



# The Challenge of Population and Migration

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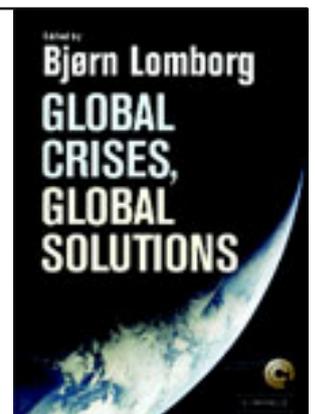
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## 1. Description of the Challenge

In an ideal world, there would be few migration barriers, and little unwanted migration. For most of human history, there were few governmental barriers to migration—instead, limited communication and transportation networks as well as rules that tied serfs were tied to the land limited human mobility mobility.

There was migration from one place to another in response to famine, war, and displacement in traditional economies, and all three combined to encourage the migration of 60 million Europeans to the Americas in the 19<sup>th</sup> and early 20<sup>th</sup> centuries. During the 20<sup>th</sup> century, the world’s population increased fourfold, and sharply different rates of population and economic growth emerged between the world’s nation states, whose number quadrupled to about 200 in the 20<sup>th</sup> century.<sup>2</sup> Most nation states have more workers than formal-sector jobs, and especially young people who know that wages are 10 or 20, times higher in another country are eager to cross national borders, putting international migration “close to the center of global problems.” (Bhagwati, 2003, 82).

If people were goods, the solution to different wage and employment levels would be obvious: encourage the transfer of “surplus” people from poorer to richer nation states, which should benefit individuals whose incomes rise, increase global GDP, and promote convergence in wages and opportunities between sending and receiving areas that eventually reduces migration pressures. If we knew how to ensure that economically motivated migration assured convergence between areas, so that migration was truly the proverbial “free lunch” among global challenges, lowering migration barriers would be the first among the global challenges.

However, we do not know how to ensure that economically motivated migration sets in motion virtuous circles that yield convergence; there may also be cases of migration setting in motion vicious circles that increases the motivation to migrate between areas. Thus, the migration challenge is to ensure that the migration that occurs promotes convergence. We tackle this challenge in three parts: explaining why the migration of professionals from developing to developed countries may lead to divergence rather than convergence among participating nation states unless there is some form of human capital replenishment from receiving to sending areas,

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<sup>2</sup> There were 43 generally recognized nation-states in 1900, and 191 in 2000, when the CIA factbook listed 191 “independent states”, plus 1 “other” (Taiwan), and 6 miscellaneous entities, including Gaza Strip, West Bank, and Western Sahara. ([www.cia.gov/cia/publications/factbook/index.html](http://www.cia.gov/cia/publications/factbook/index.html)).

how to provide incentives for employers and unskilled migrants to abide by the rules of guest worker programs so that richer countries open new doors for their entry and employment, and how to use the 3 R's associated with migration—recruitment, remittances, and returns—to accelerate economic development. The concluding section discusses the costs of measures to be implemented to allow more migration.

There is significant international migration from poorer to richer nation states: about 175 million people, three percent of the world's residents and equivalent to the world's fifth most populous country, were migrants living outside their countries of birth or citizenship for a year or more in 2000, including 6 percent classified as refugees who are unable or unwilling to return because they would face persecution at home.<sup>3</sup> The number of migrants roughly doubled between 1975 and 2000, while the world's population increased by 50 percent. Most migrants move from poorer to richer countries, and some 60 percent of world's migrants are in the more developed countries, which have 15 percent of the world's residents. Most of the remaining 40 percent of the world's migrants have moved from poorer to richer developing countries, as from Burma to Thailand or Nicaragua to Costa Rica.

Far more people would like to move from lower- to higher-income countries, as is evident in the daily reminders of migrants detected by ever-larger migration control agencies or by reports of migrants dying en route to or in their destinations. However, opinion polls suggest that most residents of richer destination countries oppose additional immigration, and instead support increased governmental efforts to curb illegal or irregular migration. After the September 11, 2001 terrorist attacks, fears of economic competition and cultural change due to immigration were joined by security fears, making it hard for many governments to maintain current entry channels or to open new entry doors for legal migrants.

Most economists welcome migration from lower- to higher-wage countries, since voluntary migration from lower to higher wage areas increases allocative efficiency, allowing an economy and the world to make the most efficient use of available resources and thus maximize production. The overall economic gain from migration is the sum of individual net income gains plus a dividend. Immigration of workers has two major economic effects: it increases the supply of labor and reduces wages or the growth in wage, and the increase in employment due to immigration raises

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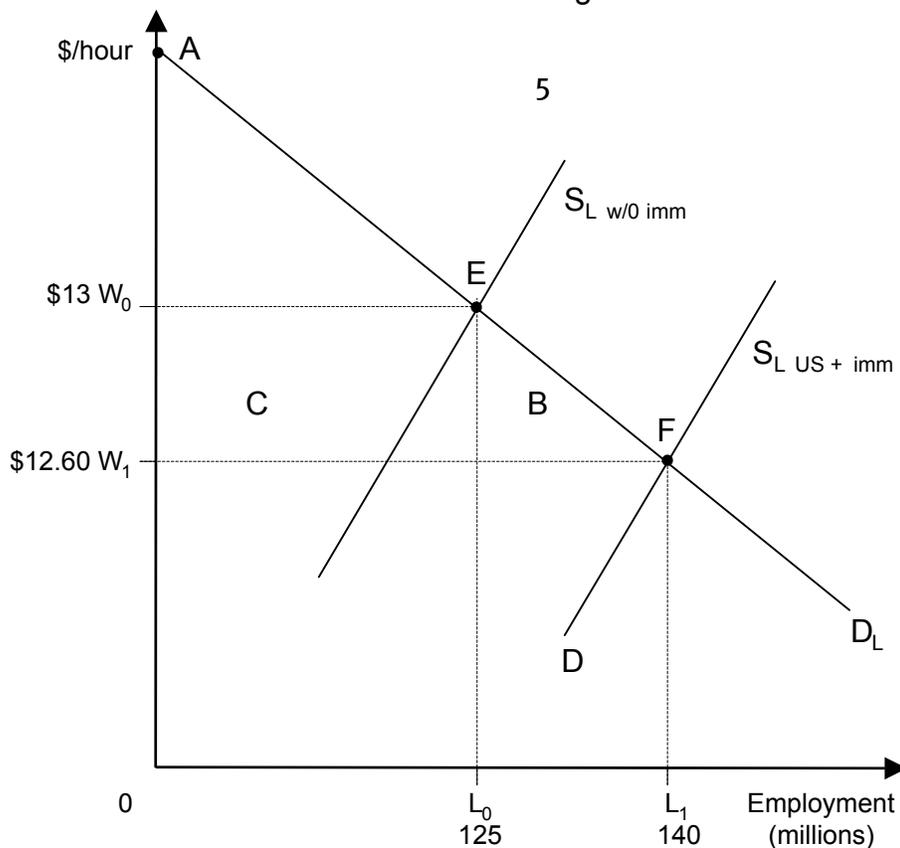
<sup>3</sup> The 1951 Geneva Convention on refugees obliges signatory countries not to refoul or return to danger persons who are outside their countries because of a well-founded fear of persecution because of race, religion, nationality, membership in a particular social group, or political opinion. In 2003, there were 10.4 million refugees, 1 million asylum seekers, 2.4 million refugees who recently returned to their countries of origin, and almost 7 million internally displaced and stateless persons, for a total of 20.6 million persons "of concern" to UNHCR (UNHCR, 2003). As the number of asylum seekers—foreigners who arrived in industrial countries and asked not to be returned because they faced persecution at home—rose in the 1990s, the industrial countries spent an estimated \$10 billion a year to care for and process asylum seekers.

national income. The wage and employment changes due to migrant workers are illustrated in Figure 1 for the US in the mid-1990s. If there were no migrant workers, the US economy would be at **E**, with about 125 million US-born workers earning an \$13 an hour. Total national income is the rectangle **AE Lo**-- the wages paid to workers--plus the triangle above showing the share of national income going to owners of capital and land. The US had 15 million migrant workers in the mid-1990s, which shifted the labor supply to the right, to 140 million at **F**, and lowered average hourly earnings by 3 percent to \$12.60.

### Figure 1. The Net Economic Effects of Migration

The movement from **E** to **F** creates two rectangles, **C** and **D**, as well as triangle **B**. Rectangle **C** represents reduced wages paid to US workers; they do not disappear into thin air, but are transferred to the (US) owners of capital and land in the form of higher profits and rents--rectangle **C**. Because of immigration, the US economy expands by rectangle **D** and triangle **B**, with migrant workers getting most of the benefits of this expansion in the form of their wages (**D**).

## The Net Gain from Immigration is B



The net gain from immigration is triangle **B**, and its size can be estimated in percentage-of-national-income terms as  $1/2 \times$  (estimated 3 percent decrease in US wages due to immigration  $\times$  11 percent immigrant share of US labor force  $\times$  70 percent share of labor in US national income, or  $1/2 \times 0.002 = 0.001$ , which means that US national income is about 1/10 of 1 percent or about \$8 billion higher in 1997 (Smith and Edmonston). To put this economic gain due to immigration in perspective, if the US economy grows by two percent a year, it expands by \$160 billion, so the immigrant economic gain is equivalent to about 20 days of economic growth. The increase in national income due to immigration—triangle **B**—will be larger if (1) there are more migrant workers and/or (2) if the wage depression effect of migrant workers is larger. For example, if the migrant wage-depression impact doubled to 6 percent, and the migrant share of the work force doubled to 22 percent (as in California in the late 1990s), the income increase due to migration by  $1/2 \times 0.06 \times 0.22 \times 0.7 = 0.005$ , or 5/10 of 1 percent, four times larger.

Most of the gains due to migration accrue to migrants whose incomes rise, so that roughly, every one million foreigners moving over borders and achieving a net income gain of \$10,000 would increase global income by \$10 billion.<sup>4</sup> Using this

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<sup>4</sup> In a similar exercise, the 1992 UNDP Human Development Report estimated that, if an additional two percent of the 2.5 billion strong labor force of developing countries migrated to industrial countries, there would be 50 million additional migrants. If each migrant earned an average \$5,000 a year or a total \$250 billion, and remitted 20 percent of foreign earnings or \$50 billion a year to countries of origin, the extra remittances would be equivalent to Official Development Assistance.

approach, Hamilton and Whalley (1984) estimated that global GDP could more double with free migration that equalized the marginal productivity of labor (and wages) between 179 countries grouped into seven world regions, adding \$5 trillion to \$16 trillion to global GDP of \$8 trillion in 1977.<sup>5</sup> Even small increases in migration can significantly raise global GDP in such models, since the first migrants face the largest gaps in marginal productivity or wages.

This basic logic of migration increasing allocative efficiency raises a question—why do the richer countries to which migrants want to move take advantage of the free lunch offered by eager migrants and open their doors to them? It is especially surprising that migration controls are high and rising when it is remembered that the benefits of migration tend to be immediate, measurable, and concentrated, since migrants who go to work abroad have higher wages measurable in dollars-- most of the gains from migration accrue to the migrants themselves in the form of higher earnings.<sup>6</sup> The costs of migration, if any, tend to be deferred, diffused, and harder to measure, as when wages fall or rise slower due to the presence of migrants, or when settled migrants send for their families and increase schooling and health care costs and raise questions about bilingual education and different ways of delivering public services.

Benefit-cost analyses require a common metric, a time horizon, and a discount rate to compare present and future. The metric is usually money, the time horizon puts the benefits and costs along a time continuum, and low discount rates mean that current benefits can offset future costs. The economic approach can be illustrated simply: if each migrant who moves from poorer to richer countries increases her income from the poor country average to the rich country average, and if country averages are not changed significantly by migration, the sum of the individual gains represent the global gain plus the dividend in the form of increased returns to capital and land.

This exercise produces enormous potential gains from migration, and prompts assertions such as that of economist Dani Rodrik that "even a marginal

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<sup>5</sup> Hamilton and Whalley assumed the world's labor supply was fully employed producing a single output, and used CES production functions to estimate differences in the marginal productivity of labor across seven multi-country regions—these differences were assumed to be due to migration restrictions. They estimate the efficiency gains that would result from labor moving until MPs and wages were equalized, that is, they assume factor-price convergence via migration, with workers losing and capital owners gaining in receiving areas and workers gaining and capital owners losing in sending areas.

There are many problems with such estimates. For example, the full employment assumption is necessary to assume that wages are determined by marginal productivity; it is assumed that the ratio of wages to profits is one in both rich and poor countries before migration barriers are lifted, and that capital does not move even as labor migrates.

<sup>6</sup> Owners of capital in receiving areas also benefit.

liberalization of international labor flows would create gains for the world economy" far larger than prospective gains from trade liberalization. For example, moving 100 million migrants from low to high income countries, and not changing average GDPs in sending and receiving countries, would raise average and total global GDP by eight percent.

**Table A. Migration: Economic Impacts, 2001 data**

**Migration: Economic Impacts, 2001 data**

Countries	World	Low	Middle	High
Population (mils)	6,133	2,511	2,667	955
Ave GDP(\$/year)	5,140	430	1,850	26,710
Total GDP (\$bils)	31,500	1,069	4,922	25,506
Moving 100 million people from low to high, same per capita averages				
Population (mils)		2,411		1,055
Ave GDP(\$/year)	5,566	430		26,710
Total GDP (\$bils)	34,138	1,037		28,179
Change in ave/tot GDP	8%			

Source: World Bank and own calculations

Migration does not lend itself to easy benefit-cost analysis because there is little agreement on exactly what constitutes benefits and costs and to whom they should be ascribed. There are losers from migration in the destination country, especially for workers similar in skill, location etc to the arriving migrants, whose wages can fall or not rise as fast or whose unemployment rates might rise. On the other hand, workers made more productive by the presence of migrants, such as skilled workers who now have more unskilled helpers, and owners of capital, gain from migration. In receiving countries, the existence of triangle B means that the overall net economic gain from migration is positive, and that losers from migration could be compensated and the receiving country would still be better off with migrants.

The economic results become more ambiguous for sending countries. Indeed, the economics literature concludes that it is very difficult to find the optimal mix of trade in goods, capital flows, and labor flows, since many of the effects of simultaneous flows depend on initial conditions. Economist Harry Johnson in the 1960s asserted a "cosmopolitan liberal" position that put priority on the individual and global impacts of migration, thereby downplaying negative effects on sending countries. Johnson argued that voluntary migration, "like any profit-motivated international movement of factors of production—may be expected to raise total world output...[except] when the migrant's private calculation of gain from migration excludes certain social costs that his migration entails." (Johnson 1968, 75). Johnson believed that there were relatively few externalities associated with migration, and that those could easily be dealt with, such as changing the way education is financed in emigration countries concerned about the brain drain.

Economist Don Patinkin took a “nationalist” approach, rejecting the argument that “the 'world' should be considered as a single aggregate from the welfare viewpoint—and that the welfare of this unit is maximized by the free flow of resources between countries.” (Patinkin 1968, 93). Instead, developing countries require a critical mass of talent, and too much migration can prevent an economic take off. Reflecting the times in which he lived, Patinkin argued that some of the 1960s “brain drain” was due to demand created by nationalistic forces in the developed countries, such as “U.S. government defense and space programs” and the “nationalistic war in Vietnam” (Patinkin 1968, 106).

The overall goal is the same—a world in which there would be relatively little economically motivated migration, as within most of the richer industrial democracies or groups of industrial democracies, such as the EU. However, there is little agreement on the role of migration in getting to this ideal world of more equality and little migration. Unlike most of the other challenges being considered, in which the desired direction of change is clear—less disease, less financial instability, and less hunger, and more education and more sanitation—the are sharp differences of opinion on whether there should be more or less migration.

