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International Labor Migration in a Globalizing Economy

Robert E. B. Lucas

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Carnegie Endowment for International Peace
Publications Department
1779 Massachusetts Avenue, NW
Washington, DC 20036
Phone: 202-483-7600
Fax: 202-483-1840
www.CarnegieEndowment.org

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About the Author

Robert Lucas is a professor of Economics at Boston University. He completed his B.Sc. and M.Sc. at the London School of Economics and received his Ph.D. from MIT. His research has included work on internal and international migration, employment and human resources, income distribution and inter-generational inequality, international trade and industry, the environment, and sharecropping. Lucas has worked on Bangladesh, Bolivia, Botswana, Brazil, Egypt, Finland, India, Lesotho, Malawi, Malaysia, Mexico, Mozambique, Pakistan, South Africa, Swaziland, and Zimbabwe, among others. Lucas has served as chief technical adviser to the Malaysia Human Resource Development Program, and director of undergraduate studies and the M.A. program in Economics at Boston University. He is also currently a Research Affiliate at the MIT Center for International Studies. His latest book, *International Migration and Economic Development: Lessons from Low-Income Countries*, was published by Edward Elgar Press in 2005.

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Summary

Although migration has expanded less rapidly than either trade or direct investment, migration has become increasingly contentious. The immediate labor market impacts on host countries appear small and dynamic gains from induced technical progress remain undocumented. Circular migration from low-income countries offers a key safety valve where the home state fails to provide employment and security, but there are dangers from over-dependence on the migration–remittance nexus. The least-developed countries benefit only through south–south migration and are probably harmed by a rapidly expanding brain drain.

Contemporary Migration: How Large a Phenomenon?

From 1970 to 2005, the stock of international migrants in the world increased from nearly 82 million to just over 190 million, according to United Nations (UN) estimates.¹ In the same period the volume of global exports expanded more than sevenfold while foreign direct investment, measured in U.S. dollars, grew to more than one hundred times the 1970 level by 2000.² Although international migration has come to attract a great deal of attention during the recent decades of globalization, the expansion in the international movement of people has lagged far behind those of commodities and capital. Indeed, as a fraction of world population, the stock of migrants rose only slightly, from 2.5 percent in 1960 to 2.9 percent by 2005. And that modest increase was due in part to the dissolution of the former Soviet Union, which redefined large numbers of internal migrants as international migrants although they did not cross a border in the interim.

Attempts to barricade borders may not have been the dominant factor in limiting expansion of international migration. Irregular migration is ubiquitous and pervasive. In the United States there are probably more than ten million irregular migrants, and additional border enforcement seems to have done little to stem the flow (Hanson 2006). Various observers estimate some 5–10 million irregular migrants in Europe; and even such nations as Japan and Saudi Arabia are reported to have significant numbers of undocumented workers.³ Among many of the developing nations, where entry requirements are often ill defined and poorly enforced, irregular migration is actually the norm.

The dominant restraint on international migration is surely a reluctance to relocate, despite widening income gaps between the poorest and wealthiest nations. Most people would simply rather stay home, though many are impelled to migrate by the failure of employment to keep pace with the labor force or the lack of security in their home countries.

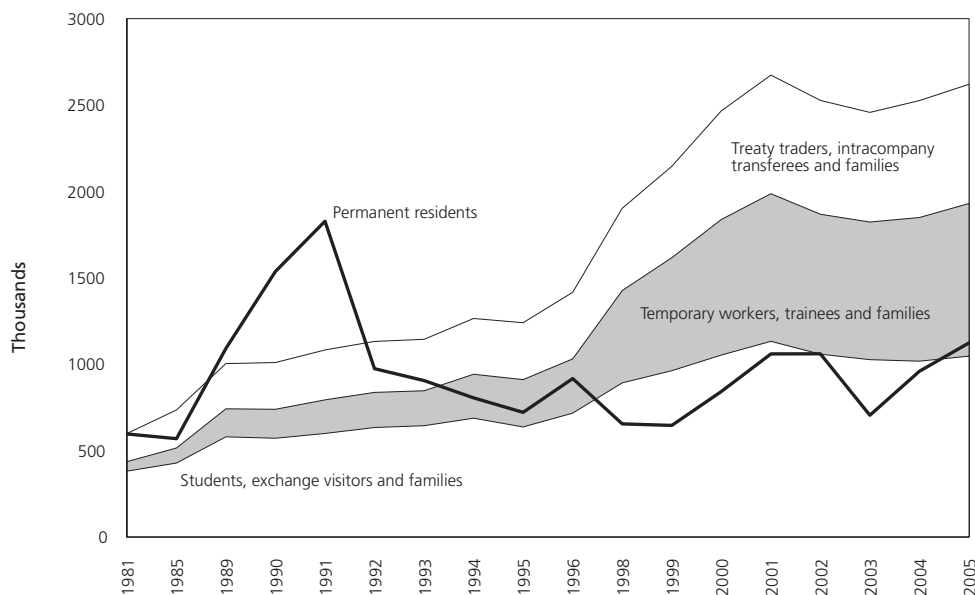
Leaving out the newly defined migrants created by the dissolution of the former Soviet Union, about 56 percent of the world's international migrants were in the More Developed Regions (according to UN definitions) in 2000. This followed a steady increase from 40 percent in 1960. However, a large portion of migrants in the More Developed Regions are from other high-income countries. For instance, almost exactly half of the stock of migrants in the Organisation for Economic Co-operation and Development (OECD) member states in 2000 were from other OECD states; more than a third of all migrants came from OECD members other than Mexico and Turkey.

Since 1990 and the release of the findings of the U.S. Commission for the Study of International Migration and Cooperative Economic Development, the notion of a migration “hump” has passed into conventional wisdom. The notion is that emigration rates initially rise then fall as states become more prosperous. Yet there is little evidence to support this hypothesis.⁴ Net migration from the

least-developed countries is no lower than from their slightly more prosperous counterparts. It is true, however, that the poorest nations have lower emigration rates to the OECD states. Much of the migration from the least-developed countries appears to be into neighboring developing countries. Geography has much to do with this. Distance deters migration, and the least-developed countries are generally more remote from the industrialized world. Indeed, given the major region of origin, there is no clear tendency for emigration to the OECD states to increase with the level of development; the lack of migration from the lowest-income countries to the OECD states thus reflects their geography far more than reflecting any migration hump based on income.

