufeng Machinery Industry Co., Ltd.	Aluminum alloy wheel hubs	61.2
Siemens VDO Automotive Huizhou Co., Ltd.	Car radios	44.6
Wanxiang Qianchao Co., Ltd. <sup>b</sup>	Universal joints, bearings, drive shafts, constant velocity joints, rubber seal elements, ball bearings	43.0
Shanghai Yanfeng Johnson Controls Seating Co., Ltd.	Seats	43.0
Guangzhou City Huanan Rubber Tyre Co., Ltd. <sup>a</sup>	Covers for radial tires	41.4
Zhejiang Wanfeng Autocar Group <sup>a</sup>	Aluminum wheels	29.8
Shandong Longji Group Co., Ltd. <sup>a</sup>	Brake drums, brake discs	19.6
Xiang Torch Investment Co., Ltd. <sup>a</sup>	Brake discs, lights, mirrors, spark plugs	19.0
Fujian Yuanguang Combined Wire Co., Ltd. <sup>a</sup>	Wiring harness	18.7
Top 10 firms		364.6
All firms		2,617.7

Note: Top 10 firms account for 14 percent of exports.

a. Domestic firm.

b. Domestic firm with many joint ventures

Source: China Association of Automobile Manufacturers/China Automotive Technology and Research Center 2002.

angles. It first compares the level of supplier quality experienced by twinned pairs of buyers in China and India. It then examines in detail two components (seats and exhausts) that lend themselves to cross-plant and cross-country benchmarking in terms of both productivity and quality.

### *The Depth of the Chain*

The degree of development of the supply chain can be gauged by examining the extent to which carmakers buy in components rather than manufacture them in-house. Data were compiled from company interviews with nine Chinese and six Indian carmakers, which provided data on the in-house versus buy-in decision for all major components, assemblies, and subassemblies.

The decision to manufacture in-house or buy in is a subtle one.<sup>3</sup> When the car industry first developed, in the early twentieth century, almost all components were bought in. By the middle of the twentieth century, in-house production was the norm for major components. Over the past few decades, the pattern has moved heavily toward buying in.

The issue of interest here is the degree to which carmakers have access to adequate local sources of supply. If the supply chain is well developed, we expect to see a pattern in which only two key components (the cylinder head and block) are almost always made in-house; a central group of key components, assemblies, and subassemblies (shown as group 2 in table 7) may be outsourced or made in-house; and a group of less central components (group 3 in table 7) is normally outsourced. (Table 7 omits a large number of items that are virtually always outsourced.)

**TABLE 7.**  
**In-House Production and Outsourcing of Various Automobile Components**

<b>Group 1</b> <b>(almost always</b> <b>made in-house)</b>	<b>Group 2</b> <b>(may be outsourced</b> <b>or made in-house)</b>	<b>Group 3</b> <b>(normally outsourced)</b>
Cylinder block	Body (skin) panels	Braking system
Cylinder head	Camshaft and valve	Bumpers
	Crankshaft	Clutch
	Engine mounting	Pistons
	Front axle	Door panels
	Gear box	Door fittings
	Rear axle center bracket	Exhaust system
	Rear axle shaft	Instrument panel
	Transmission	Seats
	Transmission case	Suspension, front and rear
		Timing belt
		Wiring harness

The pattern for China and India is as follows:

- Eight of the nine Chinese firms make the cylinder head and block in-house; three of the six Indian firms outsource them.
- For group 2 components (see table 7), there is an even balance between in-house production and outsourcing in both countries. The fraction of in-house production in China is 49 percent (that is, of the 10 components across 9 producers, there are 44 instances in which the component is bought in against 46 in which it is made in-house). The corresponding figure for India is 55 percent, suggesting a very similar pattern of outsourcing in both countries. A detailed examination of the pattern shows no anomalies: for each of these components and for both countries, one-third to two-thirds of the firms are outsourcing the component. In a large proportion of cases, the supplier is a joint venture with a multinational component supplier, or an affiliate of a (foreign) carmaker. In China 45 percent of the outsourcing instances in group 2 for which relevant information was available came from a joint venture or affiliate of the carmaker; the corresponding figure for India is 55 percent.
- For components in group 3, outsourcing is almost universal in both countries. For these 13 components, the 9 Chinese firms have a 90 percent incidence of outsourcing, while the Indian firms have an incidence of 83 percent.

These figures suggest that carmakers in both countries show a similar pattern of outsourcing. This pattern is consistent with what we would expect to observe in an environment in which there are no serious limits to the availability of suitable local suppliers.

### *Supplier Quality*

Assessing the quality levels achieved by firms in different parts of the supply chain (as conventionally measured by the fraction of parts found to be defective by the buyer) poses a number of difficulties:

- Some types of components pose greater problems than others in manufacturing, and so defect rates for best-practice producers will vary widely from one component to another.
- Systematic differences in levels of quality may be expected as we move down the supply chain, from first-tier to second-tier suppliers and so on.

In light of these difficulties, I attack the problem in two ways. The first approach is to look at three twinned pairs of buyers, one in China and one in India, chosen for their close similarity in terms of the range of components they buy. The distribution of quality across each buyer's suppliers is assessed. This method provides a snapshot of the quality of the supply chain at three different points. The strength of this method lies in the breadth of coverage: it provides an overview of a wide range of components supplied. The next section adopts a complementary approach by looking at the picture from the supplier's side. For two specific components (seats and

exhausts), half a dozen suppliers of each component in each country are examined. This allows the range of performance across different suppliers of the same product to be assessed.

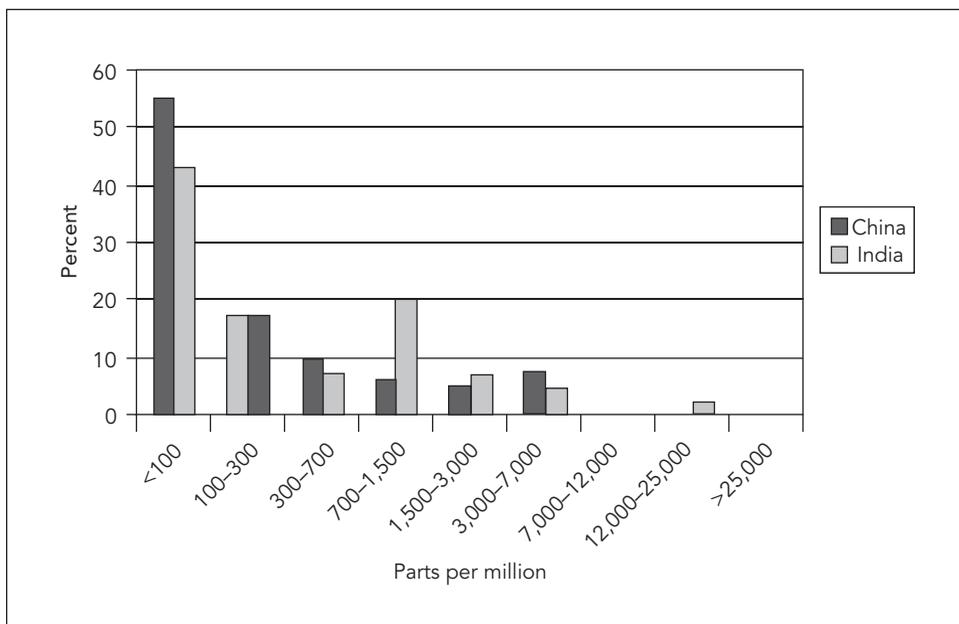
The first pair of twinned firms are carmakers. Each is a recently established multinational firm. Having been in business less than a decade, each of these firms benefited from the early development of the local supply chain that took place through the early 1990s in each country. Each firm has taken advantage of the option of inviting some of its home country suppliers to set up joint ventures with local firms in order to ensure supplier quality.

International best practice for carmakers in Japan, Europe, and the United States aims to achieve a defect rate of less than 100 parts per million among the large majority of component suppliers. In the twinned firms studied in China and India, about half of suppliers in each country achieved this rate (figure 2). The tail of the distribution for the two countries is similar, with about one-eighth of suppliers having defect rates exceeding 1,500 parts per million (table 8).

These distributions confirm the view suggested by discussions with plant personnel that in both China and India, first-tier suppliers to new-generation carmakers are already operating close to world-class standards in terms of incoming component defect rates.

The next two pairs of histograms relate to suppliers farther down the chain. I distinguish between suppliers of very basic components (such as pressed and metal parts) and more sophisticated components (requiring, for example, a series of machining and assembly operations). The first pair of companies are seat producers,

**FIGURE 2.**  
Supplier Defect Rates for a Twinned Pair of New-Generation Carmakers in China and India



**TABLE 8.**  
**Defect Rates of Components Supplied to Two Twinned Pairs of Automobile**  
**Manufacturers and Seat Producers**  
 (percentage of suppliers)

Defect rate (parts per million)	Automobile manufacturers		Seat producers	
	China	India	China	India
Less than 100 parts per million	55	43	60	72
100–300	17	17	20	4
300–700	10	7	8	0
700–1,500	6	20	4	3
1,500–3,000	5	7	4	5
3,000–7,000	7	4	0	4
7,000–12,000	0	0	4	1
12,000–25,000	0	2	0	1
More than 25,000	0	0	0	9

Note: Figures may not add to 100 due to rounding.

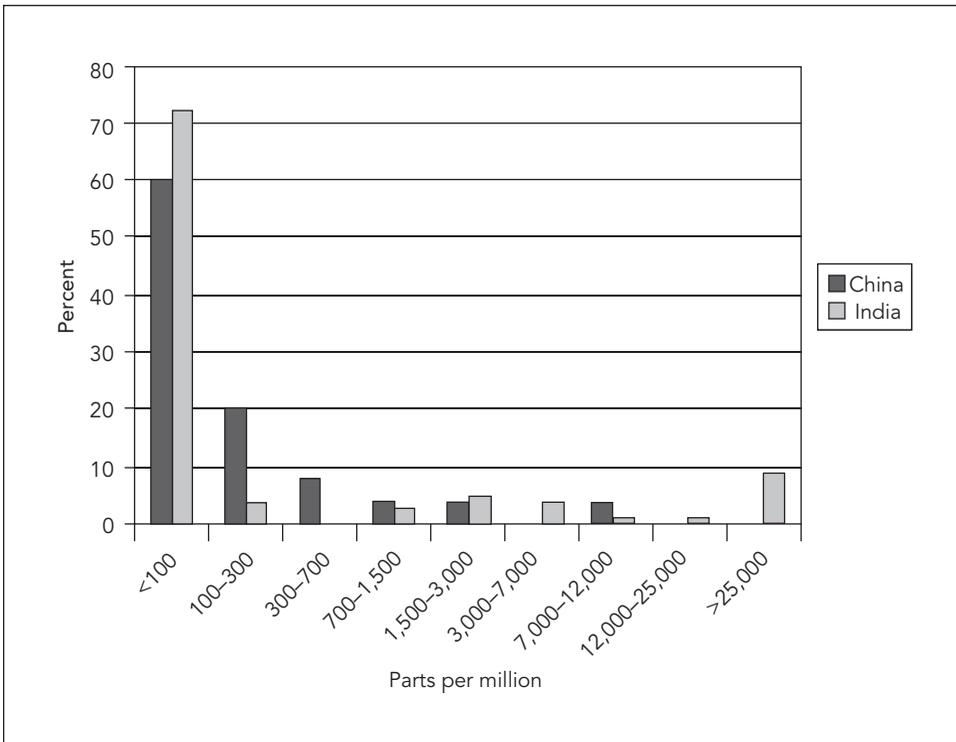
who buy in parts or sections of metal frames (pressed and stamped components, in some cases welded into a subassembly). Each company supplies seats to one of the country's leading carmakers.

The histogram of parts per million defective for incoming components from the firms' various suppliers are shown in figure 3 and table 8. In each case, about two-thirds of suppliers achieve a defect rate below 100 parts per million. The tail of the distribution is longer in the Indian case, with about one-fifth of suppliers above 1,500 parts per million, as opposed to one-tenth for the Chinese firm. Overall, however, performance in both countries is close to the levels expected of world-class suppliers in the United States, Europe, and Japan.

The components supplied to seat producers represent the lowest level of complexity. In contrast, the third pair of firms includes "typical" second-tier suppliers. These firms supply steering gear and allied components to a range of leading carmakers and first-tier suppliers. The range of components they produce is broad, and they buy in a range of components and subassemblies that require a series of machining and assembly operations. As we move down the supply chain toward producers of this kind in the United States, Japan, or Europe, it is usually the case that the distribution of defect rates for incoming parts becomes less favorable than the corresponding distribution for first-tier suppliers.

What is striking about the distributions shown in figure 4 and table 9 is how wide this disparity is for both the Chinese and the Indian suppliers. In both countries steering gear manufacturers experience extremely high rates of incoming defects. These rates are measured not in parts per million found defective but in terms of the percentage of incoming batches found to be unacceptable on first inspection. (Random samples are drawn from each batch on arrival. If the sampled parts are defective, the batch is returned to the supplier, who conducts a full inspection and rejects or reworks as necessary before sending a replacement batch.) The threshold of interest

**FIGURE 3.**  
**Defect Rates of Components Supplied to Seat Producers in China and India**



**TABLE 9.**  
**Defect Rates of Components Supplied to Twinned Pair of Steering Gear Producers**  
 (percentage of suppliers)

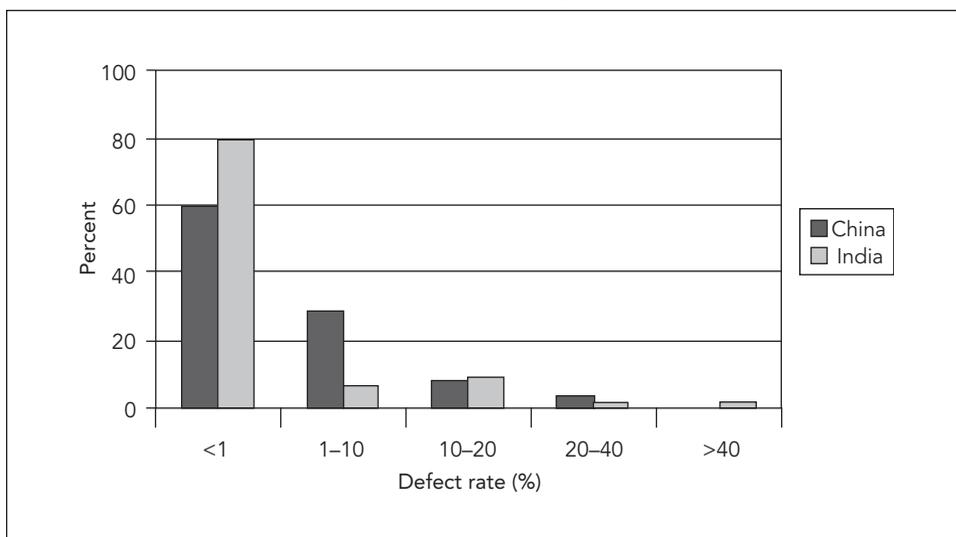
Defect rate (percent)	China	India
Less than 1	60	80
1-10	29	7
10-20	8	9
20-40	4	2
More than 40	0	2

Note: Figures may not add to 100 due to rounding.

is the percentage of batches deemed unacceptable at first inspection. Some 60 percent of Chinese suppliers and 80 percent of Indian suppliers achieve a figure of 1 percent. The tail of the distribution in each case is extremely long: about 4 percent of each firm's suppliers have more than 20 percent of their batches rejected on first inspection.

It is here that the main weakness of the supply chain relative to those in Japan, Europe, and the United States is evident. Manufacturing best practice has spread remarkably quickly to first-tier suppliers in both China and India over the past

**FIGURE 4.**  
**Defect Rates of Components Supplied to Steering Gear Producers in China and India**



decade, as figure 2 suggests. But these practices have not yet permeated the lower tiers of the supply chain. Discussions with firms in the course of this study suggests an explanation. The spread of best practice among first-tier suppliers was driven by pressure from carmakers during the late 1990s. These first-tier suppliers found themselves under pressure from the carmakers, not only to improve quality but also to lower prices. Carmakers worked actively with some first-tier suppliers to achieve low defect rates. Other first-tier suppliers were joint ventures with multinational component suppliers, which introduced best-practice techniques. But when these suppliers turned to their own suppliers, they faced a tradeoff. Should they stay with a low-cost supplier and accept high defect rates or move to a higher-cost supplier? High defect rates can be dealt with by spending more man-hours inspecting incoming parts, which are sent back to the supplier if found defective. In a low-wage environment, it may be less costly to inspect components and have them reworked than to use a supplier with a lower defect rate. Only when the first-tier supplier begins to work closely with suppliers and to drop suppliers with high defect rates is best practice likely to spread. This process is occurring in China and India, but it is happening only very slowly, and the threshold for dropping suppliers with high defect rates is often very high (box 1).

### *The Stability of the Chain*

Given the current state of development of the supply chain, will carmakers begin to take advantage of WTO entry to import components and subassemblies, following the pattern some of the new arrivals regarded as optimal in the 1990s? Discussions with carmakers suggest that the answer is a clear no. Carmakers believe that they

### BOX 1. A Timescale for Capability Building

One question of central importance relates to the timescale for capability building: how long does it take to reach world-class levels of quality? Conventional wisdom among multinational component producers involved in the present study is that starting with a new workforce on a greenfield site is a major advantage: one executive based at the world headquarters of a multinational seat maker remarked that he would expect to be able to achieve world-class quality standards at a greenfield plant in any country within one year of its establishment. If, however, he was operating in a joint venture with an established local seat maker, the process might take three years. The difference reflects the slowness of “relearning”: if established routines are in place, it is hard to change them; beginning from scratch is easier.<sup>a</sup> While the figures suggested may be optimistic, this key difference is borne out by the (limited) set of observations of the time profiles of external defect rates in selected participating firms:

- A multinational seat maker operating on a greenfield site in India had an initial external defect rate of 2,085 parts per million (the world-class threshold is 100 parts per million). By the firm’s third year of operation, the rate had fallen to 65 parts per million, close to the 50 parts per million level regarded as “award class” by multinational seat makers.
- One of the leading domestic seat makers in India began to introduce international best-practice procedures in the mid-1990s. Beginning from an initial external defect rate of 20,000 parts per million, it took five years of steadily improving performance to bring the figure down to its current level of 200 parts per million.