One reason for the ambiguity about migration is that its effects can be significantly different in different places. The 1990s upsurge in the movement of highly skilled migrants such as IT specialists and nurses, for example, is viewed by most economists as providing benefits to individual migrants as well as to receiving countries that increase their stock of educated workers. The emigration of professionals may also help sending countries via remittances and returns as well as inspiring more young people to get educated, not all of whom will emigrate. Those who question this mostly benefits scenario see costs in the form of depressed or slower rising wages in receiving countries, local students avoiding occupations in which migrants play a significant role, or health care systems postponing needed changes and turning to migrants.

Migrant countries of origin may not benefit from the emigration of brains and brawn and, in a worst-case scenario, there may be divergence rather than convergence in per capita incomes, so that in an extreme case, some nation states could wind up as long-term labor exporters, raising complex economic and human rights issues. This shift from individual to national government perspectives highlights the difficulty of finding consensus on what are the benefits and costs of labor migration. If an individual doctor or nurse achieves higher earnings by migrating, but there are negative multiplier effects in the home country’s health care system, can the national government legitimately impose restrictions on emigration in the name of the greater national good? What if nationals abroad are mistreated? In the past, some countries have gone to war to protect their nationals abroad, and there were 1990s conflicts marked by “ethnic cleansing,” or removing particular groups.

Since there are enormous economic gains to be achieved from more and orderly migration, the challenge and opportunity is cooperative management of migration for the mutual benefit of individual migrants as well as the nation states involved. Achieving such mutual benefits requires three major steps:

- reducing fears of immigration in rich countries with active selection systems that pick the foreigners most likely to succeed, enabling new and wider entry channels to be opened for professionals and similar skilled workers
- widening legal entry channels for unskilled guest workers who are encouraged to return to their countries of origin by aligning migrant and employer incentives with the purpose of guest worker programs, viz., add workers temporarily to the labor force, but not settlers to the population, and
- using the 3 R's of the migration that occurs—recruitment, remittances, and returns—to ensure that migration helps to reduce economic differences between nation states over time.

It should be emphasized that people are different from goods. A car crossing borders remains a car, with foreseeable economic and environmental impacts. People change their intentions, status, and impacts, as when migrants intending to be temporary sojourners become permanent residents and then seek to change socio-political conditions in their new countries of residence, highlighting the fact that importing workers also means importing new languages, cultures and ideas, and the means to reproduce them. The fact that people's intentions and status change means that the benefits and costs of migration are not always predictable, as Max Frisch noted when he wrote that European countries in the 1960s "asked for migrant workers, but got people." Clarifying benefits and costs, and overcoming the fear of irreversible (negative) change because of migration is a high hurdle, as illustrated by the undoubtedly apocryphal story of the dying North American Indian chief who lamented that failure to stop the arrival of European boat people ended a centuries old way of life.

### **Population and Labor Force**

At the dawn of agriculture, about 8000 BC, the population of the world was about 5 million. The world's population rose to 300 million in 1 AD, was 500 million in 1650, reached the 1 billion mark in 1800, the 2 billion mark in 1930, 3 billion in 1960, 4 billion in 1974, 5 billion in 1987, and 6 billion in 1999. The most important demographic trends today are slower but continued population growth in developing countries and aging and declining populations in more developed countries. The world's population is projected to grow to 9 billion by 2050, with almost all of the growth in what are currently developing countries.

About half of the world's population is in the labor force, and in 2000, about 1.3 billion or 43 percent of the world's 3 billion workers were employed in agriculture. The most important global labor trends<sup>7</sup> are:

- rapid labor force growth in developing countries that is adding 40 million workers annually, while and rural-urban migration reduces the share of workers in agriculture, and
- slow labor force growth in developed countries, where two-thirds of workers are employed in service industries. Labor costs are a high share of production costs in most service industries, encouraging some employers to turn to migrants to hold costs and others to offshore or outsource jobs.

If current trends continue, many developed countries will have shrinking work forces, while many developing countries will have high levels of unemployment and underemployment. To maintain the labor supply in developed countries, workers could work more hours, more women could be induced to join the work force, retirement could be delayed to reflect longer lives, or migrants could be admitted to stabilize work forces at current levels despite below-replacement fertility levels. There is a debate over the role that migration should play in the mix of policies available to stabilize labor forces and social security systems that were developed during past periods of rapid population and labor force growth, especially in Europe and Japan.

In developing countries, unemployment and underemployment could be reduced with faster industry and service sector job growth, a seemingly endless quest that has so far not created opportunities for many workers in their countries of origin. Thus, most countries welcome the opportunity to export some of their "excess" workers, generating remittances, learning new skills and acquiring new ideas that may speed up development at home. The overarching questions include how much migration between developing and developed countries is optimal, in whose interest international migration for employment should be managed, and whether migration management should be bilateral, regional, or global.

### **Differences and Migration**

Migration or movement from place to place is a response to differences. Rising differences between nation states in demographics, economics, and security, plus revolutions in communications, transportation and rights that facilitate movement over borders, promise ever-more international migration for employment. It is important to remember that most people do not migrate over borders despite growing differences that should encourage migration because of the desire to remain with family and friends

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<sup>7</sup> The World Bank's 2003 World Development Indicators (p44) reported that the global labor force in 2001 was 3 billion, including 2.5 billion in low- and middle-income countries and 470 million in high-income countries. The projected growth in the low- and middle-income countries is 40 million a year to 2010, and projected growth in high-income countries is one million a year.

and active government efforts to control who enters and stays in their territory. For these reasons, the migrant share of the global population has risen only slowly, from 2 percent in 1975 to 3 percent in 2000.

However, migration pressures are expected to rise with growing demographic and economic differences and in some cases new and easier-to-cross bridges over borders. The demographic “weight” of world regions and nation states has and will continue to shift, increasing migration pressures, with one of the most dramatic examples the contrast between Europe and Africa. Europe had 20 percent of the world’s residents in 1800, when Africa had 8 percent.<sup>8</sup> Today, Europe and Africa have about equal population shares, but by 2050 Africa is projected to have 20 percent of global residents and Europe 7 percent, a reversal of each continent’s global demographic weight within 250 years. Demographic heavyweight Europe was the major source of migrants in the 19<sup>th</sup> century and, if history repeats itself, Africa could be a major source of migrants in the 21<sup>st</sup> century.

**Table 1. Europe and Africa Demography: 1800-2050**

**Africa and Europe Demography: 1800-2050**

	Share of World Population-%		
	1800	2000	2050
Africa	8	13	20
Europe	20	12	7
World Pop (bils1		6	9

Economic differences between nation states are widening, increasing the motivation for international labor migration. The world's GDP was \$30 trillion in 2000, making average per capita income \$5,000 a year, but there was significant variation--the range was from \$100 per person per year in Ethiopia to \$38,000 in Switzerland. When countries are grouped by their per capita GDPs, the gap between high-income countries, with \$9,300 or more per person per year, versus low (below \$750 per person per year) and middle (between \$750 and \$9,300) income countries has been widening, and very few low and middle income countries able to climb into the high-income ranks over the past quarter century.<sup>9</sup> For example, in 1975 per capita GDPs in the high-income countries were on average 41 times higher than in low-income countries, and 8 times higher than in middle-income countries. By 2000, high-income countries had per capita GDPs that were 66 times those in low-income countries and 14 times those in middle-income countries.

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<sup>8</sup> Europe share of the global population (including Asian Russia) peaked at 25 percent between 1910 and 1920.

<sup>9</sup> For example, Portugal and South Korea moved from the middle- to the high-income group between 1985 and 1995, while Zimbabwe and Mauritania moved from the middle- to the low-income group. World Bank. World Development Reports, various years.

**Table 2. Global Migrants and Incomes, 1975-2000**

	Migrants millions	World Po billions	Migrants World Pop %	Yr change millions	Countries grouped by ave per capita GDP (\$)			Ratios	
					Low	Middle	High	High-lo	High- middle
1975	85	4.1	2.1%	1	150	750	6,200	41	8
1985	105	4.8	2.2%	2	270	1,290	11,810	44	9
1990	154	5.3	2.9%	10	350	2,220	19,590	56	9
1995	164	5.7	2.9%	2	430	2,390	24,930	58	10
2000	175	6.1	2.9%	2	420	1,970	27,510	66	14

Sources: UN Population Division and World Bank Development Indicators; 1975 income data are 1976. Migrants are defined as persons outside their country of birth or citizenship for 12 months or more. The estimate for 1990 was raised from 120 million to 154 million, largely to reflect the break-up of the USSR.

There is a second dimension to increasing economic differences that adds to international migration pressures. Agriculture remains the world's major employer and, in the poorer countries in which farmers are a majority of workers, farmers are taxed and have below-average incomes, while subsidies for the relatively few farmers in rich countries contribute to their above average incomes. Low farm incomes encourage rural-urban migration in developing countries as well as international migration, in part because trade barriers for farm products maintain a demand for migrants in more developed countries while reducing farm prices and farm employment in developing countries.

The Great Migration off the land in developing countries provides a ready supply of workers willing to accept so-called 3-D (dirty, dangerous, difficult) jobs inside their countries, as in China, or abroad, as when Mexicans migrate to the US. The International Labor Organization estimates that 60 percent of the world's 81 million migrant workers in 2000 were in the more developed countries of Europe and North America.

**Table 3. ILO Estimates of Migrant Workers by Region, 2000**

	Millions	Per Dist
Africa	5.5	7%
Asia	22.1	27%
Europe	27.0	33%
Latin America	2.5	3%
North America	20.8	26%
Oceania	2.9	4%
Total	80.7	100%

Applying regional labor force participation rates to UN migrant estimates  
Latin America and Caribbean

The third major difference involves security and human rights. After the global conflict between capitalism and communism ended in the early 1990s, local conflicts erupted in many areas, leading to separatist movements, conflicts, new nations, and more migrants, as in the ex-Yugoslavia and the ex-USSR. Creating new nations is almost always accompanied by conflict and migration, as populations are reshuffled so that the “right” people are inside the “right” borders. In some cases, past migrations that brought migrants into an area end years later with those migrants and their descendents being considered foreigners in a newly independent country, such as Russians who are now foreigners in the Baltics. In these cases, the descendants of past migrants can become migrants without moving, as borders move over people rather than the more familiar people moving over borders.

Demographic, economic and rights differences encourage individuals to migrate, but it takes networks or links between emigration and immigration areas to enable people to cross borders. Migration networks are a broad concept, and include factors that enable people to learn about opportunities abroad as well as the migration infrastructure that enables migrants to cross national borders and remain abroad (Massey, et al, 1998), and migration networks have been shaped and strengthened by three major revolutions in the past half century: in communications, transportation, and rights.

The communications revolution helps potential migrants to learn about opportunities abroad. The best source of information comes from migrants established abroad, since they are in a position to provide family and friends at home with information in a context they understand. Even without anchor migrants abroad, many people in developing countries see movies and TV shows produced in high-income countries and some believe that, if they can get into countries that have such wealth, they can share it, which is one reason why it is sometimes said that the TV shows *Dallas* and *Dynasty* have spurred migration toward the US from all corners of the world.<sup>10</sup>

The transportation revolution highlights the declining cost of travel. British migrants unable to pay passage to the colonies in the 18<sup>th</sup> century often indentured themselves, promising to work three to six years to repay one-way transportation costs. Migrants would sign contracts before departure, and settlers looking for workers would meet the ships, pay the fare, and obtain an indentured worker. Today transportation costs, even for unauthorized movements, are far less, typically less than \$2,500 to travel anywhere in the world legally, and \$1,000 to \$20,000 for unauthorized migration. Most studies suggest payback times for migrants are much quicker, so that even migrants who paid high smuggling fees can repay them within two or three years.

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<sup>10</sup> Even if migrants know that movies and TV shows portray exaggerated lifestyles, some of the migrants who find themselves in slave-like conditions abroad sometimes say that they did not believe that things in rich countries could be “that bad.”

The rights revolution refers to the spread of individual rights and entitlements that allows some foreigners to stay abroad. Many countries have ratified United Nations, International Labor Organization, and United Nations High Commissioner for Refugees conventions that commit them to providing all persons with basic rights such as due process, so that foreigners are not summarily removed, and additional rights, such as not returning to face persecution those seeking asylum. Most destination countries also have social safety net programs, and some extend eligibility for at least basic services to all residents, making it easier for migrants who are abroad to stay abroad.

There is little that countries experiencing “unwanted immigration” can do in the short-term about the demographic, economic, and security differences that promote migration, and they have little power or desire to reverse the communications and transportation revolutions that, as a by-product of connecting the global village, inform migrants about opportunities abroad and make it less costly for them to travel. Governments create and enforce rights, and the default policy instrument to manage migration has become new or modified laws that restrict the rights of migrants. For example, the US in 1996 enacted laws that restricted the access of unauthorized as well as many legal immigrants to social assistance program benefits, and many European countries revised their laws to define when and where a foreigner must apply for asylum to receive housing and support while his application for asylum is considered. Middle-income countries also restrict rights in an effort to manage migrants, often tolerating the presence of migrants in economic booms, and then stepping up enforcement efforts when there is recession or complaints about the migrants’ presence.

There is general agreement that manipulating the rights of migrants is not the optimal way to manage economically motivated migration. The challenge and opportunity is to find better ways to manage economically motivated migration in the 21<sup>st</sup> century.

### **1.3 Managing Migration**

The two extremes of migration management—no borders and no immigrants-- are neither desirable nor sustainable. Virtually all countries participate in international migration as countries of origin, transit, or destination, and many are all three, e.g. Thailand sends migrants to Japan and Taiwan, has Burmese and other migrants who are transiting to Malaysia, and receives migrants from Burma, Cambodia, and Laos.

The challenge is to manage migration in a way that allows the major actors involved: individuals and employers as well as sending and receiving countries, to reap sustainable benefits. This means that migration should reduce inequalities between countries and ensure that the world of 2050 is not one in which some countries serve as labor producers for others. Moving people over borders in a way that reduces rather than increases inequalities is not easy. Over 200 years ago, Adam Smith observed that “of all sorts of luggage, [people are] the most difficult to be transported” over borders.

## 2. Assessing the Opportunities

The three opportunities laid out below would improve the migration system in a way that would raise the benefits for the major parties involved. Each opportunity could be implemented within the next 5 to 15 years, and each could raise the benefits and reduce the costs of migration that is in any event likely to occur. These opportunities are:

- Policies that select migrants on the basis of point systems that expedite the entry of applicants with the education and language skills needed to be economically successful in the new country. If host country residents are convinced that migration brings economic benefits, opposition to increased immigration can be reduced.
- Guest worker policies that can come closer to achieving their temporary goals with economic instruments such as taxes and subsidies that align the incentives of employers and migrants with program goals, such as increasing the levies charged to employers if they want to extend the work permits of migrants and refunding social security contributions to migrants to encourage them to return as required by their contracts.
- Managing migration to ensure that developing countries benefit by structuring the 3 R's of recruitment, remittances in a manner that speeds up economic and job growth and narrows economic differences between labor senders and receivers.

Migrants are individuals who are citizens of countries that may gain or lose with their exit and entry. The starting point for this challenge and opportunity paper is to assume that the interests of both migrants and nation states are important (Ellerman, 2003),<sup>11</sup> and that the goal is to create a world in which people do not feel they must migrate over borders for opportunity. Unless there is a radical change in circumstances, most people will not be able to raise their incomes via migration—they will enjoy higher incomes only if their countries prosper. The challenge is to ensure that the migration of the exceptional few who cross borders also improves conditions for those who do not migrate.

