The Policy Challenges of Migration: The Origin Countries' Perspective

In evaluating the impact of remittances, the main subject of this report, it is important to take into account the implications of the initial decision to emigrate. This chapter will analyze the implications for migrants and origin countries of migration for economic gain from developing to high-income countries. Focusing on this form of migration can highlight some key policy dilemmas that governments face in improving the developmental impact of migration.

Migration is an extremely diverse phenomenon. Its economic impact on each origin country, and the impact of policy, will depend on many circumstances—among them the skills and former employment of migrants, the history of migration (the existence and location of a large diaspora), the sectors affected, patterns of trade and production, the investment climate, and the size and geographical location of the country. For example, migration policies appropriate for a large developing country with substantial low-skilled emigration and effective institutions will differ from the policies for a small island economy with substantial high-skilled emigration and weak institutions.

Migration is as complex as it is diverse, so predicting the impact of policy changes will be problematic until more research is done and better data obtained. In particular, the gender implications of migration are poorly understood and require more research. Migration also has important social and political implications, that may be as important as the economic analysis provided here. For all of these reasons, the analysis and policy recommendations in this chapter must remain heavily qualified. Our purpose is to signal to policymakers in developing countries, and to the development community in general, the elements that should be considered in formulating migration policy.

International migration often generates great benefits for migrants and their families, although at some risk. Migration can greatly increase incomes of both migrants and their families and has helped countless households escape poverty. While most workers gain greatly from migration, the decision to migrate is sometimes made with inadequate information and at high risk and cost, particularly if the migration is irregular. By providing information on migration opportunities and risks, governments could help avoid unfortunate, costly migration decisions. Governments should also consider means to prevent and prosecute trafficking and other abuse of migrants, and to strengthen migration-related partnerships between origin and destination countries.

Increasing the emigration of low-skilled workers would significantly reduce poverty in developing countries. In addition to enabling emigrants to escape poverty and to reducing poverty in the country of origin through remittances (discussed in chapter 5), low-skilled emigration can increase wages and

reduce unemployment and underemployment of poor workers in the country of origin. Many of the poorest lack the financial resources or the skills required for successful emigration to high-income countries, but available data indicate that a significant number of them do emigrate, although at lower rates than the non-poor. Reducing the restrictions on low-skill emigration, while remaining sensitive to concerns in destination countries over social tensions, job opportunities for low-skilled natives and the potential burden on public expenditures, may best be achieved through managed migration programs designed jointly by origin and destination countries. Such programs should provide for temporary, low-skilled migration—with incentives for return.

Emigration of high-skilled workers may reduce living standards of those left behind and impair growth, but can also be beneficial. Like low-skilled migration, high-skilled migration can greatly benefit migrants and their families and can help relieve labor market pressures. In addition, a well-educated diaspora can improve access to capital, technology, information, foreign exchange, and business contacts for firms in the country of origin. At the same time, high-skilled emigration may reduce growth in the origin country because (a) other workers lose the opportunity for training and mutually beneficial exchanges of ideas; (b) opportunities to achieve economies of scale in skill-intensive activities may be reduced; (c) society loses its return on highskilled workers trained at public expense; (d) the price of technical services (where the potential for substitution of low-skill workers is limited) may rise. Highly educated citizens may also help to improve governance, improve the quality of debate on public issues, encourage the education of children, and strengthen the administrative capacity of the state—all of which may be reduced through emigration of the highly skilled.

Because of the lack of data and the myriad of individual country circumstances that can

influence the impact, it is impossible to reliably estimate the net benefit, or cost, to origin countries of high-skilled emigration. We can only offer some rough observations that reflect the wide variation in high-skilled emigration rates among countries:

- Very high rates of high-skilled emigration affect a small share of developing countries' population, and many countries with high rates of high-skilled emigration have poor investment climates that likely limit the productive employment of high-skilled workers. On the other hand, the lack of high-skilled workers may contribute to the poor investment climate and limit the supply response to economic reform.
- Some countries also find it difficult to productively employ all high-skilled workers because of small economic scale or misguided educational policies that result in a large supply of college graduates for whom no suitable jobs exist.
- High-skilled emigration has had a severe impact on public services with positive externalities. The loss of skills through high-skilled emigration has particularly impaired health services in several developing countries.

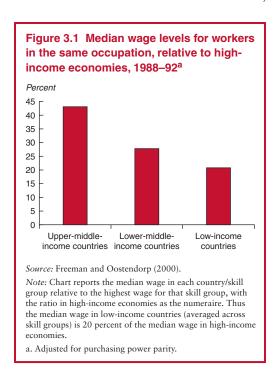
Origin countries harmed by high-skilled emigration face difficulties in managing the problem. Service requirements for access to publicly financed education can be evaded and are likely to discourage return, and proposals for the taxation of emigrants to the benefit of the origin country have made little progress. Improved working conditions in public employment and investments in the infrastructure for research and development may be effective in retaining key workers. Working conditions can also be improved by strengthening governance, which may require political will rather than money. Origin countries can also encourage educated emigrants to return by identifying job opportunities, cooperating with destination countries that have programs to promote return, permitting dual nationality, and helping to facilitate the portability of social insurance benefits.

The migration decision and its impact on migrants and their families

Making the costly and sometimes risky decision to move to another country generally involves the expectation of large increases (or lower variability) in income, described by economists as the net present value of lifetime earnings.² The migrant's expected income gain from emigration also reflects his or her employment prospects at home and the likelihood of employment overseas.

Better economic prospects drive migration

Migrants from developing to high-income countries generally enjoy large increases in earnings.³ A dataset compiled by the International Labour Organization (ILO) shows that workers in high-income countries earn a median wage that is almost five times the level of that of workers in low-income countries,



adjusted for differences in purchasing power (Freeman and Oostendorp 2000) (figure 3.1). These data may overstate the wages that migrants expect, because their earnings, at least initially, tend to be lower than those of natives (Lucas 2004a). Moreover, many poor workers who lack local language skills and have minimal education may find limited employment prospects in high-income country job markets. On the other hand, these data may understate the benefit of migration from the perspective of the household. In measuring differences in welfare between migrants and those who do not migrate, migrants' earnings in highincome countries are reduced to reflect the higher cost of living in high-income countries or purchasing power parity (PPP). To the extent that migrants send earnings back home in the form of remittances, however, this adjustment is not relevant, so household gains may exceed the PPP-adjusted rise in earnings.⁴ Furthermore, the data on income differences may influence expectations of future earnings for migrants and their children, and would undoubtedly generate much larger migration, in the absence of controls. Evidence of substantial migration pressure includes long queues of applicants for immigration to high-income countries, the rise in irregular immigration, the increase in asylum seekers (Hatton and Williamson 2002), and the high fees paid to smugglers who help migrants cross borders illegally (Cornelius 2001).

The expectation of higher earnings is not the only economic incentive for migration. Households may decide to send some members abroad to diversify the family's source of income and thus reduce risk, as shocks affecting the level of wages and the probability of employment in the destination country may not be correlated with the shocks affecting domestic workers (Daveri and Faini 1999).⁵

Migration involves considerable costs

Despite clear gains for many, migration involves costs and risks that, together with restrictions on migration, help explain why most people prefer to stay at home. Migration can entail substantial up-front costs—transportation, fees charged by recruitment agencies, fees to obtain a visa and work permit, maintenance while searching for work, forgone earnings (if the migrant was or could be employed at home), the reduction in value of location-specific skills (for example, knowing one's native language), and the pain of being separated from family and familiar surroundings. Obviously these costs will vary enormously among migrants.