Among multinational seat and exhaust makers, engineers from high-performing plants are regularly transferred to newly formed joint ventures with established domestic producers. One engineer, who had been seconded from a world-class greenfield plant in India to a recently established joint venture plant in China, remarked that his six-month stint would be “largely a matter of talking.” It was not the obvious alterations to the physical plant that mattered, he remarked, but rather inducing a shift in work practices. At the most elementary level, this involves a move away from traditional notions of “inspection at the end of the production line” to a system in which each operator along the line searches for defects in each seat section as it arrives and as it departs. The idea of such constant monitoring is to avoid “adding value to defective units” and to set the basis for a system in which the sources of defects are quickly identified and rectified (see box 2).

a. In some of the plants visited, the difference also reflected the existence of prior contractual agreements on incentive schemes, payment systems, and working practices, which are hard to change.

## **BOX 2. Starting from Scratch**

The key to achieving high levels of productivity and quality lies in establishing a series of interrelated working practices that have become standard in the global auto industry over the past generation. A recurring theme in company interviews is that this is much easier to achieve in a new firm operating on a greenfield site, with newly hired employees, and rather than looking for prior experience in the industry, the newly established employer may deliberately hire people who have never worked in the industry before.

So how can an established domestic firm adapt? A striking illustration is provided by a long-established Indian manufacturer of mechanical components (steering gear and related parts). In order to win and service a major new export contract from a multinational carmaker, the firm recently established a small-scale plant alongside its main premises. Employing a small workforce of men and women, all in their early twenties and with no employment experience, the plant is organized along “Japanese” lines: each operative is responsible for all aspects of his or her work area, including sweeping and cleaning. The company insists that all shop floor workers, whether skilled or unskilled, spend a month working as cooks in the canteen, in order to instill a sense that everyone is working as an equal member of a team, whose shared aim is to achieve the highest possible levels of quality.

This is an extreme example, but it is illustrative of a broad tendency that was evident in about half of the Indian seat and exhaust producers visited in the course of the study: the achievement of high quality standards goes hand in hand with an erosion of traditional patterns of hierarchy within the plant. The emphasis is on building teams of equals, who work in close cooperation (through quality circles and related practices) to bring about a steady flow of minor innovations in working methods, the cumulative effect of which is substantial. As one manager at a domestic Indian firm remarked in the course of our interview, “We take our technology from Europe, but our production practices come from Japan.”

have developed local sources of supply that are superior, in terms of the combination of cost and quality, to imported alternatives. This suggests that in these industries, development of the local supply chain under local-content restrictions in the years before WTO entry has been highly successful.

## **Evidence on Seat and Exhaust Manufacturers**

The main difficulty in comparing productivity and quality across firms lies in the fact that each firm has a different product mix, and controlling for this is difficult. Two producers of gearboxes, for example, would be difficult to compare in a satisfactory

way, since the differences in design and manufacturing complexity across gearboxes are very substantial. Moreover, the machine shop producing gearboxes is likely to produce a wide range of other components, making it difficult to allocate labor hours to each product line.

For this reason, the focus here is on two products that permit a relatively fair and transparent comparison across rival producers: seats and exhausts. In both cases the component is normally produced in a single specialist plant, which produces at most a handful of major product lines. The design and complexity of the products produced by different firms are fairly similar, and it is possible to identify and make allowances for differences that do exist.

A multicountry study of seat and exhaust production in North America, Japan, and Europe was carried out by a team of consultants organized by Andersen Consulting in the late 1990s (Olivier and others 1993).<sup>4</sup> That study provides some useful reference points for international best practice.

## The Sample

The aim of the exercise is to compare productivity and quality levels across the industry's leading firms. With this in mind, all seat and exhaust producers who supply the leading carmakers in each country were identified. A representative sample of 6 of these seat suppliers and 6 of these exhaust suppliers in each country (that is, a total of 24 suppliers) was chosen. These suppliers include some that are joint ventures with, or affiliates of, major multinational seat or exhaust producers who supply international carmakers across the world. Other firms in the sample are domestic producers, some of which are independent companies and some of which are affiliates of the carmaker they supply. Data were collected through a series of interviews and plant visits to each supplier.

In all cases the firms supply a similar product or set of products. In the case of seat suppliers, the standard product is a seat set for a passenger car—two front and one rear (bench) seat. The aim is to measure productivity in the assembly process. In the case of exhaust suppliers, the standard product is an exhaust, comprising a muffler, a manifold, and tubes. The aim is to measure productivity in the manufacture of such an exhaust, beginning from steel tubes and sheet steel. This process involves a series of cutting, bending, and welding operations.

Productivity is measured in terms of the number of seat sets or exhausts produced per man-hour. Quality is measured at two points. The first relates to the fraction of units found to be defective during the production process (units pulled from the line or failing to pass final inspection—the internal defect rate). The second is the external defect rate (used in the previous section), a measure of the quality of units delivered to the carmaker.

Beyond these productivity and quality measures, two supplementary measures of manufacturing performance are examined: these relate to the coordination of production with materials' suppliers and with the customer (the carmaker). The first relates to the level of inventory held, either as raw material or work in progress. This

is measured as the ratio of the value of total materials purchased each year to the value of the stock of raw materials and work in progress on a typical day. The second supplementary measure is the frequency of delivery to the carmaker. These two supplementary measures provide an additional indicator of the extent to which the organization of production conforms to international best practice.

### Choice of Technique

In comparing levels of labor productivity, the most obvious and immediate consideration to address lies in differences in the technique of production, as measured by the degree of capital intensity (or capital-labor ratio) chosen in different firms or countries. Given that cross-country wage differences are typically far greater than differences in the cost of capital, one might expect that firms in low-wage countries would find it optimal to work at a lower degree of capital intensity and therefore a lower level of labor productivity (as defined by the number of units of output per man-hour).<sup>5</sup>

Matters are complicated once the quality of units produced becomes pertinent. It may be, for example, that a low level of capital intensity makes it more difficult to reach acceptable quality standards. While this point is obvious, the tradeoffs involved can be subtle.

Comparing the experience of seat producers and exhaust makers is revealing with regard to such tradeoffs, since the two product lines differ in ways that are highly relevant to firms' choices in this area. In each case it is feasible to manufacture the product using different degrees of capital intensity. For seats, the cutting of material can be done by hand or using an automated (computer-controlled) cutting table. The sewing is done on industrial sewing machines on individual benches; the machines can be low-cost machines of a traditional kind or more sophisticated machines in which the material is moved through automatically as sewing proceeds rather than being inched through manually. Firms included in this study used both types of techniques. In the assembly operation, however, to which the productivity measure relates, there is little variation in the degree of capital intensity across firms or across countries. Seats are, in industry parlance, an "A-surface," that is, one immediately visible to the final customer. This means that the relevant measure of quality for seats extends to minute surface characteristics (the spacing of threads on the sewn joints, the presence of loose thread ends, the uniform tautness of the fabric over each section of the seats, and so forth). This consideration constrains the organization of the production process and the use of alternative methods that might involve wide differences in capital intensity. Seats are assembled either in a production line or in a series of "cells"; their assembly involves a sequence of operations in which sections of the metal frame, the foam interior, and the sewn cover are fitted together. The use of jigs on which sections are mounted for fitting is standard. The only automated process is one in which a foam section is "shrunk" to allow a sewn cover to be fitted over it; in most plants this is done for headrests but not for other seat sections. (It would not be appropriate in the case of most seat types in this study.)

The case of exhausts is very different. Here the degree of capital intensity varies widely across firms within the same country. This reflects, in part, the fact that the exhaust is a B-surface, one not immediately visible to the final customer. What matters, in terms of quality, is the mechanical strength of each welded joint, as opposed to the smoothness or uniformity of the weld. This permits the use of a wide range of techniques in the welding operations.<sup>6</sup>

Welding techniques are of three “generations.” In increasing order of capital intensity, they involve:

- A production line along which each worker carries out one or more welds using a simple handheld welding torch. The sections to be welded are clamped into a jig and held in a fixed position.
- A line on which each station has an automated jig, on which the clamped sections of the exhaust rotate while the welding torch is held in a fixed position on a stand or bracket.
- A fully automated system, in which welding is done by robots. The only manual work involves placing and clamping the sections onto a jig. In some cases, the jig then rotates through 180 degrees, bringing the sections into an enclosed area where robots perform the welding. The part is then flipped back for unloading.

The capital cost of a setup of the third kind is hundreds of times greater than that of the first setup. It might seem, therefore, that the choice of technique might rest primarily on the level of wages (relative to the cost of capital equipment) and that within a single country most firms might use the same technique. This is not the case: the firms in this study operate with a mix of techniques, covering the full range described above. The reasons for this are revealing, in respect of the tradeoffs firms face between productivity and quality (see box 3 on p. 206).

Apart from the choice of more or less capital-intensive methods, a number of other factors may affect differences in labor productivity across firms and countries. These include the volume of production (scale economies), the nature of the firm (joint venture with foreign partner or independent domestic firm), and the complexity of the component produced. The results do not suggest any influence for any of these factors in seat production, while in exhaust production, only one of these factors matters: productivity increases strongly and systematically with the volume of production (see tables 10 and 11). As to the impact of capital intensity, it has no sta-

**TABLE 10.**  
**Labor Productivity in the Manufacture of Seats**

Item	Coefficients	Standard error	t-statistic
Intercept	1.10	0.55	2.00
Country dummy (China = 1)	-0.99	0.46	-2.14
JV	0.63	0.55	1.15
Annual production	0.26	2.84	0.09

Note: The complexity and degree of capital intensity is similar for all firms. The variable JV equals 1 if the firm is a joint venture with a multinational seat maker and 0 otherwise.

**TABLE 11.**  
**Labor Productivity in the Manufacture of Exhausts**

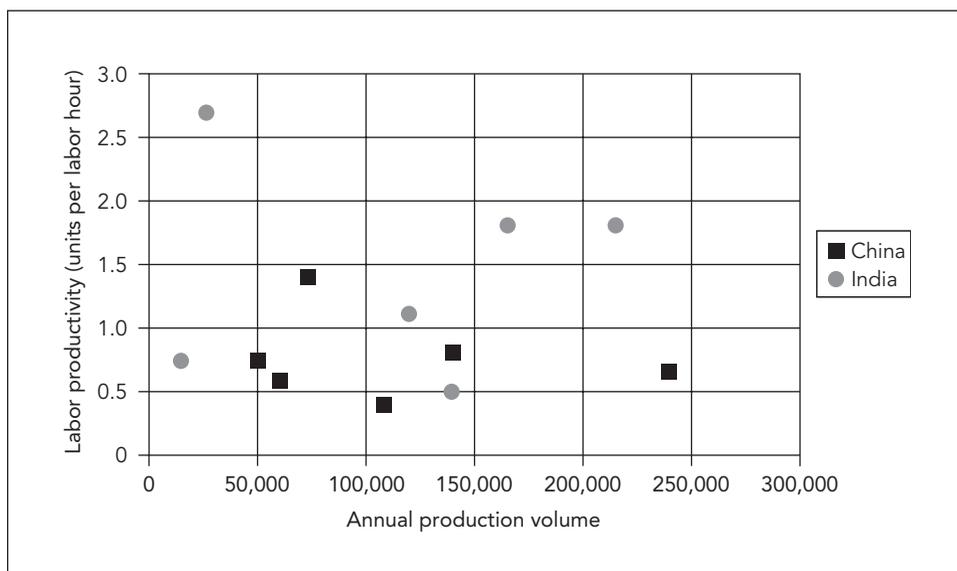
Item	Coefficients	Standard error	t-statistic
Intercept	0.41	0.35	1.19
Country dummy (China = 1)	-0.17	0.44	-0.38
WDUM	-0.33	0.67	-0.50
LDUMLO	-0.12	0.44	-0.26
LDUMHI	0.62	0.73	0.84
JV	-0.21	0.82	-0.26
Annual production	6.77	2.46	2.75

Note: The variable WDUM measures the complexity of the exhaust based on the number of major welds (excluding spot welds and tab welds). If the number exceeds 8, WDUM is set to 1; otherwise it is set to zero. If most welds are carried out using handheld welding tools, LDUMLO equals 1. If no welds are carried out using handheld welding tools and more than 20 percent of welds are carried out by robots, LDUMHI equals 1. Otherwise these variables are set to zero. The variable JV equals 1 if the firm is a joint venture with a multinational exhaust producer and 0 otherwise.

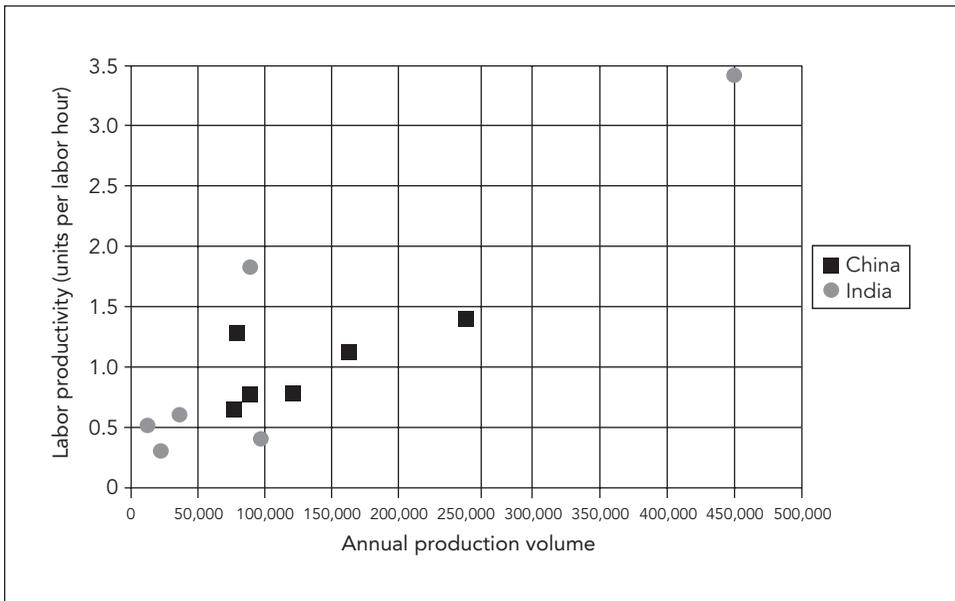
tistically significant effect on differences in productivity across exhaust makers, a point addressed in the next section.

The comparison between China and India is illustrated in the scatter diagrams shown in figures 5 and 6, which plot labor productivity versus production volume for seat and exhaust makers. In exhaust production, average production volumes and average productivity levels are similar in China and India, although the dispersion across firms on both variables is much narrower in China; India has some very small, low-productivity producers as well as one high-volume, high-productivity pro-

**FIGURE 5.**  
**Productivity versus Annual Production Volume in the Manufacture of Seats in China and India**



**FIGURE 6.**  
**Productivity versus Annual Production Volume in the Manufacture of Exhausts**  
**in China and India**



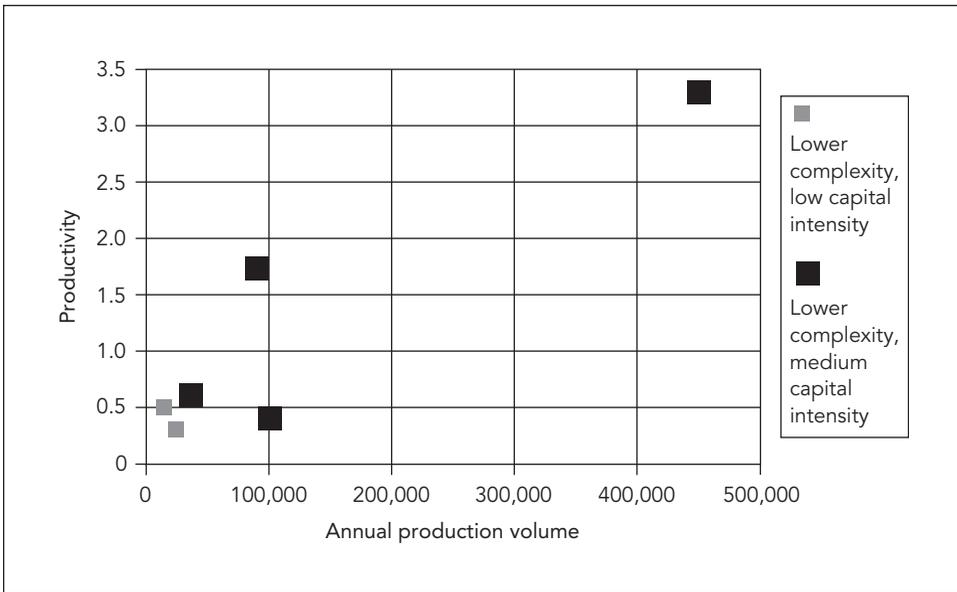
ducer. In seat production, average production volumes are similar in both countries. Productivity is significantly higher in India, with all of the top three firms being Indian.

A closer look at productivity differences across exhaust producers is provided in the next two figures, which depict the same relation for Indian exhaust makers only (figure 7) and for Chinese exhaust makers only (figure 8). These figures show the influence of product complexity and capital intensity. The product is described as “lower complexity” if the number of welds is less than 9 (a relatively simple exhaust) and “higher complexity” otherwise. The degree of capital intensity is described as “low” if most welds are carried out using handheld welding tools; it is described as “high” if no welds are carried out in this way and more than 20 percent of welds are done by robots; it is labeled “medium” in all intermediate cases.

Two points emerge from these scatter diagrams. First, two of the Indian exhaust makers are manufacturing low volumes of relatively simple exhausts using highly labor-intensive methods (the points to the bottom left of figure 7). Second, two of the Chinese producers (but none of the Indian producers) are using highly capital-intensive techniques, in which most welds are done by robot. These plants are not high-volume plants, and they do not exhibit unusually high levels of labor productivity (a point to which I return below).