### Active Immigration Policies

#### 2.1.1 Identification and description

International migration in the past meant moving a long distance and never or rarely returning to the country of origin. The cost of migration was often very high, so that those taking the uncertain and expensive journey often believed that anything

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<sup>11</sup> The motivation for migration is differences, but the international regime that has evolved, such as International Labor Organization conventions and recommendations, call for equal treatment for migrants. The best protection for migrants—the best assurance that migrants will be treated equally—is if they are in an economy and labor market in which employers who do not pay minimum wages or offer adequate working conditions cannot find workers.

abroad must be better than what they had at home. In addition to the dangers of disease and storms en route to North America in the 18<sup>th</sup> century, British residents who indentured themselves because they could not pay the one-way cost of travel to the colonies typically promised to work for four to six years upon arrival for the person meeting the boat and paying the ship's captain for their passage.

Migration today is different, often involving a temporary move abroad as a tourist, student, or guest worker and then, for those who settle abroad, an "adjustment" to immigrant or long-term resident status. About 2/3 of US immigrants are adjusters, persons already in the US when their immigrant visas become available, and many of the new long-term residents who settled in Europe in the 1990s arrived as asylum seekers or students and then had their status adjusted to long-term resident. Immigrant adjusters and other foreigners often shuttle or circulate between homes and jobs abroad and their countries of origin, so that migration today can mean maintaining personal as well as economic ties with the country of origin.

This adjustment process means that, in most OECD countries, migrants are selecting destinations rather than destinations selecting migrants, and the fact that many settlers and circulators were "not supposed to be here or stay" raises fears of "migrant invasions." For migrants, the often cumbersome process of navigating systems that regulate access to secure long-term resident status leads to frustration. Helping receiving countries to select the "right migrants" can open or enlarge immigration doors, increasing flows and benefiting migrants, host, and sending countries.

### **2.1.2 Alleviation of the challenge**

The common perception in most industrial countries is that they are getting too many of the "wrong type" of migrant, including asylum seekers not found to be in need of protection or the unauthorized workers demanded by small segments of the host country population, such as farmers. The overall net economic benefits of migrants arriving in industrial countries are estimated to be positive but small, on the order of \$1 to \$10 billion in the US economy in the mid-1990s, when GDP was about \$7 trillion.<sup>12</sup> A \$7 trillion economy growing 3 percent per year expands by

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<sup>12</sup> The \$1 billion to \$10 billion estimate was based on a simple model of the economy in which the economic gains to persons who were residents before immigration is one-half of the share of US GDP accruing to labor (60 to 70 percent) times the percent of the US labor force that is foreign born (10 percent) times the decline in residents' wages due to immigration (3 percent), or:  $0.5 \times 0.7 \times 0.1 \times 0.03 = 0.001$ , or one-tenth of one percent of GDP. The model assumes labor is homogeneous, there is a fixed capital stock, and there are constant-returns-to-scale.

If there are positive externalities-- if immigrants are entrepreneurial or if their dedication to work inspires Americans to work more productively, the economic gains due to immigration are larger. If there are negative externalities--if immigration is associated with crime or crowding in schools, for example, the gains are smaller.

\$210 billion a year, or about \$4 billion a week, so the net gains due to immigration in the US were equivalent to several weeks “normal” economic growth.

The economic benefits of immigration could be increased with active policies that selected the migrants likely to generate maximum economic benefits to the destination country, and thus could allow more migration by decreasing native resistance. This is the policy of Canada, with 32 million residents, would like more immigrants: then-Prime Minister Jean Chretien in July 2002 said that Canada’s “population is not growing as fast as it should. And it's why we have a very open immigration policy. We're working to reform it because we don't achieve as many immigrants as we would like to have in the Canadian economy.”

Canada has relatively high levels of immigration, generous social welfare programs, and significant public satisfaction with its immigration policies, which many analysts attribute to the fact that Canada does not border on a major emigration country, has very flexible policies, and admits most immigrants under a point system designed to ensure that they are an economic asset to Canada. Canada admitted 229,000 immigrants in 2002, above its of 200,000 to 225,000 target but close to the average annual intake during the 1990s, which was 221,500. Canada has three major avenues of entry for legal immigrants, but a quarter of Canadian immigrants are selected under a system that awards points for, inter alia, years of education, knowledge of English or French, and whether the applicant has been offered a job in Canada. The point system assesses foreigners wishing to immigrate for economic reasons against nine criteria on which an applicant can score a maximum 107 points, and must score at least 70 points to qualify for an immigrant visa (75 points after March 2003).<sup>13</sup>

**Table 4. Canadian Immigration, 2002**

<b>Canadian Immigration, 2002</b>		
Category	Number	Distribution
Family	65,277	28%
Economic-Principals	58,906	26%
	79,600	35%
Dependent s-Con		
Refugees	25,111	11%
Other	164	

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<sup>13</sup> For example, language skills (knowing English and/or French) can earn an applicant a maximum 15 points and education beyond a BA can earn a potential immigrant up to 16 points. The educational training factor (ETF) is worth up to 18 points—it reflects the level of education and training required for an applicant’s occupation-- and up to 10 points are awarded to applicants between the ages of 21 and 44.

Total                    229,058                    100%

Source:

[www.cic.gc.ca/english/monitor/issue03/02-immigrants.html](http://www.cic.gc.ca/english/monitor/issue03/02-immigrants.html) (January 7, 2004)

Point systems are supply-based, aiming to select migrants based on the personal characteristics most closely associated with economic success in the destination country, such as education and language. By most measures, the Canadian point system is working. In 2002, almost half of 178,000 principal immigrants and their dependents 15 and older had post-secondary (tertiary) schooling, such as college or advanced degrees, and over half spoke English or French.<sup>14</sup>

An alternative migrant-selection system is demand-based, making the entry of migrants dependent on receiving country employers—if the employer says that the migrant is the best person should fill the job, the migrant is allowed entry, and should have a job waiting with the employer-sponsor. Supply- and demand-based selection systems can converge if points are awarded in supply- systems for having a job offer, as the Canadian system does, or if only migrants with certain educational qualifications can be selected by employers, as the US H-1B system does by (usually) restricting entries to foreigners with a college degree or more.

Demand-based selection systems are the norm in industrial countries, and they tend to be cumbersome and are often adversarial for reasons that are clear if the process of proving that a foreigner is needed to fill a job are understood. Most employers do not go to Departments of Labor (DOL) and ask for visas for migrants until they have identified the migrant that they wish to hire.<sup>15</sup> However, once they step forward and request a migrant, they must normally satisfy an economic needs test, which requires DOL-supervised recruitment of local workers at DOL-set wages. Employers who have already identified the migrants they want rarely hire the local workers who apply, which prompts complaints. The result, in a country such as the US, is an infrastructure of lawyers and consultants who help employers to write job descriptions and develop recruitment strategies that satisfy labor departments that there was an honest search for qualified local candidates, but which rarely result in the hiring of local workers.

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<sup>14</sup> In 2002, of 229,000 immigrants, 43 percent spoke English, 5 percent French, and 6 percent both English and French. CIC. 2002. **Facts and Figures: Immigration.**

[www.cic.gc.ca/english/pub/index-2.html#statistics](http://www.cic.gc.ca/english/pub/index-2.html#statistics)

<sup>15</sup> Labor Secretary Robert Reich testified in 1995 that "Of the current employment-based immigrants who are subject to the Department of Labor-administered permanent labor certification process, we estimate that over 90 percent are already in the US and about two-thirds are already working -- sometimes illegally -- for the employer which files the petition on his behalf." Quoted in High-Tech Foreign Workers. 1997. Migration News. October. Vol. 4. No 10.

The tension between employers and labor departments reflects the trade offs between employer access to foreign workers and protections for local workers. The key to reducing the rules and regulations associated with economic needs tests are minimum age, education and language standards that migrants must meet, and economic instruments that allow employers to hire migrants if they are willing to pay for the privilege.

There are several ways in which employers could be faced with economic incentives to make honest searches for local workers with economic instruments. The US Commission on Immigration Reform in the mid-1990s recommended that employers who paid a \$10,000 fee could obtain immigrant visas for needed foreigners with BA degrees or more without engaging in supervised labor recruitment—paying the fee would be deemed to have satisfied the labor market test.<sup>16</sup> Alternatively, a fixed number of visas could be made available, as with 20,000 “green cards” for IT workers in Germany, and then auctioned among employers, with the market determining the price of each visa.

Supply-side selection systems can also auction immigrant visas. Countries can set minimum standards for applicants, as in the US diversity lottery system,<sup>17</sup> which requires at least a high-school education, and allow applicants to bid for the available visas instead of picking the winners of immigration visas randomly. Auctioning immigration visas to the highest bidder has been proposed by several economists, including Gary Becker, but has not been fully implemented by any country.<sup>18</sup> However, the principle of using the economic instruments of fees rather than rules and regulations to balance access to the country versus protecting local workers could increase the efficiency of the migration system and reduce opposition to immigration, allowing current doors to open wider and permitting new doors to be opened to migrants. Fee-based or auction systems can still require applicants to meet minimum personal characteristic standards.

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<sup>16</sup> Hewlett-Packard testified in May 1996 that labor certification cost to obtain an immigrant visa for an H-1B worker cost an average \$15,000 and took 22 months. CIR Commissioners Robert Hill and Bruce Morrison, "Give me your skilled workers," *Legal Times*, August 5, 1996.

<sup>17</sup> Diversity immigrant visas are granted to persons who applied in a lottery that is open to those from countries that sent fewer than 50,000 immigrants to the US in the previous five years. In most years, 10 million or more foreigners applied, and about 100,000 or 1 percent are selected in the first round, since not all of those who apply satisfy the education requirement and some decide that they do not want to immigrate.

<sup>18</sup> The closest auction-type immigration visa available is the investor visa, offered by Canada, the US, and many developing countries, which allows foreigners to obtain immigration visas in exchange for investments, usually investments that create or preserve jobs. These programs do not have a good track record.

### 2.1.3 Side effects and uncertainties

There are two major side effects and uncertainties associated with migration systems that use economic instruments to select migrants. First, switching from they-pick-us to we-pick-them migration management is likely to require more efforts to curb unauthorized migration, and perhaps changes in asylum and related policies. Since it is costly to e.g. enlist employers in the fight against unauthorized migration, or to hire more staff to speed up the processing of asylum applicants and remove those not in need of protection, enforcement costs may rise in the short-term. However, without stepped-up enforcement that draws a clearer line between legal and illegal, employers and migrants may bypass the migration selection system.

The cost of curbing unwanted and unlawful immigration is already very high. In 2002 five industrial countries - Canada, Germany, the Netherlands, the U.K. and the U.S. - spent at least \$17 billion on the enforcement of immigration laws and to care for asylum seekers, about two-thirds as much as they provided in Official Development Assistance to the countries from which many of the migrants involved came (Martin, 2003). Despite sharply higher enforcement costs and asylum expenditures, these countries had stable or growing stocks of illegal, irregular, or unauthorised migrants.

Second, selection systems that facilitate the entry of the “best and brightest” from developing countries could accelerate the “brain drain,” increasing inequality between nation states and migration pressures.<sup>19</sup> In order to prevent this, there should be compensation or human capital replenishment assistance from labor receivers to labor senders. This could be accomplished in several ways, including having emigration countries levy exit taxes on migrants or collecting income or other taxes on their nationals abroad. Alternatively, immigration countries could divert some of the taxes paid by migrants, or a surcharge levied on migrants’ incomes, to their countries of origin or a UN development agency. For example, Bhagwati proposed a 10 percent surtax on migrant incomes for their first 10 years abroad, collected by receiving countries and returned to the migrants’ countries of origin (Bhagwati, 1976; Bhagwati and Partington, 1976).<sup>20</sup>

When compensation for the brain drain was discussed in the 1960s and 1970s, critics emphasized that it a nationalist perspective is required to argue that migrants

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<sup>19</sup> Todaro (1980) observed that “Migrants typically do not represent a random sample of the overall population. On the contrary, they tend to be disproportionately young, better educated, less risk-averse, and more achievement oriented and to have better personal contacts in destination areas than the general population in the region of out-migration.”

<sup>20</sup> Bhagwati proposed a brain-drain tax in *Deedalus* in 1972, and the two 1976 volumes were the outcome of conferences to discuss compensation for the brain-drain. Legal scholar Partington emphasized that taxing migrants abroad on behalf of their country of origin could best be justified if the migrants were still considered members of their countries of origin.

enjoying windfall gains in the form of higher incomes abroad should share some of these gains with fellow citizens left behind. Walter Adams and most other writers argued that the brain drain could increase inequality between nation states, an undesirable trend because the world is organized into nation states all of which deserve to achieve higher growth and incomes (Adams, 1968).<sup>21</sup> An internationalist perspective, on the other hand, holds that voluntary migration is desirable for the individuals who move voluntarily, and cosmopolitans such as Harry Johnson argued that the losses to developing countries from the brain drain were exaggerated, in part because the benefits to their countries of origin from remittances were underestimated.<sup>22</sup>

Even with a nationalist perspective, most emigration countries cannot successfully tax their nationals abroad. One exception may be Eritrea, which has since 1993 imposed a tax of 2 percent on the incomes of expatriates, and enforces collections by making it hard to keep or buy land in Eritrea or renew passports unless the tax is paid. Countries such as the US tax the worldwide income of residents, but exempt from taxes the first \$75,000 in income of those living overseas, which exempts most of the 3.2 million Americans abroad from paying US income taxes.

Most of the 1960s and 1970s compensation for brain drain debates suggested government-to-government transfers, with the amount of the transfer some fraction of the increased earnings of migrants abroad. Another possibility would be to have the employers of professionals in countries that have per capita incomes that are, e.g., five or more times higher than in developing countries to provide Human Capital Replenishment Assistance to their countries of origin. This Replenishment Assistance could be an upfront fee instead of a 10-year income tax surcharge, say 10 percent of the migrant's first year salary, which is what the employer may pay to a local recruitment agency. Thus, if sending and receiving countries could cooperate to handle the recruitment of migrant workers, there could be no additional cost to employers or migrants. Human Capital Replenishment Assistance could perhaps best be spent to improve elementary and secondary schooling systems in labor sending countries, since higher education in the occupations associated with

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<sup>21</sup> Eli Ginzberg, perhaps the leading US labor economist advising Democratic presidents in the 1960s and 1970s, in a review of the Adams book concluded that "free competition for talent in a world of nations with grossly unequal bargaining power will often have pernicious ...consequences for the week." *Political Science Quarterly*, Vol 85, No 4. December p696. Many US authors of brain-drain papers in the 1960s discussed the "economics of the movement of high-level manpower."

<sup>22</sup> Harry Johnson directed a Rockefeller Foundation project on the brain drain. In 1972 he wrote "if one takes a cosmopolitan point of view, there can be no doubt that efficiency, growth, and the relief of world poverty would be very effectively promoted by unlimited freedom of migration." (Johnson, 1972, 381-2). One of the papers prepared under the project concluded that: "A good case can therefore be made for...the free movement of capital throughout the world." (Grubel and Scott, 1966, 274).

emigration can often be financed privately, as with nursing and computer-related occupations.

#### **2.1.4 Economic evaluation**

The industrial countries with aging populations that “need” immigrants to stabilize work forces and pension systems include many residents who oppose additional migration. Migration systems that select those likely to succeed economically could reduce this opposition and thereby open new channels for migrants.

The best single predictor of a person’s earnings is her level of education, and years of education is often the threshold characteristic to determine if a foreigner will be granted an immigrant visa in we-pick-them selection systems. However, a nation’s stock of human capital is critical to its economic growth, especially in the endogenous growth theories that make technological progress and thus long-term growth rates dependent on the creation and implementation of new ideas, which in turn depend on having an educated and skilled work force in which there are knowledge spillovers. If immigrants on average have more education than residents, they can raise the average educational level of the work force in destination countries, accelerating technological progress and long-term growth rates. As newcomers, immigrants may play a special role in increasing productivity because of their different experiences and perspectives, as when the extra drive and ambition associated crossing national borders is associated with “new blood” that increases economic growth.