Any perception that migration is synonymous with immigration needs to be dispelled. Though we lack precise measures on circular migration, a large portion of international migrants return home. This is not only true of those who enter on a temporary visa; significant fractions of “settlers” subsequently depart. Some leave because they have accumulated sufficient savings and wish to enjoy them among kith and kin in the old country, perhaps on retirement. Some no doubt leave having become disillusioned with their experience in the new country or because their circumstances have changed. But the world has also witnessed a growth in the use of temporary migration schemes of various kinds. This is illustrated for the case of the United States in Figure 1. The number of people becoming permanent residents in the United States has been on a broad upward trend since the time of the Great Depression. However in the last quarter century, the rise in the number of temporary workers and their families, students, and such categories as Treaty Traders and Intracompany Transferees has clearly been far greater, at least until the events of 2001.

Figure 1. U.S. Visas Issued: 1981–2005



Source: U.S. Department of Homeland Security data at <http://www.dhs.gov/ximgtm/statistics/publications/yearbook.shtm>

In some of the traditional lands of permanent settlement, the use of temporary visas has expanded. For instance, in 1985 the United States issued 47,324 H1B visas (for temporary workers in specialty occupations); in 2004 issues of H1B visas had reached 386,821.⁵ Canada has increasingly relied on temporary permits too. In Europe, migration has always been perceived as temporary, at least initially; and at present sixteen European Union (EU) countries have bilateral agreements in one of the following forms: Seasonal Employment, Project Based Workers, Guest Workers, Internship, Training and Apprenticeship, Cross Border Employment, or Working Holiday Makers.⁶ In Japan, trainees, working students, and over-stayers represent temporary sources of labor, and Korea has recently moved to regularize some aspects of similar schemes. The massive movements to the Persian Gulf from Arab neighbors, South Asia, and Southeast Asia are entirely temporary; and recruitment to the Gulf has continued an upward trend. Temporary worker schemes are thus clearly both ubiquitous and expanding. In fact, given the dangers and costs of re-crossing borders, many irregular migrants probably stay longer than those who enter legally on a temporary permit.

Population movements are, of course, not necessarily conterminous with labor movements across borders. In most contexts the majority of migrants enter under family reunification schemes. More than 60 percent of immigrant visas issued by the United States and by Canada were on a family basis during the 1990s. (In contrast, however, only the very highly skilled are permitted to bring their families to the Persian Gulf states). In addition, students represent one of the most rapidly expanding categories of international migrants. North American universities have long served as magnets for foreign students. In addition, the enrollment of non-OECD students in EU universities increased by about 55 percent during the 1990s, and less traditional destinations such as Japan have begun to attract substantial numbers of overseas students. Moreover, at the end of 2004 there were about 13.5 million refugees recognized by the Office of the United Nations High Commissioner for Refugees, representing just over 7 percent of the global stock of migrants.

The rubric under which migrants enter is thus varied. Yet no matter under which program migrants arrive, it is common to work. The labor force participation rates of those entering for family reunification can be high. In many countries foreign students work while studying; in some contexts a student visa is indeed a thinly disguised device to access cheap labor, and the propensity of overseas students to remain for subsequent employment is frequently high (especially from lower-income countries). Refugees resettled in the higher-income countries certainly participate in the labor force. Though among those seeking asylum, the right to work remains a matter of dispute in a number of countries. But the vast majority of refugees remain in neighboring developing countries, some are in camps, others are scattered geographically; and their sources of livelihood are major concerns (Young et al. 2005).

Migration has thus expanded less rapidly than trade or capital movements during this recent phase of globalization. Nonetheless, even the prevailing levels of population movements prove highly contentious. These movements take many forms though any distinction between migration for labor purposes, as opposed to other reasons, is blurred at best. In particular, temporary migrations are an important aspect of today's world. What are the economic implications of these movements?

Potential Economic Gains and Losses From Migration

Several simulation exercises indicate that the total global income gains from even small increments to labor mobility could be quite enormous. Walmsley and Winters (2003), for instance, estimate that a 3 percent expansion of global migration could generate a larger increase in world incomes than a complete liberalization of all trade flows.⁷

What drives these massive simulated gains are the gaps in earnings between the poor and rich nations. When the gap in earnings of unskilled workers between some of the poorer and richer nations exceeds twentyfold, as presumed in these exercises, transfer from the low to high earnings settings potentially offers huge gains. In the process of these simulated changes, the migrants themselves are, by far, the largest winners. In reality we know that a significant portion of the gains to migrants are now siphoned off by various forms of middlemen. Migration is becoming increasingly commercialized: agents are commonly hired to aid with access to visas and overseas jobs; smugglers charge high fees for bringing irregular migrants across borders; money-transfer intermediaries charge exorbitant rates. Nonetheless the net potential gains to migrants entering the industrialized countries are extremely high. Even if one doubts whether 3 percent more migrants could be found who could actually perform the low-skilled occupations in demand in high-income regions, there can be little doubt that very major gains are indeed feasible. Yet the impacts of any additional migrations on the incomes of those left at home and of natives in the host countries is more ambiguous. While migrants are clearly the big winners, others may even lose.

Impact on Receiving Countries

The initial impact of migrants' arrival upon the host country's economy depends upon a number of circumstances. In contexts where wages are relatively flexible, such as the United States, there is some evidence that the added supply of labor depresses wages of workers within the same broad education level (Borjas 2003). Where wages are less flexible, such as in much of Europe, the impact tends to be revealed in higher unemployment (Münz et al. 2006). Yet, in both cases, the magnitudes of such impacts appear to be relatively small.