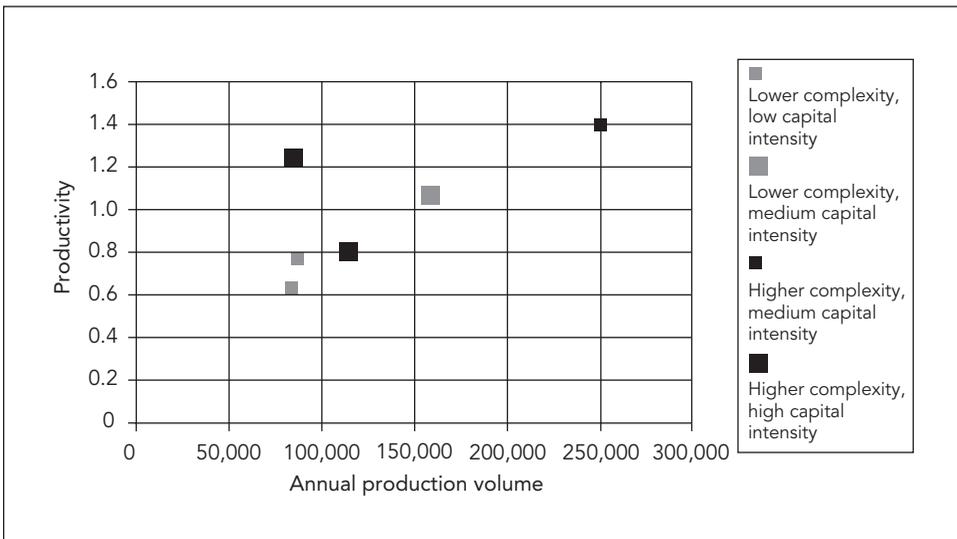
With all these controls and qualifications in place, we may now ask: how do these levels of labor productivity compare with leading plants in the United States, Japan, or Europe? For seats, where techniques of production are similar across countries, labor productivity levels are also similar. The 1996 Andersen survey identified a pro-

**FIGURE 7.**  
**Productivity versus Annual Production Volume by Indian Producers of Exhausts**



ductivity level of one seat set per man-hour as the median value in their sample, which they identified as the benchmark for world-class productivity levels. Discussions with multinational seat producers in the course of the present study indicate that this figure remains valid and constitutes a norm for world-class producers in high-wage countries. As figure 6 indicates, the median value for Chinese and Indian

**FIGURE 8.**  
**Productivity versus Annual Production Volume by Chinese Producers of Exhausts**



producers is approximately one seat per man-hour, suggesting that world-class norms are being achieved.

A different picture emerges for exhausts, where a wide range of levels of capital-intensity can be used. Given local wage rates, and setting quality considerations aside, it will be economically optimal for Chinese and Indian firms to employ a relatively labor-intensive technique, leading to a lower level of labor productivity (which does not imply a lower level of total factor productivity).

The median level of labor productivity in both Chinese and Indian plants is about one unit per man-hour. This compares with a threshold figure of six units per man-hour for the plants surveyed in the 1996 Andersen study, which identified this median figure for the firms it surveyed as the threshold of world-class performance. Discussions with multinational exhaust producers suggest that this figure remains valid as a norm for world-class plants in high-wage countries.

If all plants in China and India were using relatively labor-intensive techniques, this gap in labor productivity levels would be unsurprising. What is of interest is that a wide range of levels of capital intensity are in use. While a very low degree of capital intensity implies low productivity, the use of robot-based production does not lead to very high levels of labor productivity. The benefits of shifting to a more capital-intensive technique lie elsewhere (box 3).

### *Quality Benchmarking*

Two measures are used to benchmark quality, the external and the internal defect rates, both expressed in parts per million. The external rate refers to defects in parts delivered; this is the primary indicator of quality from the point of view of the purchasers (that is, carmakers). Leading international carmakers regard a threshold of 100 parts per million as a benchmark for world-class producers.<sup>7</sup> This threshold is exceeded for 14 of the 21 firms surveyed (data were unavailable for 3 firms), 7 from India and 7 from China.

Seat makers in both countries achieve relatively good scores, with scores for India markedly better than those for China (for four of the six Indian firms, no unit supplied to customers had been rejected in the past year). Five out of six Chinese seat suppliers have scores below 100 parts per million, though only one has a score comparable to the top four Indian firms (reporting a level of 10 parts per million).

Exhaust producers in both countries have much higher external defect rates: two Indian producers and one Chinese producer attain rates below 100 parts per million, while two other producers (both Chinese) achieve rates in the range of 100–200 parts per million. The tail of poor performance is longer in India: one firm reported an external defect rate of 1 percent (10,000 parts per million), while ancillary information on two firms that were unable to supply figures suggest rates exceeding 1 percent.

While external defect rates are directly relevant to buyers, the internal defect rate provides a key insight into the tightness of quality control during the production process. The internal rate is based on a count of all units that are pulled from the

### BOX 3. Why Robots? Choice of Technique in Exhaust Manufacture

Of the six Chinese exhaust makers, three use robots for some of their welding operations. At first glance this might seem a surprising choice of technique: given low local wage rates, the use of the most capital-intensive of the three available production techniques might seem inappropriate. One payoff from this choice, however, lies in achieving high quality standards—not in terms of the “external defect rate” (the quality of parts delivered to the customer) but rather in terms of minimizing the loss of materials in the course of production (scrap losses). The largest component of the firm’s unit costs in exhaust production is materials costs (primarily tube and sheet steel), excluding the cost of catalytic converters. The use of robots minimizes scrap losses, and the payoff from switching to robots is at its highest on complex welds, such as those on a tube manifold<sup>a</sup> or those in which tubes are welded to the (very expensive) catalytic converter unit. Of the three Chinese firms employing robots, one (“Plant A”) uses them only for catalytic converter welds, a second (“Plant B”) uses them primarily for tube manifold welds, and a third (“Plant C”) uses them for the majority of its welding operations (including all front pipe welds, all circular welds on the muffler, and the major welds on the central pipe).

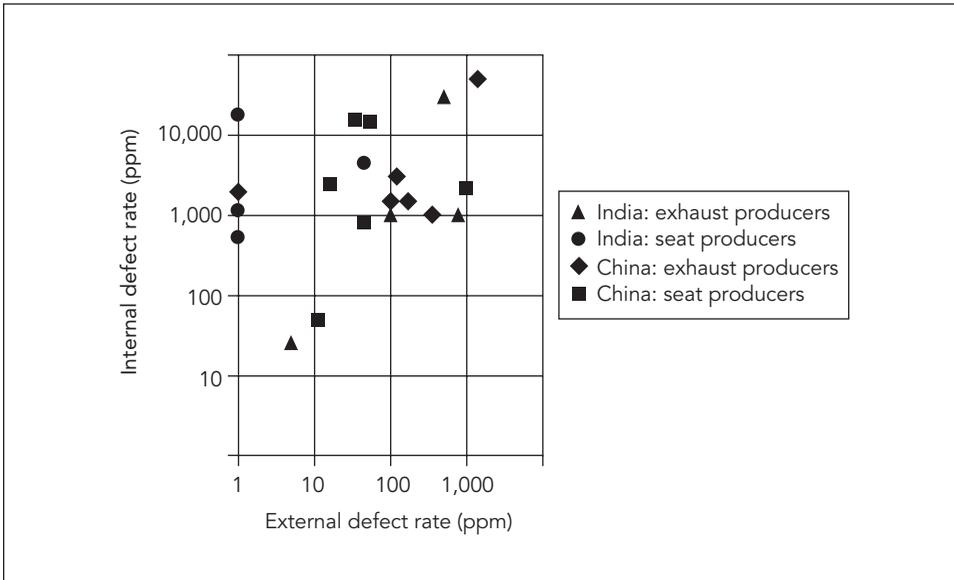
An interesting feature of these operations is that the level of manning on sections of the line using robots is very high by the standards of Europe, Japan, or the United States, where a single operator controls several robots. Plant C uses one operative per robot. The payoff lies in the unusually low level of scrap losses: while Plant A achieves a loss rate of 2 percent of the total materials cost (equivalent to 1 percent of plant sales revenue, corresponding to the threshold regarded as the norm among multinational exhaust makers), Plant C achieves the extremely low figure of 0.16 percent.

This figure can be put in perspective by noting that for each \$100 Plant C spends on materials and components (excluding catalytic converters), it spends only \$2.50 on labor. A 2 percent scrap rate implies a loss of \$2 on each \$100 spent on materials; reducing the scrap rate to 0.16 percent implies a saving of \$1.84. To achieve an equal saving on the corresponding labor cost of \$2.50 would require a quadrupling of labor productivity.

a. A manifold is the section of an exhaust that joins together the inflow from several pipes into a single flow. It can be made by welding sections of steel tube or (cheaply) using cast iron.

line during the production process or that fail to pass first inspection. (Such units are normally set aside for rework, though in some cases they may be scrapped.) Internal defect rates are typically much higher than external rates. As figure 9 illustrates, there is a clear positive correlation between internal and external rates; both reflect the tightness of quality control in the production process and in final inspection. Internal defect rates for both countries lie mostly in the 1,000–10,000 parts per million range; half of the Chinese firms and half of the Indian firms have rates of 2,000

**FIGURE 9.**  
**Internal and External Defect Rates by Chinese and Indian Producers of Seats and Exhausts**



Note: The scale is logarithmic. Rates below 1 ppm are recorded as 1 ppm. Three firms did not report external defect rates. Two Indian seat makers had almost identical internal and external rates and the corresponding points are indistinguishable at (1,600) on the figure.

parts per million or less, corresponding to the threshold for world-class performance in the Andersen study.

These results suggest that the median firm in both countries is operating at, or close to, international best practice levels. Two ancillary measures of international best practice confirm this view. The first is the frequency of delivery to customers, which is widely used as one indicator of effective coordination between producer and customer. This is typically higher for seat producers, whose plants are usually located near the customer. All six Chinese seat producers and five of the six Indian producers deliver at least once a day to their main customer. For exhaust producers, all six Chinese firms deliver at least once a day, though only three of the six Indian producers achieve this level.

The second ancillary measure is the level of inventory held, a good indicator of the tightness of control of the manufacturing operation. The usual measure is the stock turn ratio, defined as the value of annual production divided by the value of materials and work in progress in the plant on a typical day. Thus a firm that holds one week's production in the form of materials and work in progress and operates 52 weeks a year has a stock turn ratio of 52. Among seat producers, the Chinese firms studied achieve higher turn ratios than Indian firms: four out of six report a turn ratio exceeding 100, corresponding to world-class levels in the Andersen Consulting study; all six Indian firms have ratios in the range of 22–52. For exhaust producers the calculation of stock turn ratios is more difficult, as some raw materials

are often held in relatively large quantities, as they are sourced from distant steel plants and there is a concern about stock-outs. Figures on stock turn ratios are less reliable in this case: only three of the Chinese firms and four of the Indian firms reported figures. A figure of 35 was the world-class threshold in the Andersen Consulting study; all but one of the seven reporting firms had a rate in the 10–50 range, the exception being an Indian firm with a ratio of 120.

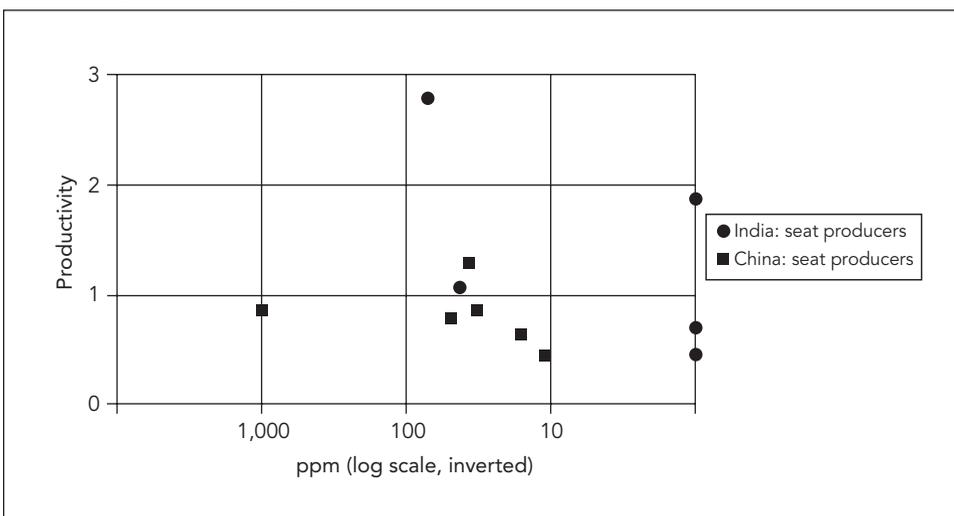
### *Productivity and Quality*

A natural question to raise in this setting is whether productivity is correlated with quality across different seat or exhaust plants. Here, two forces are at work. One way of reducing external defect rates would be to devote more personnel to quality control and checking, leading to higher quality and lower productivity and so to a negative relationship. It is also the case, however, that establishing well-designed working practices might be expected to contribute to improvements in both productivity and quality, leading to a positive relationship.

The pathbreaking study of Womack, Jones, and Roos (1991) on “lean production” techniques found productivity and quality to be uncorrelated across plants. In contrast, the Anderson study cited earlier found a clear positive correlation.

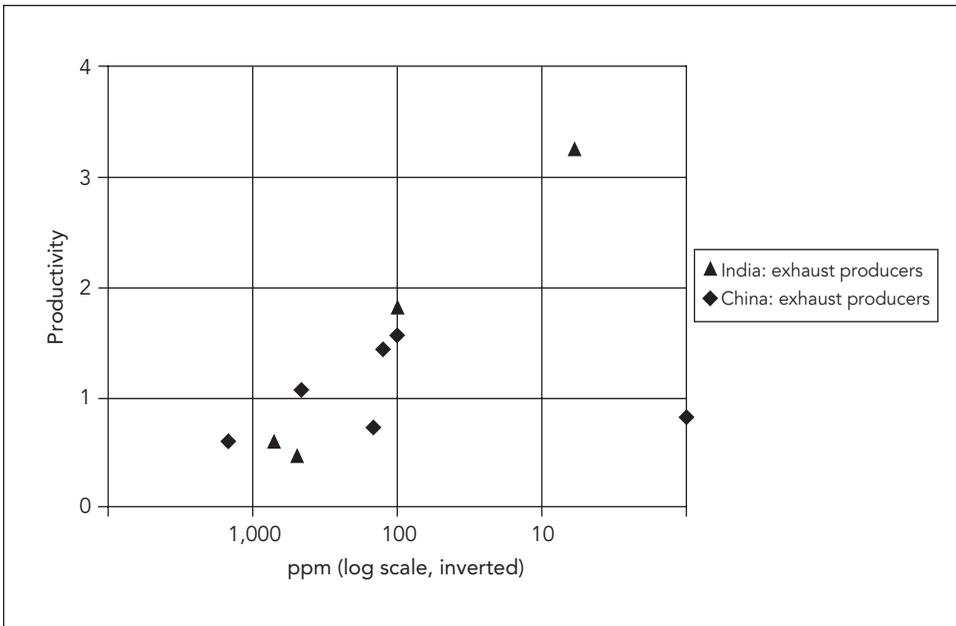
The relationship for the plants in the present study is shown in figures 10 (for seats) and 11 (for exhausts). In the case of seats, there is no significant relationship between productivity and quality. In the case of exhausts, a (weak) positive relationship is present. Recalling the fact that productivity rises with production volume in

**FIGURE 10.**  
Productivity versus Quality for Chinese and Indian Producers of Seats



Note: Quality is measured by the external defect rate, shown on a logarithmic scale, as in figure 9. The horizontal axis is inverted here, so that quality increases to the right.

**FIGURE 11.**  
**Productivity versus Quality for Chinese and Indian Producers of Exhausts**



Note: Quality is measured as in figure 10.

exhausts (figure 6), this suggests that high-volume exhaust plants might exhibit both higher productivity and higher quality. However, a regression of quality on production volume, controlling for product complexity and capital intensity, and joint venture status, in the manner of table 11, indicates that there is no significant link between production volume and quality.

### *Summing Up*

The various measures of performance for seat and exhaust makers suggest that quality levels in both countries are at, or close to, international best practice levels. The challenge for both sets of companies now lies in moving toward higher-level capabilities. Here the aim is to offer a service to the carmaker that involves a partnership in design activity. Such activities now occur at the international rather than the national level. Seat or exhaust makers begin from a performance specification prepared by the carmaker for a new platform; the seat or exhaust maker then develops a design that meets the required performance targets. One of the six Indian seat makers is already operating at this level, using a team of 200 design engineers to provide new seat designs for the international market. Similar developments are evident among Chinese component makers visited in the course of this study. One wheel maker, for example, is designing aluminum alloy wheels for several U.S. carmakers.

## Conclusions

The overall picture that emerges from this study is that the development of the auto industry supply chain in both China and India has proceeded very rapidly at the level of carmakers and their first-tier suppliers: here current standards of supplier quality are at, or close to, world-class standards. The main weakness of the supply chain lies in the fact that best practice techniques are permeating down to second-tier suppliers in a very slow and uneven manner. The similarity in the pattern across both countries is striking.

In the decade before WTO entry, both countries used domestic content restrictions to stimulate development of the component industry, with a view to widening and deepening the benefits accruing from attracting international carmakers. Policies of this kind are not always appropriate or successful. Indeed, they are liable to have seriously damaging effects, especially when pursued in small countries under conditions of continuing protection. In the present case, however, the availability of a large domestic market, the presence of a population of existing component suppliers to whom enhanced production capabilities could be transferred effectively, and the impending move toward a more open trading environment led to a successful outcome. The “infant industry” has been successfully nurtured, and international carmakers show no inclination to turn away from local suppliers following WTO entry.

One of the key benefits from the development of enhanced capabilities in the component supply chain lies in the fact that it can lead to increases in exports of components and subassemblies from domestically based firms to overseas carmakers. While the development of the local supply chain in both countries has in large part been driven by the presence of multinational carmakers, component exports are driven equally by multinational and domestic firms. Both India and China have a substantial body of purely domestic firms that have achieved major successes in export markets; of the top 10 component exporters in China, 6 are domestic firms; of India’s top 10, half are domestic firms (and 3 of these belong to a single domestic industrial group).

A second key benefit from the development of enhanced capabilities among component suppliers is that domestic carmakers can outsource more effectively, achieving cost reductions while maintaining quality levels. This process is now beginning to take hold, particularly in India, where the Mahindra and Mahindra company has had a major success following this route (box 4).

One of the most striking features of the strategic decisions of the leading component producers lies in their occasional use of highly capital-intensive techniques in low-wage environments. These choices are heavily driven by concerns about achieving high levels of quality control in the production process. For some Chinese exhaust makers in particular, the use of robots for welding has led to substantial gains by reducing scrap wastage to extremely low levels.

Another strategic choice, and one that is more readily understandable in a low-wage environment, is the use of highly qualified workers for shop-floor operations.