Selective migration systems that add to the national stock of human capital can benefit the residents of more developed countries, but they can also increase inequality between countries. To avoid this outcome, some kind of compensation system is needed to replenish the human capital that moved from poorer to richer countries. However, the case for compensation has been challenged by a new literature that reaches the seemingly counterintuitive conclusion that the emigration of skilled workers can accelerate economic growth in the migrants’ countries of origin.

The conclusion that a brain drain can be a brain gain is a straightforward result of the assumptions. Imagine a developing country with no emigration that suddenly allows professionals to leave for higher incomes abroad, raising the average return to education, which should induce more people to stay in school and obtain professionals credentials. However, not all of the expanded number of professionals will emigrate, so that opening emigration doors can increase the number of professionals in an emigration country (Mountford, 1997; Beine, Docquier and

Rapoport, 2001). The very plausible result is that the “optimal level of brain drain” is not zero, but the literature does not suggest an optimal level.<sup>23</sup>

Finally, the continued “disintegration” of the production process may limit the need for immigration (Feenstra). As markets integrate globally, firms find it profitable to allocate production of specific parts of their “value chains” to different countries, so that the production of a good or service can be subdivided among locations according to labor costs. Instead of importing workers to provide IT services, production disintegration can allow IT services to be provided to US consumers from India, sometimes called outsourcing.

### **2.1.5 Feasibility**

The fastest growth in international migration is at the extremes of the education ladder, involving both well-educated professionals and uneducated farm workers. Among professionals, there appears to be a sharp contrast between the side-effects of IT specialists emigrating from India and nurses emigrating from South Africa, highlighting the importance of conditions in both labor sending and receiving countries in evaluating the benefits and costs of the migration of professionals.

In the Indian IT industry, the positive externalities or spillover effects of what began as an island of 7,000 IT specialists in the mid-1980s have been significant. In 2003, India had 700,000 IT workers and about \$10 billion in revenues from exports of computer-related products, including services provided to foreign firms in India (outsourcing). In addition, the virtuous circle that began with exporting IT workers include higher enrollments in science and engineering and the availability of world-class IT services to private firms and government agencies in India—meeting global standards for foreign customers raised the quality of services provided to local customers.

In South Africa, by contrast, the emigration of doctors and nurses is associated with vicious circles of fewer health care workers at a time when the need for health care is growing because of AIDS and recent initiatives to improve immunization. The emigration of health personnel trained to developed country standards can leave especially rural areas with few staff, increase the work load on remaining staff, and discourage change in bureaucratic, top-down, and often staff- and patient-unfriendly health care systems. In many countries, health care graduates who received government support for their education must serve several years in rural and other health-care need areas before receiving their licenses, but the experience in often unsupervised and poorly equipped and staffed clinics reinforces the desire to

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<sup>23</sup> For example, a study making heroic assumptions, including that the 1994 level of education in a country was a function of the average number of migrants from that country who arrived in OECD countries between 1988 and 1994, concluded that “migration prospects seem to play a significant role in education decisions.” (Beine, Docquier and Rapoport, 2001, 288).

emigrate as soon as possible for better working conditions and higher wages to repay debts.

The response in South Africa has been an agreement with the UK National Health Service to avoid “aggressive recruitment” of especially nurses. However, attempting to stop the emigration of health care workers would not necessarily solve the problem of worker shortages. In 2002, there were about 32,000 unfilled nursing jobs, an estimated 7,000 South African nurses abroad, but 35,000 nurses in South Africa who are not working as nurses. Thus, even if all South African nurses abroad returned, there would be unfilled nursing jobs, and the large number of non-working nurses at home suggests that the government might want to determine why so many trained nurses are not working as nurses rather than attempting to restrict emigration.

Facilitating the emigration of nurses from India and the Philippines, and complaining about their emigration from South Africa, may be due to differences in the way that nursing education is financed, differences in local labor markets, and differences in remittances and returns. In the Philippines, about 15,000 nurses emigrated in 2003, there were 7,500 nursing graduates, and some doctors are reportedly retraining as nurses in order to increase their opportunities to go abroad. However, most nursing education is paid by nursing students, often with the help of relatives already abroad, and many of the nurses who leave with contracts for two-year stints abroad send back remittances and eventually return.

There are many contrasts between IT and health care. IT is often perceived as a private sector “luxury” while health care is often considered a public sector necessity. Second, the costs of IT services has declined over time, while the cost of health care services tends to rise over time. Third, there seem to be fewer issues with privately financed professionals who emigrate than with those whose professional education was subsidized by taxpayers, even if tax funds paid for the basic education of migrants. The migration of professionals from developing to developed countries is likely to increase, but it appears that flows must be evaluated separately to determine its effects on development, and the cases of Indian IT specialists and South African doctors and nurses may represent the two extremes of a very wide spectrum of cases.

The migration of professionals refers to persons who have completed their education before they cross borders. There is an associated issue involving students from developing countries who study in developed countries, and policies that permit them to settle as immigrants. In many ways, foreign student programs are ideal “probationary immigrant” systems, since foreign students can generally stay in the country only if they successfully complete their studies, which requires learning the host-country language and becoming familiar with host country ways of study

and work. If foreign students find an employer to hire them after graduation, more countries are permitting them to remain as guest workers or settlers.

In 2000, there were two million foreign students in the OECD countries, half from outside the OECD, including 34 percent in the US, 16 percent in the UK, 13 percent in Germany, 11 percent in France, and 8 percent in Australia (OECD, 2002, 52). Foreign students tend to study subjects that impart skills transferable internationally, e.g. science and engineering rather than law, and many institutions of higher education have become dependent on the revenues from foreign students.

Teitelbaum (2003) argues that the high percentage of foreign students in US doctoral programs reflects labor market deficiencies and student desires for immigrant visas, not a “national need” for more PhDs in basic sciences. In many basic sciences, six or more years of graduate study is followed by five to 10 years of low-paid postdoctoral research, so that graduates do not get “real jobs” until age 35 or 40. According to one study, bioscientists can expect to earn \$1 million less than MBAs graduating from the same university in their lifetimes, and \$2 million less if stock options are taken into account, suggesting one explanation for the very different composition of students in MBA programs and graduate science programs.

Professionals who raise brain drain and compensation issues and students who raise adjustment-of-status issues have been joined by a third type of migrant—natural persons who cross borders to provide services. The General Agreement on Trade in Services (GATS), part of the World Trade Organization, entered into force in January 1995, and is a central focus of the current Doha round of negotiations aimed at liberalizing flows of goods and services over borders in ways that benefit developing countries. GATS aims to liberalize trade in services, which are often defined as goods that are produced and consumed simultaneously, and usually change the consumer, as with medical services.

There are four major modes or ways to move services over borders—cross border supply, consumption abroad, FDI or commercial presence, and the migration of natural persons:

- **Mode 1.** Cross-border supply are services provided from the territory of one country to another, such as international telephone calls to call centers, sometimes called business outsourcing. Mode 1 service supply is most analogous to trade in goods, since services but not producers or consumers cross borders.
- **Mode 2.** Consumption abroad are services provided within one country to consumers from other countries, such as tourism or educational and health services; consumers travel to the provider to receive the service.
- **Mode 3.** FDI or commercial presence are services provided abroad via a subsidiary of a bank, insurance company, or other firm located in the country where the service is provided. Mode 3 services are often accompanied by migration, as with intra-company transfers of staff from one of the firm’s locations to another.

- **Mode 4.** Temporary movement of natural persons involves services provided by individuals temporarily abroad, either self-employed persons who are paid directly by the customers to whom they provide services, as with architects and consultants, and persons employed by a service provider in the host country, as when Indian IT workers are employed in the UK or US. The GATS is silent on the skill level of the service provider and length of stay, but does not apply to persons “seeking access to the labor market” and those seeking permanent stay abroad.

Liberalization of trade in services has been achieved primarily via market access, most-favored nation (MFN) and national treatment (Mattoo and Carzaniga, 2002). Market access means that governments should honor their commitments to accept foreign service providers; MFN means if a country allows foreign firms to enter a sector such as banking, the country must treat all banks from WTO member countries equally, and national treatment means that governments must treat foreign and national service providers equally. GATS allows exemptions to national treatment for “services provided in the exercise of governmental authority.” For example, GATS allows governments to permit only citizen employees to provide government-provided or funded-services, including teaching in schools.<sup>24</sup>

The GATS explicitly allows countries to cite national immigration policies as a reason not to open a particular sector to the temporary movement of natural persons or to deny entry to certain individuals.

Services are 70 to 80 percent of output and employment in the world’s high-income economies, and the service sector tends to expand with economic development, since the demand for most services is income elastic--if incomes rise 10 percent, the demand for tourism or health care services rises more than 10 percent. Many services once considered to be immobile have become mobile with falling telecommunications costs, including back-office processing of bank and medical records. Labor is typically 70 to 80 percent of production costs in supplying services, versus 20 percent for manufactured goods, and lower wages in developing countries give them a “comparative advantage” in producing many services, especially as technologies and training in computer-related occupations become standardized around the world.

For example, firms that “outsource” services, such as setting up call-center operations in India or coupon-redemption centers in the Caribbean, enlarge Mode 1 services trade. Multinationals that establish a subsidiary abroad, and then move managers and specialists there for a few years, help to expand Mode 3 FDI-related trade in services. About 85 percent of world trade in services are in Modes 1 and 3.

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<sup>24</sup> Countries may also de-regulate the provision of services, but limit competition to national suppliers, e.g. introduce vouchers and charter or private schools, but allow only national firms employing citizens to provide educational services. Some would like to allow foreign service providers to provide educational services, e.g. Mexican firms to provide educational services with vouchers to Mexican children in the US.

**Table 5. Global Trade in Services by Mode, 2000****Global Trade in Services by Mode, 2000**

Mode	2000 (\$ mils)	Per Dist
1. Cross-border supply	1,000	28%
2. Consumption abroad	500	14%
3. Commercial presence	2,000	56%
4. Migration-compensation	50	1%
Total	3,550	

Source: WTO Statistics, March 14-15, 2002

Developing countries, led by India, advocate liberalization of Mode 4 temporary movement of natural persons; the long-term goal is a GATS visa that would allow professionals from architects to zoologists at first, and unskilled workers later, to move freely between signatory nations as employees or as self-employed service providers. Developing country demands fall in four major areas: eliminating or reducing economic needs tests<sup>25</sup> that can limit the entry of migrant workers, making visa and work permit issuance easier,<sup>26</sup> expediting the recognition of an individual's credentials,<sup>27</sup> and avoiding the requirement that service provider migrants pay social security and related taxes.<sup>28</sup> Developing countries also want Mode 4 to apply to semi-skilled workers who provide construction, cleaning and similar services, but Winters et al (2002, 57) conclude that subcontracting and using intra-company transfers "offers the greatest chance of extending Mode 4 to lower-skilled workers."

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<sup>25</sup> Economic needs tests (ENTs) require employers seeking permission to hire foreign service providers to satisfy their governments that local workers are not available. There are two major types: pre-admission and post-admission. Pre-admission labor certification means that an employer must demonstrate that she has tried to find local workers while offering at least prevailing or government-set wages, and the border gate remains closed until the employer satisfies the government that foreign service providers are truly needed. Post-admission tests allow employers to open border gates, and there is generally no enforcement unless the agency receives complaints of abuses.

<sup>26</sup> Developing countries would like "one-stop shops" in industrial country consulates that would issue multiple entry visas that are easy to obtain and renew, with the right to file trade complaints if inter-agency conflicts slow visa issuance.

<sup>27</sup> Developing countries would prefer that the WTO develop and administer a global mutual recognition system, so that an architect, doctor, or nurse recognized as such would have her credentials recognized in all WTO member countries.

<sup>28</sup> Payroll taxes add 20 to 40 percent to wages in most industrial countries, and developing countries complain that migrant service providers are often required to pay them, even though they have limited access to the benefits they finance. If the comparative advantage of developing countries is lower labor costs, requiring migrants to pay social security taxes erodes their comparative advantage in providing services, according to developing countries.

## Guest Worker Policies

### 2.2.1 Identification and description

Guest worker programs aim to add workers temporarily to the labor force. Most guest workers are unskilled, and they usually fill 3-D (dirty dangerous, and difficult) jobs in labor-receiving countries. Guest worker programs tend to become larger and to last longer than planned, and many migrants settle despite program rules that envision them rotating in and out of the country, with recruitment stopping when unemployment rises.

Guest worker programs suffer from distortion and dependence. Distortion refers to the fact that labor markets are flexible, adjusting to the presence or absence of migrants. Once businesses make investment decisions that assume migrants will (continue to) be available, they often resist efforts to stop recruitment. Dependence means that migrants and their families develop a dependence on earnings from foreign jobs unless the 3 R's of recruitment, remittances, and returns accelerate stay-at-home development. If the 3 R's do not provide local alternatives, and legal channels to go abroad are blocked, migrants may turn to smugglers or traffickers to find foreign jobs.

The failure of past macro or economy wide guest worker programs to live up to their promise has discouraged the resumption of large-scale programs that admit unskilled workers. If distortion and dependence could be minimized, new channels for migrants to cross national borders could be opened. Thus, using economic instruments to make guest worker programs operate closer to their goals could enable more workers who would otherwise be unemployed or underemployed in developing countries to work abroad, and allow employers to fill vacant jobs.<sup>29</sup> For example, raising taxes on employers who want to renew work permits can reduce extensions of work visas that can lead to settlement, and refunding social security tax contributions can encourage guest workers to depart at the end of their contracts.<sup>30</sup>

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<sup>29</sup> Even if economic mechanisms ensured that guest workers arrived and departed according to program rules, there could be opposition to guest workers on the grounds that, e.g. guest workers have restricted rights in their host countries, since they normally lose the right to be in the country if they lose their jobs. For example, a leading book concludes: “restrictions on the employment and residential mobility of legally admitted aliens appear anachronistic and, in the long run, administratively unfeasible.” (Castles and Miller, 1998, 286).

<sup>30</sup> Sending countries can also benefit if the migration abroad is temporary. Ellerman (2003, 12) noted that the return of “forced labor” from Slovenia to Germany during World War II helped to create electrical and electronics companies that led to the the *Iskra* (Spark) group and the modern high technology industry in Slovenia.

### 2.2.2 Alleviation of the challenge

Migrants generally move from lower to higher wage countries, so that most developed and many middle-income developing countries are destinations for migrants seeking jobs and higher wages. Countries hosting unskilled migrants range from traditional immigration countries such as the US, most of the Western European nations that recruited guest workers, and Asian countries from Japan and Korea<sup>31</sup> to Singapore and Malaysia. The Gulf oil-exporting nations have some of the highest percentages of migrants in their work forces, and migrants are significant among a diverse set of countries that are richer than their neighbors, from South Africa to Cote d'Ivoire, and from Argentina to Costa Rica. However, there are no universally accepted best practices for minimizing the distortion and dependence associated with guest workers.

During the heyday of guest worker programs in the 1960s and early 1970s in Western Europe, millions of migrant workers were recruited in southern Europe and Northern Africa to fill jobs in construction, mining, and manufacturing. Most labor-importing countries had only one program, and guest worker admissions were influenced by the macroeconomic policies that affected the unemployment rate, including fiscal policies as well as interest and exchange rates. In the early years of the programs, the migrant work force was flexible, since workers who were laid off within a year of their arrival usually had to return to homes in Italy or other southern European countries, so that unemployment could be imported and exported.

The close relationship between the number of foreigners in the country and the number of employed foreign workers meant that guest workers were associated with employment and hard work in the 1960s. However, by the time that recruitment was stopped in Western Europe in 1973-74, most migrants had “earned” permanent resident rights, and many unemployed migrants elected not to return to their countries of origin despite return bonuses and policies meant to discourage family unification by, for example, not allowing newly arrived family members to work for a year or two, but the result was to make it harder for newcomers to find jobs.