Lack of data makes it difficult to directly test the relationship between costs and the decision to migrate. However, distance can be used as a proxy for costs, representing not only transport costs, but also migrants' limited familiarity with countries of destination. Adams and Page (2003) find that distance is a significant determinant of the direction of migration from developing countries to the United States, European members of the Organisation for Economic Co-operation and Development (OECD), and the Arab Gulf. Long, Tucker, and Urton (1988) found that distance was an important constraint on internal migration in the United States and the United Kingdom; what holds for internal migration (without political barriers or language differences, and with limited cultural differences) probably holds even more strongly for international migration. Household surveys also provide indirect evidence that distance has an important impact on migration: while some of the poorest do migrate internationally, they are more likely to remain at home or to migrate internally (see below).

Among the largest quantifiable costs to migrants are fees paid to private recruitment agencies, whose role in the international labor market has increased substantially, in part because of the rise of temporary labor migration programs. A major conduit of job opportunities for migrant workers, private recruitment agencies often are instrumental in seeking out new markets for job opportunities abroad. They also provide services such as language training and assistance with settlement (see Xiang 2003 in the case of China). However, they also can be a source of abuse (ILO)

Table 3.1 Fees charged by recruitment agencies

Country	US\$	Year
Migration to the Middle East		
Bangladesh	1,727	1995
India	900	1995
Pakistan	768	1995
Sri Lanka	689	1995
Sri Lanka	893	1986
Migration to Japan Thailand	>8,000	1996
Migration to Malaysia Thailand	666–1,000	1991

Sources: Abella 2004; Lucas 2004a; Eelens and Speckmann 1990; Spaan 1994.

2003b). Because many migrants lack information on foreign job markets, and some agencies may have considerable market power, recruitment agencies have captured a substantial share of the rents generated by limits on immigration (Lucas 2004a). Available data (mostly from past years) indicate that recruitment charges range from \$689 (in 1995) for Sri Lankan immigrants to the Middle East to \$8,000 (in 1996) for Thais seeking work in Japan (table 3.1).

Recruitment agencies' potential for earning rents raises the issue of whether governments should regulate their fees. As constraints on migration generate significant excess profits, efforts to regulate recruitment fees would appear to have merit. However, limitations on the terms of mutually agreed contracts can be difficult to enforce, and excessive regulation can drive recruiters underground or lead them to switch to other countries. A few governments have attempted to regulate fees paid to recruiters, and require registration and minimum capital requirements or financial guarantees to limit abuses (ILO 2003a). In general, successful regulation of recruitment agencies involves a large pool of potential migrants (to reduce the likelihood of recruitment agencies switching to alternative sources), effective government institutions, and regulations that focus on the most egregious abuses (instead of just reducing the market rate). Even the Philippines, considered to have a model program, experiences difficulties in enforcing fee limits, while most recruiters, including the Union of Filipino Overseas Contract Workers, argue that stringent regulation of recruiters impairs the competitive position of Philippine migrants relative to workers from other countries (Martin 2005). Destination countries are probably in a stronger position to regulate recruitment agencies effectively.

Decisions to migrate are often made with inadequate information

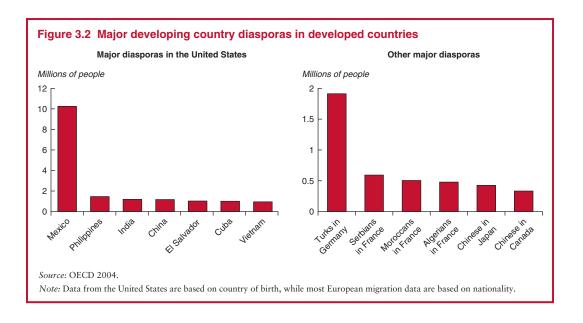
The distance and differences in language and culture between countries of origin and destination imply that migration is particularly affected by inadequate information. Migrants may have a distorted notion of the possibilities of employment and the likely wage in countries of destination, as well as insufficient information on the costs and potential risks of the trip. Smugglers, recruitment agencies, and others with a financial stake in encouraging migration may present a biased picture of the migration experience, and poor information increases the potential for migrants to suffer from fraud and abuse.⁷

Some origin-country governments have attempted to protect their emigrant workers by regulating the terms of labor contracts. For example, Indonesia, the Philippines, and Sri Lanka have drafted model contracts for various occupations and host countries that detail working terms and conditions to be specified in advance (Abella 1997). Such efforts can be useful in articulating standards and informing migrants of their rights. However, enforcement of such contracts in destination countries can be problematic (IOM 2003). The Philippines, India, and Bangladesh review contracts prior to migrants' departure, and Bangladesh verifies the genuineness of overseas work visas. Some countries have entered into bilateral agreements that require destination countries to issue visas only if the contract is approved by the origin country. Restrictive policies of this kind run the risk of encouraging irregular migration if workers cannot secure approval of contracts in advance. Some countries use financial incentives, such as special exemptions from travel taxes for those who clear contracts with government agencies, to facilitate government review of contracts. Some countries with large numbers of emigrants offer a comprehensive set of services, including predeparture training, information on labor markets in destination countries, legal services,⁸ reintegration support, and welfare funds financed from fees paid to origin-country governments by departing workers.⁹

A diaspora can reduce the costs facing migrants

The stock of emigrants in countries of destination can reduce the costs facing new migrants from the same origin country. The major countries of origin with significant diasporas in high-income countries (figure 3.2) are for the United States: China, Cuba, El Salvador, India, Mexico, Philippines, and Vietnam; and in other countries: Turkey (for Germany); Serbia and Montenegro, Morocco, and Algeria (for France); and China (for Japan and Canada). As migrant networks spread, private institutions and voluntary associations emerge to provide a range of services, including counseling, social services, and legal advice; lodging, credit and job search assistance; and the means to reduce the cost of undocumented migration, including smuggling and transport, counterfeit documents, and arranged marriages (Massey and others 1993). The migrant diaspora can also reduce the likelihood of, and fears concerning, abuse (see Gunatilleke 1998 for the example of Sri Lanka).

Evidence of how the diaspora encourages migration can be seen in the grouping of immigrants from the same country or local region in countries of destination. Bartel (1989) and Jaeger (2000) find that U.S. immigrants tend to move near former immigrants of the same ethnicity. Munshi (2003) finds that an individual is more likely to be employed and to hold a higher paying nonagricultural job when a large number of migrants from his home community are in the United States. ¹⁰ Studies of the Asia Pacific region have shown that

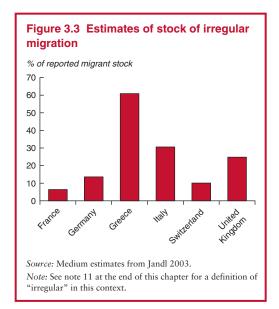


networks raise migration rates once a few initial migrants are established in destination countries (Massey and others 1998).

Irregular migration is often subject to substantial costs and risks

Irregular migration appears to have increased significantly in major countries of destination, although the estimates are unreliable. The estimates are based typically on the differences between census reports and other immigrant registries, arrests at the border or internally, and regularization programs (Jandl 2004).¹¹ Irregular migration may have doubled in the United States between 1990 and 2000, and may now account for some nine million people (Passel, Capps, and Fix 2004)—about 25 percent of the total stock of migrants. The scale of irregular migration in Europe may also be high. Just under 700,000 irregular migrants applied for regularization under the recent amnesty drive in Spain. Mid-range estimates provided by Jandl (2003) indicate that irregular migrants range from less than 10 percent of the total reported stock of migrants in France to 60 percent in Greece (figure 3.3).