More generally, the employability and productivity of migrants depends upon how well their skill profiles match the demands of employers. A few countries, including Australia and Canada, have adopted a point scheme to filter acceptable immigrants in an effort to enhance the likelihood of job matching. However, where prior job offers are required for entry, as in some categories of migrants to the United States, the demands of employers are probably more closely matched. Indeed, it may be argued that a large portion of irregular migration is driven fairly directly by employers' demands. To this extent, penalties on employers for hiring irregular migrants is probably one of the most effective ways of limiting undocumented immigration, but few societies possess the political will to impose and enforce such penalties (Martin and Miller 2000; Hanson 2006). In contrast, employers' demands may reflect hardly at all on the sudden mass influx of refugees that many developing countries have witnessed. Granting asylum to large refugee populations may impose substantial costs on some very low-income countries; finding livelihoods to support those remaining in camps and absorbing others into the domestic labor market become a high priority.

The initial impacts of migration upon the host country are thus quite mixed. Though in most situations, the net overall impact on incomes of natives is probably small. Over time, other factors come into play. First, the mix of industrial activities in the host country may begin to adapt to the new arrivals. For instance, some of the more labor-intensive forms of agriculture would probably not exist today in EU countries and in the United States were it not for access to migrant workers. The fact that some of these lines of agricultural products are also subsidized raises curious anomalies with respect to public policy.

Second, migration can have an impact on the fiscal balance of the host state. Whether migrants are net contributors to this balance depends upon, *inter alia*, whether they are employed, whether taxes are collected out of their incomes, and whether they are eligible for and need state support.⁸ Certainly some of the high-income nations with low or negative natural population growth rates are actively considering the potential for migration to resolve the dynamic problem of supporting an ageing population. More highly-skilled migrants are probably large net contributors to the fiscal coffers, as are migrants of working age, and those who stay only temporarily rather than becoming dependent upon state support in their old age. Thus, unless migration is managed explicitly for this purpose, it is unlikely to offer a major source of relief in the pending social security crises (Lee and Miller 2000).

A third dynamic effect of immigration is the role of migrants in accelerating technical progress in an economy. From the 2000 Census, the U.S. National Science Foundation (2006) estimates that more than 35 percent of Ph.D. scientists and engineers in the United States were foreign born. There are no clear estimates of the contribution of these migrants to technical progress in the United States. Though, more generally, there is evidence to indicate that

additions to human capital may have their biggest impact on growth through technical progress rather than through raising worker productivity (Davies 2003). It should also be noted that any such contributions of immigrant researchers are not confined to the country of immigration alone: there is growing evidence of the effects of research conducted in one country having substantial effects on technical progress abroad as well (Coe and Helpman 1995; Eaton and Kortum 1996). It has even been hypothesized that the concentration of highly-skilled persons in one location may enhance the productivity and pay of each worker. Thus, immigration of highly-skilled professionals could raise the productivity of their native colleagues. Yet there is little evidence to support such positive spillover effects (Acemoglu and Angrist 2001; Davies 2003).

The net impact of migration upon total income generated in the host countries is probably small in most instances. Some of the dynamic effects may be larger though we lack sufficient evidence to be sure. However, these net impacts mask the fact that some groups within the host countries gain while others lose: the distributional impacts of immigration may be substantial even while the net effect remains small. Those in direct competition with the new migrant workers are typically hurt most. Very often these are prior migrants. Employers generally gain from the larger pool of potential employees. Beyond this the distributional effects are, however, mixed. For instance, whether the professional classes gain from the arrival of less-skilled workers depends both upon whether their professional activities benefit from complementary subordinates and whether, as consumers, the middle classes gain from cheaper costs of hiring migrants (for example, as gardeners and babysitters). Also, the professional classes may benefit from lower prices for low-skill services more generally (Davies and Wooton 1992).

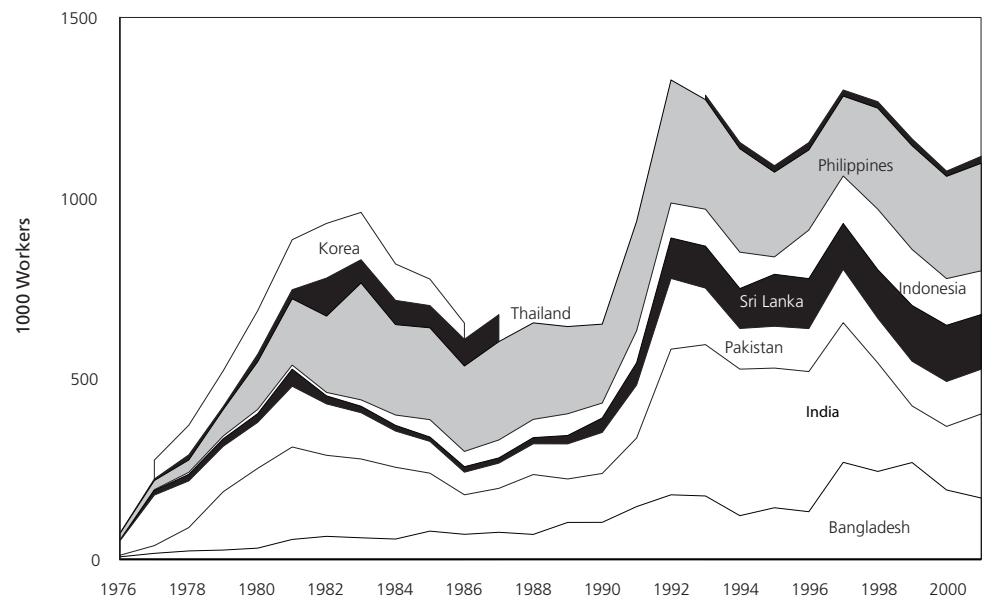
Impact on Sending Countries

Turning from the economic impacts of migrants upon the host countries and their existing populations, consider the case of those left behind in the countries of origin. Again the story is mixed. On the one hand is the negative potential of such factors as “brain drain,” to which the following section will turn. On the other hand, remittances tend to be seen by many governments as the dominant benefit to the home country from labor migration abroad. Reported remittances to the developing regions have grown rapidly, although it is not clear how much of this is simply a growth in reporting. In any case, international remittances to the developing regions are now the largest source of financial inflow after direct foreign investment, having surpassed both debt flows and official development assistance. For several of the major emigration countries, remittances exceed merchandise export earnings. Remittances also offer a critical source of support in times of crisis and tend to increase during times of economic downturn at home, in contrast to other financial flows (World Bank 2006). Remittances provide an important source of income and of foreign exchange. Whether