Contradictory policies that aimed to “strengthen the will of migrants to return” while “promoting the integration of migrants who nonetheless decided to stay” left European guest worker countries with the worst of all worlds--and a growing gap between the number of foreigners and the number of employed foreigners. Newly arrived foreigners with little education and few language skills found it hard to get first jobs and legal work experience, especially since high wages and high unemployment allowed employers to select non-migrant workers.

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<sup>31</sup> In Japan and until recently Korea, many of the foreign workers are considered trainees and thus not covered by minimum wage and other labor laws that apply to workers. Trainees who “run away” from their employers can often earn more as unauthorized workers.

In many European countries, the worst thing a newly arrived foreigner could do in the 1980s and 1990s was to get a good job, since they were reserved for unemployed local workers. Many countries made it far easier for new arrivals to obtain social benefits than jobs, and foreigners soon became associated with joblessness and welfare dependency. For example, adding 100 non-EU males increased employment by 73 in 2000, while adding 100 EU nationals increased employment by 86 or 20 percent more, and the gap was larger for women.

**Table 6. Non-EU Foreigners in the EU: Employment and Unemployment, 2000**

**Non-EU Foreigners: Employment and Unemployment, 2000**

Employed, 25-39 (%)	Men	Women
Non-EU Foreigners	73	44
Nationals	86	68
Ratio--Non-EU/Nats	0.8	0.6
Unemployment, 25-39 (%)		
Non-EU Foreigners	15	19
Nationals	6.5	10
Ratio--Non-EU/Nats	2.3	1.9

Source: Thorogood and Winqvist, 2002, 6

Lagging employment-population ratios among foreigners helped to set the stage for the new guest worker programs of the 1990s, each more carefully aimed at filling jobs in particular industries or occupations in a sort of rifle fashion.

Unlike the macro guest worker programs, which can be likened to shotguns that sprayed workers throughout the labor market, the new micro programs are more like rifles aiming to provide workers to particular labor markets or segments of labor markets. Macroeconomic policies have far less impact on the demand for migrants in micro guest worker programs, whether they admit computer programmers or farm workers.

Despite a proliferation of micro programs, there far more irregular workers than in the past. The presence of these unauthorized workers distorts labor markets, leads to protection gaps, and complicates the quest for a migration management new system in which migrants are legal. Irregular workers can give advantages to employers who hire them, and push particular types of employers toward hiring unauthorized workers, as with the spread of labor contractors and irregular workers in US agriculture. Irregular workers may have limited protections under labor laws, leaving them vulnerable to exploitation.

Governments can open new and wider channels for legal guest workers if they use taxes and subsidies to align employer and migrant incentives with program goals. For example, employers could be required to pay usual payroll taxes on the wages of guest workers, which helps to equalize the cost of employing foreign and native

workers. To encourage worker rotation and discourage settlement, employers could face additional charges to renew a migrant's work permit. Finally, employer-paid taxes and fees could be used to raise subsidize R&D efforts aimed at raising productivity in migrant sectors that often have low profit margins and few organizations to facilitate cooperation to mechanize or restructure work in a way that reduces dependence on migrants.

An example of one of the most successful mechanization-replacing-migrants cases shows the importance of a government al coordinating mechanism. In the early 1960s, over 80 percent of the workers who hand-picked the processing tomatoes used to make catsup in California were Mexican Bracero guest workers. Without them, the argument went, the US industry would move to Mexico and catsup would become a luxury product. The Bracero program nonetheless ended in 1964 during the War on Poverty and the quest for civil rights because of concerns that the presence of Braceros was slowing the economic progress of Hispanics. Instead of moving to Mexico, California today produces about five times more tomatoes at a fraction of Bracero-era costs.

There were two keys to the transformation of the tomato harvest: the cooperation of plant scientists to develop tomatoes that ripened uniformly and had an oblong shape amenable to mechanical harvesting and bulk handling, with engineers who developed a harvester that cut the plant, shook off the tomatoes, and then used electronic eyes to separate red from green tomatoes and other plant material. Mechanical harvesting eliminated 90 percent of the hand-harvesting jobs, and its quick adoption was spurred by the state government's establishment of grading stations that took random samples of tomatoes to determine their quality and resolve the perennial price-quality issue between growers and processors.<sup>32</sup> The funds for transforming the tomato industry were supplied by government, not by the employers of Braceros, but it is clear that employer-paid taxes and fees could substitute for government funds in such cases, much as e.g. farmers already assess themselves fees to fund research on diseases and product promotion.

Distortion can be reduced with employer-paid taxes and fees, while dependence can be tackled with refunds of the social security and other taxes paid by migrants. Migrants (and their employers) contribute 20 to 40 percent of their earnings in payroll taxes in most OECD countries, and refunding these social security and unemployment insurance contributions when the migrant returns home would encourage voluntary returns. Providing the refund to the migrant in his country of

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<sup>32</sup> Hand-picked tomatoes were sold by farmers in 60-pound lugs and, with a current value of about \$50 a ton or 2.5 cents a pound, there would be a relatively small loss of \$1.50 if a lug is rejected by the processing plant because it had too many green tomatoes or too many dirt clods. Mechanical harvesting brings tomatoes to processing plants in 25 ton loads, so rejecting a load means a loss of \$1,250 (Martin and Olmstead, 1985).

origin would also provide a convenient way to match a portion of returned migrants' savings that are invested in job-creating development projects. Labor-sending governments may be able to collect taxes on foreign earnings if e.g. returned workers receives credits in local social security systems for their work abroad in exchange for tax contributions made upon return.

Dependence-reducing schemes should rely on incentives rather than coercion. Some Caribbean countries require guest workers leaving legally to sign contracts that deduct 10 to 30 percent of wages and forward them from the foreign employer to a government institution at home that is convert funds into local currency for the migrant's family or hold them until the migrant returns. These schemes have been prone to abuse by governments who are often dealing with migrants who never before participated in tax and benefit programs; there are often unexplained deductions, and some workers and families complain they do not receive the monies due them.

For example, there is still litigation over the 10 percent forced savings program in the first phase of the 1942-64 Mexico-US Bracero program, when the US government guaranteed Bracero contracts, meaning that the US government would pay wages owed to Mexican workers if US farmers did not. The 256,000 Mexicans who received contracts to work as Braceros in the US between 1942 and 1949 had 10 percent of their US wages withheld by US employers and forwarded via the Wells Fargo Bank and Union Trust Company of San Francisco to the Bank of Mexico and then to the Banco de Credito Agricola in Mexico.

A total of \$34 million was deducted from Bracero earnings between 1942 and 1946, and at least some of it was not returned to the workers to whom it was owed. Several class-action suits were filed in the US in 2001-02 seeking to recover the WWII-era forced savings, plus interest, from the Mexican and US governments; the suits sought \$50 million to \$100 million in lost wages and interest and \$500 billion in punitive damages. Mexico's Foreign Relations Ministry says that rural banks were consolidated into the rural development bank Banrural in 1976, and that there are no records of what happened to the forced Bracero savings. Nonetheless, the in Mexican government in November 2003 offered each of the ex-Braceros who registered \$5,000 or \$10,000.

### **2.2.3 Side effects and uncertainties**

It is very difficult to keep guest worker programs true to their purpose, prompting the aphorism that "there is nothing more permanent than temporary workers." Taxes and subsidies can help to align employer and worker incentives with program rules, but employers may still find it better to prolong the stay of experienced workers rather than recruit and train new migrants, and migrants may not be induced to return to their countries of origin voluntarily by the promise of a social security

refund, especially if they do not see jobs or profitable areas to invest at home. If employers and migrants believe that migrant adjustment to settler status is an option, then a once-abroad, stay-abroad mentality can make it difficult to enforce worker rotation despite taxes and subsidies.

There are two major challenges to expanding channels for legal guest workers: currently high levels of illegal or irregular migration and the tension between numbers and rights in developing countries. With many employers and migrants already accustomed to operating outside of the tax system and in violation of immigration and labor laws, stepped up enforcement is necessary to persuade them to operate in the mainstream labor market rather than the underground economy. Simply opening more doors for guest workers without bringing employers and migrants in the underground economy out of the shadows may increase rather than reduce unauthorized migration.

In the past, some countries had legalization programs, offering regular immigrant status to unauthorized foreigners who satisfied residence, work, and other criteria, e.g. US programs in 1987-88 legalized 2.7 million foreigners. However, the enforcement side of the US grand bargain did not deter continued illegal migration, while talk of another amnesty and low unemployment rates encouraged more migration, and the result was that illegal immigration surged in the 1990s. The ends of the policy option spectrum are marked by two extremes—guest workers and legalization. The guest worker option allows irregular foreign workers who find regular jobs to have their employers register them and thus receive work permits valid for one, two, or more years, as in Italy, Spain, and Thailand. The legalization option allows irregular foreigners who satisfy residence or work requirements to receive immigrant visas, which gives them more rights and flexibility and puts them on a path to naturalization.

The in-between option is earned legalization, which means that unauthorized foreigners who satisfy work requirements receive a temporary legal status, and then they can “earn” an immigrant status with continued employment, tax payments, and crime-free records. The Agricultural Job Opportunity, Benefits, and Security Act of 2003 (AgJOBS), pending in the US Congress, would allow unauthorized foreigners who did at least 100 days of farm work in a 12 month period to register for a six-year Temporary Resident Status (TRS) that permits work in the US and travel in and out of the US. While in TRS status, workers would have to do at least 2,060 hours or 360 days of any kind of farm work over six years, including at least 1,380 hours or 240 work days during the first three years following adjustment to earn an immigrant status, which their spouses and minor children would receive when the migrant

qualified. Earned legalization in this case aims to prevent currently employed illegal workers from leaving for better jobs with legal status.<sup>33</sup>

The US has six to eight million unauthorized foreign workers, and President George Bush in January 2004 proposed an earned guest worker program to deal with them. Under the Fair and Secure Immigration Reform (FSIR) proposal, US employers would acknowledge that they hired irregular workers by giving them letters to show that the migrant had a US job. To become a legal guest worker, the migrant would take the employer's letter to a US government agency, pay a registration fee of \$1,000 to \$2,000, and receive a three-year renewable visa. However, "there is no linkage between participation in this program and a green card [immigrant visa]...one must go home upon conclusion of the program" unless the US employer has applied for an immigrant visa on behalf of the worker. The number of green cards or immigrant visas available for US employers who cannot find US workers, currently 140,000 a year for workers and their families, would increase by some undetermined number to make an immigrant visa a more realistic option, but there could still be long waits for immigrant visas.<sup>34</sup>

The second issue is the tension between numbers and rights, and it is often played out in sending countries' policies toward e.g. whether to allow women to go abroad as domestic helpers. Countries such as Bangladesh and Pakistan ban the emigration of unskilled female migrants, under the theory that they will be too vulnerable to abuse overseas, while Indonesia, the Philippines and Sri Lanka allow women to go abroad as domestic helpers, but try to educate them at home and protect them abroad. The result is a tension that is sometimes resolved in favor of numbers, and sometimes in favor of rights. For example, in March 1995, Singapore hanged a Filipina maid Flor Contemplacion for killing another maid and the child in her care, sparking massive demonstrations in the Philippines and a ban on Filipinas going to Singapore to work as maids. The ban was short-lived, especially because women who had gone into debt to obtain contracts to work in Singapore protested when their opportunities to go abroad were restricted.<sup>35</sup>

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<sup>33</sup> Earned legalization represents another grand bargain between those with opposing views. Farmers want a work force that is required to do farm work, and worker advocates are willing to exchange a few years of "indentured status to agriculture" for the right of farm workers to eventually earn full immigrant status, which would mean they no longer had to work in agriculture.

<sup>34</sup> For example, if five million unauthorized workers register, and the government adds 100,000 employment-based immigrant visas a year, it would take 50 years to convert all of the temporary workers to immigrants—excluding families.

<sup>35</sup> A similar fight is playing out in Indonesia. Nahdhatul Ulama, the largest Muslim organization in the country, in October 2003 asked the government to halt the emigration of women, saying: "The sending of migrant workers to work as baby-sitters, domestic helpers, waitresses and the like will only disgrace the whole nation." Advocacy groups estimate there are four million Indonesians working overseas legally and illegally, 70 percent of them women. However, as pressures for a ban on women working overseas mounted, some 3,000 women scheduled to go overseas staged a demonstration demanding the right to emigrate.

#### 2.2.4 Economic evaluation

The purpose of using economic instruments to regulate guest worker admissions, employment, and returns is to open more doors for unskilled workers to find jobs in higher wage countries. There is a well-known gap between the goals and outcomes of guest worker programs that prompts the aphorism—there is nothing more permanent than temporary workers—but this is a predictable result of the incentives often facing employers and migrants. Absent mechanization or a change wrought by changing tastes or trade patterns, employers can become very comfortable with migrants and protest that we will have to go out of business without them, while migrants and their families absent local development face lower incomes.

Since decisions to hire migrants and to migrate abroad are economic decisions, guest worker programs that regulate the entry, employment, and stay of guest workers are more likely to achieve their goals if they include economic mechanisms that align employer and worker incentives with program rules. One way to align employer incentives with program rules that require employers to seek local workers first and to rotate guest workers out of the country after 6 to 24 months is to equalize the cost of employing foreign and native workers by requiring employers to pay usual payroll taxes on the wages of guest workers, plus an extra charge if the employer wants to renew the work permit of a migrant.. Such an employer tax system would not make migrants cheaper than local workers, as they are under some current guest worker programs, and the extra tax for renewals should encourage employers to consider alternatives such as mechanization or restructuring work.

Employer-paid taxes could serve another useful role. Many migrants are hired in competitive sectors of the economy marked by relatively low profit margins and little capacity for employers to work cooperatively to mechanize or restructure work. An employer-paid tax on the wages of migrants could be used to fund research that would ultimately reduce dependence on migrants. Malaysia and Singapore require employers of guest workers to pay levies, but levy funds in these countries become general tax revenues rather than funds available to restructure migrant jobs to increase productivity.<sup>36</sup>

To reduce migrant worker dependence on foreign jobs and to encourage returns, the social security taxes paid by migrants could be refunded to migrants returning home, which would encourage voluntary returns and provide a convenient way to match a portion of returned migrants' savings that are invested in job-creating development projects. Charging migrants social security taxes helps to level the

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<sup>36</sup> The US H-1B program, which admits foreign professionals for up to six years. charged employers a \$1,000 per worker fee to generate funds that provided, inter alia, scholarships to US students interested in high-tech careers.

playing field with local workers, refunding their contributions helps to align migrant incentives with program rules, making enforcement easier.

There are many examples of how NOT to use economic instruments to manage migration. Most Middle Eastern oil exporters have large foreign worker populations, and require foreigners to have local sponsors (kafeels). Sponsors often charge migrants a fee for sponsoring their stay in the country, and thus have an incentive to sponsor too many migrants. The result is a low-wage, low-productivity economic system that leaves local workers un- or under-employed and can lead to tensions between foreigners and nationals. Gulf governments are trying to "nationalize" their labor forces, but are discovering that nationals do not want to accept the low-wage private sector jobs now filled by migrants.

Refunding social security contributions to migrants who return is more common. Several countries provided refunds of social security contributions to induce migrant returns in the 1980s, including the French and German return bonus programs of the early 1980s.<sup>37</sup> In Germany, a migrant family could get a departure bonus of up to \$5,000, plus the employee's contributions to social security upon return to the country of origin. The departure bonus scheme reduced the number of foreigners in Germany from 4.7 million in 1982 to 4.4 million in 1984-85, but most studies concluded that the foreigners who took departure bonuses would have left in any event, so that Germany merely bunched normal emigration during the two-years that bonuses were available (Hönekopp, 1990).