Most irregular migrants are low-skilled because (a) immigration laws in high-income



countries provide high-skilled workers with greater opportunities for legal entry and residence, and (b) it is more difficult for high-skilled workers to practice their professions without adequate documentation, such as educational credentials (Chiswick 2000). Also, skilled migrants often have more to lose at home and may be less inclined to run the risks involved in irregular migration. Irregular

migrants also tend to be temporary, rather than permanent, immigrants (Carter 1999).¹²

Irregular migration imposes substantial costs on migrants, compared with permanent migration. It can be more expensive: the average price in 1991 for smuggling an illegal migrant from China to the United States was estimated at \$30,000 and from \$3,750 to \$12,000 for migrants smuggled to Lithuania (Salt and Stein 1997). Irregular migrants can also be paid low wages, have poor working conditions, and be subject to violations of the protections afforded under industrial-country labor laws (Vayrynen 2003). Employers may be able to pay irregular migrants less than legal migrants and natives because only certain employers will hire irregular migrants, or because the migrants are reluctant to move away from support networks. Lower pay and higher costs of migration also make irregular migration less desirable for the origin country, because they cut into remittances. Remittances can be reduced by the relatively expensive money transfer operations used by irregular migrants who lack access to bank accounts (see chapter 6).

Irregular migrants can also be exposed to physical danger. Since 1994 an estimated 2,600 undocumented migrants have died crossing the United States-Mexico border (Meek 2003). Entrapment into prostitution is a danger for women and children (Wickramasekera 2002). Trafficking in persons is estimated globally to involve some 600,000 to 800,000 men, women, and children each year (U.S. Department of State 2004). Different national policies toward migration control make it difficult to combat trafficking and smuggling, although the international protocols against these activities provide a common instrument to criminalize them. 13 Several governments, notably in Southeast Asia, have instituted restrictions on the emigration of women, fearing their exploitation. Unskilled and semi-skilled women are allowed to emigrate from Bangladesh only when accompanied by a male partner (Siddiqui 2003). Such outright bans, in addition to being limitations on what is generally viewed as a basic right to emigrate, are likely to be counterproductive: they may compel many women to move as undocumented migrants, thus increasing their vulnerability (Misra and Rosenberg 2003). More comprehensive, cooperative policies by governments are likely to have a more positive effect, including the dissemination of information on the risks of migration, strengthened protection for women in destination countries, and stepped-up identification and prosecution of traffickers. Migration agreements between countries of origin, transit, and destination can help achieve such policy coherence (as in the bilateral agreements between some EU states and Morocco and Tunisia, for example).

There are costs for those left behind

Finally, migration may impose costs on family members left behind, particularly children. For example, Battistella and Conaco (1996) find that the children of migrant parents from Luzon, Philippines, performed worse in school and tended to be less socially adjusted (particularly if the mother had emigrated) than children with both parents at home. On the other hand, Bryant (2005) found that the improvement in the children's health and schooling (financed by remittances), coupled with strong involvement of the extended family, tended to mitigate the social costs of a parent's migration. In general, emigration does impose hardships on family members left behind, but it also improves household income and improves families' ability to make compensating adjustments that mitigate those hardships.¹⁴

The impact of international migration on countries of origin varies

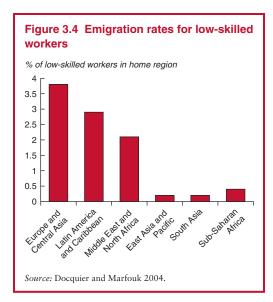
The impact of migration on countries of origin varies greatly, depending on the size of emigrant flows, the kinds of migrants, and labor and product market conditions in the country. In describing these effects, it is useful to distinguish between skill levels, given the differences in the labor markets for low- and high-skilled workers.

Low-skilled migration

Low-skilled migration can improve labor market conditions for other poor workers

The stock of low-skilled emigrants who moved from developing to industrial countries in 2000 averaged about 0.8 percent of developing countries' low-skilled, working-age residents—about the same as in 1990. The regions with countries close to the major destination countries had relatively high rates of low-skilled emigration (figure 3.4).¹⁵

The effects of South-North migration on working conditions for low-skilled workers in the developing world as a whole must be small. In individual countries, however, largescale emigration can place increased pressure on wages or reduce unemployment of lowskilled workers at the margin. For example, real wages in Pakistan's construction sector and the Philippines' manufacturing sector closely trace the deployment of overseas workers (Majid 2000; Gazdar 2003).¹⁶ Lowskill emigration also may reduce underemployment or raise labor-market participation without significant wage increases. Wage trends in Albania, Bangladesh, and Sri Lanka, for example, display no obvious signs of



improvement, despite massive emigration (Lucas 2004a). The wage response to emigration depends on the institutional setting in the labor market in the home country (such as the role of unions, public sector employment, and minimum wage laws); the extent of emigration relative to the domestic labor force; and the degree to which emigrants were productively employed before migrating.

The impact of international migration may differ considerably among regions within countries of origin, depending on the degree of geographic concentration of emigration and the links with other regions through internal migration. People in regions lying close to a common border with the destination country or with easier access to overseas markets (such as metropolitan centers or coastal areas) have a tendency to migrate (Long, Tucker, and Urton 1988; Malmberg 1997). These effects can be greatly magnified through the influence of migrant networks, once initiated from a specific location (Gunatilleke 1998; Shah 1998). Internal migration to areas of high departure can be quite important to the trickledown benefits of international migration, and internal migration also can have an important poverty-reducing impact (box 3.1).

Migration of low-skilled workers is usually beneficial

Whether emigration results in reduced underemployment, increased labor-market participation, or higher wages, low-skilled workers in the home labor market gain, either directly or indirectly, from additional remittance spending. Emigration of low-skilled workers thus can act as a safety valve for the failure to create appropriate employment at home. There have been cases, however, usually in the context of South-South migration, where large outflows of temporary or irregular workers have resulted in massive return flows due to economic or political shocks in destination countries.¹⁷ Also, reliance on large-scale emigration may retard efforts to address the issue of employment expansion over the long term, as a result of either the remittance-driven

Box 3.1 Internal versus international migration

lthough internal migration is much larger than Ainternational migration, they are in some respects similar phenomena. Both are largely driven by economic disparities among regions, although conflict and natural disasters (not discussed here) can also catalyze large movements of people. Both internal and international migration can be permanent or temporary, voluntary or forced. Both can subject migrants to substantial risks. Both can result in improved labor conditions in the regions of origin. Internal migration in Bangladesh, for example, makes more rural land available for tenancy (Afsar 2003). While the risks are often higher with international migration (particularly for irregular migrants), internal migration can also be plagued by trafficking of persons, particularly of women and children, as evident in parts of Sub-Saharan Africa (Black 2004) and in India and China (Lee 2005).

Internal and international migration also have their differences. Wage differentials are often lower within countries than between countries, reflecting smaller differences in economic conditions within countries than between countries.

Internal migration may have a larger role in reducing poverty than does international migration. While the expected wage gain is lower in internal migration, poor workers may have a better chance of finding work domestically than in economies with higher wages, where workers' lack of skills and language ability restrict job opportunities. Moreover, international migration tends to be more costly, so the poorest workers may not be able to afford it. While data are sparse, household surveys in a few countries indicate the important impact that internal migration has on poverty. In Sierra Leone, internal remittances helped reduce income inequality in poor areas in the 1980s (Black and others 2004). In the Asia Pacific region, international remittances accrue disproportionately to richer regions, while domestic transfers are directed mostly to poorer regions (UN-

ESCAP 2003). In Ghana, internal remittances are estimated to reduce the level of poverty by 14 percent, compared with only 5 percent for international remittances (Adams 2005).

Internal migration can have large costs on receiving areas. The proliferation of HIV/AIDs in Ghana has been linked to the movement of women from rural to urban areas, where unemployment and poverty often force them into the unprotected sex trade (Black 2004b). In some countries, internal migration to the cities has been so massive as to increase crowding and place inordinate burdens on public services, which lowers the quality of urban life.^a

Internal migration often responds to substantial emigration abroad. In the Philippines, there are indications of large movements from rural areas of the Philippines into the Manila region from which most overseas workers are drawn, although this movement appears to have done little to help sustain wages in rural areas (Saith 1997). Bangladesh has seen rapid responses of intra-village migration to replace departing workers (Mahmud 1989). At the same time, as internal migrants gain skills, resources, information, and network contacts, they often emigrate internationally. For example, workers displaced by falling agricultural prices in southern Mexico often moved to northern towns to work in *maquiladoras*, later moving to the United States.