remittances stimulate domestic investments, hence economic growth, is disputed (Chami et al. 2003; Catrinescu et al. 2007). Some of the evidence points to substantial spending on housing and education investments out of remittance receipts (Edwards and Ureta 2003). Yet, more generally, complaints of inadequate investment out of remittance receipts are surely misplaced: one might wish that the country were investing more, but to insist that those families who receive remittances do this investing seems unfair. There is some emerging evidence that remittance receipts impact the domestic labor markets by encouraging withdrawal from labor force participation or at least reduced work effort (Azam and Gubert 2005). Yet, again, there seems little wrong with this scenario if families choose to take out part of their increased well-being in the form of leisure; moreover in labor surplus economies, a diminution of labor supply is unlikely to impact others negatively. Members of very poor rural households in at least some of the developing countries tend to migrate internally rather than internationally. Nonetheless, some international migration corridors (notably from southern Asia to the Persian Gulf) have offered important opportunities for significant numbers of very poor, low-skilled workers to migrate, resulting in significant poverty reduction at home from the remittances returned⁹ (See Figure 2).

Long-term dependence upon a strategy of exporting labor in return for remittance inflows can prove risky and costly. The risks arise from the potential for sudden cessation of the migration opportunity; large numbers of migrants were suddenly repatriated at the time of the Gulf War, for instance. Having a

Figure 2. Estimated Annual Flow of Asian Workers to the Middle East by Country of Origin: 1976–2001



Source: Lucas (2005)

large portion of the country's adult population absent may also prove costly in terms of family cohesion and even the functioning of society more generally. The absence of parents may harm the education and upbringing of children; this is offset to some extent by additional spending on education permitted by remittance inflows and shaped by the returns to education if the child follows the parent overseas (McKenzie and Rapoport 2006). For some of the tiny island states, such a strategy may nonetheless make sense—where the limited domestic market and high transport costs pose barriers to job creation at home (Pritchett 2004). For most countries, however, such barriers are not binding though the emigration-remittance option may alleviate the political pressure to address a lack of employment creation at home.

Emigration can affect the home labor market directly, as well. For instance, the withdrawal of labor can tighten labor markets, either inducing higher wages or less underemployment for those left at home. In contexts where surplus labor characterizes the home labor market, little impact on wages can be anticipated. Though the pool of workers in low-wage, informal sector employment may be diminished, this offers more opportunities to those remaining at home. Yet by no means do all developing country labor markets exhibit surplus labor characteristics: emigration has been followed by rising wages in a number of contexts (Lucas 2005, chapter 3).

Most of these effects upon those left at home depend to a large extent on whether the migration is permanent or temporary. Temporary migrants, unaccompanied by their families, are much more likely to remit than are permanent settlers overseas. Return migrants may also bring fresh skills with them though such skills do not always match the demands of the home economy, and many returnees elect to retire. The effects also depend quite critically upon the skill profile of those who emigrate.

Migration of Highly-Skilled Workers

The adult, foreign-born population, with a tertiary education residing in the OECD countries rose by almost 8 million from 1990 to 2000 (Docquier and Marfouk 2006). This represented an increase of more than 63 percent. Virtually every OECD country now has mechanisms to expedite the admission of highly-skilled persons, and the competition to attract the highly skilled is intensifying.

By 2000, about 42 percent of the highly-skilled migrants in the OECD countries were from other OECD countries. The interchange of professional personnel among the high-income countries is clearly important. Still, more than half of the highly skilled migrated from non-OECD countries, raising a specter of a growing brain drain from the developing regions. North America remains the dominant destination for highly-skilled migrants: by 2000 about two-thirds of all highly-skilled expatriates in the OECD regions were in North America. However, the share of Europe has been rising, and some 30 percent of

**Table 1. Stock of Expatriate Population with Tertiary Education
OECD Member Countries, 1990 and 2000**

(1000 persons)

| | 1990 | 2000 | Net increase |
|------------------|--------|--------|--------------|
| N. America | 8,205 | 13,238 | 5,033 |
| EU15 | 2,162 | 4,256 | 2,094 |
| Other Europe | 396 | 615 | 219 |
| Asia and Oceania | 1,698 | 2,294 | 596 |
| Total | 12,464 | 20,405 | 7,942 |

Source: Docquier and Marfouk (2006).

the net increase in highly-skilled migrants in the OECD entered the European member countries during the 1990s (see Table 1).

On average, the share of tertiary-educated citizens abroad in the OECD states, relative to the total population of tertiary-educated persons at home and overseas, rises the lower the per capita income is in the country of origin. In other words, the relative rate of brain drain is greater from the lower-income countries. There is, however, considerable variation in this rate of exodus. From some parts of the world the rate of brain drain has been very high: from Central America, the Caribbean, East Europe, parts of the Middle East, Indochina, and from virtually all of the African countries. From some of the smaller island states, well over half of their tertiary-educated population is overseas; and for most of Africa the proportion exceeds 20 percent. In contrast, the rate of brain drain to the OECD countries is relatively low from such countries as Indonesia, Swaziland, and several Central Asian countries. Though from Swaziland, many of the highly skilled migrate to South Africa; and from Central Asia, movement has been into Russia.

An important source of brain drain is the propensity of foreign students to remain abroad to work. As noted above, North American universities have traditionally provided the dominant attraction for foreign students though this flow has more recently been diversified to other high-income countries as well. There is surprisingly little evidence on the return rates of these students. One of the only systematic studies is that of Finn (2001) who reports that 51 percent of foreigners receiving doctorates in science and engineering from U.S. universities between 1994 and 1995 were working in the United States in 1999. Among students from India and China, Finn finds these stay rates were 87 and 91 percent respectively. Indeed, a strategy of attracting the best and the brightest from overseas is implicitly or explicitly becoming a part of national policy for a number of the high-income countries.¹⁰ Offering training at levels not available at home clearly has its merits both for the students and for the host country. Whether it is a blessing for those left at home is far less clear—if the host country pays the tuition costs and especially if the students never return home.