#### **BOX 4. Piggybacking the Supply Chain**

One of the most crucial indirect benefits of the recent wave of international joint ventures in the car industry lies in the fact that these ventures stimulate the development of capabilities in the domestic supply chain, allowing domestic carmakers to benefit from new possibilities in outsourcing from low-price, high-quality suppliers. Perhaps the most striking instance of the mechanism in an Indian context is the case of Mahindra and Mahindra, one of India's leading producers of commercial vehicles and tractors. In 1994 the company went through a major restructuring, one outcome of which was a new policy shift in favor of substantial outsourcing of components and subassemblies. Over the following four years, virtually all components other than engines, transmission systems, and body (skin) panels began to be outsourced. For engines the head and block were bought in from a local supplier in semifinished form; all transmission components were bought in. For rear axles the center bracket was bought in as a casting and machined in-house, but the tubes and shafts were bought from local suppliers in fully finished form.

This shift toward reliance on the local supply chain came to a peak with the firm's introduction of the Scorpio van, a light multiuse vehicle launched in 1998. The Scorpio van was designed in-house, using an Italian design house as a consultant on styling. The outsourcing policy was pushed to new levels, with a network of 110 local suppliers. This network allowed the company to reduce unit production costs by much more than they otherwise could have, and it allowed the Scorpio to be sold at an ex-dealer price (including air conditioning and power steering) of 5.5 lakh rupees (\$11,000), about 60 percent of the price expected by industry observers at the time of its launch. Sales of the Scorpio have transformed the financial fortunes of Mahindra and Mahindra during the five years since its launch.

This is particularly striking in India, where some firms have achieved "award class" levels of export success by employing all-graduate work forces (box 5).

Underlying the rapid advance of first-tier producers toward world-class levels of quality has been a rapid absorption and diffusion of working practices that originated in Japan in the 1960s and 1970s and became standard in Europe and the United States during the 1980s. These include strong emphasis on cooperation and team work, the steady improvement of quality through diagnosis of sources of defects by groups of operatives and the immediate implementation of strategies to preempt recurrences ("quality circles"), and the organization of a tightly coordinated inflow of raw materials and parts with the outflow of finished products, thus minimizing inventory costs. These practices are standard among all 12 of the seat plants visited, both joint ventures and domestic companies.

### **BOX 5. Wage Rates and Employment Policies**

One of India's largest component exporters, an independent domestic company, employs only university graduates for all shop-floor operations. As one executive explained, "Twenty percent of our local taxi drivers have degrees. By insisting on graduate qualifications, we can empower all individuals and give them freedom to reach goals. We need people who can operate computer-controlled equipment without supervision."

The theme of India's excess supply of highly qualified individuals with poor employment prospects is an old one. Current trends in some parts of the car industry are driven by a search to take advantage of this. One Indian seat maker employs only science graduates for all production line operations. While this employment strategy might seem to risk a high rate of labor turnover, this is not the case: the current quit rate of 4 percent a year is seen by the firm as acceptable. While this strategy raises the firm's wage costs, the payoff in terms of quality more than outweighs the added cost. The firm's external defect rate is below the figure of 50 parts per million regarded as "award standard" by multinational seat makers; all line workers operate in "quality circle" teams, all speak English, and most can make formal presentations to visitors and interact with foreign executives visiting the plant. The multinational joint venture partner view the plant as one of its leading plants worldwide, and its production engineers travel abroad to sister plants to transfer know-how.

This reflects, in part, the fact that car producers interact very closely with seat suppliers, so that independent domestic seat plants gain production know-how from their main customer. The prevalence of such practices was uniformly lower across all of the exhaust plants visited. In these plants, there is a strong focus on results as measured by external defect rates, scrap losses, and labor productivity, but the means of achieving these results are less uniform, and the organization of production varies widely. This is reflected in the higher levels of external defect rates among exhaust makers in both countries.

These qualifications notwithstanding, the performance of seat and exhaust makers, as well as the overall performance of first-tier suppliers to new-generation car-makers, has reached levels that are at, or close to, international best practice. The main challenge now facing the industries is to extend international best practice to second- and third-tier component suppliers.

### **Notes**

1. Tier 1 suppliers are those selling directly to the carmaker (assembler). Tier 2 suppliers are those selling directly to tier 1 firms, and so on.

2. These volumes correspond to about one-tenth of Japan's production the same year. In 2003 the world's leading automobile producers were Japan (8.1 million units), Germany (5.3 million), the United States (4.9 million), France (3.2 million), the Republic of Korea (2.4 million), and Spain (2.2 million). China ranked 14th and India 15th.
3. For an analysis of the strategic issues involved, placed in the context of the industry's history, see Helper (1991).
4. The study covers Canada, France, Germany, Italy, Japan, Mexico, Spain, the United Kingdom, and the United States. In addition to seats and exhausts, it also covers braking systems (where cross-firm comparisons are more problematic).
5. To make the same point in a different way, a lower level of labor productivity is consistent with a high level of total factor productivity.
6. In contrast, cutting sheet steel, and pipe bending are done on similar machines throughout the industry. Low-cost traditional machine tools are used to cut steel, and specialized automated machines are used to bend pipes.
7. The 1996 Andersen study identified a median level of 500 parts per million for seats and 100 parts per million for exhausts as the threshold for world-class standards. Since that study was conducted, industrywide norms for seats have advanced, and a figure of 100 parts per million is now regarded as the norm.

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## **Comment on “The Globalization Process: Auto-Component Supply Chains in China and India,” by John Sutton**

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GUR OFER

The very interesting paper by John Sutton looks as if it deals with nuts and bolts. While doing so, however, it sheds light on and provides insights into many issues of industrial structure, foreign direct investment (FDI), globalization, and development. It is indeed an illuminating paper. Since I am not an expert on the specific nuts and bolts discussed and the paper is somewhat shy regarding its wider contributions, I will try to identify the relevant development (and transition) issues and implications.

The choice of the appropriate industrial structure of automobile production was at first a domestic (national) issue, but during the past decades it shifted to the global arena. In national automobile industries in the United States and other countries, a pendulum swing occurred on how much to produce inside the main firm and how much to outsource. From almost complete buying-in, it has since moved to the current arrangement of quite extreme outsourcing: in some cases just two key parts are internally produced. The trend for the future seems to be of even more outsourcing, with firm's headquarters concentrating solely on strategic issues, innovation, design, marketing, financing, and coordination of production around the globe. Major parts of production and assembly, as well as other service activities, also shifted during the past decades from the national to the global space.

How much to outsource is determined by the quality of management and that of market networks and market infrastructure inside a country and beyond. The spreading of these activities across national borders is also related to issues of economic development, FDI, and globalization.

Outsourcing is more efficient in a well-established market environment, one that includes inexpensive and rapid transportation and communication networks, a dependable and well-enforced contract culture and other market-oriented formal institutions, and informal rules of the game and of the culture of doing business, à la Douglas North. Under such conditions the mother firm is better able to take advantage of competition among suppliers and can look for locations where production costs are lower and quality ensured. In this way the headquarters can unload

the managerial complexities and burden of producing secondary components and concentrate on the main profit-generating activities and strategic issues. The level of outsourcing is therefore determined by the comparative advantage of intrafirm management capacity over that of the market environment. Still, even in a developed market environment, the automobile manufacturers keep the competition among component suppliers limited to just a few producers and impose different supervisory measures on them.

Under the communist system, the tendency of planners and firms was to vertically integrate as much as possible under one roof (Richet 2002). Transition brought with it pressures to revolutionize technologies, management practices, and financing and to turn to a more rational pattern of outsourcing. Here, however, it encountered the lack of market institutions, market infrastructure, and culture. In Eastern Europe—the Czech Republic, Poland, and elsewhere—the problem was partly solved by foreign automobile corporations, which were allowed to buy existing enterprises or start new “greenfield” ventures. Even so, they had to create special (semiclosed) production and supply chains, a hybrid between market and in-house production, typically more tightly supervised than in market economies. Creating these chains was necessary to overcome the weakness of the emerging markets. In the Russian Federation the process of outsourcing faced many more hurdles than it did elsewhere, partly because its leaders have always been more reluctant to let FDI take over and partly because the creation of markets lagged developments in Eastern Europe. As a result, modern automobile producing, as well as outsourcing, has been moving at a much slower pace than elsewhere (Richet and Burassat 2000; Richet 2002; Brzezinski and Fluchter 1998; Bohata 2000).

With respect to John Sutton’s paper, the communist example raises an important question: what are the differences in the quality of market infrastructure between China, which is still partially centrally planned, and India, which always had a sort of market economy, even if partially planned from above and largely autarkic? The new Chinese automobile industry is partly state owned and partly belongs to the quasi or fully private sector. Are there problems of weak and undependable markets? Of contract enforcement? From the evidence presented in the paper on inventory levels of component producers, it seems that China is doing somewhat better than India on this score. It would be interesting to understand why.

Aside from the potential differences between China and India due to central planning in China, one would also expect to find weaker market support in both countries, due to their low level of economic development. The paper does show that some outsourcing in both countries—mostly between automobile producers and the so-called tier 1 component producers (producers of major components sold directly to automobile producers and to exports)—is conducted, within a highly controlled or semiclosed version of markets. It also demonstrates that at the tier 1 supply level, on both sides are foreign owners, at least partial owners, and in many cases they are the same owners on both sides of the transactions. Even so, I wonder to what extent the level of supervision, at least at the top tier of supply, is tighter than in developed market economies.

Prof. Sutton's paper tests the efficiency of the supply chains in two ways, using information on the frequency of supply of components to the automobile manufacturers and data on inventory levels of component producers. The first measure is a proxy of the inventory needs of the main producers, how close they can get to operating "just in time." There is, however, no direct estimate in the paper of their own inventory levels. The second measure serves as a proxy of the quality of the supply system to the component producers from "second-tier" suppliers, that is, beyond the link between producers of automobiles and producers of components. Here inventories are found to be somewhat higher than international standard levels, especially for exhaust systems, and they are higher in India than in China. The high level of inventories reflects supply deficiencies down the chain, where there is less direct supervision down the supply hierarchy. More attention needs to be paid to the issue of supply chains and the quality of market networks, particularly at the lower tiers. Rather than focusing exclusively on how automobile producers can directly affect and guide the quality of their direct suppliers, greater emphasis is needed on the quality of the (free) market mechanism and networking concentrate that may bring the same results.

The paper presents a model case of the impact of FDI and the way it works. FDI brings with it advanced know-how and the ability to disseminate it in the economy. In the case of automobile parts, the process progresses at an amazingly rapid speed. In just a few years the recipient economies managed to reach productivity and quality levels equal to or near international practice levels and to export about 10 percent of total output. Export shares were probably constrained by the high demand of domestic automobile producers. The paper describes beautifully the process of penetration of advanced practices, starting from tier 1 and moving to tier 2 (the production and supply of components to tier 1 component producers). In the case under study, most was accomplished within five years or so. The paper, however, also demonstrates the increasing difficulties of penetrating farther down into the economy, even at the level of tier 2, into areas in which traditional production existed before and domestic firms are the great majority.

Improved quality in the top chain of supply was achieved in great part by the direct penetration by multinational component producers. In this way a "modern sector" link was created at the tier 1 level. Going farther down the chain required using market services—and in most cases the education and training of domestic producers—mostly using economic and market type incentives. The choice of the format of FDI penetration (examined below) illustrates the kind of difficulties involved. The quality levels reported for tier 2 suppliers in both China and India are very promising.

This discussion is closely related to the issue of the choice of strategy faced by incoming foreign entrepreneurs: whether to opt for joint ventures with existing producers or invest in greenfield plants. Prof. Sutton's paper contributes to the wealth of evidence in favor of greenfield plants. Long-established production and management patterns and traditions are evidently so deeply entrenched that the accumulated beneficial know-how and experience of traditional producers are offset by

resistance to change. This has to do with the traditional patterns of management and the kind of technology used. When they are the main obstacles, taking over existing enterprises may be beneficial. This was the dominant pattern of FDI in the automobile industry in the Czech Republic (Bohata 2000). In contrast, in the Russian Federation the dominant pattern has been one of joint ventures with long-existing domestic enterprises, a pattern that has delayed the creation of a modern automobile industry there.<sup>1</sup>

An equally serious problem in existing enterprises is that of the work pattern and culture of the labor force. In many cases it is cheaper and faster to train new workers from scratch, and doing so produces a better workforce, a point Prof. Strong's paper makes very strongly.<sup>2</sup> It is illustrated by an extreme case, in which a domestic producer created a brand new plant near an existing one and staffed it with inexperienced workers.

All three forms of FDI are superior to a purely domestic enterprise, which has to learn through market signals of buyers and the spillover effects of FDI plants. Comparing Russia with China (and India), one is struck by the relative ease with which a modern industry can be created when empty fields are available that can be turned "green" compared with a situation in which most fields are already taken. Is this another piece of evidence of the Gerschenkronian advantage of backwardness or of the Chinese miracle?

Despite these problems, Prof. Sutton's paper does show that some component producers, even major exporters (in both India and China), are independent domestic producers. I wonder, however, to what extent there has been a spillover effect from the new foreign enterprises.

To what extent do achievements depend on governments' requirements that FDI investors in automobile and component manufacturing include large shares of domestic content? Prof. Sutton finds such a period of support and protection helpful and justifies it by the "infant industry" argument. At the same time, despite domestic worries about what might happen when these restrictions are removed upon joining the World Trade Organization, he believes that the component industry is now strong enough to be exposed to open global competition.

To my knowledge, when Volkswagen came in to take over Skoda in the Czech Republic, such restrictions were not imposed. Yet a network of component suppliers was established within a short time, most of them inside the Czech Republic (Bohata 2000; Keren and Ofer 2001). It is also true that domestic content requirements are used extensively around the world in similar situations. One may wonder, however, if this protection explains the success in China and India or if success indicates that it may have been redundant in the first place.

Prof. Sutton's paper yields a number of interesting insights on the choice of technology. The main issue is the extent to which developing countries can efficiently adapt existing (capital-intensive) technologies used in developed countries to low labor cost environments. The problem is that modern capital-intensive technologies are typically highly complementary with quality, certainly at international practice standards. The paper demonstrates this connection in the case of welding, as well as

in the consumption of expensive materials in the case of exhausts. Faced with these additional constraints on the choice of technology and taking into account the high costs of redesigning such technologies, China and India make use of dual (and triple) technologies for the production of both seats and exhausts. In addition, when a "high" technology is used, the high cost of capital is sometimes compensated for by using highly educated (in some sense overqualified) workers or putting additional supervisors along the production belts or the assembly lines. Another version of a "hybrid" technology deliberately tolerates higher rate of internal defects, which, while wasting more materials, allows a higher labor-capital ratio. Still, in some cases, when a "low" technology is used, the rate of external rejection suffers.

The measure of productivity levels used in the paper are, appropriately, the number of units produced per working hour. Given that productivity and quality are at or not far from accepted international ones, it must follow that unit labor costs are lower than international prices. With lower capital-labor ratios, even assuming higher capital costs, costs per unit (and hence prices) should be below global market prices. One may wonder, then, why exports have not expanded faster. The paper does not calculate the costs of production and prices of the components. It would be nice to have some international comparisons of these variables.

While the paper studies the entire automobile component industry, most of the direct evidence is based on firms producing seats and exhausts, two components near the bottom of the list in terms of technological complexity and quality requirements. Indeed, the production of seats is not that far from that of industrial textiles, the classical forerunner or pioneer in stories of early industrialization of developing countries half a century or more ago. Exhaust systems are somewhat more sophisticated, and the paper documents lower performance levels there. Many other automobile components require higher-level and more capital-intensive technology, and their quality is therefore much more technology determined. It would be interesting to know to what extent the rest of the industry, especially the more advanced components, follows similar patterns.

The discussion of the lower end of the automobile component industry seems to follow nicely the model of the global product cycle, in which the production of lower-technology products is moved to developing countries to make room for the production of higher-technology ones in industrial countries. In a world economy driven by information technology and microbiology, the entire automobile industry is positioned at best in the middle technological range. The huge size of China and India, the relatively small number of cars currently in use, and the potentially large domestic demand make these countries a choice location for future development of an automobile industry. This raises the issue of the participation of China and India in design and innovation activities in automobile production. When this happens, China and India will move to a higher circle on the product cycle. The paper mentions some design and innovation activity in India.<sup>3</sup> Given what was said about information technology and other cutting-edge technologies, there is no reason that this cannot happen. Both China and India (and perhaps the Russian Federation) seem to have a potential comparative advantage in automobile production and a good chance to

reach that level before too long. China is formulating a new strategic plan to transform its automobile and components production into a major industry for the domestic as well as the export market. Among other steps, it plans to remove some constraints for FDI, including the one forbidding majority ownership.

In conclusion, this is a very important and interesting paper that sheds light on key development issues through the prism of careful analysis of firm-level data.

## Notes

1. Foreign investors in joint ventures can have minority or majority ownership. A joint venture in which they own more than 50 percent is similar to a greenfield operation in many respects. Until recently, China did not allow majority ownership by foreign owners in the automobile and component industries. A recent deal with Honda and a new strategy for faster development of the Chinese automobile industry may signal the removal of this restriction (*Wall Street Journal*, May 26, 2004).
2. A story has it that the main criterion for rejecting applicants for work in some of the new hotels in St. Petersburg was work experience in Soviet hotels.
3. See also the discussion of development of design work in India in *The Economist*, pp. 59–60, April 3–9, 2004.

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# Aid Flows

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# The Millennium Development Goals and the Monterrey Consensus: From Vision to Action

ZIA M. QURESHI

*Most developing countries are not on track to meet the Millennium Development Goals. The income poverty goal is likely to be met at the global level, but Africa will fall well short. For the human development goals, the risks are much more pervasive across regions. Likely shortfalls are especially serious with respect to the health and environmental goals (child and maternal mortality, access to safe drinking water and basic sanitation). Few, if any, regions will achieve the mortality goals. The implication of these prospects is clear. There is an urgent need for both developing and developed countries to scale up action based on the Monterrey partnership. Policies and governance in developing countries are improving, but progress needs to be accelerated and deepened to achieve stronger economic growth and improve the delivery of basic human services. Developed country actions to date have fallen well short of the Monterrey commitments. Two top priorities are to ensure a timely and pro-development outcome to the Doha Round and to increase aid in amounts that are sufficient and in forms that are responsive to needs.*

The turn of the century was marked by some significant and promising events for world development. The Millennium Declaration—signed by 189 countries in September 2000—led to the adoption of the Millennium Development Goals (MDGs), which set clear targets for eradicating poverty and other sources of human deprivation and promoting sustainable development (see annex A for a list of the goals and targets). Major international meetings in Doha, Monterrey, and Johannesburg in 2001 and 2002 contributed to the emergence of a shared understanding of the broad development strategy and policies needed to attain the MDGs. The meeting in Monterrey in March 2002 ushered in a new compact between developing and developed countries that stressed mutual responsibilities in the quest to meet the MDGs. The

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Monterrey Consensus called on the developing countries to improve their policies and governance and on the developed countries to step up their support, especially by opening their markets and providing more and better aid.