The links between internal and international migration are inadequately understood, in part because basic data are lacking. To gather more data, it has been recommended that a migration module in demographic and health surveys, censuses, household income and expenditure surveys, and labor force surveys be included (Afsar 2005).

^aIn China, for example, rapid urbanization has been accompanied by the emergence of urban enclaves of landless, unemployed migrants from rural areas (Pan 2004).

exchange-rate appreciation or the reduced pressure for policy reform. In general, however, the opportunity to send low-skilled workers abroad provides substantial benefits to origin countries because of the impact on labor markets and remittances.

Low-skilled migration has contributed to poverty alleviation

The reduced supply of low-skilled workers may help to alleviate poverty, if as a result of emigration, poor people receive higher wages or find new opportunities to work or receive remittances (see chapter 5). Low-skilled emigration also alleviates poverty to the extent that the people emigrating are poor.¹⁸ It is unlikely, however, that a large proportion of migrants to industrial countries are poor according to the World Bank's definition of poverty as living on less than \$2 a day although certainly a very large share is poor compared to even the poorest in high-income countries. Most migrants from Mexico to the United States come from households located at the middle and upper-middle levels of the income distribution (Rivera 2005). Individuals with very low incomes are unlikely to be able to obtain the financial resources necessary for migration (see, for example, Mahmud 1989 for Bangladesh). Most of the world's poor people live in countries that are far away from industrial countries (Bangladesh, Brazil, China, India, Indonesia, and most of the countries of Sub-Saharan Africa), so transportation is expensive. Moreover, many poor people lack the rudimentary skills required to obtain a job in industrial countries, as well as the social networks that would facilitate migration and provide assistance once in the destination country.

Nevertheless, the limited data indicate that the very poor do move abroad to some extent. In Sri Lanka, returns from household surveys show that the share of households with a family member abroad is approximately equal across income groups. 19 Adams (2004) provides model-based estimates implying that about 5 percent of Guatemalan households with incomes of less than \$2 a day received

remittances from abroad (used here as a proxy for having a household member who emigrated). Adams (2005) shows that less than 8 percent of Ghanaian households that received international remittances had estimated incomes (excluding remittances) that fell within the first to fourth deciles of households by per capita expenditures; 55 percent had expenditures in the top three deciles. Lucas (2004a) quotes studies of Kerala (India), Pakistan, the Philippines, and Thailand to support a conclusion that most emigrants were not from the lowest income levels, although the poorest did participate to some extent.

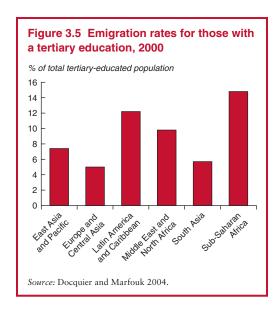
High-skilled emigration

There is a sharp increase in high-skilled migration

The emigration of high-skilled workers from developing countries has increased since the 1970s.²⁰ By 1990, the stock of high-skilled South–North migrants *in the United States alone* was more than eight times the total number of high-skilled migrants from developing to industrial countries over the 1961–72 period, not counting foreign students (Docquier and Rapoport 2004). The number of highly educated emigrants from developing countries residing in OECD countries doubled from 1990 to 2000, compared to an approximate 50 percent rise in the number of developing-country emigrants with only a primary education (Docquier and Marfouk 2004).

Rates of high-skill emigration vary enormously among developing countries, from less than 1 percent (Turkmenistan) to almost 90 percent (Suriname) and by region, from 15 percent for Sub-Saharan Africa to 5 percent for Europe and Central Asia (figure 3.5). It is important to keep in mind this degree of diversity, as high-skill emigration can have very different effects, depending on the size and economic conditions in origin countries.

The increase in high-skilled migration is partly due to the growing importance of selective immigration policies first introduced



in Australia and Canada in the 1980s and later in other OECD countries.²¹ Major recruiting countries have increased their intake of skilled migrants and relaxed their criteria relating to labor-market testing and job offers. Some countries (for example, Germany, Norway, and the United Kingdom) have introduced new programs; others (such as Austria, Republic of Korea, the Netherlands, and Sweden) offer fiscal incentives to attract talent to specific sectors (OECD 2005). These programs, and the migrants themselves, are responding to rising skill premiums in industrial countries that have tightened global competition for skilled workers.

In some instances, high-skilled emigration has a negative impact on living standards of those left behind and on growth

There are several reasons that migration of high-skilled workers may decrease living standards and growth. First, the total return to education may be greater than the private return, because highly educated workers may be more productive when interacting with similar workers, and they may help train other workers. One statistical measure of the beneficial impact of high-skilled immigrants is that in the United States, both international

graduate students and skilled immigrants were found to be positively correlated with patent applications (Chellaraj, Maskus, and Mattoo 2005). Highly educated citizens may also make contributions to public goods—for example, in improving governance and strengthening the administrative capacity of the state—which may be lost through high-skilled emigration (McMahon 1999).

Second, the productivity of firms may increase with size. If large firms require networks of professionals with specialized skills, then overall productivity will be higher with many professionals. For example, the value of telephone networks increases with the number of people connected. Expanding networks efficiently may require highly technical skills.

Third, emigration of high-skilled workers may impose a fiscal cost. In most developing countries education is heavily subsidized by the state, so that the permanent emigration of educated workers represents a loss of fiscal revenues.²²

Finally, emigration of high-skilled workers will increase the price of services that require technical skills. It is difficult to provide comparable levels of service with low-skilled workers, and greater resources devoted to training may be lost through further emigration.

But high-skilled migration is often beneficial for origin countries

The costs of high-skilled emigration should be evaluated against the beneficial effects of migration, skilled and unskilled: increased remittances, higher wages (for migrants and workers who stay home), and benefits to destination countries (see chapter 2). Moreover, high-skilled emigration will have a limited impact if it is difficult for high-skilled workers to find productive employment in the country of origin. This may be the case for three reasons. First, the investment climate may be so poor, because of political instability or other reasons, that many high-skilled workers cannot pursue their professions. Even under such conditions, however, high-skilled emigration may be harmful if it deprives the government of

competent administrators and limits the prospects for growth once the investment climate improves. Second, a significant proportion of high-skilled workers may not be trained in professions required by the economy, perhaps because of government subsidy policies. And third, some of the smallest developing countries lack the economic scale to productively employ a large number of specialized professionals.²³ These issues serve to underscore concerns over the appropriateness of state subsidization of university education in many countries.²⁴

Some recent articles have claimed that high-skilled emigration, even of productively employed workers, may benefit development. The opportunity to emigrate increases the returns to education, leading more individuals to invest in education with a view to emigrating. However, only some of the educated people will actually emigrate. If the increase in human capital of those unable to emigrate exceeds the loss from those who do emigrate, then society's human capital rises following the opening of emigration opportunities (a phenomenon known as the "brain gain").25 The effect will be largest in countries with large stocks of emigrants (so that the probability of emigration is high). These models have been questioned, however, because they assume that foreign firms are not able to discriminate among educated workers (otherwise they would take the best qualified, and so destroy incentives for education by marginal candidates), and because these models do not apply where family reunification programs, unrelated to the skills, predominate (Schiff 2005).

Findings on the impact of high-skilled emigration are mixed

It is difficult to generalize about the impact of skilled migration. The dispute over gains and losses has remained largely conjectural and has not been settled by the available empirical studies. On balance, it is not possible at present to provide an aggregate, reliable estimate of the true impact of high-skilled emigration. Some partial conclusions follow.