There are, indeed, a number of ways in which the departure of the talented and highly skilled may impose costs upon those remaining in the home country. One concern is with respect to the impact of the brain drain on the fiscal balance in the home economy. Where the home state finances a significant portion of emigrants' education, departure becomes a form of capital flight. Moreover, the home country is normally unable to recoup any of these costs in the form of subsequent income taxes unless the educated person remains or returns to work at home. The second potential cost from the brain drain, which attracts the most attention, is the loss of key personnel from specific occupations: notably the departure of healthcare workers and educators, limiting the capacity of the home state to deliver social services. A final cost is the correlation between the presence of a highly-educated population and various positive aspects of civic life (see, for instance, McMahon 1999). Yet whether the presence of the highly skilled is a causal factor in these positive outcomes and hence whether a brain drain imposes spillover costs by diminishing the quality of civic life is far less apparent.

A key element shaping the magnitude of these brain drain costs is how effectively highly-educated migrants would be deployed if they remained at home. This is especially true with respect to the disruption from the loss of key personnel. It may be true that more healthcare workers could have a major impact on life expectancy and the quality of that life in poor rural areas of developing countries. However, if the realistic alternative for emigrating doctors and nurses is to treat relatively affluent patients in the metropolitan areas of the home country, then their emigration may do little to deepen the problems facing the rural poor. The recruitment of healthcare workers from Africa by health systems in the industrialized nations (including state-run systems) has raised serious concerns amidst the HIV/AIDS and malaria epidemics. Yet in a number of the countries in Sub-Saharan Africa, much could be done to improve the allocation and deployment of existing medical personnel (OECD 2003; Clemens 2006). More generally, Hugo (1996) refers to a "brain overflow" when nations invest heavily in higher education then fail to employ the resultant graduates effectively. Where such underemployment of graduates occurs, the costs of a brain drain may be quite limited—although an increased scarcity of highly-skilled workers may increase income inequality, which has potential negative spillovers.

The term "brain gain" has been coined to represent ways in which emigration of highly-skilled personnel may benefit those left at home. Specifically, two main routes for such gains have been hypothesized. First, a highly-educated diaspora may serve to stimulate trade, capital flows, and technology transfer to the old country. The knowledge of the diaspora about trade and investment opportunities, combined with the ability of the highly-skilled abroad to enforce contracts at home through network links offers a potential for enhanced commerce. Through cultural links with home, the diaspora can act as a conduit for knowledge transfer. Although these potential influences of the diaspora

have come to attract a good deal of attention, there is very limited supporting evidence of their importance. Of the three links, the most systematic evidence to date is with respect to the migrant stimulus to bilateral trade (Rauch 2001). There are also convincing case studies of the importance of a diaspora in the transfer of technology to select contexts (Saxenian 1999, 2002). Yet whether the least-developed countries are able to benefit from knowledge transfers from their diaspora in the industrialized regions remains to be established and might well be doubted.

The second route through which emigration of the highly skilled has been hypothesized to benefit the home country is by stimulating further education at home (Mountford 1997; Stark and Wang 2002). In the Philippines, for instance, there seems little doubt that higher education is an important vehicle for access to emigration opportunities. Yet, in Mexico, emigration to the United States seems to serve as a disincentive for rural families to educate their children since a better education offers little gain to low-income migrants in the U.S. labor market (McKenzie and Rapoport 2006). Moreover, even if education is actually stimulated by emigration opportunities, whether there is any positive net impact on those left at home remains far from clear (Schiff 2006).

If the costs of a brain drain are poorly documented, any benefits from a brain gain enjoy even less supporting evidence. Meanwhile, for those states with high emigration rates of their tertiary-educated population, the question arises as to the available policy options. The industrialized regions will show little self-restraint in attempting to attract the highly skilled; indeed, these efforts are likely to intensify. Restricting emigration ought not to be an option; any such restraint would be a violation of the basic human right of exit. Nonetheless some options exist. Publicly-provided training might be redirected to emphasize skills specific to local needs. For instance, in the healthcare field, paramedics could do a good deal to improve rural health delivery in many developing countries though such training would not be highly demanded overseas. Some countries have already adopted schemes requiring a period of public service for those who receive state financing for their education. In addition, for those who are simply seeking training in order to emigrate, serious thought needs to be given to the role for private, rather than state, financing of their training.

Migration of Less-Skilled Workers

Emigration of the highly skilled may well, on balance, harm those left at home though the extent of this harm remains to be quantified. On the other hand, emigration of low-skilled workers tends to reduce poverty amongst those left at home. The reduction in labor supply at home either puts upward pressure on wages for those remaining in the domestic labor market or diminishes the extent of their underemployment. In addition, remittances from low-skilled workers generally pass to lower-income families at home more than do remittances from the highly skilled. Indeed, the propensity of low-skilled workers to

send remittances out of given wages tends to be greater than that of the more highly skilled; this is only because low-skilled migration is more often temporary in nature and frequently requires leaving immediate family members behind. These potential poverty-reducing effects of low-skilled emigration can, nonetheless, be offset when a family's major income earner leaves then neglects to remit for their support.