With broad agreement on the goals and strategies to achieve them, the task now is implementation—translating vision into action. This needs to happen within countries and at the global level. All parties must deliver on their part of the compact.

Is this happening? What progress has been made? What constraints are blocking implementation? How are all parties doing in delivering on their commitments? What are the priorities in the agenda? This paper addresses these questions.

## **MDG Prospects: Reasons for Optimism, Grave Concerns**

Reviewing the prospects of reaching the MDGs raises both optimism and grave concerns.

### *The Income Poverty Goal: A Mixed Picture*

The world is likely to meet the goal of halving income poverty between 1990 and 2015, thanks to stronger economic growth, spurred by improvements in policies, especially in China and India. With current trends, most regions will achieve or come close to achieving the goal. East Asia has already met it. However, Sub-Saharan Africa is seriously off track, with just eight countries, representing about 15 percent of the regional population, likely to achieve the goal. Within other regions that will likely meet the goal at the aggregate level, a number of countries will not. Low-income countries under stress, about half of which are in Africa, are especially at risk of falling far short. The trends are broadly similar with respect to the target of halving the proportion of people who suffer from hunger, also part of Goal 1. The target is likely to be met at the global level, but Sub-Saharan Africa and a number of countries in other regions will fall short.

### *The Human Development and Environmental Goals: More Serious Concerns*

The risks are more pervasive across regions with respect to the human development goals. While economic growth has a significant effect on education and health outcomes, just as it does on income poverty, the magnitude of the effect is typically smaller. Prospects for progress on the human development goals also depend on the scale and effectiveness of development interventions directed specifically toward them. The determinants of these goals are multiple and cut across sectors.

Prospects are brighter in education than in health. With current trends, several regions will achieve or approach the goal of providing universal primary education, but shortfalls are likely in Sub-Saharan Africa and possibly in South Asia and the Middle East and North Africa. Gender gaps in education are greatest in the same three regions. While the target for gender equality in primary and secondary educa-

tion is to be achieved preferably by 2005, about one-third of developing countries appear unlikely to achieve it even by 2015. Prospects for gender parity at all levels of education, including higher education, are even less encouraging.

Prospects are gravest in health. On current trends, most regions will not meet the goals of reducing child and maternal mortality. In fact, only 15–20 percent of countries appear to be on track to meet the health goals. The goal of halting and reversing the spread of HIV/AIDS and other major diseases (malaria, tuberculosis) appears daunting, as the incidence of these diseases continues to rise, exacerbating conditions affecting child and maternal mortality and entailing broad and serious economic and social consequences. The risks of failure to halt the spread of HIV/AIDS are especially high in Sub-Saharan Africa, but they are substantial in many countries in other regions as well.

Meeting the health goals is rendered more difficult by the large gaps in access to safe drinking water and basic sanitation. These gaps are largest in Sub-Saharan Africa for water and in South Asia for sanitation. The goal of halving the proportion of the population without access to safe water and sanitation by 2015 means providing an additional 1.5 billion people with water and 2 billion with sanitation. With current rates of progress at about half what is needed, most regions will fall well short, and only about one-fifth of countries will achieve the target increase in access. Among low-income countries, only half as many will make it.

### *Variation across Countries*

Global and regional trends hide considerable variation across countries. East Asia provides a good example. At one end, the region has middle-income countries, such as China and Thailand, which have already met or will soon meet several of the MDGs. Some of those countries are developing “MDG plus” agendas. At the other end, low-income countries, such as Cambodia and Papua New Guinea, are seriously off track. Diversity also appears within countries, especially large ones. Although China has already met the income poverty MDG at the national level, progress has been much slower in some inland provinces, where large concentrations of poverty remain.

Middle-income countries in general are much better positioned than low-income countries to achieve the MDGs, with many of them having already met them or well on their way. Yet notwithstanding their progress on income poverty, these countries remain home to 280 million people living on less than \$1 a day and 870 million people living on less than \$2 a day. Several of these countries lag on some of the non-income MDGs. For example, despite its spectacular performance in reducing income poverty, China is not on track to meet the child mortality goal.

### *Daunting Challenge, But Grounds for Hope*

The MDGs present a difficult challenge, but past development successes give cause for hope. Globally, adult illiteracy was halved in the past 30 years, while life expectancy at birth increased 20 years in the past 40 years. Some countries have advanced very far very rapidly. Vietnam, for example, a low-income country, reduced

the poverty headcount from 51 percent in 1990 to 14 percent in 2002. Even in Sub-Saharan Africa, there are encouraging stories of success. Botswana doubled the proportion of children in primary school in 15 years, nearly achieving universal primary education. Benin increased its primary enrollment rate and Mali its primary completion rate by more than 20 percentage points in the 1990s. In Mauritania enrollment of girls increased from 67 percent of the rate for boys in 1990 to 93 percent of the rate for boys in 1996. Uganda reduced HIV/AIDS infection rates during eight consecutive years in the 1990s, and Zambia may soon become the second African country to slow the spread of this scourge. These achievements demonstrate that rapid progress is possible, given good policies and the support of partners.

### **Scaling Up on the Basis of the Monterrey Consensus**

The implications of the foregoing assessment are clear. The achievement of the development goals will require accelerating the pace of development and doing so swiftly. In line with the principles and partnership established at Monterrey, all parties must scale up their action. The agenda has three essential elements:

- Accelerating and deepening reforms to achieve stronger economic growth
- Empowering and investing in poor people—stepping up action to improve the delivery of services affecting human development
- Speeding up implementation of the Monterrey partnership, matching stronger efforts by developing countries to spur growth and improve service delivery to poor people with stronger support from developed countries and international institutions.

### *Acting on Multiple Fronts*

The multidimensionality of the MDGs, the linkages among them, and their multi-sectoral determinants imply that the policy agenda for achieving the goals is broad. Indeed, the agenda spans the gamut of development. There is no one-to-one link between the MDG relating to a sector and policies relating solely to that sector—the outcome in a given sector depends critically on factors outside that sector. For child survival, for example, mother's education and access to safe water and sanitation may be more important than access to health facilities. Likewise, girls may be unable to attend school or visit health clinics if they spend much of their time fetching water from distant sources or if adequate and safe means of transport are lacking. The agenda cuts across sectors, policies, investments, and institutions. The scaling-up effort, therefore, requires concerted action on multiple fronts.

### *Promoting Stronger Economic Growth*

At the center of the strategy to achieve the MDGs and related development outcomes must be the promotion of stronger economic growth. Growth directly reduces

income poverty and expands resources for use toward reaching the nonincome goals. So first and foremost, economic growth in developing countries needs to be stronger than recently achieved or currently projected. Sub-Saharan Africa needs to double its average GDP growth rate, to about 6 percent. This is an ambitious goal, but some countries in the region (Cape Verde, Mauritius, Mozambique, Uganda) achieved it in the 1990s. What is needed is accelerated policy and governance reform to improve the enabling climate for growth—macroeconomic stability and openness, a good regulatory and institutional environment for private sector activity, adequate physical and financial infrastructure, and better public sector governance.

### *Scaling Up Service Delivery*

Reaching the goals also requires policies and actions that enhance the capabilities of poor people—men and women—to participate in and benefit from growth. For their participation to be effective, the poor need to be empowered, through improved delivery of education and health services, as well as related infrastructure services, such as water and sanitation and rural roads. Stepped-up investments in these services must be accompanied by reforms in sector policy and institutional frameworks to improve the effectiveness of delivery, including greater involvement of communities, especially poor people, in making decisions.

### *Enhancing the Global Development Partnership*

The developing countries are in the driver's seat in setting the agenda for achieving the development goals, but they need help from development partners. Implementation requires increased cooperation at the global level. The developing countries need expanded access to markets in developed countries to increase exports and spur growth. And they need more aid to finance development programs that improve the delivery of human development and infrastructure services. This mutualism was clearly recognized and affirmed at Monterrey, but progress to date has been relatively slow. The spirit of Monterrey needs to be translated rapidly into action.

## **Priorities for Developing Countries**

*Policies improving, but much farther to go.* Indicators for the past five years show improvement in policies in all regions, albeit to varying degrees. On average, policy indicators are weakest in Sub-Saharan Africa, but even there they show improvement on most dimensions, suggesting that recent reforms are beginning to take hold. Improvement in policies is creating conditions that enhance countries' capacity to make effective use of resources for development, domestic and external. While some improvement has occurred in all policy areas, progress is especially notable in macroeconomic management and trade policy: average inflation and tariff rates have been cut in half in the past decade. The improved policy environment has contributed to a pickup in economic growth. Indeed, average per capita GDP growth in low-income

developing countries in the past five years was higher than during any other five-year period in the past two decades. Better policies pay off.

Despite this improvement, however, growth in many countries—most of them in Sub-Saharan Africa—remains below the level needed to achieve the MDGs. In 1998–2002 per capita growth in nearly 60 percent of low-income countries (with a combined population of 950 million) was less than 2 percent; in 32 percent of low-income countries (with a combined population of 555 million) per capita growth was negative. Factors such as adverse political and external circumstances—including the limited availability of aid resources and impediments to access to export markets in developed countries—have played a role, but the growth response to improvements in the macroeconomic and trade policy environment has been dampened by slower progress on structural and institutional reforms, which are essential for improving the enabling climate for private sector activity. Stronger growth in the future will depend crucially on more vigorous and consistent efforts to speed up reforms in these areas.

In the delivery of services—human development, infrastructure—the picture is broadly similar, showing some areas of progress and others requiring stronger action. Resource allocation has improved somewhat, as evidenced by the increased investment in human capital. Public education and health spending increased during the 1990s from 6.9 percent to 7.4 percent of GDP in low-income countries for which data are available.

In some countries there are encouraging examples of successful innovation in service delivery to the poor—among them the Education with the Participation of Communities (EDUCO) program in El Salvador, the Progresá program of conditional cash transfers to the poor linked to school and clinic attendance in Mexico, and the Female Secondary School Assistance Program in Bangladesh, which employs targeted financial incentives and community engagement to increase girls' school enrollment. Key ideas from these innovations are now being applied in other countries, including most recently Nepal. In many countries, however, the quality and effectiveness of service delivery show major deficiencies, pointing to the need to accelerate improvements in the underlying policy and institutional framework to raise the yield of increased spending on services.

*Core of the reform agenda: institutional reform.* Cutting across the policy agenda is the need to improve governance. Public sector governance, while improving, remains the weakest area in most countries. Institutional dimensions of reform are also paramount in the improvement of the private sector business climate and the performance of the service delivery sectors. In macroeconomic management as well, performance is strongly correlated with the quality of institutions responsible for policy implementation. In most developing countries, improved management of the environment requires building up fledgling environmental institutions. Responding to these challenges, more and more governments have launched governance and institutional reforms. An important example is the New Partnership for Africa's Development (NEPAD), an initiative owned and led by African countries that places improvement in governance at the center of the reform agenda.

*Country focus and ownership: central to success.* The primary determinant of the prospects for achieving the MDGs is developing countries' own policies. Overall, progress has been encouraging, but reforms need to be accelerated and deepened. Looking across developing countries, five areas need particular attention, as set out below. Within these broad areas, policy priorities for individual countries must be determined at the country level, in the context of coherent country development strategies. Country ownership and leadership of the development strategy are crucial to effective implementation and achievement of results.

In low-income countries the poverty reduction strategy papers (PRSPs) are the primary avenue for expression of a country-owned and -led development strategy. In middle-income countries policy integration and prioritization is performed within respective national strategy frameworks. By the end of March 2004, 37 countries had prepared or were implementing full PRSPs; 16 more had prepared Interim PRSPs. Countries are increasingly reflecting the MDGs in their PRSPs, and the PRSP process itself is being deepened along various dimensions—participatory process, growth strategies, public expenditure management, and poverty and social impact analysis. Continued strengthening of the PRSP process, and deepening of the links with the MDGs, will ground the agenda for achieving the development goals in country-owned strategies. Countries can spell out their commitments to policy and institutional reforms in these strategies, which in turn enables donors to commit support in a coherent and consistent way.

### *Solidifying Macroeconomic Stability*

*Fiscal management: main area for improvement.* All regions show improvement in macroeconomic management, but progress has been uneven and remains fragile in many countries, especially in Sub-Saharan Africa. Fiscal management is the area of most concern; performance is much better on monetary and exchange rate management. In terms of meeting the goals of public debt sustainability and containment of fiscally derived macroeconomic imbalances, fiscal policy remains unsatisfactory in about one-third of low-income countries. The deficiencies in structural aspects of fiscal policy are more serious, with almost half of low-income countries assessed to have an unsatisfactory composition of public expenditures. For these countries a strengthening of macroeconomic policies, especially fiscal management, remains necessary. Even in countries with better performance, maintaining and building on macroeconomic stability, an essential foundation for sustained growth, will be a continuing challenge.

Macroeconomic policy indicators are better on average in middle-income countries than in low-income countries. Because these countries are typically more integrated into international capital markets, maintaining sound macroeconomic policies is especially important for reducing vulnerability to crises that can wash away hard-won gains in reducing poverty. Average output loss from currency crises in the past two decades is estimated at 7.5 percent of precrisis GDP. Although vulnerability indicators have improved in the past few years, the reduction of public debt, espe-

cially external debt, relative to GDP remains a key area for further progress in several countries. Also important are improvements in the governance of financial and corporate sectors to prevent the buildup of balance-sheet vulnerability.

### *Improving the Private Sector Enabling Environment*

*Extending progress on outward-oriented strategies.* Despite significant liberalization, the scope for further reductions in trade barriers is substantial, especially in some regions. In South Asia, for example, despite sharp declines since the late 1980s, the average tariff remains about 20 percent. Taking into account nontariff barriers (excluding technical product regulations), South Asia's average tariff equivalent was estimated at 32 percent in 2001, the highest among developing regions. Developing countries should take advantage of the Doha Round to make further strides toward trade openness. Countries that derive a sizable part of government revenue from trade taxes may need assistance in adjusting to a regime of lower trade tariffs.

In addition to reducing trade barriers, countries should move vigorously on the "behind-the-border" agenda, to enable the private sector to exploit the opportunities created by lower trade barriers. That agenda includes the efficient supply of services closely related to trade—customs, transport and telecommunications, financial services—and improvement of the broader enabling environment for entrepreneurship and private investment. Evidence suggests that liberalization and regulatory reform in services trade could significantly increase economic growth.

*Reducing regulation and strengthening institutions.* While improving, the regulatory and institutional environment for private sector activity still needs significant reform in many countries. Regulation is typically much heavier and more complex in low-income countries, notwithstanding their more limited implementation capacities, raising the cost of starting and operating a business and creating opportunities for corruption. It typically takes 30 days and costs less than 10 percent of per capita income to start a business in high-income countries; in low-income countries, it takes 74 days and costs twice per capita income. While regulation is heavy, the essential institutions underpinning markets are weak. The most serious shortcomings are in property rights and rules-based governance, an area assessed as less than satisfactory in almost four-fifths of low-income countries. Such an environment deters investors, both domestic and foreign. Weak creditor rights and contract enforcement also inhibit the growth and deepening of the financial system.

Countries need to shift emphasis from regulating business operations to building institutions that facilitate business by supporting the efficient and fair functioning of markets. A key area of reform is the strengthening of property rights and of institutions that establish and enforce the rule of law (legal and judicial reform, reduction of bureaucratic harassment). A related area, especially in middle-income countries, is the continued strengthening of the institutions of corporate governance.

### *Upgrading Public Sector Governance*

*Accelerating governance reform.* The need to accelerate reform is greatest in public sector governance. Progress is being made, and the quality of public sector governance has improved, especially in Europe and Central Asia and South Asia. But the reform agenda calls for more vigorous action in many countries. In as many as three-fourths of low-income countries, overall public sector governance is assessed to be less than satisfactory, making it the weakest area of performance. The weaknesses are most pervasive in low-income countries in Sub-Saharan Africa, precisely where stronger institutional capacities are needed to manage development interventions that will spur progress toward the MDGs. They are especially acute in the low-income countries under stress in all regions. Governance ratings are higher in middle-income countries, but those ratings are still lower than these countries' ratings in other policy areas. These findings indicate the need to focus attention on governance and institution-building reforms, as poor governance and weak institutions can seriously undermine the effectiveness of policies and programs throughout an economy. Initiatives such as the NEPAD, therefore, are especially valuable and timely.

*Reducing corruption.* The most serious shortcomings in public sector governance are in transparency, accountability, and control of corruption. Reform is complex in these areas, which are less amenable than other areas to "technocratic" solutions. Progress will depend on a careful nurturing of reform ownership and of needed changes in bureaucratic culture. Political will is key, as are political processes that allow broad participation, build in checks on executive authority, and enable citizens to hold administrations accountable.

*Building on progress in public financial management.* Performance is better on average in public financial management (expenditure and revenue management, budget systems). More attention to public expenditure and budget management in the preparation of the PRSPs and in the Heavily Indebted Poor Countries (HIPC) Initiative has contributed to progress in these areas, which must be sustained and deepened. The importance of improved management of public resources is underscored by the need to create fiscal space for increased spending on key infrastructure and human development services (see below) within sustainable overall fiscal positions. In many countries the scope for reallocating spending toward development remains substantial. On the revenue side, analysis shows that on average low-income countries can increase their tax-to-GDP ratio by at least 1–2 percentage points by eliminating tax exemptions and improving tax administration. Doing so would help mobilize resources, although the bulk of the financing needed to achieve the MDGs will have to come from economic growth, external resources, and improvement in the efficiency of existing spending.

Decentralized governance can improve the delivery of services at the local level. This is especially important for large middle-income countries like Brazil and China, which need to devise strategies to tackle major concentrations of poverty at the sub-national level. To be effective, decentralization must be underpinned by sound inter-governmental fiscal systems and adequate local institutional capacities.