Moving more workers over borders raises the more general issue of the economic impacts of migrants on countries receiving them. In 1997, the National Research Council (NRC) concluded that the economic benefits from legal and illegal immigration to the US add \$1 billion to \$10 billion per year to U.S. Gross Domestic Product, largely because immigration holds down U.S. wages and thus prices, and increases the efficiency of the economy (Smith and Edmonston, 1997, 135-65). Thus, immigration was a net positive economic factor, but a very small factor in an \$8 trillion economy that normally expands by \$300 billion a year.<sup>38</sup>

The NRC report emphasized that the most important economic issues are distributional. Who benefits and who suffers from immigration? In particular, how does the presence of new arrivals affect settled immigrants and Americans similar in

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<sup>37</sup> The 1982 election in Germany was won by the "rightist" CDU-CSU-FDP parties in part because they promised to "do something" about out-of-control immigration. The newly elected government copied the French return bonus program of 1981.

<sup>38</sup> The employment rates--the percentage of immigrants versus natives of the same age and sex--of immigrants have been declining, reflecting what the NRC termed the increased difficulty that recent immigrants have finding US jobs. For example, in 1990, 22 percent more native-born women worked than immigrant women aged 25 to 34.

education and skills to the new arrivals? How quickly do immigrants climb the American job ladder? The NRC found that most of the economic benefits of immigration accrue to the immigrants themselves, to owners of capital, and to highly educated U.S. residents. The fact that highly educated U.S. residents benefit from immigration, and that immigrants, when ranked by years of education, are at the extremes of the distribution,<sup>39</sup> means that immigration tends to increase inequality.

In 1986, the President's Council on Economic Advisors (CEA) summarized the labor market effects of immigrants as follows: "Although immigrant workers increase output, their addition to the supply of labor . . . [causes] wage rates in the immediately affected market [to be] bid down. . . Thus, native-born workers who compete with immigrants for jobs may experience reduced earnings or reduced employment." (Council of Economic Advisors, 1986, 221)

Research interest and policy concern focuses on how immigrants affect those in the bottom half of the labor market. Governments have long protected vulnerable low-wage workers by establishing minimum wages and regulating hours of work; there are also education and training programs to help workers improve their job skills and thus their earnings. Economists and other social scientists have used three kinds of studies to examine the labor market effects of immigrants in detail: case studies, econometric studies, and economic mobility or integration studies.

**Case studies** examine a particular industry or occupation. Many of the first immigration studies were case studies that were undertaken after a strike by U.S. workers resulted in their replacement by immigrants. When farm workers in southern California went on strike for a wage increase in 1982, for example, many lost their jobs. There was no direct competition between new migrants and established workers, however. The unionized workers were displaced in a competition between employers. The unionized harvesting association lost business to farm labor contractors (FLCs) who hired nonunion and often unauthorized workers. The harvesting association went out of business, and the union workers lost their jobs (Mines and Martin, 1984).

Case studies show that immigration can displace established workers and depress wages by adding vulnerable workers to the labor supply. This scenario conforms to accepted labor market theory, but the actual effects on wages and employment are indirect and hard to measure (General Accounting Office, 1988). Once employers begin hiring newly-arrived workers through FLCs, for example, hiring and supervision can change. Local workers may not learn about job vacancies if the FLCs find

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<sup>39</sup> Among recent arrivals, 30 percent of the foreign-born population had an undergraduate, professional, or graduate degree in 1997, compared with 24 percent of U.S.-born Americans ages 25 and older. At the other end of the distribution, about 34 percent of the immigrants did not finish high school, versus 16 percent of the U.S.-born.

additional workers by asking current employees to bring in their friends and relatives. Such network hiring helps explain why many garment shops in New York or Los Angeles have Mexican, Chinese, or Thai seamstresses, but not a mixture of the three. Network hiring also explains how the owners of office buildings in Los Angeles in the 1980s came to replace unionized U.S.-born black janitors with immigrants hired by cleaning contractors.

**Econometric studies** consider how immigration, wages, and employment interact in a city labor market, or they compare labor markets among cities. They begin with the assumption that, if immigrants depress wages or displace workers, then the more immigrants there are in a city, the greater the observed wage depression or job displacement, especially in comparisons across cities with different shares of immigrant workers. Econometric studies might study the influence of immigration on the wages and unemployment rates of blacks, Hispanics, and women in Los Angeles by comparing them with similar groups in Atlanta, which has a relatively small immigrant population.

In the 1980s, to the surprise of economists, such studies found few wage or labor market effects related to immigration. In 1990, George Borjas summarized the research literature by saying “modern econometrics cannot detect a single shred of evidence that immigrants have a sizable adverse impact on the earnings and employment opportunities of natives in the United States.” (Borjas, 1990, 81) One well-known econometric study concluded, for example, that the 1980 influx of Cuban immigrants to Miami in the Mariel boatlift had no measurable negative effect on the wages and employment of local workers (Card, 1990).<sup>40</sup> The best-known 1990s review concluded that the “weight of the empirical evidence suggests that the impact of immigration on the wages of competing workers is small.” (Smith and Edmonston, 1997, 220).

As more data became available in the 1990s, however, it became clear that workers who competed with migrants tended to move away from areas with more newly arrived migrants—presumably to avoid competing with them in the labor market. The effects of immigration on wages and unemployment in Los Angeles or Houston were thus dissipated throughout the United States in a process that demographer William Frey called “the new white flight.” (1994); Many of the workers assumed to compete with newcomers may not, as with government employees whose wages are set at federal or state levels, and the earnings of many union workers are determined by national or regional collective bargaining agreements. Borjas in 2003 reversed his earlier conclusion, finding that “immigration reduces the wage and labor supply of

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<sup>40</sup> During the four months of the boatlift, Miami’s labor force increased by 7 percent, but there were no significant differences in wage and job opportunities for native-born workers in Miami and in other U.S. cities

competing native workers, as suggested by the simplest textbook model of a competitive labor market.” (Borjas, 2003, 1370).

Borjas concluded that a 11 percent increase in the US labor force due to immigration between 1980 and 2000 reduced the wages of the average US-born worker by 3.2 percent (Borjas, 2003, 1370).. But the wage depression was almost 9 percent for US-born workers who had not completed high school, suggesting significant wage effects in particular industries, such as agriculture, probably the U.S. industry most dependent on immigrant workers. In 2000, about 90 percent of hired workers on US farms were believed to be immigrants, including half who were unauthorized, despite the legalization of over 1 million illegal farm workers in 1987 and 1988. Farm workers who were legalized moved on to nonfarm jobs, which created a vacuum that drew in more unauthorized workers and helped keep farm worker wages and benefits among the lowest in America.

**Economic mobility**, or integration, studies investigate how immigrants and their children are faring in the United States. Their starting point is the fact that “immigrants on average earn less than native workers [and] this gap...has widened recently...[as] the skills [years of education] of immigrants have declined relative to those of the native-born.” (Smith and Edmonston, 5-33). The average educational level of immigrants has been rising, but the educational level of U.S.-born residents has risen faster, which explains the widening education gap. Because education is the best predictor of a person's earnings, the fact that the US-born residents have more years of schooling helps to explain the growing inequality of income among people living in America, in particular between foreign-born and U.S.-born Americans and within the foreign-born population.

One of the most important issues for society and the economy is whether those who immigrate to the United States are so energetic and ambitious that their earnings will quickly catch up to and even surpass those of their native-born counterparts. Barry Chiswick conducted research in the 1970s that found just such a catch-up pattern for immigrants who arrived in the 1950s and 1960s. The immigrant men Chiswick studied initially earned 10 percent less than did similar U.S.-born men. But the drive and ambition that prompted them to migrate enabled the migrants to close the earnings gap after an average of 13 years in the United States, and to earn six percent more than similar U.S.-born men after 23 years in the United States.<sup>41</sup> The immigrants' motivation and ambition, it seemed, could expand the U.S. economy and raise average earnings.

George Borjas, however, contended that Chiswick's study captured a unique set of circumstances: the influx of highly skilled Asian immigrants after 1965 policy changes

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<sup>41</sup> The immigrant men were compared to US-born men of the same age and education (Chiswick, 1978).

and a booming U.S. economy. In 1970, the average immigrant earned 1 percent more than the average U.S.-born worker. However, not all immigrants caught up in earnings, including Mexican and Central American immigrants. During the 1970s and 1980s, the proportion of Mexicans and Central Americans among immigrants rose, and so did the earnings gap— Mexican and Central American immigrant men had 25 percent to 40 percent lower earnings than similar US-born men in 1970, and 50 percent lower earnings in 1990. Instead of catching up to Americans in earnings, Borjas concluded that immigration could expand the low-income population.<sup>42</sup>

### **2.2.5 Feasibility**

The number of guest worker programs is increasing, with most targeted at particular niche labor markets, e.g. farm workers, seasonal service providers for hotels and restaurants, and construction. Most of these new programs are unilateral, begun and administered by the labor receiving country, and demand for migrants in these micro guest worker programs is generally unaffected by larger economic trends. Levies and refunds to align employer and worker incentives with program rules in such programs can minimize distortion and dependence.

Making the transition from the current widespread employment of irregular workers to a world of legal migrants may be the most difficult challenge. Experience shows that, in a world of growing inequality, it is hard to avoid sending the signal that there are brighter lights over borders, so that many policy actions in receiving countries are accompanied by more irregular migration. The obvious solution would be for recruitment, remittances, and returns to accelerate economic development so that emigration pressures decline over time, the next challenge.

## **Migration for Development**

### **2.3.1 Identification and description**

Migration can be a tool for development, and development can affect migration patterns; in a world achieving Millennium Development Goals, there may be a short-term increase in migration followed by a decline due to faster economic and job growth. Migration can speed up development if the 3 R's of recruitment, remittances, and returns accelerate job and economic growth, while development increase emigration if opening a previously closed economy to trade and changing policy regimes to deregulation, privatization and the use of market prices to allocate resources displaces workers in previously protected sectors. The result can be a migration hump, or temporarily more migration in the short term even as the stage is set for less migration in the long term.

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<sup>42</sup> Between 1970 and 1990, the proportion of the U.S. male labor force who had not completed high school by age 25 fell from about 40 percent to 15 percent, while the proportion of immigrants without a high school diploma fell only from 48 percent to 37 percent.

Development should reduce economically motivated international migration by reducing its “root causes.” These root causes are many and complex but, in contrast to studies of trade, investment and aid and their relationship to development, “migration is the most under-researched of the global flows.” (World Bank, 2002, 82). Economists generally view voluntary migration as an investment: most migrants make sacrifices now in the hope that they and their families will have a better future in another place. Individuals who move voluntarily are better off (or they return), as are the employers abroad who hire them. The issue is whether individual and employer benefits also benefit sending and receiving societies, and how much. Most research suggest that migrants generate more benefits than costs in receiving countries, but the impacts of emigration on sending countries are less clear: “individualists” or “internationalists” assert that voluntary migration that leads to higher incomes for migrants increases global economic output and is good even if emigration leaves migrant countries of origin worse off, while “nationalists” emphasizes that emigration may have to be limited or returns enforced to set in motion virtuous circles of growth and development in countries of origin.

Between these extremes are the pragmatists who embrace the individual and global gains from migration, but want to ensure that the 3 R’s of recruitment, remittances, and returns benefit migrant countries of origin and promote Diaspora-led development. The second half of the challenge is development and migration—how to manage migration cooperatively during the migration hump, so that the prospect of unwanted migration does not slow economic integration. Concretely, the challenge is to have more examples of Nafta-type agreements, with the US government arguing that economic integration with Mexico would eventually reduce unauthorized migration, and fewer Turkey-EU dilemmas, in which fears of mass migration slow economic integration.

### **2.3.2 Alleviation of the challenge**

The current focus of migration research and policy is make better use of recruitment, remittances, and returns among the world’s 175 million migrants to accelerate development in the migrants’ countries of origin. It should be possible to secure international cooperation to achieve this goal, and achieving it is likely to have measurable impacts over the next 5 to 15 years.

The question is how to ensure that economically motivated migration in fact benefits countries of origin, but most of the recommendations deal with the “architecture” of the a new top-down international migration organization rather than what it would do to ensure that migration reduces inequalities between nation states. The most common prescription is for a World Migration Organization to develop a “new

international regime for the orderly movements of people.”(Ghosh, 2000, 6),<sup>43</sup> which might involve consolidating the various norms governing migration and reviewing the migration policies of member states with an eye toward opening more legal channels for migration. Bhagwati (2003b) says that a WMO “might realistically begin to fill the last remaining gap in the institutional architecture that covers our interdependent world.”

The WMO is meant to be an analogue to the World Trade Organization, and implicit in most recommendations for a WMO is the suggestion that, just as the WTO is credited with freeing trade, so a WMO could set rules that increase migration channels. However, there is no clear theoretical basis for more migration, or even an consensus on a theoretical framework to estimate an optimal level of migration.

Until there is a WMO to develop best-practice guidelines, how can the development impacts of current levels of migration be maximized? The three major aspects of the migration process are recruitment, remittance, and return policies. Recruitment refers to who emigrates, and the concern is that if the best and brightest of a poor country’s brains and brawn emigrate, economic development in countries of origin may be slowed. There is no easy answer to the recruitment dilemma, since employers in higher-wage countries want to hire the best workers, who are also the most likely to be useful to the development of their countries of origin.

The keys to resolving the recruitment dilemma when professionals emigrate lies in remittances and some form of compensation to replenish the human capital that moves over borders. Maximizing the benefits of unskilled migrants, on the other hand, rests on promoting remittances and returns. There is almost unanimous agreement that developing country efforts to restrict the emigration of all or some “key workers” are not likely to be effective. If migrants moved over borders under bilateral agreements, and if employment services in sending and receiving countries could match workers and employers, there would be a potential for government services to substitute for the current migration infrastructure, which includes smugglers and traffickers.

Remittances from migrants abroad,<sup>44</sup> and the return of migrants with new skills, technologies and ideas, can help launch economic take offs in the regions and

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<sup>43</sup> Ghosh calls for “regulated openness” with participating countries sharing “common objectives,” a “harmonized normative framework,” and a “monitoring mechanism.” Ghosh, 2000, 227). Regulated openness, according to Ghosh, means that migration policies should be comprehensive, transparent and predictable, should not alter the existing refugee regime, and should facilitate the migration that accompanies increasing trade in services (222-4). Ghosh lays out the three pillars of the new regime (227)-- shared objectives, harmonized goals and new institutions-- but does not specify what they would be.

<sup>44</sup> The IMF estimates remittances for each country, and publishes them in its Balance of Payments Statistics Yearbook under several categories. The two major categories are worker remittances,

countries from which migrants come, and new or strengthened people connections or transnational communities can also facilitate trade and investment. The volume of remittances depends on the number of migrants, their earnings, and their willingness to remit. Studies demonstrate convincingly that the best way to maximize remittances is to have an appropriate exchange rate and economic policies that promise growth (Ratha, 2003), but making it easier and cheaper to remit can also facilitate transfers home from migrants abroad.