Table 3.2 Emigration rates of skilled workers, 2000

Percentage of workers with tertiary education living abroad

	Less than 10%	10% to 20%		More than 30%
Number of countries	62	33	16	28
Share of developing country population (%)	75	19	3	3

Source: Docquier and Marfouk 2004.

The available data indicate that high rates of high-skill emigration affect only a small share of developing countries' population. A data set developed by Docquier and Marfouk (2004) indicates that the 77 countries with high-skilled emigration rates (to industrial countries) in excess of 10 percent account for only one-quarter of developing-country population (table 3.2).²⁶ Moreover, about half of these people live in countries with very poor investment climates (included in the bottom 25 percent of developing countries, as measured by the United Nations' Human Development Index), which may indicate that many high-skilled workers face limited opportunities to practice their professions. It is important to note that these data do not distinguish by profession (even though high emigration rates for literature professors and physicians would have different economic impacts) or by quality (the emigration of a Nobel laureate physicist would represent a greater loss than the emigration of an average university graduate).

Some countries encourage skilled migration. China, Cuba, India, the Philippines, Sri Lanka, and Vietnam all have programs to facilitate training for migration, suggesting that some policymakers see the benefits of skilled migration—among them remittances, relieving job market pressures, development of an extensive diaspora, and expectations that many migrants will eventually return with improved skills (as discussed below).

Direct, cross-country tests of the relationship between high-skilled emigration and growth have been mixed. The preponderance of evidence supports the view that education makes an important contribution to growth.²⁷ Beine, Docquier, and Rapoport (2001) detected a positive and significant impact on human capital formation from the opportunity for emigration, whereas Faini (2003) found that a higher probability of migration for workers with secondary education had no visible impact on secondary educational achievement in the home country.

High-skilled emigration has had enormous impact on some sectors, especially health

The sectoral distribution of high-skilled emigrants is important for assessing the implications for countries of origin. Meyer and Brown (1999) estimate that about 12 percent of developing-country nationals trained in science and technology live in the United States. If accurate, these estimates suggest that high-skilled emigration may be much more serious for production than shown by the data from Docquier and Marfouk (2004) given above, where total high-skilled emigration to industrial countries was estimated at about 8 percent of the stock of high-skilled developing-country nationals.

High-skilled emigration may have a particularly severe impact on the health sector, and the emigration of doctors and nurses may reduce the likelihood of some countries meeting the Millennium Development Goals for reducing child mortality, improving maternal health, and combating HIV/AIDS and tuberculosis. Chanda (2001) estimates that at least 12 percent of the doctors trained in India live in the United Kingdom, that Ethiopia lost half of its pathology graduates from 1984 to 1996, that Pakistan loses half of its medical school graduates every year; and that in Ghana only about one-third of medical school graduates remain in the country. Perhaps one-half of the graduates of South African medical schools emigrate to high-income countries (Pang, Lansang, and Haines 2002), and Jamaica had to train five doctors, and Grenada 22, to keep just one (Stalker 1994).²⁸ Of course, the incentive for migration is often conditioned not only by the opportunity for higher earnings abroad, but also by poor working conditions and public sector services in origin countries.

Origin countries face considerable difficulties in limiting high-skilled emigration

Even if high-skilled emigration were found to be detrimental to living standards and growth, countries of origin would face serious obstacles in reducing it. Some countries have required that graduates of publicly funded education work for a period of time in public sector jobs. But such requirements can be evaded, and their existence is likely to discourage return of migrants to the country of origin. Several proposals have been made for international schemes to tax high-skilled emigrants, with the funds earmarked for developing countries. Such schemes have made no progress, as they would be hard to enforce. Calculating the welfare loss from high-skilled emigration and thus setting an appropriate level of tax would be difficult. Moreover, the schemes would require the cooperation of migrants and countries of destination—something not likely to be achieved. Bhaghwati (1976) advocates that developing countries should subject their nationals working abroad to local taxes, as does the United States. However, many developing countries would find such a system of taxation difficult to administer.

Some governments encourage skilled workers to stay by improving working conditions, providing research facilities, and giving incentives for research (see the discussion of incentives for return, below). China has reported a nine-fold increase from 1995 to 2003 in foreign programs offered in cooperation with local institutions, which has resulted in lower numbers of students going abroad (Vincent-Lancrin 2004). Such programs may require substantial resources, and poorer countries will face difficulties in creating the conditions required to retain their most-skilled workers. In some cases improvements in governance, which may require political determination rather than large expenditures, may help to retain workers.

Cooperation from destination countries may help

Effective means of limiting high-skilled emigration, or increasing its benefits, will require the cooperation of countries of destination. One example has been the United Kingdom's code of practice for the international recruitment of health-care workers, which restricts the active solicitation of health care professionals from developing countries. However, implementation has been difficult because the code does not apply to private sector recruiters (House of Commons 2004). A recent proposal to require countries of destination to provide Caribbean countries with subsidies for training health professionals could increase the supply of health workers in both origin and destination countries (Commonwealth Secretariat 2005).²⁹ More broadly, contributions by destination countries to education in origin countries could both compensate origincountry governments for their training of emigrants and improve the qualifications of workers coming to destination countries. Another approach, which would improve the coherence of development policies, would be for destination countries to increase their investment in sectors in which they lack skills, rather than "raiding" those skills from poor countries.

Diasporas

A large diaspora can expand market access for origin countries

A potent benefit of high-skilled emigration is the creation of a large, well-educated diaspora, which improves access to capital, information, and contacts for firms in countries of origin. Immigrants play a role in facilitating trade by providing information and helping to enforce contracts (Rauch and Trindade 1999) and by acting as intermediaries that can match buyers with reliable local suppliers (Yusuf 2001). Johnson and Sedaca (2004) emphasize that diasporas can act as "first movers" who catalyze growth opportunities and make connections between markets that otherwise would not exist. Barré and others (2003) cite the importance of diasporas in

generating possibilities for codevelopment between firms in the countries of origin and destination, and expanding technical cooperation. With the growth of outsourcing of manufacturing components and telecommunications and other services, diaspora networks may be of increasing importance. However, despite the broad agreement on the importance of diasporas and the many anecdotal comments on how they have assisted development, it is difficult to quantify these benefits.

The diaspora can be a significant source of foreign-exchange earnings (beyond remittances) for countries with sizeable emigration. Orozco (2003) documents diaspora-related increases in exports and tourism receipts for Central America. Gould (1994) and Head and Ries (1998) found that increased emigration to the United States and Canada raised exports from countries of origin.

There is some evidence that the diaspora plays an important role in the transfer of knowledge between destination and origin countries. Agrawal, Cockburn, and McHale (2003) find that patent applications are likely to be filed in both the country of residence and the country of origin. Meyer and Brown (1999) and Brown (2000) identify Internet-based expatriate networks of skilled professionals and students that facilitate the transfer of knowledge. However, the effectiveness of these networks is open to question: less than half of the 61 Internet-based networks examined in 2004 were updated regularly, and only 56 percent were updated within the past year.³⁰ Origincountry governments can help maintain ties to the diaspora by supporting professional networks, promoting dialogue with government, and funding educational, linguistic, and cultural programs.