In 2000, about 56 percent of low-skilled migrants in the OECD countries were in Europe and a third were in North America.¹¹ The low-skilled foreign workers present in the OECD states are rarely drawn from the low-income developing countries. Geography plays a massive role in shaping migration corridors, and distance is a particularly significant deterrent to migration of low-skilled workers. Thus, among the European OECD countries, 52 percent of low-skilled migrants are from other OECD states (38 percent from OECD members other than Turkey). In the United States, 43 percent of the low-skilled migrants are from Mexico alone. Less than 9 percent of the low-skilled migrants in the OECD countries were from least-developed countries as of 2000; indeed the number of low-skilled migrants from these least-developed countries was almost identical to the number of migrants with a tertiary education from the same countries (see Table 2). It is also apparent, with countries such as Angola, Cambodia, and Laos heading the list of least-developed countries of origin of low-skilled workers, that a large portion of these low-skilled migrants came as resettled refugees.¹²

**Table 2. Expatriate Population in OECD Countries
by Region of Origin and Education Level**

(1000 persons)

| | Education level | Region of Origin | | | | Total |
|---------------------------|-----------------|------------------|--------------|-----------------|------------------|-------|
| | | OECD | Other Europe | Least Developed | Other Developing | |
| N. America | Low | 4414 | 182 | 251 | 2295 | 7142 |
| | Middle | 4517 | 332 | 397 | 3819 | 9064 |
| | High | 4992 | 724 | 537 | 6986 | 13238 |
| Europe | Low | 5839 | 1650 | 626 | 3918 | 12032 |
| | Middle | 2923 | 1001 | 273 | 1870 | 6067 |
| | High | 2395 | 588 | 259 | 1629 | 4871 |
| Asia & Oceania | Low | 883 | 362 | 67 | 1025 | 2337 |
| | Middle | 1144 | 207 | 40 | 585 | 1977 |
| | High | 1146 | 124 | 58 | 967 | 2294 |
| Total OECD | Low | 11136 | 2194 | 944 | 7238 | 21512 |
| | Middle | 8584 | 1541 | 710 | 6273 | 17107 |
| | High | 8533 | 1436 | 853 | 9581 | 20403 |

Source: Docquier and Marfouk (2006).

The upshot is that most of the international migration of low-skilled workers from low-income countries is south–south migration, from one developing country to another. Virtually all of these movements are irregular, and very little systematic data exists on their magnitudes. Many of these south–south migration corridors are to slightly better-off neighboring countries: Bangladesh–India; Indonesia–Malaysia; Myanmar–Thailand; and Lesotho–South Africa. The potential income gains from such movements are clearly far less than from migration to the industrialized regions. Nonetheless some of these streams probably serve an important role in poverty alleviation, especially in cases where migrants originate from the lower-income regions of their home countries. The mass migration of predominantly low-skilled workers to the Persian Gulf and the ensuing remittances have certainly played a critical role in raising living standards among the poor throughout large parts of South and Southeast Asia.

Relationship Between Trade and Migration

There are both direct and indirect links between trade and migration. The interchange of professionals and other skilled workers among countries is a direct and necessary concomitance to merchandise trade and foreign direct investment. Mode 4 of the General Agreement on Trade in Services (GATS) of the World Trade Organization (WTO) provides a formal codification for the movement of persons to deliver services in another country. To date, agreements under this provision have been restricted almost entirely to the migration of highly-skilled and professional service providers. The movement of professionals between the developing and industrialized regions is predominantly one way: from the developing countries. The industrialized nations have been more reluctant to admit low-skilled workers through trade agreements, notwithstanding the tendency of some of these nations to turn a blind eye to irregular migrations.

More indirectly, the globalization of trade could serve to diminish income gaps and hence diminish migration pressures. Are trade and migration thus substitutes? This remains an area of dispute. To the extent that south–north trade is shaped by an abundance of low-skilled workers in the south and by capital and skills in the north, freer trade ought eventually to narrow the gaps in low-skilled workers' earnings, reducing the need to migrate. On the other hand, if the agglomeration of highly-skilled persons in the industrialized countries serves to make each such person more productive, then increased trade can exacerbate the pressures for a brain drain, even in the long run. Perhaps far more importantly, the short-term impacts of sudden trade liberalization can go either way, for workers across a range of skills. For example, a country whose agricultural exports increase may face rising prices of food at home under liberalization; that serves to undermine real wages. By contrast, increased imports of less expensive agricultural goods may lower incomes for small-scale farmers. Combined with macro-economic mismanagement and population growth, trade

liberalization in Mexico may well have exacerbated the exodus to the United States, at least in the short term (Hanson 2006). More generally, liberalization associated with stabilization and structural adjustment programs in the developing countries following the debt crises of the 1980s, financial crises of the 1990s, and transition in formerly socialist countries have initially undermined incomes at home—again adding to the pressures to move overseas.

Meanwhile, some aspects of trade protection in the north have probably exacerbated migration pressures. It is an irony of the public policy in many of the industrialized countries that subsidies and protection to low-skilled activities, notably agriculture, stimulate precisely those sectors providing much of the employment to irregular migrants. Whether the ubiquitous protection of agriculture in the industrialized states harms living standards in the developing world, thus contributing even further to migration pressures, is more ambiguous. Net food importers tend to gain from these agricultural subsidies of the north as do food-exporting developing countries with privileged export access to European markets. Protection of certain crops, such as cotton in the United States, has most certainly harmed living standards among some of the cotton exporters of Africa. There exists little or no coherence between the trade and migration policies adopted by the higher-income countries. These two sets of issues are the realms of separate ministries, which typically fail to coordinate, despite the obvious links between their concerns.

Trade policies of both countries of origin and destination impact migration outcomes. But migration also shapes trade flows. The role of information provided by migrants in stimulating trade has already been noted. In addition, the growing circular migration of scientists and engineers, both among the countries of the north and between the developing and industrialized regions, is a contributing factor in diffusing and shifting technological superiority and hence reshaping trade patterns (Saxenian 1999).

Policy Implications

Globalization of trade and capital flows has occurred far more rapidly than globalization of labor markets and migration. The labor market for professionals and highly-skilled persons is becoming more directly integrated at the global level. However the market for less-skilled workers is integrating mainly through the indirect channel of wage arbitrage represented by outsourcing and trade more generally. There is virtually no movement of less-skilled workers between the least-developed countries and the industrialized world, despite massive prevailing income gaps.