Remittances to developing countries more than doubled between the late 1980s and the late 1990s, after experiencing drops in 1991 (Gulf war) and in 1998 (Asian financial crisis). Remittances surpassed official development assistance in the mid-1990s and surged after 2000, perhaps reflecting a higher percentage of migrant savings transferred via the banking system as the costs of bank transfers fell and the September 11, 2001 terrorism curtailed informal transfer systems. Banks have begun to compete aggressively for the relatively high margin business of transferring funds in relatively small sums over borders, which should reduce transfer costs over time.<sup>45</sup>

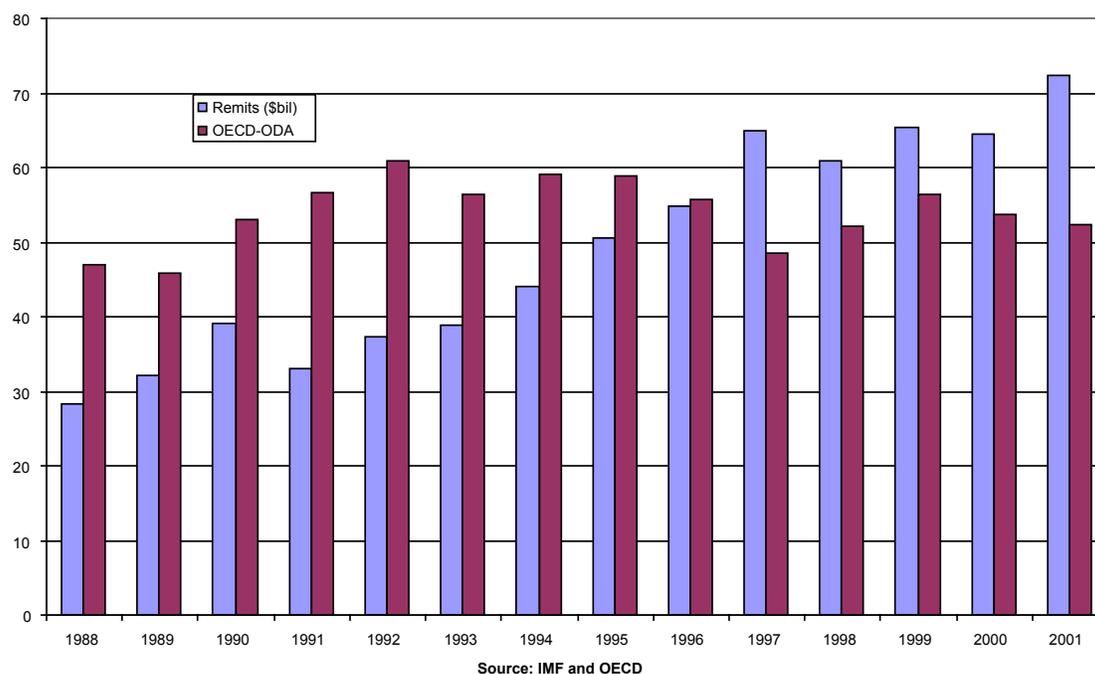
**Figure 1. Remittances and ODA to Developing Countries, 1988-2001 (\$ bil)**

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which are the wages and salaries that are sent home by migrants abroad 12 or more months and listed under current transfers and compensation of employees (called labor income until 1995), which are the wages and benefits of migrants abroad less than 12 months and included as income in a country's current account. Many countries do not know how long the migrants remitting funds have been abroad, so most analyses combine workers remittances and compensation of employees. For example, Mexico reports under worker remittances, while the Philippines reports under compensation of employees.

<sup>45</sup> Ratha, 2003, 165, reports that the average remittance to Latin America is \$200, and that transfer fees range from 13 to 20 percent.

Remittances to Developing Countries and ODA (\$bil), 1988-2001



A handful of developing countries receive most remittances. The three largest recipients, India, Mexico, and the Philippines, received a third of remittances in recent years, and the top six countries, these three plus Morocco, Egypt, and Turkey, received half of all remittances to developing countries. Remittances are most important in smaller and island nations, where they can be equivalent to 20 to 40 percent of GDP, e.g. in 2001, remittances were 37 percent of GDP in Tonga, 26 percent in Lesotho, 23 percent in Jordan, and 15 to 17 percent in Albania, Nicaragua, Yemen, and Moldova. The major sources of remittances were the US, \$28 billion in 2001, Saudi Arabia, \$15 billion, and Germany, Belgium, and Switzerland, \$8 billion each.

Table 7. Remittances to Developing Countries, 1995-2001

## Remittances to Developing Countries: 1995-2001

	1995	1996	1997	1998	1999	2000	2001
Developing Countries(\$bil)	48	53	63	60	65	65	72
India	6.2	8.8	10.3	9.5	11.1	9.2	10
Mexico	4.4	5	5.5	6.5	6.6	7.6	9.9
Philippines	5.4	4.9	6.8	5.1	6.9	6.2	6.4
Morocco	2	2.2	1.9	2	1.9	2.2	3.3
Egypt	3.2	3.1	3.7	3.4	3.2	2.9	2.9
Turkey	3.3	3.5	4.2	5.4	4.5	4.6	2.8
Subtotal	24.5	27.5	32.4	31.9	34.2	32.7	35.3
Share of total							

India	13%	17%	16%	16%	17%	14%	14%
Mexico	9%	10%	9%	11%	10%	12%	14%
Philippines	11%	9%	11%	9%	11%	10%	9%
Morocco	4%	4%	3%	3%	3%	3%	5%
Egypt	7%	6%	6%	6%	5%	4%	4%
Turkey	7%	7%	7%	9%	7%	7%	4%
Big 6 share	51%	52%	52%	54%	53%	51%	49%

Source: [www.worldbank.org/prospects/gdf2003/gdf\\_statApp\\_web.pdf](http://www.worldbank.org/prospects/gdf2003/gdf_statApp_web.pdf) (p198)

Many migrants go abroad to finance upward mobility at home, and they remit a portion of their foreign earnings to replace the local earnings their family would have had if they had not left, and a portion to invest in improved housing, more education, or health care.<sup>46</sup> Most remittances are used for consumption, helping to explain their stability, but many developing countries made their exchange rates more realistic in the 1990s and encouraged migrants to remit.<sup>47</sup> Automatic stabilizers in developed countries, such as unemployment insurance, help to stabilize the flow of consumption remittances to developing countries (even jobless migrants sometimes remit), and can help to stabilize economies in migrant sending and receiving countries even if they are at the same point in the economic cycle.

Remittances clearly improve the lives of the households that receive them, and can also improve the lives of non-migrant neighbors as they are spent, creating jobs via multiplier effects. Most studies suggest that each \$1 in remittances generates a \$2 to \$3 increase in local GDP, as recipients buy locally produced goods and services (Taylor and Adelman, 1996). A study of 74 low and middle-income developing countries found that a 10 percent increase in the share of remittances in a country's GDP was associated with a 1.2 percent decline in the share of people living on less than \$1 per person per day (Adams and Page, 2003).

Classical theories of migration suggested that the emigration of men in the prime of their working lives would reduce economic output in migrant areas of origin, or leave it unchanged in Lewis-type economic development models.<sup>48</sup> Empirical research

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<sup>46</sup> There has been a great deal of modeling of possible reciprocal altruistic relationships between migrants and their families left behind, with remittances serving to ensure that if, e.g. an unauthorized migrant is detected and removed or a legal migrant is injured or laid off, the family at home will take care of him (Tcha, 1996).

<sup>47</sup> The World Bank's 2003 Global Development Finance speculated that remittances to high-debt and less-transparent countries tend to be more stable than those to middle-income open economies because the latter include more remittances destined for investment, and investment remittances fluctuate with variables such as interest rates and exchange rates.

<sup>48</sup> Lewis (1954) assumed that the traditional agricultural sector of developing countries had an unlimited supply of labor that could be absorbed in an expanding modern industrial sector with no loss of farm output. Ranis and Fei (1961) extended the Lewis model so that, once the marginal product of labor and wages are equal in the traditional and modern sector, rural-urban migration stops; Johnson (1967) noted that rural-urban migrants could take capital with them.

suggests that, while emigration may initially reduce output in local economies, remittances can lead to adjustments that maintain output, as when migrant families shift from crops to less labor-intensive livestock or hire labor to continue to produce crops. If agricultural productivity in migrant areas of origin had been constrained by the unavailability of credit to buy machinery or construct irrigation, the remittances from migration can overcome the missing credit market constraint.

Migration and remittances accelerate changes underway in often traditional communities. A very visible effect of remittances is to allow families receiving them to build or improve their housing. Many migrant families build more housing than they need, introducing rental housing in areas that previously had none, a development that with socio-economic consequences, as when newlyweds began to live away from in-laws in rural Turkey as rental housing became available (Martin, 1991). Women assumed new roles in the absence of migrant husbands, and some became moneylenders in their villages, a remarkable change in often traditional areas.

There has been a sea-change in attitudes of governments toward migrants, with some that once saw migrants as “traitors” now considering them key engines of development. Mexican President Vincente Fox has called Mexican migrants in the US “heroes” for their remittances, encouraged banks to make it easier and cheaper to remit savings to Mexico. Federal and state governments in Mexico created programs to match remittances that were invested to create jobs in migrant areas of origin, and many other governments are recognizing the potential of their Diasporas to accelerate development at home.<sup>49</sup>

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Todaro (1969) took a micro perspective, showing that rural and urban wages did not converge as expected in Lewis-style models because, with high and rigid urban wages, rural migrants continued to pour into cities despite high unemployment because their expected earnings (higher wages times the probability of employment) were higher in the cities. Todaro argued that the solution to unwanted rural-urban migration was urban wage subsidies and migration restrictions; Bhagwati and Srinivasan (1974) showed that tax and subsidy schemes could yield optimal migration levels without migration restrictions.

<sup>49</sup> Indian-origin people abroad have incomes totaling \$160 billion a year, a third of the GDP generated by one billion Indians in India. Estimates of Indians abroad include 2.2 million in the UK; 1.7 million each in the US and Malaysia; 850,000 in Canada; 700,000 in Mauritius; 500,000 in Trinidad and Tobago; 400,000 in Guyana; and 340,000 in Fiji. See South Asia. 2003. Migration News. Vol 10. No. 2. April. Harvard’s Mihir Desai put the number of Indians in the US at one million, 0.1 percent of India’s population, and their income at 10 percent of India’s GDP, so that a relatively small tax on Indians in the US would substantially raise Indian government revenues. However, it may be hard to collect such a tax. Indians abroad remitted \$14 billion, but they have invested relatively little in India, \$0.5 billion, compared to \$60 billion invested in China by 55 million overseas Chinese.

Remittances and returns can lead to new industries, as with the high-tech sectors of Taiwan, India, and China.<sup>50</sup> The Taiwan government opened the Hsinchu science park to attract home American-educated Taiwanese engineers, and a third of the 312 start-up companies in Hsinchu in 2002 were started by returnees with experience in Silicon Valley. Governments look to associations and networks formed by migrants abroad for development ideas and assistance, including the Colombian Red Caldas network, the Global Korean Network, the Philippines Brain Gain Network, Polish Scientists Abroad, Association of Thai Professionals in North America, Iranian Scientific Information Network, Tunisian Scientific Consortium, and the Arab Scientists and Technologists Abroad. China, with one of the largest Diasporas, sent 580,000 students abroad between 1979 and 1999, but only 25 percent returned by 2002.<sup>51</sup> However, Premier Zhao Ziyang called Chinese migrants "stored brainpower overseas," and some Chinese cities have built "Returning Student Entrepreneurial Buildings" to encourage their return.

### 2.3.3 Side effects and uncertainties

If migration is to be a tool for more rapid development, the 3 R's of recruitment, remittances, and returns should accelerate development in migrant areas of origin or elsewhere in migrant countries of origin, so that economically motivated migration declines over time. The keys to more rapid development are globalization to integrate economies into world markets and using markets to set prices and allocate scarce resources. But the same policies that can reduce economically motivated migration in the long run can increase it in the short run. If there is a pre-existing migration link between areas with displaced workers and labor markets abroad, there can be a migration hump, and prospects for more migration can slow the integration necessary for faster growth.

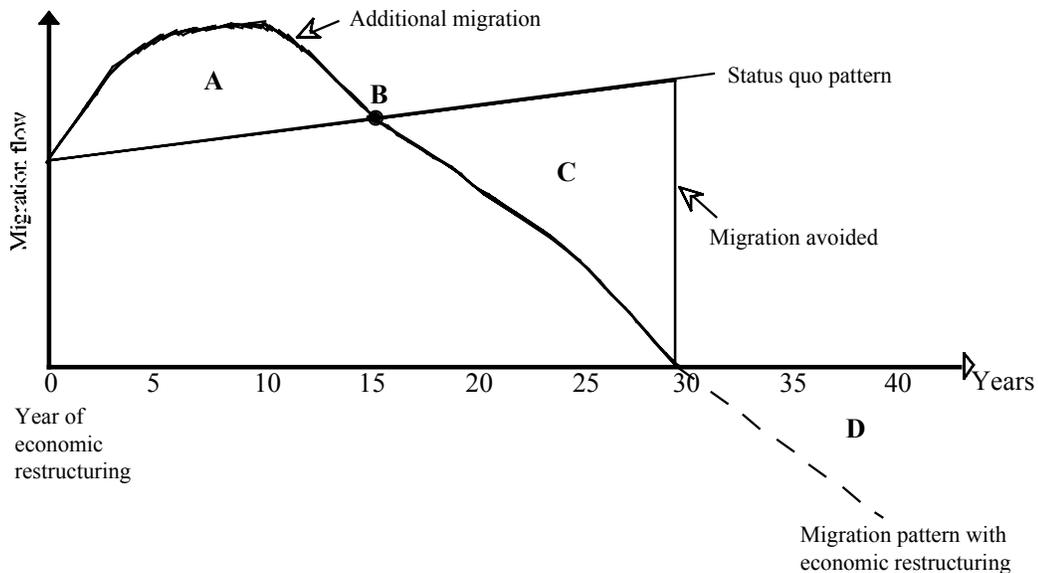
The migration hump is pictured in Figure 1, where the straight line represents the status-quo migration flow and the hump line depicts the volume of migration-- first rising and then falling.. The number of migrants is on the Y-axis and time is on the X-axis, and the additional migration associated with economic integration is represented by **A**. However, the economic and job growth economic integration facilitates leads to migration falling to the status quo level at **B**. **C** represents the migration avoided by economic integration, and **D** represents the previously emigration country being a destination for migrants. The critical policy parameters are A, B, and C -- how much additional migration results from economic integration (A), how soon does migration return to the status quo level (B), and how much migration is avoided by economic integration and other changes (C)?

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<sup>50</sup> Diaspora is a Greek word first applied to Jews dispersed outside of Israel in the 6th century BC, after Nebuchadnezzar of Babylon destroyed the first Jewish temple.

<sup>51</sup> Jonathan Kaufman, "China Reforms Bring Back Executives Schooled in US," Wall Street Journal, March 6, 2003. Rone Tempest, "China Tries to Woo Its Tech Talent Back Home," Los Angeles Times, November 25, 2002.

Figure 2. The Migration Hump



While there is disagreement about the ability of globalization and economic integration to narrow differences between developing and developed countries, the US Commission for the Study of International Migration and Cooperative Economic Development concluded that "expanded trade between the sending countries and the United States is the single most important remedy" for unwanted migration (1990, p. xv, emphasis added). However, the Commission warned that "the economic development process itself tends in the short to medium term to stimulate migration." This migration hump presents a "a very real short-term versus long-term dilemma" for the United States when considering a free trade agreement billed as a long-term means to curb unauthorized immigration from Mexico (1990, p. xvi).

Martin (1993) examined NAFTA's likely impacts on Mexican and US agriculture, examining how demand-pull factors in the United States and supply-push factors in Mexico were likely evolve under NAFTA. He concluded that the flow of Mexicans to the United States, running at 200,000 settlers and 1 to 2 million sojourners a year in the early 1990s, would increase by 10 to 30 percent for 5 to 15 years, producing a hump when Mexico-US migration was viewed over time. The upward slope of the hump in the 1990s was due primarily to previous demographic growth and insufficient job growth in Mexico, as well as strong US demand for Mexican workers. The downward slope of the hump was projected to occur when the number of new entrants to the Mexican labor market fell and economic growth created more and better-paid jobs in Mexico.