### *Strengthening Infrastructure*

*Substantial scaling up of investment needed.* Infrastructure plays a dual role in the effort to achieve the MDGs. An important part of the enabling environment for economic growth, it also delivers services that are key to achieving the human development and gender equality goals. Currently, there are large gaps in the availability and quality of key infrastructure, especially in low-income countries and in rural areas within countries. Narrowing those gaps requires sizable increases in investment and associated spending on operation and maintenance (O&M). Estimates suggest that average spending on infrastructure (investment plus O&M) in low-income and lower middle-income countries may have to almost double from the levels of the 1990s (when such spending fell by 2–4 percent of GDP). This implies increases in infrastructure spending (covering power, transport, telecommunications, and water and sanitation) on the order of 3.5–5.0 percent of GDP in low-income countries and 2.5–4.0 percent of GDP in lower middle-income countries relative to the low levels of the 1990s, with the pace of the increase depending on the institutional capacity and macroeconomic conditions in the country concerned.

Financing this spending will be a major challenge. Efforts must continue to improve the regulatory and institutional environment for private investment in infrastructure, which has increased but not as much as expected. Innovative instruments for risk mitigation could also help leverage more private financing. At the same time, public spending on infrastructure must reverse its decline of the past decade. That will require stronger mobilization of domestic resources, including improved cost recovery, a reallocation of spending, and increased external assistance. Especially in the low-income countries, external assistance must provide a larger share of total infrastructure spending than the roughly 10 percent it provided in the 1990s. Infrastructure requirements relating to water and sanitation warrant special attention in public spending and foreign assistance programs, given their close links to the health and gender goals and the fact that this sector traditionally attracts less private financing than other infrastructure sectors, such as power and telecommunications.

*Increased investment: not the sole answer.* To ensure its effectiveness and sustainability, investment must be underpinned by improvements in the policy and governance framework, especially the capacity of key institutions. With more and more responsibilities in infrastructure falling on local governments, strengthening administrative and financial capacities at the local level, including developing and facilitating the use of appropriate subsovereign financing instruments, will be increasingly important.

### *Accelerating Human Development*

*More resources complemented by more effective use.* Encouraging progress has been made in human development. More investment is being made in education and health, and more attention is being paid to the effectiveness of service delivery. But progress needs to be accelerated and broadened if the human development goals are

to be achieved. The deficiencies in service delivery are most serious in Sub-Saharan Africa and South Asia, though even in these regions individual countries are making progress. Ghana is reducing child mortality, for example, and Ethiopia and Rwanda are improving primary completion rates.

In most low-income countries, meeting the targets in education and health requires the commitment of more resources to these services. However, in a number of these countries, there is substantial scope for increasing the impact of existing spending by addressing poor targeting of subsidies, lax resource management, low efficiency and quality of service, and information failures. Examples abound. In Guinea the share of public spending in education and health accruing to the richest quintile was found to be seven times that accruing to the poorest. In Uganda 87 percent of nonwage resources intended for schools were diverted to other uses before the problem was discovered and corrective action taken. Teacher salaries absorbed more than 90 percent of the recurrent education budget in Kenya. Teacher absenteeism is 39 percent in Bihar, India. Among doctors in primary health facilities in Bangladesh, absenteeism is 73 percent. Despite free immunization, 60 percent of children are not immunized in India, because mothers are unaware of the benefit. Many of these problems can be traced to weaknesses in governance and institutional capacities.

*Main elements of the agenda.* Concerted action is needed on several fronts:

- Scaling up investment in human capital in low-income countries while maximizing the impact of existing public spending by improving the targeting of public services in education, health, and social assistance
- Paying attention to intersectoral linkages when developing and implementing programs (it is hard to reduce child mortality when only 10 percent of poor households have access to an improved water source, as in Ethiopia)
- Addressing governance-related impediments to service quality and effectiveness
- Piloting and evaluating empowerment options to strengthen the involvement of stakeholders, especially poor people, in the design and delivery of services, and scaling up on the basis of successful programs, such as EDUCO and Progresa

Community involvement is particularly important in reducing gender disparities in education. Since the success of interventions to educate girls is fundamentally embedded in the sociocultural context, community involvement can help ensure that interventions are responsive to needs. Improvement of access to education—and to other key services—by women and girls requires that the design of services reflect gender concerns. Indeed, the goal of empowerment of women calls for gender concerns to be fully integrated into policymaking more broadly.

*Donor support: EFA-FTI and GFATM.* The scaling up of human development in low-income countries requires that more donor support come in forms that promote broad sector reform, encompassing the policy and institutional dimensions of the sector and moving away from past practices focused more on earmarked expenditures or vertical programs that delivered a narrow package of interventions. The Education for All–Fast Track Initiative (EFA-FTI) is helping support a shift in that

direction. Disbursements under the program, slow to take off because of agency programming and budgeting cycles, need to be expedited. As of January 2004, only \$6 million of the first \$170 million committed to the initial group of countries had been disbursed. World Bank projections suggest that as the FTI scales up to all low-income countries, at least \$3.7 billion a year will be needed in external financing for primary education by 2005–06, up from about \$1 billion in 2002.

Implementation of the Global Fund for HIV/AIDS, Tuberculosis and Malaria (GFATM) has also been slow. As of January 2004, just \$1.5 billion out of \$3.4 billion in pledges had been committed, and only \$230 million had been disbursed. Expediting progress in this priority area requires better donor coordination and the alleviation of institutional capacity constraints in recipient countries.

### **Priorities in Developed Countries**

*Actions well short of the Monterrey vision.* As agreed in Monterrey, if the MDGs are to be achieved, stronger reform actions by developing countries must meet with stronger support from developed countries in an enhanced global development partnership. Priorities for developed countries relate to trade and aid policies. Also important is the broad conduct of macroeconomic and financial policies in a way that is conducive to strong global economic growth and stable private capital flows. Attention to key global public goods is also needed.

How well are developed countries doing in living up to their commitments? A review of progress shows that actions seriously lag commitments in most areas. Accelerating progress toward meeting the MDGs requires much stronger support from the developed world than witnessed so far. The agenda can be grouped under five headings.

### *Fostering a Robust Global Economic Recovery*

Through their impact on trade and capital flows, global economic conditions exercise a major influence on prospects for growth and poverty reduction in developing countries. Growth in developing countries cannot thrive in the absence of strong and sustainable growth in the advanced economies. Although the prospects for recovery in world economic growth appear to be reasonably bright over the near term, sustaining a strong global economy will require the major countries to address some outstanding issues and imbalances.

*Orderly resolution of imbalances.* Disorderly adjustment in the largest economies could retard growth or leave global economic conditions vulnerable to shocks. The United States is running a large external current account deficit. Such large external imbalances, financed increasingly with debt instruments, are difficult to sustain for a long period. As economic growth in the United States gathers steam, a gradual tightening of fiscal and monetary policies could help bring about an orderly adjustment. In Europe the central challenge is to implement needed structural reforms,

especially in labor markets and social security systems, in order to return economic growth to a sustainable 2–3 percent range over the medium term. In Japan economic policy needs to continue to focus on countering deflationary tendencies, stabilizing public sector debt, and addressing the accumulation of imbalances in the financial and corporate sectors. A common, longer-term structural challenge is to address the fiscal impact of the demographic changes occurring in these countries.

The ongoing global economic recovery, buttressed by low interest rates in the advanced economies, is also reflected in some recovery in private capital flows to developing countries in 2003. The outlook for sustaining these flows in the longer term would improve if the large fiscal and external imbalances in the advanced economies were reduced, freeing up financing for developing countries, and the developing countries continued to improve their policy and institutional environment to make sound and sustainable use of external financing. Prospects for private capital flows would also benefit from improvements in the international financial architecture to make those flows more stable and reduce the likelihood and severity of financial crises, including more extensive use of collective action clauses and improved practices in sovereign debt restructuring.

### *Moving Forcefully on the Doha Development Agenda*

*Reducing trade barriers.* Improved market access for exports by developing countries can give a major boost to growth and progress toward poverty reduction and other MDGs. Currently, trade barriers in developed countries discriminate against developing countries in many cases. They are highest on products of major export interest to developing countries. Protection of agriculture is a multiple of protection of manufacturing. Taking into account both tariff and nontariff barriers—including domestic subsidies but excluding technical product regulations—average protection in agriculture in high-income OECD countries in 2001 was 25.6 percent, while average protection of manufacturing was 3.6 percent. Both tariffs and domestic subsidies contribute significantly to the high protection in agriculture, but tariffs have a much larger impact. Protection is particularly high on key products. OECD countries' tariffs on sugar, for example, are frequently above 200 percent, and their support to sugar producers of \$6.4 billion a year roughly equals developing country exports. In the European Union, producer support for beef is as high as 84 percent of the value of domestic production. U.S. subsidies to cotton growers totaled \$3.6 billion in 2001–02, twice as much as all U.S. foreign aid to Africa, costing West African cotton growers an estimated \$250 million as a result of their depressing effect on prices.

Within manufacturing, while average protection is low, tariff peaks and escalation discriminate against developing country exports and efforts to move up the value chain. In clothing, for example, tariff peaks average 16–17 percent in Canada, Japan, and the United States. More than 60 percent of imports subject to tariff peaks originate in developing countries. On average the incidence of contingent protection—antidumping actions—is also higher against developing countries.

Estimates show that gains from a significant reduction in these trade barriers would be substantial, both for developing and developed countries. Stronger growth resulting from a pro-development outcome of the Doha Round could increase real income in developing countries by \$350 billion by 2015 (roughly equivalent to the entire GDP of Sub-Saharan Africa), lifting an additional 140 million people out of poverty by that year (a decline of 8 percent). The bulk of these potential income gains—as much as 70 percent—would arise from liberalization in agriculture.

*Liberalizing trade in services, including migration.* Gains from liberalizing trade in services, especially the temporary movement of workers, could be a multiple of those from liberalizing merchandise trade, according to some estimates. Services are the fastest-growing component of developing country exports. Services provided over telecommunications links and by migrant workers show particular dynamism. Workers' remittances, estimated at \$93 billion in 2003, are now the second-largest source, behind foreign direct investment, of private external funding for developing countries. Against this background, a cause for concern is the recent build-up of protectionist pressure against imports of services in some developed countries, reflected, for example, in new legal norms in the European Union and pending legislation in the United States that could limit outsourcing of government contracts.

*Pushing for a timely and pro-development outcome of the Doha Round.* Putting the Doha Round back on track must be accorded the highest priority. Developed countries, because of their weight in the system, need to lead by example. Bilateral or regional agreements are a poor alternative to forward movement on the multilateral front. Agreement on some focal points or targets for trade policy reform would provide a needed impetus. Such focal points could include the following:

- Complete elimination by high-income countries of tariffs on manufactured products by a target date
- Complete elimination of agricultural export subsidies, complete decoupling of all domestic agricultural subsidies from production, and reduction of agricultural tariffs to, say, no more than 10 percent by a target date
- Commitments to ensure free cross-border trade in services delivered via telecommunications networks, complemented by actions to liberalize the temporary movement of service providers

At the same time, reform should aim to achieve greater transparency and predictability in trade policy, by limiting the use of less transparent instruments, such as specific tariffs; simplifying regulatory requirements; and imposing greater discipline on the use of contingent protection.

Any incorporation of rules relating to domestic regulations, such as competition and investment policies (the so-called Singapore issues), into World Trade Organization agreements needs to ensure that the rules support development and take into account the different implementation capacities of developing countries. A flexible approach is warranted. The agreement reached in 2003 to clarify the Trade-Related Intellectual Property Rights (TRIPS) Agreement to expand poor countries' access to essential drugs at low cost is an example of such flexibility. Support to developing

countries to build their institutional capacities to deal with the trade-related agenda and take advantage of better market access opportunities should also be stepped up. The Integrated Framework for Trade-Related Technical Assistance is a useful initiative in this context. “Aid for trade” and complementary measures to facilitate technology transfers to developing countries can have a significant impact and will be needed to enable poor countries to realize the potential gains from global trade reforms noted above. Some of these countries will also need assistance in adjusting to a reduction in trade preferences following further nondiscriminatory trade liberalization and to the potential effects of a significant increase in world food prices should that materialize.

### *Providing More and Better Aid*

*Substantially increasing official development assistance.* Official development assistance needs to rise well beyond current commitments, which leave a large gap between the development ambitions of the international community and the resources provided. An increase in aid is critical to support reforms in low-income countries and enhance their prospects of achieving the MDGs. Aid also plays an important role in middle-income countries, by reinforcing domestic efforts to tackle concentrations of poverty and countering negative shocks.

Against this background, it is encouraging to see aid volumes begin to reverse their decline of the past decade. Official development assistance rose in 2002 and, according to preliminary estimates, again in 2003. If realized, commitments of increased assistance made by the donor community in follow-up to Monterrey would raise official development assistance from the 2002 level of \$58 billion by about \$18.5 billion by 2006. This would raise total official development assistance from 0.23 percent to 0.29 percent of donors’ gross national income. This increase would indeed be welcome, but it still falls well short of what is needed as part of the global compact to achieve the MDGs.

Country-level analysis conducted recently by the World Bank indicates that, as a conservative estimate, an initial increment of at least \$30 billion could be used effectively. Early commitment of this additional sum would help create a virtuous circle by encouraging developing countries to undertake and sustain deeper reforms, which would make aid still more productive. As countries improve their policies and governance and upgrade their capacities, the amount of additional aid that can be used effectively would rise into the range of \$50 billion plus a year that estimates suggest is likely to be necessary to support adequate progress toward the MDGs. Ongoing work to examine the merits of various options, such as an international finance facility, for mobilizing the substantial additional resources that are needed and can be effectively used to achieve development results is, therefore, important and timely.

It is useful to view these estimates of additional aid requirements in context. An additional \$50 billion would raise official development assistance relative to donors’ projected gross national income in the second half of this decade to roughly the same level as at the beginning of the 1990s (levels in earlier decades were still higher). Since

then, conditions for effective use of aid in developing countries on average have improved, thanks to better policies. Donors' income levels have also risen. Ironically, as aid has become more productive and donors' capacity to give has grown, aid amounts have declined sharply. This does not mean that all donors have reduced their assistance. The aid effort varies widely across members of the OECD Development Assistance Committee, ranging from a low of 0.13 percent of gross national income by the United States in 2002 to a high of 0.96 percent by Denmark.<sup>1</sup>

While aid volumes are rising again, there is some concern that much of the increase may be dominated by strategic considerations (the war on terrorism, conflict and reconstruction in Afghanistan and Iraq). Large amounts have recently been committed for these purposes, but it is unclear whether all of these commitments represent an increase in total aid or are in part a reallocation of aid from other countries. In the period ahead, it will be important to ensure that development aid is not crowded out by aid influenced by such strategic objectives.

*Improving the allocation of aid.* Most donors today are more selective than they were a decade ago, allocating more aid to countries with better policies and more poverty. But there is considerable variation among donors. On average multilateral assistance, which accounts for about a third of total official development assistance, is much more sharply targeted to good policies and to poverty. Based on a newly developed index that measures both policy and poverty selectivity in aid allocation, multilateral institutions on average are more than three times as selective as bilateral donors, with the International Development Association being the most selective. Among bilateral donors, the Nordic countries, the Netherlands, and the United Kingdom are the most selective (with Denmark the highest). Some of the largest donors, such as France and the United States, have not been particularly selective along either the policy or poverty dimension. Japan is selective on policy but not on poverty, reducing the overall selectivity of its aid. Thus while the typical donor has improved its aid quality in terms of targeting more funds to poor countries with better policies and governance, this cannot be said for the typical aid dollar, as the largest donors in absolute amounts are less selective. Looking ahead, actions now being taken by some of these donors are expected to improve aid allocation. The Millennium Challenge Account in the United States, for example, aims to improve aid effectiveness by tying increased assistance to performance.

Efforts to improving the targeting of aid need to take account of the special needs of conflict-affected and other low-income countries under stress. The challenge is to weigh weak policies and institutions with the need to maintain critical engagement. Appropriately timed and directed aid, sensitive to local efforts to rebuild and institutional capacity constraints, can play a useful role in these situations. Well-timed aid can also be effective following adverse exogenous shocks, helping limit the diversion of development resources into short-term relief efforts.

*Increasing the effectiveness of aid through improved alignment and harmonization.* Related to better allocation of aid across countries, the effectiveness of aid depends crucially on its alignment with national development priorities within country programs and on harmonization and coordination of donor policies and proce-

dures around the recipient country's own systems. In low-income countries the PRSP provides the framework for strategic alignment with country-owned and -led priorities and for achieving better coherence and coordination in donor support activities. The country-led alignment and harmonization efforts in Tanzania and Vietnam, centered on the PRSP, provide good examples. Aid alignment and harmonization efforts were given an impetus by the High-Level Forum on Harmonization held in Rome in February 2003, and the donor community, under the auspices of the Development Assistance Committee (DAC) Working Party on Aid Effectiveness and Donor Practices, is now conducting important follow-up work, including elaboration of a set of indicators of progress. Results from this work will be important to widening the application of good practices and better monitoring progress.

*Providing aid in forms that are responsive to country circumstances and needs.* As countries build a track record of policy performance, their efforts should be supported with timely, predictable, and longer-term aid commitments. Such commitments would enable them to embark on sustained reforms and investments necessary to meet the MDGs with assurance that needed support would be forthcoming. Aid should be provided in forms that can flexibly meet countries' needs for incremental financing. Currently, only about a third of bilateral official development assistance is available for program and project expenditures in recipient countries. The rest is allocated to special purposes, such as technical cooperation, debt relief, emergency and disaster relief, food aid, and aid administration. These special purpose grants accounted for almost all of the \$6 billion nominal increase in official development assistance in 2002 (in real terms the increase was about \$4 billion).

Going forward, a much higher proportion of additional aid will need to be provided directly to countries in the form of cash, so that it can be deployed in accordance with country priorities to finance the costs of meeting the MDGs. Where country circumstances warrant it, and budget frameworks are sound, more aid could be provided in forms that allow for the financing of recurrent costs, through budget or sectorwide support or through targeted assistance to well-designed sectoral programs. Many activities in education and health that are crucial to progress toward the MDGs involve expanding recurrent spending. To ensure debt sustainability in heavily indebted countries that are pursuing good policies, consideration should be given to providing a larger share of additional aid in the form of grants.