The return of expatriates can benefit development

The return of expatriates to their home country is widely perceived as benefitting development (Ellerman 2003). Expatriates may

be more effective than foreigners in transferring knowledge back home because of their understanding of local culture. However, returnees may also represent retirees, or the less-skilled of the skilled cohort of emigrants (Borjas and Bratsberg 1994; Lowell and Findlay 2001), or may have difficulties in readapting to the home country (Faini 2003), or their skills may have deteriorated while abroad (Ghosh 1996). Returnees may be those disappointed by the wages or working conditions or may have more difficulty in finding or retaining jobs.³¹

A range of programs have been established to encourage return of highly educated nationals living abroad, with mixed results. Among developing-country governments, for example, China, the Philippines, Taiwan (China), Thailand, and Tunisia have offered a wide range of incentives, including research funding, access to foreign exchange, expanded real estate investment options, and study opportunities.³²

The domestic policy environment is critical to productive return. Cervantes and Guellec (2002) cite the favorable impact of returning expatriates in the Republic of Korea, attracted by strong research and development (R&D) environments and infrastructure investments. Industrial parks helped to lure entrepreneurs back to China. In Taiwan (China), the Hsinchu Industrial Park attracted more than 5,000 returning scientists in 2000 alone (Saxenian 2002). Conversely, a poor investment climate will inhibit return. In Armenia, barriers to foreign direct investment (FDI) and inadequate enforcement of contracts have prevented a more active involvement of the Armenian diaspora in local development (Gevorkyan and Grigorian 2003). Saxenian (2000) cites the reluctance of Indian entrepreneurs to return because of government regulations that increase the administrative cost of operating a business-although the Indian diaspora has contributed to the development of information technology in Bangalore.33

Both origin and destination countries can help facilitate return, on both a temporary and

permanent basis, through changes in regulaion. Both can allow dual citizenship, an increasingly common practice (Aleinikoff and Klusmeyer 2002). Origin countries can eliminate rules that prevent emigrants from owning or investing in property back home. Permanent residents can be protected from losing their status if they leave for a relatively limited period of time, as this discourages productive temporary returns to the origin country. Destination countries can also allow returning migrants to benefit from the rights they acquire during their work abroad, such as pensions, health insurance, and disability programs (Holzmann, Koettl, and Chernetsky 2005).³⁴ Such arrangements, however, require effective institutions in the origin country to provide such services and are best achieved through negotiations between origin and destination countries.

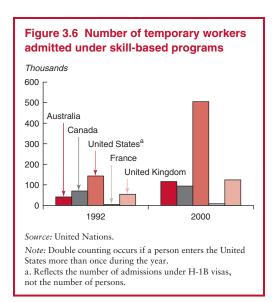
Destination countries have provided various incentives for the return of migrants. For example, France has provided loans and technical assistance to migrants from Mali and Senegal to establish businesses in their home countries. However, few of the businesses appear to have been successful, either because of the inadequate investment climate in the recipient communities (Gubert 2005) or because participants had worked in low-level jobs in France and lacked entrepreneurial skills (Magoni 2004). Many of these programs are quite small.³⁵

International organizations, too, have managed programs to promote return, although they tend to cover few emigrants. The IOM's Return of Qualified African Nationals program successfully attracted more than 2,000 highly skilled persons back to 41 African countries from 1974 to 1990, and the program was later expanded to the Migration for Development in Africa program (MIDA).³⁶ Similar programs have been run for Latin American countries, Afghanistan, and Bosnia and Herzegovina.³⁷ The United Nations Development Programme's TOKTEN project promotes temporary return (threeweek to three-month development assignments), which is often easier to achieve.

Temporary migration and international agreements

The number of temporary workers admitted to high-income countries under skill-based programs rose substantially in the 1990s, doubling in the United Kingdom and almost quadrupling in the United States (figure 3.6). Foreign student programs are also proliferating, in part due to competitive marketing and entry policies by Australia, Canada, Germany, and the United Kingdom. Inflows of unskilled, seasonal workers also have increased since the early 1990s in most high-income countries that have such programs (UN 2004). Greater emphasis on temporary migration may reflect opposition to expanding permanent migration.

Temporary labor migration schemes vary greatly from country to country. Skilled migrants tend to have more opportunities under unilateral visa programs (such as the U.S. H-1B visa and the temporary skilled migration programs of Australia and Canada), while unskilled migrants often must rely on bilateral or regional agreements, such as the seasonal work programs between Germany and countries in central and eastern Europe.



Temporary migration may facilitate greater migration flows

While temporary migration programs can generate benefits similar to those of permanent migration (such as higher incomes for migrants, improved efficiency in destination countries, remittances for origin countries), in some respects those benefits differ between permanent and temporary migration. For the legal migrant, being admitted on a temporary basis may be less desirable than permanent residence, which provides for free movement between destination and origin countries. However, the existence of temporary migration programs (reflecting resistance to permanent migration) may facilitate larger legal flows.

From the point of view of the destination country, temporary migration offers the flexibility to target required skills and to adjust entry in response to changes in labor demand. Temporary migration can reduce fiscal pressures that may be associated with low-skilled immigration, in that temporary migrants tend not to bring their dependents (who may require public services). At the same time, programs can be made conditional on employment, thereby limiting social tensions from immigration. Provisions for temporary migration also can be viewed as offering an alternative to irregular migration.

The record of destination governments in ensuring that temporary migration programs are indeed temporary has been mixed. For example, over 22 years, most workers in the Mexico-U.S. guest workers program returned at the end of their seasonal jobs, although some found ways to obtain permanent status (Martin 2003). Similarly, from 1960 to 1973, threequarters of the 18.5 million foreigners who came to work in Germany left. But 25 percent remained. Coupled with rules that allowed many to eventually bring their dependents, this resulted in significant permanent settlement. There is some evidence that the recent guest worker programs in Europe, particularly those involving subcontracting for short-term projects and some return incentives, have managed higher return rates (Lucas 2004a).

There are advantages and disadvantages to temporary migration

Reliance on repeated, temporary migration for workers also has some economic drawbacks. Hiring a temporary immigrant may mean a shorter duration of employment compared with hiring a permanent immigrant, and thus higher costs for training. Temporary migrants are also less likely than permanent ones to invest in skills specific to the destination country (such as language proficiency and licensing requirements), because the returns are enjoyed over a shorter period of time (Chiswick 2000). Nevertheless, for emigrants from developing countries, the wage differentials are so large that they may justify substantial investments in acquiring such skills, even for temporary stays.

For the origin country, remittances (and repatriation of assets) may be higher with temporary migration, because temporary migrants are less likely to bring their dependents and more likely to maintain close ties with the home country. Perhaps most importantly, temporary migration programs can provide an opening to increase legal, unskilled migration, which generates the greatest developmental impact for origin countries, as already noted. On the other hand, temporary migration may provide a less reliable means of exporting large labor surpluses, as cancellation of future access is easier for destination countries than expelling existing migrants. However, it is this flexibility (coupled with less long-run population pressure, fewer concerns over integration, and fewer pension commitments) that makes temporary migration desirable for destination countries, thus facilitating agreements for larger unskilled migration (Winters 2005).

Bilateral agreements can play an important role in low-skilled, temporary migration

Bilateral labor agreements have become a major vehicle for low-skilled, seasonal workers in agriculture, tourism, and construction, as evidenced by agreements between the United States and Mexico, Germany and central and

eastern European states, and Saudi Arabia and Egypt and Libva. There are several hundred such agreements worldwide, including some 168 signed in the last 50 years in Latin America alone, half in the past 10 years (IOM 2005a).³⁸ Bilateral agreements could improve the benefits of temporary migration for origin countries through greater certainty of access and conditions. This may be particularly important in markets where increased competition from other suppliers might lead to a reduction in access (as occurred in Saudi Arabia and the Middle East in the 1990s). Bilateral agreements can help build the confidence in both origin and destination countries that a particular channel of migration will generate real benefits and minimize costs—for example, that migrants will be treated well and will return at the end of their contract.

Several factors impede the maximization of gains from bilateral agreements, however. Some origin countries may lack sufficiently reliable information on demand for their workers in destination countries, and in which sectors, to negotiate appropriate agreements. Destination countries may likewise have difficulty reliably estimating labor shortages in particular sectors. And origin countries may face resource constraints in implementing obligations with regard to prescreening of migrants or monitoring of their return, although these may be covered by the destination country (as in a nurses program between Romania and Italy). Origin countries may also lack bargaining power to conclude terms favorable to them or to conclude agreements at all. For example, of 18 bilateral agreements proposed by the Philippines with countries in Africa, Asia, Europe, and the Middle East, five countries refused to enter into agreements, and others have remained inactive (Go 2004).