The demands of employers are paramount both in driving the search for skilled migrants and in allowing irregular migration of less-skilled workers to continue. An increasing supply of labor holds down wage costs for firms, while it is probably not in the direct, short-term self-interest of skilled natives to allow

quotas for skilled migrants to increase; nor is it in the self-interest of domestic low-skilled workers to permit irregular migration. However, lack of admission contributes to increases in already massive global inequality and continued overseas poverty; these undermine global stability and security, with potential negative effects on workers at all skill levels in the more developed regions.

Where migration occurs—of professionals, of low-skilled workers from countries bordering on the high-income states, or south–south movements—the migrants themselves are normally the big winners. The return of migrants, or at least their intended return, is critical to gains for those who remain in the country of origin. Temporary migrants remit more, retain more ties with the home country, and may return with useful, freshly-acquired skills and attitudes. An important explanation for the limited amount of international migration observed is a common preference to remain at home. The prevalence of return migration often reflects a similar preference, to go home after a sojourn of high earning and saving abroad.

The element of return is thus important to the interests of those who are left behind and to many of the migrants too. Increasingly, temporary migration is the preferred mode for the host countries also, including the traditional lands of more permanent settlement. A preference to admit migrants only temporarily may be economically motivated. The intent is to have migrants contribute to the local economy and fiscal coffers while of working age, but then to have the migrants depart before they become dependent or the economy no longer needs them. Alternatively, the preference to admit only temporarily may reflect the desire to preserve the nation-state and its character. International migration involves more than mere movement of labor inputs across borders; *people* arrive.

To the extent that temporary migrations are in the mutual interest of the home and host states, it becomes important to seek better methods of managing such programs. Organized recruiting through intermediaries and contracting of projects involving migrant workers generally result in a higher return rate than does casual hiring of individual workers. However, reports are common of abusive and exploitative treatment of workers by intermediaries. Although such contracting schemes are likely to be an important feature of any low-skilled temporary worker programs from developing countries, they will require continuous and active monitoring; and that demands bilateral cooperation. Repeat contracting with agents, conditioned upon a good record of transparency, reliability, and worker treatment would serve as an incentive for agents to improve conditions. Uncertain prospects for reentry discourage return; multiple-entry visas could ease reentry and thus enhance the rate of returning home. Such visas would, however, require appropriate protection to prevent their transfer to others. Mechanisms to transfer pension or social security contributions to an account in the home country, to be collected only by the migrant upon return (or his/her heirs), could also be sought as a device to encourage circular movement.

There has been little progress in addressing these issues at a multilateral level.

Although the GATS of the WTO encompasses cross-border provision of labor services, most of the rapid expansion in international trade in services occurs through cross-border supply, consumption abroad, and especially through commercial presence covered by Modes 1–3 of the GATS. Mode 4 of the agreement, which entails the temporary movement of “natural persons” to provide services, amounts to less than 2 percent of trade in services. Moreover, commitments under Mode 4 have been largely confined to the case of intra-company transferees. Negotiations over Mode 4 have proved one of the most difficult issues in the current Doha Round of trade talks in the WTO. The developing countries, led by India, wish to expand their ability to provide these services based on their low-wage costs. Specifically, this could require exemption from minimum wage laws and social security contributions required by the host countries in which the services would be provided. It also could establish a GATS visa to facilitate movement. Some observers have argued that Mode 4 offers precisely the type of contracting likely to enforce return migration (Schiff 2007). Opponents argue the expansion of Mode 4 to encompass more low-skilled activities would result in social dumping, undermining the wages of the local population, and permanent settling. While the Doha Round has been delayed over other disputes, the prospects for a multilateral agreement on Mode 4 also seem dim. Meanwhile, bilateral (and regional) agreements are proliferating. However, these seldom entail expanded access for less-skilled workers.

A number of steps may be envisaged to improve upon and expand temporary migrant schemes, no matter whether these are bilateral or broader. Yet inherent in such schemes is a dilemma. On the one hand, the civic rights and opportunities faced by migrants in the host setting demand protection. On the other hand, improved outcomes for the migrants discourage return and hence tend to limit the development potential of migration for those who remain behind. Similarly, family reunification is clearly a key concern for migrants; the prolonged absence of a spouse or parent may have adverse effects on marital arrangements and the nurturing of children. Yet family reunification diminishes the likelihood of return, repatriation of skills, and the flow of remittances in the interim. These dilemmas are rooted in human social behavior. Migration policy must thus address more than economic concerns.

Notes

- 1 United Nations (UN) Population Division (2004, 2006).
- 2 Export data from <http://www.imfststatistics.org/>. Foreign direct investment data from <http://stats.unctad.org/FDI>.
- 3 See, for example, International Organization for Migration (IOM) (2000) and Iguchi (2002).
- 4 See Lucas (2005), chapter 2, for a critical review.
- 5 Source: <http://www.dhs.gov/xlibrary/assets/statistics/yearbook/2004/Table24.xls>.
- 6 For a tabulation of these schemes, see Katseli, Lucas, and Xenogiani (2006).
- 7 See also World Bank, 2006.
- 8 See, for example, Bonin et al. (1999) on the case of Germany.
- 9 See, for example, Gustafsson and Makonnen (1993) on Lesotho or Adams (2006) on Guatemala.
- 10 See, for instance, the report on the U.S. context in National Academies (2005).
- 11 Sources: Dumont and Lemaître, 2004 ; Docquier and Marfouk, 2006. Low-skilled here refers to adults with less than nine years of education.
- 12 Yet many of the industrialized countries are even selective with respect to refugee entry. Of the refugees admitted to Canada between 2000 and 2002, about twelve percent had at least a college degree (Citizenship and Immigration Canada, 2003).
- 13 See the collected papers in Lloyd and Williams (1996) and Faini et al. (1999).