*Providing debt relief and ensuring debt sustainability.* Much progress has been made under the HIPC Initiative in reducing heavily indebted poor countries' debt and debt service burden and creating fiscal space for much needed increases in poverty-reducing spending. While most acute in the case of the heavily indebted poor countries, the issue of achieving and maintaining debt sustainability is of broader concern to low-income countries. The International Monetary Fund and the World Bank are developing a debt sustainability framework intended to provide guidance on issues relating to financing strategies for low-income countries, including the range of indicators for assessing debt sustainability, the role of policies in determining appropriate debt thresholds, the importance of including domestic debt in such assessments, and the appropriate mix of grants and new credits. These issues are

becoming increasingly important in the light of the need for large increases in external financing to meet the MDGs and the implications for country debt sustainability. Debt sustainability is not only a resource flow issue, however; it also depends crucially on increasing growth, expanding and diversifying exports, improving access to global markets, and mitigating the effects of exogenous shocks.

### *Stepping Up Action on Key Global Public Goods*

As globalization has advanced and awareness of the international spillovers of local actions and conditions has grown, there has been a welcome increase in attention to sphere for global collective action, in areas such as control of infectious diseases, promotion of education and dissemination of knowledge, opening up of the international trade regime, and promotion of a more stable international financial system. In all of these areas, there is progress to report, but action needs to be stepped up.

One key area for global collective action that is directly related to the MDGs is environmental sustainability. Developed countries bear much of the responsibility for the preservation of the global environmental commons, as they are the largest contributors to the degradation of the commons and possess the financial and technical resources needed for prevention and mitigation. Developing countries must also play their part, by improving their environmental management, including through increased regional cooperation that donors could support. While there has been good progress on protecting the ozone layer, thanks to implementation of the Montreal Protocol, much less progress has been made in most other areas, including greenhouse gas emissions, biodiversity, and fisheries. Aid to developing countries to support improved environmental practices, both bilaterally and through multilateral vehicles, has declined after a short-lived increase following the 1992 Rio Convention. Not all advanced countries have shown weak resolve in addressing the environmental challenges; there are good global citizens, such as Sweden and Switzerland. Looking ahead, priorities include stronger and more concerted action on greenhouse gas emissions and increasing aid to developing countries in support of environmental sustainability, including through the Global Environment Facility.

### *Improving Policy Coherence for Development*

Cutting across the policy areas is the need to improve the overall coherence of policies in rich countries in terms of their development impact. All too often, policies are contradictory, with support to development provided in one area defeated by actions in others. For example, \$58 billion in official development assistance by the OECD countries is undermined by five times as much protection to domestic agricultural producers. Advocacy of and support for private sector development and export diversification in developing countries are blunted by systematic escalation of tariffs on higher-value imports from those countries. Norway's stellar performance as an aid donor coexists with the most restrictive agricultural trade policy regime among

the OECD countries; a similar contradiction between aid and trade policies applies to the European Union. The African Growth and Opportunity Act (AGOA) of the United States was undercut by its 2002 Farm Bill and its higher protection against imports from low-income and least developed countries than from the rest of the world.

The realization that development policy extends well beyond aid and specific trade preferences is leading to welcome indications that the developed countries are willing to look broadly at the policy areas that affect development—trade, aid, foreign investment and other capital flows, migration, knowledge and technology transfer, the environment—and to put in place institutional arrangements that would help ensure coherence. A noteworthy development in this context is the passage into law of an “integrated global development policy” in Sweden in January 2004 that calls for the country’s aid, trade, agriculture, environment, migration, security, and other policies to be aligned with the objective of reducing poverty and promoting sustainable development. Another notable development was the issuance by Denmark of the first in a planned series of reports on how it is contributing to the goal of establishing a global partnership for development (MDG 8). Preparation of similar reports is being considered by some other OECD members, including Belgium, Canada, Finland, Germany, the Netherlands, Norway, and Sweden.

Two related ongoing initiatives at the OECD are a “horizontal project” on policy coherence for development that looks at the impact on developing countries of a broad range of developed country policies and increased attention in DAC peer reviews to issues of policy coherence. Work on these issues is also being undertaken by private think tanks and civil society, including the Center for Global Development and the World Economic Forum. These encouraging efforts will prove very valuable if they were instrumental in bringing about more systematic attention to issues of development impact and coherence in rich country policymaking.

## Conclusion

Based on current trends, prospects for achieving the MDGs are rather bleak. Most developing countries will not meet most of the goals. The income poverty goal will be achieved at the global level, but Africa is likely to fall well short. The risks are much more pervasive across regions with respect to the human development goals. The prospects are gravest in health. Few, if any, regions are likely to achieve the child and maternal mortality goals.

Achievement of the MDGs and related development outcomes requires an urgent and significant scaling up of action on the part of both developing and developed countries, based on the Monterrey partnership. Absent a quick and significant acceleration of action on respective responsibilities, the world risks falling hopelessly behind in its efforts to achieve the development goals.

Policies in developing countries have improved, enhancing their capacity to make effective use of resources for development, domestic and external. Performance varies

widely, however, and reform needs to be accelerated and deepened in many countries, especially in Sub-Saharan Africa. Promotion of stronger economic growth must be at the center of the strategy to achieve the development goals, complemented by actions to improve the delivery of human development and related key services, especially to poor people. A substantial scaling up of investment is needed in infrastructure and human capital. Key reform priorities relate to: strengthening capacity in the public sector and raising the quality of governance, especially improving public expenditure management and combating corruption; and improving the enabling climate for private sector activity, by solidifying progress on macroeconomic stability, further reducing barriers to trade, and shifting emphasis from regulating business operations to strengthening market institutions, such as property rights and the rule of law.

Overall, developed country actions have fallen well short of the Monterrey vision; progress seriously lags commitments in most areas. This must change, and change quickly, to help accelerate progress toward the development goals. The vision of Monterrey needs to be translated rapidly into concrete actions. Priorities for developed countries relate to trade and aid policies. But also important are the broad conduct of macroeconomic and financial policies conducive to robust growth in the world economy and increased attention to key global public goods, including environmental sustainability.

A successful pro-development and timely outcome of the Doha Round is critical. Of particular importance are improving market access and reducing subsidies in agriculture. Aid flows need to rise well above current levels, and aid needs to be provided in forms that can flexibly meet the incremental costs of achieving the MDGs. Good policy performance needs to be supported with predictable and longer-term aid commitments. There is also substantial scope for increasing the quality and effectiveness of aid by improving the allocation of aid across countries, aligning aid with country-owned strategies and priorities, and harmonizing donor policies and practices. To ensure debt sustainability in heavily indebted poor countries that are pursuing good policies, a larger proportion of additional aid should be provided in the form of grants. Cutting across these areas for action is the need to improve the overall coherence of policies in rich countries in terms of their development impact.

## Annex A. Millennium Development Goals and Targets

The Millennium Development Goals and targets come from the Millennium Declaration, signed by 189 countries, including 147 heads of state, in September 2000. The goals and targets are related and should be seen as a whole. They represent a partnership of countries determined, as the Declaration states, “to create an environment—at national and global levels alike—which is conducive to development and the elimination of poverty.”

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### **Goal 1: Eradicate extreme poverty and hunger.**

Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day.

Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger.

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### **Goal 2: Achieve universal primary education.**

Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.

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### **Goal 3: Promote gender equality and empower women.**

Target 4: Eliminate gender disparity in primary and secondary education, preferably by 2005, and at all levels of education no later than 2015.

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### **Goal 4: Reduce child mortality.**

Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate.

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### **Goal 5: Improve maternal health.**

Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio.

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### **Goal 6: Combat HIV/AIDS, malaria, and other diseases.**

Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS.

Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases.

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### **Goal 7: Ensure environmental sustainability.**

Target 9: Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources.

Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.

Target 11: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers.

*(continued)*

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**Goal 8: Develop a global partnership for development.**


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Target 12: Develop further an open, rule-based, predictable, nondiscriminatory trading and financial system (includes a commitment to good governance, development, and poverty reduction, nationally and internationally).

Target 13: Address the special needs of the least developed countries (includes tariff- and quota-free access for exports of the least developed countries, enhanced debt relief for heavily indebted poor countries and cancellation of official bilateral debt, and more generous official development assistance for countries committed to reducing poverty).

Target 14: Address the special needs of landlocked countries and small island developing states (through the Programme of Action for the Sustainable Development of Small Island Developing States and the outcome of the 22nd Special Session of the General Assembly).

Target 15: Deal comprehensively with the debt problems of developing countries through national and international measures to make debt sustainable in the long term.

Target 16: In cooperation with developing countries, develop and implement strategies for decent and productive work for youth.

Target 17: In cooperation with pharmaceutical companies, provide access to affordable, essential drugs in developing countries.

Target 18: In cooperation with the private sector, make available the benefits of new technologies, especially information and communication.

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## Note

1. The United States recently has increased its aid commitments, which would raise its net official development assistance in 2006 by about 50 percent over the 2002 level.

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## Comment on “The Millennium Development Goals and the Monterrey Consensus: From Vision to Action,” by Zia M. Qureshi

ROMILLY GREENHILL

Zia M. Qureshi’s paper, a summary of the World Bank’s *Global Monitoring Report 2004: Policies and Actions for Achieving the MDGs and Related Outcomes*, provides a global assessment of progress toward the Millennium Development Goals (MDGs). It also sets out, in some detail, the policies that must be followed by both developed and developing countries if the MDGs are to be met by 2015. The paper powerfully highlights the lack of progress toward the MDGs and places the onus on both developed and developing countries to move faster. This is a step forward from earlier approaches to development, which stressed policy failure in the South as the key cause of poverty and economic instability.

However, there is a fundamental contradiction at the heart of Qureshi’s paper. On the one hand, along with most in the development policy community, he stresses that development will never take place unless poor countries are able to “own” their own policies and make their own decisions. He rightly points out that “country ownership and leadership of the development strategy are crucial to effective implementation and achievement of results.” Yet the substance, and even the language, of his paper suggests an approach based on top-down policy prescriptions and external priority setting rather than domestic debate, local accountability, and national decisionmaking.

Shortly after stressing the importance of country ownership for successful development and effective policymaking, Qureshi sets out five very detailed policy areas in which he believes developing countries need to make progress. Although he acknowledges that “policy priorities for individual countries must be determined at the country level,” he argues that these priorities should be set “within these broad areas.” Not surprisingly given that Qureshi is a World Bank economist, the areas identified fall within the Washington Consensus model of development and include macroeconomic stability and improving the private sector enabling environment. Thus it appears that countries may be allowed to “own” their own policies only if

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they fit with the broad priorities set by the World Bank and International Monetary Fund (IMF).

Even within the five priority areas identified by Qureshi, developing countries seem to have little room for maneuver. Under “improving the private sector enabling environment,” for example, Qureshi argues that trade barriers need to come down. As he writes, “despite significant liberalization, the scope for further reductions in trade barriers is substantial.” He seems to overlook the fact that some developing countries may want to retain trade barriers for good reasons—to protect vulnerable groups, for example, or allow certain industries to develop. He seems to be stressing a “one size fits all” approach rather than allowing domestic policy choices in response to domestic priorities.

This top-down, externally driven agenda is clear. Qureshi writes, for example, that “half of these countries are assessed to have an unsatisfactory composition of public expenditures.” Of course, most poor country citizens, like most donors, would probably prefer that government money be spent on education, health, and infrastructure rather than defense, state houses, or presidential palaces. But there remains a question about who has the right to assess government expenditure priorities—elected representatives of the people or unelected World Bank officials? Local MPs and civil society groups may have the right to assess their country’s budget as “unsatisfactory,” but does Qureshi?

The examples just presented are drawn from Qureshi’s paper. But they are symptomatic of a broader contradiction within World Bank thinking. On the one hand, the Bank is now officially committed to promoting country ownership of policies and accountability to local people rather than donors. This shift in emphasis has come from the very top of the organization: Bank President James Wolfensohn, for example, proclaimed at the Financing for Development Conference in March 2002 that “this is not about rich countries telling developing countries what to do. This is about creating a chance for developing countries to put in place policies that will enable their economies to grow. Policies that are home grown and home owned. For the surest foundation for long-term change is not development by fiat, but social consensus.” Similarly, the World Bank’s 2002 Lending Directive states that “there is no single blueprint for reform that will work in all countries . . . any country’s reform program must be designed with country ownership to fit that country’s specific circumstances” (World Bank 2002, p. 6).

Yet in reality, the Bank and IMF still seem to be promoting a single policy blueprint in all countries, as the examples presented below make clear. For them, “ownership” does not appear to mean that countries should be free to develop their own policies. Policies do not have to be locally grown and locally developed, as long as the country is willing to accept the donor line and is committed to implementing policies set in Washington. This narrow definition of country ownership is confirmed by working papers from within the IMF, which state, “Ownership does not require that an IMF-supported program be a government’s first choice, nor that it be the program that officials would have preferred in the absence of IMF involvement. . . . As a general proposition, what is essential is that the responsible and controlling offi-

cial be committed and that opposition can be overcome" (Boughton 2003, p. 4). A similar approach is reflected within the official IMF definition of national ownership, namely, "a willing assumption of responsibility for an agreed program of policies by officials in a borrowing country who have the responsibility to formulate and carry out those policies" (IMF 2001, p. 6). In summary, the Bank and IMF definition of ownership appears to be quite compatible with countries following a set of policy prescriptions written by, or at the very least heavily influenced by, Bank and IMF staff and imposed even in the face of popular opposition.

The narrowness of the definition of *ownership* used by the Bank and IMF is also clear from the content of the policies found in Bank and IMF programs. If countries were genuinely able to set their policy priorities, and if donors merely came in to support such domestic priority setting, we might expect to find a range of different policies within Bank and IMF programs. Faced with a failing public water supplier, for example, one country might choose to privatize, while another might choose to reform the public system, possibly with donor assistance. In fact, donor programs show a remarkable similarity across countries. A recent survey of 14 low-income countries in which the Bank is funding the water sector, for example, found that 12 of them included some form of privatization conditionality (Wood 2003).

Recent ActionAid case study research in Uganda and India clearly demonstrates that donors are still in the driver's seat when it comes to setting policy choices. In Uganda, for example, donors have put the country under substantial pressure to privatize the urban water system. In the country's 2002 Poverty Reduction Support Credit, privatization was included as a trigger condition: no privatization, no money. This despite the fact that the public National Water and Sewerage Corporation had been reforming rapidly and made substantial progress in improving services. Moreover, the conditionality was set without any of the stakeholder input that is supposed to be a central element in the policymaking process, including through the Poverty Reduction Strategy Paper. According to AWEAPON, a Ugandan nongovernmental organization that has followed the process closely, "The debate about water privatization never took place. The policy is being implemented and there is nothing that can be done to change it. Basically the donors are now saying to us, 'We have come this far, now you have to come to help us and make it work. You have no choice.'" This is also a concern felt by MPs in Uganda. As one MP put it, "the donors are telling the government what to do—it is not fair the way they influence government policy."

India, a much larger country, that is far less dependent on donor aid than Uganda, tells a similar story. The World Bank had pushed privatization of the electricity sector for several years, starting with the Electricity Reform Act in 1995 and ending with full privatization of the power generation and distribution companies in 1999. In the public mind, there is no doubt about the role played by the Bank. As one consultant involved in the process put it, "There's no doubting the decisive role played by the Bank in pushing the reforms—it's 100 percent a Bank model. Orissa had to accept the conditions, given its poverty, debt, and the fiscal crisis in the state. There were huge problems in the sector, but Orissa was in an unusually weak negotiating position with the Bank compared with other states." Yet the Orissa case is hardly a

shining example of a successful privatization. The state government has incurred huge debts as a result of the privatization, private companies have breached their contracts by failing to invest new working capital, and performance has failed to improve.

If the Millennium Development Goals are to be met, it is clear that in some countries, some policies will have to improve. But it is also clear that such improvements can take place only as a result of domestic processes, domestic debates, and domestic priorities. Donors such as Qureshi and his World Bank colleagues, can, of course, help stimulate the debate, assist countries in formulating their policies, and share international experiences. But they should no longer be laying down detailed reform blueprints and threatening to withhold funds if their own policy prescriptions are not followed. It is time that donors began to support countries in developing their own social consensus, rather than continuing to push for development by fiat.

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## Comment on “The Millennium Development Goals and the Monterrey Consensus: From Vision to Action,” by Zia M. Qureshi

HUSNIA AL-KADRI

Data from the past three decades indicate that gender equality and empowerment of women can secure the future of women and, more importantly, ensure the future welfare of households, communities, and national economies. For that reason I insist that the issue of gender equality is not limited to a single gender goal. It applies to all the Millennium Development Goals (MDGs); without progress toward gender equality and empowerment of women, none of the MDGs goals will be achieved. Mr. Qureshi is pessimistic about the ability of the low-income countries to achieve the MDGs. Fifty percent of the problems are caused by the absence of women from public life and the low participation of women in the wage-earning labor force.

Gender equality in the MDGs is highly associated with education. Research confirms the importance of equality in this domain, but this is not sufficient. The road map for implementing the MDGs includes four indicators of gender equality: the number of women in parliament, the level of education, the level of literacy, and the level of wage employment. All of these reduce to only one indicator: education. In Yemen education is used as the main tool for empowering women; the other indicators are neglected. In countries where the women’s movement is strong, women can advocate for all four indicators. But in the Middle East and North Africa generally, and Yemen in particular, the women’s movement is so weak that women are invisible in public life, where policy and decisions are made (UNDP 2002).

The World Bank report *Gender and Development in the Middle East and North Africa: Women in the Public Sphere* identifies the economic and social obstacles that women in the region face. The report indicates that the status of women in many countries in the region improved as a result of public spending on education and health and that most countries in the region are on their way to meeting MDG 2, which calls for bridging the gender gap in primary and secondary school by 2005.<sup>1</sup>

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These gains in women's education have not translated into gains in the visibility of Arab women in the public sphere (World Bank 2003). The participation of Arab women in the labor force still ranks among the lowest in the world.

From my point of view, the MDGs must be considered as an umbrella to the implementation of Poverty Reduction Strategy Paper (PRSP) projects and programs. The PRSP is owned nationally and internationally. It provides key opportunities to mobilize national actors to achieve the MDGs.

Educated and intellectual women in Yemen place great importance on the PRSP process. We believe that the PRSP is a chance to empower women by mainstreaming gender issues at all levels of projects and programs, as well as in the overall PRSP process.

PRSP is a dynamic process. Annual PRSP progress reports provide information to the general public and policymakers about the performance of government policies and programs in achieving the poverty reduction goals.

Two of the important pillars of the PRSP are good governance and decentralization. We women in Yemen consider these pillars the key to empowering women. By being part of the process, we learned that the scope of governance goes beyond the technical arena of simple delivery of basic services, extending to the political dimension, to social empowerment, the process of collective action, collective participation, collective bargaining, and social expression (Evertzen 2001). Good governance as a system stresses the empowerment and participation of people, gender equality, transparency, accountability, and effectiveness. Decentralization gives citizens more and better opportunities to influence decisionmaking.