Fears of the migration hump can slow the economic integration needed to accelerate development, as may be the case with Turkey's application to join the EU. There are 3.5 million Turks living abroad, five percent of persons born in Turkey, including 3 million in Europe. Turks are only partially integrated into many European societies, and there are fears that freedom of movement rights for Turks would lead to another wave of migration. Between 1961 and 1973, some 1.5 to 2 million Turks went abroad for employment, equivalent to 10 to 12 percent of Turkey's 1970 work force and 40 percent of the Turkish men aged 20-39 in the Turkish work force in 1970. Current estimates are that 20 to 30 percent of Turkish youth would emigrate to seek higher wages in Europe if they could, although it is not clear how many would stay abroad if there were no jobs for them (Teitelbaum and Martin, 2003).

The keys to minimize the size and duration of the migration hump include careful phasing of policies that can promote displacement, and cooperation to manage any resulting migration. In the Mexico-US case, it is clear that it is far easier to displace workers in agriculture and manufacturing than to create new jobs with foreign investment. Furthermore, the new jobs created may not be in areas with displaced workers, and they may not be first in line to be hired even if there are jobs, as when male farmers are displaced but assembly line factories prefer women. In some low-income countries, such as those in sub-Saharan Africa, trade liberalization alone can increase emigration pressures because the exchange rate falls, making overseas work more attractive (Faini, Grether, and Melo, 1999).

There is another side effect of emigration that is rarely discussed. Migrants leave for many reasons, including because they have fundamental disagreements with their country's leaders. Diasporas can also finance civil wars and unrest, as in Sri Lanka and other countries (Collier, 2000), so that migrant remittances can prevent the economic take off needed for stay at home development.

#### **2.3.4 Economic evaluation**

The new economics of labor migration moves the locus of migration decision making from individuals to families, and imagines families making decisions about who should emigrate in order to maximize family income, reduce risk, and overcome constraints, such as missing markets for credit and insurance (Taylor and Martin, 2001). Familial decision making is associated with e.g. sending some household members to domestic labor markets and some to foreign labor markets, as when households in rural Mexico send girls to maquiladora-type assembly plants and boys to the US to work in agriculture, construction, and services.

Migrants tend to be positively selected from the general population with respect to human capital characteristics, and their exit can lead to a "brain drain" that has effects similar to those of capital flight, that is, lower productivity and wages of complementary labor in migrant-sending areas. Even nonmigrants can benefit from

emigration, if the remittances spent in the area at least equal to the value of the production migrants would have produced had they stayed behind (Djajic, 1986), but emigration benefits all those who stay behind if it results in an overall increase in the capital-labor ratio within the migrant-sending economy (Wong, 1983).

Instead of more migration, trade could be a substitute for migration, as occurred in countries that have gone through the migration transition from labor senders to receivers, such as Korea. Between 1950 and 2000, world GDP increased 4-fold to \$30 trillion, while world trade in goods increased 17-fold to \$13 trillion, or 40 percent of the value of global output.<sup>52</sup> Increased trade was stimulated by economic growth and reductions in the average tariff on manufactured goods, from 40 percent in 1950 to 4 percent in 2000. Most global trade involves goods, which means that a good is produced in one country, taken over borders, and consumed in another.

Trade and investment often seem to be the slow road to stay-at-home development, but there is no other path that promises sustained economic and job growth. The new globalizers, as the World Bank (2002) terms Chinese and Indian states that attracted foreign investment to produce manufactured goods for export, have had the fastest rate of poverty reduction and often attract internal migrants. Thus, at least parts of developing countries with about three billion residents have experienced substantial poverty reduction as a result of trade and investment, but other developing countries with about two billion residents seem to be falling further behind, “in danger of becoming margin to the world economy” except as sources of migrants (World Bank, 2002, x).

Migrant-receiving nations could reduce migration pressures by liberalizing trade in farm commodities. The World Bank (2002, 131) asserted: “Industrial countries spend more than \$300 billion a year in agricultural subsidies, more than six times the amount they spend on foreign aid.” If developing countries had unrestricted access to industrial country markets, their GDPs would rise five percent, according to the World Bank, versus the one percent gain from remittances.

In most developing countries, 40 to 60 percent of the labor force is employed in agriculture, and farm goods are a major export. Most migrant-receiving countries protect their farm sectors, generally by guaranteeing their farmers higher-than-world prices for the commodities they produce, and then sometimes donating or subsidizing the sale of the surplus in world markets, which depresses world prices for farm commodities. Between the late 1980s and late 1990s, the producer support equivalent (PSE) level of subsidy for the farm sector in the US, Japan, and the EU rose from about 4 times ODA to 5 times ODA. In the late 1990s, when global exports of manufactured goods were about \$3.5 trillion a year,

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<sup>52</sup> Average world capita GDP doubled from \$2,500 to \$5,000 per person per year between 1950 and 2000.

global exports of farm goods were less than \$500 billion a year, including a third from developing countries.<sup>53</sup>

**Table 8. ODA and Farm Subsidies: 1990s**

**ODA and Farm Subsidies: 1990s**

	ODA(\$bils)	Farm Support (PSE \$bils)	
	2000	1999	1986-88
DAC/OECD 24	56	252	221
US	10	54	42
Japan	13	59	54
EU	28	114	95

DAC is Development Assistance Committee members of the OECD

PSE is producer support equivalent

PSE is the value of transfers from taxpayers (payments) and consumers (higher prices) to farmers

Source: OECD

### 2.3.5 Feasibility

Most of the world's labor force growth is in developing countries, while most industrial country labor forces will shrink without immigration. The movement of migrant workers over borders seems like a natural fit that leads to closer economic integration and a narrowing of economic differences, but fears of out-of-control migration in industrial countries may slow the economic integration that fosters stay-at-home development. For example, here is little doubt that the presence of partially integrated Turks in Europe has made some EU countries reluctant to embrace full Turkish entry into the EU, and the US justified intervention in Haiti in 1994 to slow emigration to the US.

The question is how to develop policies that meet the interests of the parties directly concerned: migrants and employers, while satisfying the needs of labor-sending and labor-receiving countries. From the perspective of the industrial countries that include about 12 percent of the world's workers and 60 percent of the world's migrants, the starting point must include more effective policies to reduce unauthorized migration and guest worker programs that minimize distortion and dependence. Once such policies are in place, industrial countries are more likely to open doors to legal migrants. Cooperation between sending and receiving countries to reduce irregular migration can also set the stage for cooperative efforts to reduce migration pressures over time.

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<sup>53</sup> Another comparison is with global arms sales, some \$26 billion in 2001, down from \$40 billion in 2000. About 2/3 of global arms sales are to developing countries—they bought an average of \$20-\$22 billion worth of arms a year in the 1990s.

## Conclusions

Migration is as old as humans wandering in search of food, but international migration is a relatively recent phenomenon: it was only in the early 20th century that a system of passports and visas developed to regulate the flow of people across the borders of nation-states. International migration was widespread across the Atlantic before World War I and government regulation reduced it, and international migration did not resume across the Atlantic in the 1950s and 1960s because economic convergence made economically motivated migration unnecessary. Fast-growing European countries instead recruited guest workers from southern Europe, many of whom settled. Today, about 60 percent of the world's 175 million migrants are in the high income countries, and labor migration between lower and higher wage countries has spread globally, so that virtually all countries are sending, transit, and/or receiving areas for migrants.

Most migrants who move from lower- to higher-wage areas have higher incomes, and the sum of these individual gains increases global GDP. There is also an immigration dividend in immigrant receiving countries in which migrants are fully employed, and for the US in the mid-1990s, when about 10 percent of workers were migrants, the dividend was estimated to be 1/10 of one percent, or equivalent to about two weeks of normal economic growth.

The migration challenge is a question of developing policies to permit more migration, and to use this increased migration to reduce inequalities and thus migration pressures in a globalizing world. Many of the potential economic gains from migration are not realized, largely because the richer countries to which migrants want to move are raising their border controls in the face of fears that range from terrorism to the association of some migrants and their children with high rates of unemployment and welfare dependency. Most economic analyses suggest that the economic costs of immigration in the form of lower wages, higher unemployment, or higher social welfare costs in receiving countries are easy to overestimate, but it is harder to assess the costs of terrorism or the costs of diversity, as when current residents fear that "different" newcomers will change local languages and cultures.<sup>54</sup>

## Migration Benefits

Disagreements on which items associated with migration are benefits and which are costs, and the complexity assessing potential costs such as terrorism make it very hard to conduct a benefit-cost exercise of migration. The exercise below is illustrative of the gains that could be realized from more migration. For example,

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<sup>54</sup> In one sense, the case for more migration is very analogous to the case for free trade, that is, overcoming the tendency of losing producers and their supporters to organize, and for winning producers and their supporters to attribute their success to their own abilities, not to freer trade (Summers, 1999, 9).

doubling the number of migrants in the rich countries *if there were no change in GDP per capita in sending and receiving countries as a result of the migration*, could increase global GDP by \$2.6 trillion or eight percent, with all of the gain in the high-income countries.<sup>55</sup>

**Table 9. Migration: Economic Impacts, 2001 data**

**Migration: Economic Impacts, 2001 data**

Countries	World	Low	Middle	High
Population (mils)	6,133	2,511	2,667	955
Ave GDP(\$/year)	5,140	430	1,850	26,710
Total GDP (\$bils)	31,500	1,069	4,922	25,506
<i>Moving 100 million people from low to high, same per capita averages</i>				
Population (mils)		2,411		1,055
Ave GDP(\$/year)	5,566	430		26,710
Total GDP (\$bils)	34,138	1,037		28,179
Change in ave/tot GDP	8%			
<i>Moving 10 million people from low to high, same per capita averages</i>				
Population (mils)		2,501		965
Ave GDP(\$/year)	5,706	430		26,710
Total GDP (\$bils)	31,760	1,065		25,773
Change in ave/tot GDP	1%			

Source: World Bank and own calculations

This economic gain in the high-income countries would be immediate if the newcomers were similar to natives, measurable in economic terms, and concentrated, since most of the benefits accrue to migrants and the local owners of capital. More realistic migration numbers, and efforts to take account of costs, would lower these economic gains. The movement of 10 million migrants, for example, would raise world GDP by \$260 billion or one percent, smaller but still almost five times the annual amount of ODA.<sup>56</sup>

The costs of migration, if any, tend to be deferred, especially if the first migrants to arrive are coming to fill vacant jobs, and families arrive only later. Nation states have been likened to redistributive clubs, so that “affluent and free countries are, like elite universities, besieged by applicants. ...as citizens of such a country, we have to decide: whom should we admit?” (Walzer, 1983, 32). Costs, and perceptions of costs of migration, rise with economic and noneconomic factors, including unemployment

<sup>55</sup> If an additional 100 million migrants moved from low to high income countries, and they on average gained \$26,280 a year, the difference between average per capita GDPs in low and high income countries in 2001, the world's GDP would rise by \$2.6 trillion or eight percent.

<sup>56</sup> The benefits of migration tend to fall over time if migration accelerates convergence between rich and poor countries.

and how “different” newcomers are from established residents. Costs also tend to be dispersed, especially if they are associated with integration issues, and are much harder to measure, as there can easily be disagreement over whether something like diversity should be considered a benefit or cost?

Most of the gains of economically motivated migration accrue to migrants in the countries of destination, which raises the question of how and how much of these economic benefits to share with countries of origin? This paper assumes that nation states have legitimate interests in the economic consequences of migration. Instead of attempting to restrict emigration, it seems better to allow and in some cases facilitate migration, but also for emigration nations to work cooperatively with destination countries on the 3 R’s of recruitment, remittances, and returns in a manner that maximizes the benefits of migration for countries of origin.

### **Benefit-Cost Analysis**

The major challenge is to open entry doors in destination countries wider, which means overcoming obstacles to more migration in receiving countries by selecting settlers or immigrants in systems that ensure their economic success and ensuring that guest workers and their employers have incentives to behave in accordance with rotation rules, as when employers must pay to prolong migrant stays and migrants are encouraged to return by social security refunds.

Overcoming opposition to migration in destination countries does not lend itself readily to benefit-cost analysis. A typical benefit-cost analysis asks whether a particular government intervention will be worthwhile—will a government-built dam generate more benefits than costs. In such analyses, costs usually come first and are relatively easy to measure, so the major challenge is to measure benefits, determine when they will occur, and use an appropriate discount rate to compare costs and benefits. Migration poses different challenges—the benefits usually come first and are more readily measurable in higher incomes, while the costs come later and are far more difficult to measure, which makes it very hard to find an appropriate discount rate and compare benefits and costs.

Suppose we take the simple approach of summing net individual gains to obtain the global gain from more migration, so that the global gain is simply the individual gain times the number of migrants. In such a scenario, gains very quickly mount unless benefits fall, as might be expected if more migrants move and there is a convergence in incomes, e.g. assuming that 1,000 migrants have no impacts on incomes in sending or receiving countries could result in individual gains of \$25,000 each, but 10,000 may reduce the gain to \$20,000 per migrant if there is downward pressure in receiving areas and upward pressure in sending areas. However, there is still a net gain, as would be expected if migrants are moving voluntarily for economic reasons.

### **Table 11. Benefits and Costs of More Migration**

**Benefits and Costs of More Migration**

Number	Net Individ Gain (\$)	Aggregate Gain(\$)
1,000	25,000	25,000,000
10,000	20,000	200,000,000
100,000	15,000	1,500,000,000
1,000,000	10,000	10,000,000,000

Source: See text

The hard question is costs—do they increase with numbers because of convergence in incomes and difficulties in integrating more newcomers etc, or do they decrease with numbers because there are economies of scale in providing services to newcomers, or because the ambitions that motivated migration inject new entrepreneurial spirits into host countries. If we were to assess costs according to opinion poll findings about whether the level of migration is too high, too low, or about right, we would assume that the costs of migration are very high. Public opinion surveys conducted in the US between 1965 and 1993 consistently found a majority of Americans wanted both legal and illegal immigration reduced, and fewer than 10 percent of agreed that immigration should be increased (Simon, 1989, p350).<sup>57</sup> A summer 2002 US poll found a striking difference between mass and elite opinion: 55 percent of the public said legal immigration should be reduced, compared to 18 percent of opinion leaders (Chicago Council on Foreign Relation. 2002)

There is no easy way to quantify the perceptions that immigration imposes costs, and thus should be reduced. In the absence of cost assumptions, we can assume that there are declining net individual gains from migration. The unique aspect of migration as a global challenge is that benefits exceed costs as long as there is voluntary movement.

**Prioritizing Migration**

Migration is playing out on a global stage in which demographic, economic and security differences are widening between many nation states, encouraging more economically motivated migration. The challenge and opportunity is to manage the migration that is occurring, and the additional migration that could occur, in a manner that reduces these differences, and so that convergence between nation states reduces migration over time.

Lowering migration barriers should rank very high on the global agenda. Most studies suggest that the economic benefits of more migration are very high, and the costs are low. The trick is to lower resistance to more migration in destination countries, which can be accomplished by:

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<sup>57</sup> The year 1953 was the only year in which more than 10 percent of Americans favored increasing immigration.

- selecting migrants in a manner that ensures they will be successful, and then compensating their countries of origin so that inequalities between countries are reduced
- opening wider channels for less skilled migrants by using economic instruments to align the incentives of employers and migrants with guest worker program rules
- ensuring that the 3 R's of recruitment, remittances, and returns narrow economic differences between sending and receiving areas.

**Table 12. Migration Benefits and Costs**

Opportunity	Benefit	Cost	B/C Ratio	Remarks
Select successful migrants	open wider/new entry channels for migrants	Distortion in receiving/brain drain in sending	Depends on numbers and extent of distortion etc	
Guest workers	open wider/new entry channels for migrants	Distortion in receiving/dependence in sending	Depends on numbers and abilities of levies/refunds to align incentives/rules	
Migration for development	convergence between nation states that reduces migration pressures over time	May need changes in policy in both sending and receiving countries		

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