Nevertheless, there is scattered evidence that countries like the Philippines have been able to use bilateral agreements to gain favorable employment conditions for their migrants—and in some cases to support their return and reintegration (Lucas 2004b).

Bilateral agreements can help ensure that origin-country credentials are accepted in destination countries, for example.³⁹ They can help ensure that temporary migration is indeed temporary, and that returning migrants are reintegrated, by supporting the transfer of technology and human resource development in the origin country, as under Spain's agreements with Colombia and Ecuador (IOM 2005a). Bilateral agreements can also ensure that the origin country cooperates in monitoring and managing migration, for example, by incorporating a readmission provision (as in the 1997 agreement between Italy and Albania).

They also can limit the effects of brain drain. For example, a pilot scheme between the Dutch and Polish ministries of health prepared Polish nurses for employment in the Dutch health care system for a maximum period of two years and to facilitate their subsequent return and reintegration into the Polish health care system. 40 Other proposals take a development-cooperation approach, under which destination countries fund the training (to their standards) of a given number of nurses in excess of origin country demand, with the surplus nurses granted temporary visas to work in destination countries for a specified period, with guaranteed return.

Except in the EU, regional and international agreements have had little impact on migration

At the regional level, there has been some progress on removing technical and administrative barriers to the cross-border exchange of skilled personnel for business purposes in Africa, Europe, Latin America, and parts of Asia. Also, several consultative processes on migration have emerged at the regional and global levels. However, with the major exception of the EU, most regional arrangements have had little impact on the free movement of less-skilled foreign workers or on permanent migration (World Bank 2005).

International treaties have had only limited impact on migration. Mode 4 of the General

Agreement on Trade in Services (GATS) has the potential to improve cooperation on labor services between countries of origin and destination, but so far it has not facilitated a significant rise in cross-border labor movements (box 3.2). The ILO has pioneered the development of international instruments for protecting the rights of migrant workers, and the UN General Assembly adopted the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, which clearly defines the rights of migrant workers, including irregular workers (Wickramasekera 2002). The convention entered into force in 2004. However, none of the major destination countries have ratified it yet, and its means of enforcement are limited.

International agreements governing migration contrast sharply with those for trade

A major impulse behind the General Agreement on Tariffs and Trade and its successor, the World Trade Organization, was that multilateral agreements that provide for nondiscrimination among countries would maximize the gains from trade. By contrast, there is little support for multilateral, nondiscriminatory approaches to migration, at least in destination countries. In part this is because the economic implications of nondiscrimination differ between trade and migration. In trade, nondiscrimination maximizes economic efficiency by allowing the lowest-cost supplier to compete, thus reducing prices and forcing high-cost producers to improve efficiency or exit the market. But labor markets in highincome countries are generally not permitted (through minimum-wage laws and socialinsurance schemes) to adjust fully to the lowest-cost supplier. Thus the benefits of nondiscrimination are weaker in migration than in trade. U.S. consumers benefit if Indian shirts are cheaper than Mexican shirts, but U.S. employers benefit little if Indians are willing to work for less than Mexicans-the decline in wages is limited.

Box 3.2 Mode 4 and international migration

The WTO General Agreement on Trade in Services (GATS) does not cover labor migration per se, but rather the narrower concept of movement of people across borders as one of four modes of delivering services. Mode 4 covers the temporary movement of persons across borders for the purpose of supplying a service. "Temporary" movement is not defined, but permanent migration is explicitly excluded, as are workers in most nonservice sectors, such as agriculture or manufacturing.

Mode 4 service suppliers can be viewed in terms of both duration and purpose of stay: they enter a country for a specific purpose (to fulfill a service contract), for a limited and (generally) specified period of time, and are usually confined to one sector or one job (they do not enter the labor market and are not free to search for employment). Mode 4 is normally understood to include business visitors (persons who come for three months or less to negotiate a contract), intracorporate transferees (persons transferred within a company from one country to another), and suppliers of contractual services (individuals or employees of foreign companies with a contract to supply a service to a client in the receiving country). While Mode 4 includes persons at all skill levels, to date market-opening commitments by WTO members have been limited to the highly skilled.

Relatively few market-opening commitments on Mode 4 have been made by both developed and developing countries. Those that have been made tend to be subject to restrictions on number, type, and duration of stay of service suppliers. Countries' actual regimes for temporary entry of workers tend to be more liberal than their GATS commitments, however, and considerable movement on service issues is occurring in a range of sectors (such as health), notwithstanding the near-absence of relevant GATS commitments.

Five issues arise regarding GATS Mode 4 as an instrument to manage labor mobility. First, GATS commitments are fixed commitments of guaranteed

treatment, while migration regimes seek to retain flexibility to make adjustments in line with labormarket conditions. Second, GATS commitments follow the most-favored-nation (MFN) principle that is, treatment offered to one country must be extended to all WTO members—whereas migration regimes can offer special treatment to countries with which regulatory trust or other special relationships have been built (through visa waiver programs, for example). Third, GATS Mode 4 covers only a relatively limited subset of the workers moving around the globe. Agricultural workers, for example, are not generally viewed as falling under the GATS. Fourth, multilateral trade negotiations have a 50-year history, while migration has largely remained a national policy prerogative characterized by limited international dialogue. Finally, movement of people, especially the lower-skilled, raises a raft of issues related to social and cultural integration, exploitation, impact on local labor markets, and, more recently, security that trade agreements are ill-equipped to address.

Against this background, what role might the GATS play in managing labor mobility? The GATS is a narrow, but sharp, instrument that can deliver a powerful guarantee of access, but only for certain types of workers. Beyond this, however, GATS negotiations can be used to create a sense of urgency that may serve to bring migration authorities to the table to discuss ways to manage mobility. Bilateral or regional approaches could, for example, include lowskilled workers and develop creative, cooperative approaches to issues such as remittance transfer, brain drain, and loss of investment in education, prescreening of temporary workers, and return. These agreements could assist in building regulatory trust and improving management schemes in receiving and sending countries. Over time, by creating a template of basic requirements or criteria that could be applied to all countries on a nondiscriminatory basis, they could be used to extend access to a wider group of countries and so approach the MFN principle of GATS.

But the largest reason that nondiscriminatory approaches are limited is that people are not goods: migration has much broader implications for society than does trade. Destination countries tend to be concerned that immigrants from countries with very different cultures will not integrate easily into society, and high-income countries tend to limit low-income migrants for fear of overburdening public services (see chapter 2). Thus even those countries that have immigration regimes that do not discriminate by country tend to discriminate by level of skill.

A final important distinction between trade and migration is that trade is subject to relatively effective regulation, while many countries of destination face considerable difficulties (and internal disagreements) in regulating immigration. The lack of effective regulation and incomplete efforts to control immigration encourages many low-skilled migrants to run substantial risks that can lead to conditions akin to slavery, great physical danger, and even death. On the other hand, the same lack of control works to the advantage of migrants by offering opportunities that might not otherwise exist and by benefiting groups within destination countries. The evidence in this chapter suggests that cooperation between origin and destination countries, through agreements that provide for temporary, lowskilled migration, and through enforcement of laws protecting migrants from exploitation and abuse, can improve the impact of migration for countries and for migrants.