Good gender-sensitive governance depends on four criteria:

- Participation: equal participation in government institutions and process, freedom of association, and space for an active women's movement
- Transparency: transparency and gender equity in the allocation of resources
- Legitimacy: legislation for gender equality and promotion and protection of women's rights
- Effectiveness: gender-sensitive policies and institutional structures

Yemeni women will try their best to help local governance increase women's participation in policies, formal or informal political structures, and civic engagement in politics. They will work to strengthen gender awareness and capacities among male and female politicians and civil servants. Delivering services that address the specific needs and interests of women and men in the community requires gender-sensitive economic development, development planning, equitable allocation of resources, and awareness of women's right.

## Note

1. The exception is Yemen, where the illiteracy rate remains very high (74 percent for women, 32 percent for men).

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## Closing Address

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HILDE F. JOHNSON

I would like to thank Belgium for organizing this important conference and for inviting me to chair the closing roundtable. This is actually the third time I have had the opportunity to chair a wrap-up session of the ABCDE, and I would like to take a moment to review where we have been. In 2001 the fear of demonstrations and difficulties in Barcelona led to the canceling of the conference, and the whole ABCDE happened on the Internet. In 2002 the Swedes had the same concerns, so they handed the ABCDE over to us in Oslo. And there were lots of demonstrations in the streets. I think there were 20,000 Norwegians demonstrating, but they did so very peacefully, so nothing bad happened. The conference was in Paris in 2003, and there were virtually no demonstrations, at least very marginal ones. In Oslo representatives from Attac declined to participate in the ABCDE conference. This year Attac is here, and there are no demonstrations. I think that is worthy of applause.

Excellencies, ladies and gentlemen, let me now take us on to the roundtable. The theme of this conference is “Doha, Monterrey, and Johannesburg: Are We on Track?” May I suggest that this also be the topic of our roundtable discussion.

As you all see, we have an excellent panel before us. We have one representative of each layer, so to speak, of government. The Prime Minister of Belgium, Mr. Guy Verhofstadt, will provide a bilateral perspective. Mr. Verhofstadt has now committed Belgium to reaching 0.7 percent of GNP for aid. Belgium is one of the first countries in a long time, apart from the old group, to make this new commitment. I would like to commend that and say that we are looking forward to the day when Belgium is part of the G-0.7, which is maybe more important a group than the G-8 or G-7.

The President of the European Commission, Mr. Romano Prodi, will provide a multilateral and regional perspective. The European Commission now represents 25 member countries. And, as we know, it is not only a large donor in international development but also an incredibly important player in policy coherence and in delivering on Millennium Development Goal 8. It is perhaps appropriate that yesterday

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Hilde F. Johnson is Norway's Minister of International Development.

the European Commission made the headlines, with Commissioner Pascal Lamy stating its willingness to move the Doha negotiations forward, including being willing to delete export subsidies.

The President of the World Bank, Mr. James D. Wolfensohn, will provide a global perspective. He has served for the past 10 years, during which time there have been three different managing directors in the International Monetary Fund. So I would say that Mr. Wolfensohn has been instrumental in changing the Washington Consensus. That is my personal view, and I congratulate him for doing that and also for being honest with us. So we have high expectations of what he is going to say to us about whether or not we are on track.

Regarding the topic of discussion, let me underline that our point of departure is the grand bargain that is anchored in Millennium Development Goal 8. We have Doha, Monterrey, and Johannesburg as our reference points. And the question is, are we on track? Are we on track with trade in terms of foreign direct investment? Are we on track with aid in terms of official development assistance? Are we on track in terms of sustainable development? Will Doha become a development round? How can we see that it does? These kinds of questions are what we would urge our speakers to address.



## Closing Address

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GUY VERHOFSTADT

The 21st century was supposed to be the century of fresh hope for the world. That's what we always believed, that's what we worked toward. The century began with some laudable initiatives, not least of which was the Doha Development Agenda, which was intended to prompt the political and economic elite to go beyond mere words. But the question we have been asking over the two days of this year's ABCDE Conference is this: "Are we on track?" The answer is a resounding no—or to state it more diplomatically, progress is very uneven.

Action is urgently required. Every year 2 million people die of tuberculosis, 1 million die of malaria, and 3 million die of AIDS, and dozens of guerrilla wars and civil wars rage. Some 840 million people go hungry every day.

The 2003 *Human Development Report* classifies countries in terms of life expectancy, education, and disposable income. The top 25 countries include those in Western Europe and nations like the United States, Japan, Australia, and Israel. The bottom 25 countries are all in Sub-Saharan Africa.

Antiglobalists are right in saying that economic globalization is making the rich richer and the poor poorer. But I do not agree with their solution. It is senseless to try and stop the world from turning.

The only way of doing something about the current injustice is to break open old structures, structures that have remained basically the same since colonial days, structures in which the prosperous West is protecting its power and prosperity. We need to be bold and dare to break open these structures.

At the start of the conference, I talked about free trade and the G-8. I firmly believe that there is not too much but rather too little free trade. The protectionism displayed by Europe and the United States is curbing growth in the South. Consequently, I am delighted by the bold proposals put forward yesterday by the European Commission. The proposals represent the right way to launch constructive negotiations, and I would like to offer my congratulations to Commission President Romano Prodi for taking that step.

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Guy Verhofstadt is the Prime Minister of Belgium.

We have to be brave enough to take things even farther and proceed with some truly international reorganization. We must develop from a G-8 of rich countries to a G-8 or G-10 of regions. Organization at the regional level is important globally, and it is an excellent form of cooperation for peace, prosperity, and democracy. And if it worked in Europe—an age-old battleground scarred by war after war—it must be capable of succeeding elsewhere. The recent enlargement of the European Union to include 10 former Communist countries is proof that such cooperation really works. So we must strive to ensure that such cooperation increasingly takes shape on other continents too. This idea could also be applied to the United Nations, where regional representation could replace national representation.

We must dare to launch fresh socioeconomic initiatives. The establishment of a stronger Economic, Social, Environmental Council within the United Nations would provide a way of monitoring compliance with minimal social and environmental standards. It would help coordinate activities of organizations such as the World Trade Organization, the International Labour Organization, and—why not?—the World Bank. Another possibility could be the creation of a World Social Organization as the social counterpart of the WTO. Such an institution—or the creation of a stronger Economic, Social, and Environmental Council—could mark the beginning of new relations between the North and South. It could address not only financial and economic considerations but also working conditions, human rights, and the environment. Such an organization could ensure, among other things, that the subsidiaries of multinationals honor international agreements about a code of conduct.

These ideas may seem high flown or utopian, but they aren't. What matters is that people in authority strive toward common goals. The fact that we didn't manage to reach agreement in Cancun doesn't mean that we should be unable to continue making major headway in the Doha agenda. Taking action is not a matter of politics but a matter of ethics.

Every government has to do what it can to advance development. No government needs to wait for an agreement to be reached before ensuring that 0.7 percent of its GNP is allocated to development cooperation. I am well aware that this is no easy matter. I am leading a government. I, too, have a budget that has to be balanced. But I am proud to be able to tell you that over the past five years, Belgium has more than doubled its development aid. In 2002 we earmarked 0.43 percent to development aid. In 2003 that figure rose to 0.61 percent. If I'm not mistaken, that makes Belgium the sixth-ranking country in the world in this regard.

I am well aware that there is no cause for celebration yet. But the point I want to make is that it is up to every country and every organization to bring about the necessary changes in their own domain and to take the required initiative. If we really intend to achieve something, if we really want something to happen soon, we will have to take matters into our own hands. When I look at your commitment and potential, I feel sure that together we can move things forward.



## Closing Address

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ROMANO PRODI

Thank you for inviting me here. I think there are a lot of synergies between the European Union, the European Commission, and the World Bank, and we really need to work together.

First, I would like to address the enlargement of the European Union and its effect on financial assistance. Enlargement, and the financial package connected to it, is certainly helping the new acceding countries. But what can bring about a substantial change is the fact of being able to attract foreign investment and of being part of the European market. The same result cannot be achieved with the same dimension of financial assistance.

For those countries that are not supposed to join—at least in a foreseeable future—the EU, we have conceived what we call the “ring of friends,” a policy aimed at enlarging the single market to encompass a greater area—from Russia to Morocco—and thus involve a larger number of countries and provide a natural incentive for investment. This concept can, in the future, bolster very strong progress in the development of some areas of the world. Although it does not solve all of the world’s problems, it can nonetheless be very helpful.

But I want to stress that enlargement will not diminish the level of our aid. On the contrary, it is our clear goal to increase the level of our aid. We want to go this way. It is a priority. There is no connection between enlargement and the provision of aid. I want to make this clear, because otherwise we shall go in the wrong direction.

Second, there was a very interesting observation about Africa that I found striking. You say that Africa’s primary problem is achieving peace. This is a very real problem that we have started to tackle. I have worked, and we are working, to help all of the interregional structures in Africa. Recently, I invited the African Union Commission to meet with the European Commission. This is a very small entity; it is still very weak. But the only way to promote development in Africa is to help the African Union in its efforts to bring peace to the continent.

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Romano Prodi is the President of the European Commission.

One of the big—and very risky—decisions we have made is to give a large sum of money to the African Union in support of its peacekeeping efforts. I say this because we have to work together to ensure success. Without peace in Africa, anything else can't be achieved. Aid is provided in substantial amounts, but then 10 times more is spent on conflicts, including small conflicts. As a consequence, development assistance is blocked for 10 or 15 years. It is a serious problem that needs to be discussed.

But I have learned a lesson from the African Union Commission. The European Commission consists of 15 men and 5 women, whereas the African Union Commission consists of 4 men and 4 women. The African Commission is set up, designed, to include as many women as men. I think we can learn something from that.

Well, the question that you asked, and that I want to answer before ending, is the general question on Monterrey and Doha. Clearly, I agree with Guy Verhofstadt that an allocation of 0.7 percent of gross national product gives you a seat on the Security Council. But my question is, if you give 0.35 percent, do you get half a seat? Because, at the moment, very few countries go beyond 0.35 percent. I was in Monterrey when we fought for setting a target, and I do remember that when we looked at figures, we realized that we could not make them public. Many countries were even lower than 0.2 percent in their assistance. This was the reality, and the reality has not changed much. We are still, on average, allocating half of the 0.7 percent. The goal for 2006 was 0.39 percent, with a minimum of 0.33 percent. So I think we have to make sensible decisions about this because, while I agree with Guy that trade is important, if there is no aid, trade is not sufficient to make progress.

If we analyze the strategy for Doha, the European Union is ready to move in three areas. First, we propose a special package for the poorest and weakest countries, the G-90. Second, on the Singapore issue, the European Union is ready to treat each item on its merits and we are ready to align ourselves to the consensus that will be possible to reach. And finally, on agriculture, we are ready to try to cut subsidies. In a parallel manner, we need to have the same level of commitment from the United States and other countries, like Canada, concerning the level of subsidization of their agricultures. And we need the help of our public opinions and the help of the World Bank.



## Closing Address

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JAMES D. WOLFENSOHN

Let me first of all say thank you to the Prime Minister for hosting this conference. We are very grateful to you, and I am very happy indeed that we have so many people from different spectra of society at the meeting.

My impression is that we have done more than enough analysis to know what it is that would get us to the Millennium Development Goals. We can keep analyzing it, but you keep coming back to the proposition that developing countries and developed countries each have responsibilities, and they are fairly clearly laid out, although in points of emphasis some people differ. Developing countries, in terms of governance, need to build capacity and strengthen their legal systems, they need to strengthen their financial systems, and they need to fight corruption. These are conditions precedent to development. As for the developed countries, at Monterrey, Johannesburg, and Doha they said they would help build capacity, open their markets for trade, increase aid, and try to help on the issue of corruption, given that it's not a one-sided issue.

This commitment has been analyzed many ways, and subsidiary issues, such as the level of aid and the pace of openness of trade, have consumed us. Most world leaders understand that the issue is not one of two worlds, but one of one interconnected world. And if that needed to be brought home, it was probably brought home best on September 11, and more recently in Madrid.

The leaders that I've met and many people elsewhere all understand that we are in a different sort of world today and that spending \$900 billion a year on military expenditures, \$300–\$350 billion on agricultural subsidies and tariff protection, and just \$50–\$60 billion on development is crazy. I said jokingly the other day that, if we spent \$900 billion on development, we might have to spend only \$50 billion on military expenditures. No one has bought that yet. The point is that we are out of balance. But there are many leaders who, I think, would like to do something about it.

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James D. Wolfensohn is the President of the World Bank.

What are the inhibitions? What is inhibiting the wealthy side of the house? Well, the first thing is that I think, at the moment, everyone is concerned about growth. It looks as though it's picked up, but in the last days at least the stock markets are reflecting some indecision. But overriding it all is Iraq, the situation in Palestine, and the issue of terror. It is very hard in the press and in public debate to get beyond these highly visible issues and to get people to focus, in terms of action, on anything but these critical visible issues. If you look at the European or American press, headlines are about the latest crisis, the latest problem, the division between the United States and some of its allies and between Europe and some of its allies, the participation, and the fragmentation of view. And so if peace is a key component in terms of development in Africa, resolution of these issues is needed. And addressing confrontations between extremists of one side or another and the rest of the community, wherever it is, is fundamental to getting back to the issue of what sort of peaceful world we want, and what sort of world we want for the young people who are here today, and what sort of world they want.

This issue of peace and development is an issue that is consuming us. It consumes most political debates in different countries, as do the issues of security, job security, and the future for much of the population of the rich world.

It is in this context that I would like to comment on the observations made by Prime Minister Verhofstadt, who has made some extremely important suggestions for a more regional and representative approach to governance. My slight worry is that even if you have a regional and more representative approach to government, while you have individual country interests, as focused as they are on their own issues at this moment, I think you'd get a better debate. But whether you'll get better action as a result is not clear.

I think that reorganizing the problems is a good thing to do, but the fundamental problem in terms of the wealthy countries is their preoccupation with more visible issues rather than the fact that 2 billion more people will populate the planet in the next 25–30 years, all but 50 million of them in developing countries.

For me, that is the real issue. That's the train that's coming down the track that's going to hit us, even more than some of the other more visible issues that we face today, with the possible exception of the confrontation, as perceived by some, with radical Islam. So that is the first point I'd like to make.

The second point is that I think that if we are going to seriously address the questions of reaching the Goals, we have to think a step beyond institutional reorganization. In May, in Shanghai, we will be discussing the issue of scaling up. How do we take successful projects and initiatives and take them to scale? How do we get beyond fixing 50 schools in a country to fixing 5,000 schools? How do we go beyond 100 community development programs to 10,000 community development programs? It's not surprising that we chose Shanghai to have this discussion, given China's success scaling up 80 case studies from a variety of countries.

My interim conclusion is that the big change we have to make is to stop thinking about poor people as the object of charity or the problem, and think about enfranchising them and saying they are part of the solution. China got this right in many

of the projects I have seen. Giving responsibility to the people who are most concerned in order to have local ownership, and doing it on a broader scale, is something we have to develop far more significantly, and I hope it will come out of the discussions in Shanghai.

The third thing I want to say, for the benefit of the young people who are here, is that we at the World Bank were late in addressing the issue of youth. But surprisingly, I think we are now ahead of most other institutions. We have 2.8 billion people under the age of 24. We have 1.5 billion under the age of 15. We have to create a billion new jobs in the coming years. And there is no way that we will have peace unless we can give hope and opportunity to young people.

Nearly a year ago I met in Paris with a group of young people, and I gave a sort of patronizing introduction about the future that we were going to give to them. And the first person who spoke said, “Mr. Wolfensohn, we’re not the future. We’re the now. And please understand that at 17 we’re different than you were at 17.” And he added, “My younger brother, who’s 12, is different than I was at 12. And so you have to take into account what we think, because we can help you with AIDS, we can help you with education, we can help you with understanding, we can help you with peace.”

I am relating this story, because I am delighted that we have young people with us here today, and at least in my organization, we didn’t do enough in relation to young people. But by the end of this year, in 20 of our offices we will have permanent groups of young people between 15 and 23 who will be commenting on all our projects and working with us.

Let me finally say, in relation to the developing countries themselves, we’ve focused on trade and we’ve focused on aid, we’ve focused on what the rich countries are or are not doing. But developing countries also have problems. I look particularly at those countries that are faced with huge problems of governance. As I get around the world and talk a lot about corruption, I hear a lot of discussion about corruption. But, frankly, in almost any country, in 24 hours you can know whether the president is a crook, whether the prime minister is a crook, whether his wife is getting 10 percent, whether the family is getting 10 percent, which minister is a crook, which chief justice is a crook. It doesn’t take a genius to find out what the real structure is. You sit down and talk with many leaders in these countries, and you know that the people close to them may be the worst offenders. So we really need to buttress reformers in developing countries who are really trying to bring about a change.

Two major initiatives are under way today, one in Nigeria and one in Brazil. In Brazil President Lula is trying to change the culture in terms of equity, social justice, and the balance between rich and poor. I think it is a remarkable effort. In Nigeria a group under the finance minister and a dozen other people are tackling the issue of corruption and governance.

So there are initiatives taking place, and there are success stories in the developing world. We should not forget that in the past 40 years we have made huge progress in terms of poverty, life expectancy, and many other statistics. We are not

entirely on track—but we’re not entirely off track either. And there are huge supporters, like the Prime Minister and Romano Prodi, to whom I must pay public tribute for what he’s done for development. There are many good leaders in the world who are moving together. What we need to do is follow the track, take some of those engines that are off track and put them back on, and above all, act now and get up enough speed to get us to the goal that we’re seeking.

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#### **IN THIS VOLUME**

Introduction by François Bourguignon, Boris Pleskovic, and André Sapir; opening addresses by Jean-François Rischard, Guy Verhofstadt, and Marc Verwilghen; opening speech by François Bourguignon; keynote address by Joseph E. Stiglitz, written with Andrew Charlton; papers by Thierry Verdier, Robert E. B. Lucas, John Sutton, and Zia M. Qureshi; comments by Jose Olivio Oliveira, Raquel Fernández, Chien Yen Goh, Riccardo Faini, Louka Katseli, Aderanti Adepoju, Gur Ofer, Romilly Greenhill, and Husnia Al-Kadri; and closing addresses by Hilde F. Johnson, Guy Verhofstadt, Romano Prodi, and James D. Wolfensohn.

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