Notes

- 1. Of course, migration may arise out of a combination of economic, political, and social goals. Also, migration among developing countries is an increasingly important phenomenon, but given data limitations we focus here on migration from developing to industrial countries.
- 2. Empirical work largely confirms the view that income differentials are important determinants of migration. Borjas (1987), Karemera, Oguledo, and Davis (2000), and Hatton and Williamson (2002) found that migration to the United States was negatively related to source-country income per capita,

- among other variables. Solimano (2002) found that real per capita income differentials between Argentina and source countries were the main determinant of net migration flows in the twentieth century.
- 3. See also chapter 2, which points out that migrants' earnings (per worker) increase eleven-fold, before adjusting for differences in purchasing power in high-income versus developing countries.
- 4. The basic idea is that the opportunity to earn money based on developed country prices but spend it (through remittances) based on developing country prices is a major benefit from migration. The same adjustment from the perspective of the migrant is discussed in the modeling exercise in chapter 2.
- 5. See the discussion of remittances and smoothing of household consumption in chapter 5.
- 6. By the late 1990s, public employment services already played an insignificant role in the recruitment of foreign workers, except where migration was covered by bilateral labor agreements (ILO 1997). For example, nine out of ten workers sent from Asia have used private recruiters (Abella 1997); and for Romania, most jobs in countries with which the government has not secured bilateral agreements are found by private intermediaries (Diminescu 2004).
- 7. Hugo (2004) describes how work contractors are the primary source of information for potential migrants from Indonesia, and relates this to the high levels of exploitation of Indonesian contract workers compared with workers from other countries.
- 8. Support services provided through Philippine labor attachés have provided critical legal counseling and protection (Moreno-Fontes Chammartin 2005).
- 9. The funds operated by the Philippines, Pakistan and Sri Lanka provide scholarships, legal aid in destination countries, insurance against death and disability, and loans for predeparture costs, housing, and self-employment. The administration and delivery can often be difficult, particularly on insurance (Tan 2004), and some emigrants may resent the mandatory nature of the schemes (Abella 1997).
- 10. Also regarding Mexico, Mora and Taylor (2005) find that the presence of a family member in the United States increases by 7 percent the probability that an individual will migrate, while McKenzie (2005) shows that larger migration networks increase the probability of other community members migrating.
- 11. An irregular migrant in this context is defined as any person entering, residing, and working in a country without proper documentation of their legal status in that country, or any person who has committed a crime or breach of immigration law in that country and therefore is not entitled to remain in that country.
- 12. However, Cornelius (2001) notes that the share of irregular migrants who settle permanently in the

United States has increased—a trend accelerated by tighter border enforcement adopted in the mid-1990s.

- 13. Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children; and Protocol against the Smuggling of Migrants by Land, Sea and Air, 2000. These supplement the Convention against Transnational Crime, 2000.
- 14. Dedicated government offices such as the Philippines Overseas Workers Administration, unions such as the seamen's union in the Philippines, and non-governmental organizations (NGOs) can help families and communities make adjustments when family members migrate.
- 15. These data are described in Docquier and Marfouk (2004), which relies on census data (plus extensive estimations), and thus undercounts irregular migrants, who are mostly low skilled. The data are taken largely from industrial countries, so that low-skilled migration to other developing countries, as well as high-income countries in the Middle East and Asia, is not reflected (which, for example, reduces the ratio of low-skilled emigrants from South Asia).
- 16. Similarly, mine labor recruiting in South Africa increased wages in the plantation sectors in both Malawi and Mozambique, which ultimately resulted in the curtailed permission to recruit in Malawi in the early 1970s (Lucas 1987).
- 17. For example, the compulsory repatriation of workers to Kerala following the Gulf conflict in 1990–91 threw Kerala into a fairly sharp recession (Lucas 2004b).
- 18. This is not invariably true, for example, if the departure of one household member leaves his or her dependents impoverished. In general, family income is likely to rise with emigration, but cases of real hardship caused by emigration do exist.
- 19. This calculation is based on income that includes remittances from the emigrant, so the number of Sri Lankan households with a family member abroad that were poor *prior to migration* is probably larger.
- 20. Much of the data on high-skilled migration refers to individuals who have some tertiary education, although other kinds of qualifications (electrician, plumber, ability to handle sophisticated machinery) are of economic interest.
- 21. See Lowell (2001) for a list of programs to attract high-skilled workers.
- 22. For example, forgone income tax revenues associated with Indian-born residents of the United States may be equal to one-third of current individual income tax receipts in India (Desai, Kapur, and McHale 2001), although this is a very low share of total government revenues.
- 23. Such countries benefit highly from remittances. Remittances to countries with populations of less than

- 1.5 million totaled about 6 percent of gross national income, compared with an average of 1.7 percent for all developing countries.
- 24. Available data do not distinguish émigrés educated at home from those educated abroad, an issue of growing importance as education is increasingly marketed to the developing world by high-income countries.
- 25. This theory is developed in Mountford (1997), Chau and Stark (1999), Stark (2003), and Drinkwater and others (2002).
- 26. These data do not include high-skilled emigrants to other developing countries, which may be an important issue for many developing countries.
- 27. Microeconomic evidence tends to find that education is associated with higher earnings (Mincer 1991). After some considerable debate, recent articles find that years of schooling have a positive impact on productivity growth (de la Fuente and Domenech 2002), and that the quality of education (as measured, for example, by pupil-student ratios or the dropout rate) may matter more than the quantity (Barro and Lee 2000).
- 28. Clemens (2005) presents an alternative view, arguing that health systems in Africa are not greatly weakened by emigration because the option to emigrate encourages entry into the medical field.
- 29. Institutions exist in countries of origin that train workers for external labor markets, for example some nursing schools in the Philippines and a medical school in Budapest that teaches in German. However, these schools do not receive funds from potential countries of destination (World Bank 2004).
- 30. Data are based on a survey carried out for a background paper, available on request.
- 31. Workers who stayed in Albania had higherquality skills than returnees (De Coulon and Piracha 2002), and returnees from Sweden were found to be less successful economically than emigrants who stayed (Edin, LaLonde, and Åslund 2000). See also Hugo (2002) on re-emigration from Australia and Constant and Massey (2003) on Germany.
- 32. See Pang, Lansing, and Haines 2002 on Thailand, Lucas (2004a) on China, and the IOM office in Tunis on Tunisia.
- 33. The High-Level Committee on the Indian Diaspora (2001) notes the role of expatriates in attracting R&D investments from Intel, Oracle, Texas Instruments, Sun Microsystems, and IBM.
- 34. Recognizing benefits earned abroad may reduce costs to the destination-country government, as many such services are likely to be less expensive in developing countries. The cost implications have some uncertainty, as some migrants will choose to return even without portability of benefits.

- 35. For example, a program between Germany and Eritrea disbursed only 65 loans from 1993 to 1997, while a project in Italy's Veneto region trained only 30 Albanian immigrants in setting up companies or launching joint ventures with local companies in their country of origin.
- 36. The Return of Qualified Africans program was evaluated by the European Commission as contributing to development at micro levels (IOM 2005b).
- 37. The Return for Qualified Afghans has been criticized for offering low compensation packages and involving few individuals despite being expensive to run (Jazayery 2002).
- 38. Australia, Argentina, Canada, and the United States entered into bilateral labor agreements with countries of origin in the mid-twentieth century. The *bracero* program admitted some five million Mexican farm workers to the United States between 1942 and 1966. In Europe, Germany and France recruited guest workers from southern Europe, Turkey, and North Africa after the Second World War until the economic downturn of the 1970s.
- 39. An example is the agreement that provides for the acceptance of Vietnamese information technology credentials in Japan (Vietnam Trade 2005).
- 40. The pilot ended in January 2005, and the outcomes are being evaluated by the Dutch government.
- 41. Regional examples include the Regional Conference on Migration (Puebla Process) and Lima Process in the Americas; MIDSA and MIDWA in Africa; and the Manila, APC, and Bali Processes in Asia. Inter-regional processes include the "5 plus 5" (a migration dialogue established in 2002 between southern Europe—France, Italy, Malta, Portugal, Spain—and the Maghreb group—Algeria, Libya, Mauritania, Morocco, and Tunisia. Global consultation forums include the UN Global Commission on International Migration, the Berne Initiative, IOM's International Dialogue on Migration, and ILO's International Labor Conference.

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