References

- Acemoglu, Daron, and Joshua Angrist. 2001. "How Large Are Human-capital Externalities? Evidence from Compulsory Schooling Laws." *NBER Macroeconomics Annual 2000*, 15: 9–59.
- Adams, Richard H., Jr. 2006. "Remittances, Poverty and Investment in Guatemala." in *International Migration, Remittances, and the Brain Drain*, eds. Maurice Schiff and Çağlar Özden. Washington DC: World Bank.
- Azam, Jean-Paul, and Flore Gubert. 2005. "Those in Kayes: The Impact of Remittances on Their Recipients in Africa." *Revue Economique*, November, 56: 1331–1358.
- Bonin, Holger, Bernd Raffelhüschen, and Jan Walliser. 1999. "Germany: Unification and Ageing." *European Economy: Generational Accounting in Europe*, European Commission, Directorate-General for Economic and Financial Affairs.
- Borjas, George J. 2003. "The Labor Demand Curve is Downward Sloping: Reexamining the Impact of Immigration on the Labor Market." *Quarterly Journal of Economics*, 118: 1335–1374.
- Catrinescu, Natalia, Miguel Leon-Ledesma, Matloob Piracha, and Bryce Quillin. 2007. "Remittances, Institutions and Economic Growth." mimeo.
- Chami, Ralph, Connel Fullenkamp, and Samir Jahjah. (2003). "Are Immigrant Remittance Flows a Source of Capital for Development?" IMF Working Paper WP/03/189, Washington DC: International Monetary Fund.
- Citizenship and Immigration Canada. 2003. *Immigration Overview: Facts and Figures*, Ottawa: Ministry of Public Works and Government Services.
- Clemens, Michael. 2006. "Do No Harm: Is the Emigration of Health Professionals Bad for Africa?" paper presented to the Myron Weiner Seminar Series, MIT, February 28.
- Coe, David T., and Elhanan Helpman. 1995. "International R&D Spillovers." *European Economic Review*: 859–887.
- Davies, James B., 2003. "Empirical Evidence on Human Capital Externalities." Working Paper No. 2003-11, Tax Policy Branch, Department of Finance, Ottawa: Government of Canada.
- Davies, James B., and Ian Wooton. 1992. "Income Inequality and International Migration." *Economic Journal*, 102, July: 789–802.
- Docquier, Frédéric, and Abdeslam Marfouk. 2006. "International Migration by Educational Attainment," in *International Migration, Remittances, and the Brain Drain*, eds. Maurice Schiff and Çağlar Özden. Washington DC: World Bank.

- Dumont, Jean-Christophe, and Georges Lemaître. 2004. "Counting Immigrants and Expatriates in OECD Countries: A New Perspective." Directorate for Employment, Labour and Social Affairs, Paris: OECD.
- Eaton, Jonathan and Samuel Kortum. 1996. "Measuring Technology Diffusion and the International Sources of Growth." *Eastern Economic Journal*, Fall: 401–410.
- Edwards, Alejandra Cox, and Manuelita Ureta. 2003. "International Migration, Remittances and Schooling: Evidence from El Salvador." *Journal of Development Economics*, 72 (2), Special Issue: 429–461.
- Faini, Riccardo, Jaime de Melo, and Klaus F. Zimmermann. 1999. *Migration: The Controversies and the Evidence*. Cambridge: Cambridge University Press.
- Finn, Michael G. 2001. *Stay Rates of Foreign Doctorate Recipients from U.S. Universities 1999*. Oak Ridge: Oak Ridge Institute for Science and Education.
- Gustafsson, Bjorn, and Negatu Makonnen. 1993. "Poverty and Remittances in Lesotho." *Journal of African Economies*. 2, May: 49–73.
- Hanson, Gordon. 2006. "Illegal Migration from Mexico to the United States." National Bureau of Economic Research Working Paper No. 12141: Cambridge, MA.
- Hugo, Graeme J. 1996. "Brain Drain and Student Movements," in *International Trade and Migration in the APEC Region*, eds. P. J. Lloyd and Lynne S. Williams. Oxford: Oxford University Press, 210–228.
- Iguchi, Yasushi. 2002. "Japan," in *Migration and the Labour Market in Asia: Recent Trends and Policies*. Paris: OECD: 183–213.
- International Organization for Migration. 2000. *World Migration Report*. Geneva: IOM.
- Katseli, Louka T., Robert E. B. Lucas, and Theodora Xenogiani. 2006. "Migration and Development: Challenges for European Policymaking." Draft Report, OECD Development Centre: Paris.
- Krugman, Paul. 1979. "A Model of Innovation, Technology Transfer, and the World Distribution of Income." *Journal of Political Economy*, April: 253–266.
- Lee, Ronald, and Timothy Miller. 2000. "Immigration, Social Security, and Broader Fiscal Impacts." *American Economic Review*, 90, May: 350–354.
- Lloyd, P. J., and Lynne S. Williams, eds. 1996. *International Trade and Migration in the APEC Region*. Oxford: Oxford University Press.
- Lucas, Robert E. B. 2005. *International Migration and Economic Development: Lessons from Low-Income Countries*. Northampton, MA and Cheltenham, UK: Edward Elgar.
- Martin, Philip L., and Mark Miller. 2000. "Employer Sanctions: French, German and U.S. Experiences." *International Migration Papers*, No. 36, Geneva: International Labour Office.
- McKenzie, David, and Hillel Rapoport. 2006. "Migration and Education Inequality in Rural Mexico." www.iadb.org/intal/aplicaciones/uploads/publicaciones/i_INTALITD_WPPRE_2006_Mckenzie-Rapoport.pdf
- McMahon, Walter M. 1999. *Education and Development: Measuring the Social Benefits*. Oxford: Oxford University Press.
- Mountford, Andrew. 1997. "Can a Brain Drain be Good for Growth in the Source Economy?" *Journal of Development Economics*, 53, August: 287–303.

- Münz, Rainer, Thomas Straubhaar, Florin Vadean, and Nadia Vadean. 2006. "Cost and Benefits of European Immigration." OECD.
- National Academies. 2005. "Policy Implications: International Graduate Students and Postdoctoral Scholars in the United States." Report from the Committee on Science, Engineering, and Public Policy, at http://www7.nationalacademies.org/internationalstudents/Intl_news.html
- National Science Foundation. 2006. *Science and Engineering Indicators 2006*, chapter 3, at <http://www.nsf.gov/statistics/seind06/c3/c3s4.htm>
- Organisation for Economic Co-operation and Development. 2003. *Trends in International Migration: Continuous Reporting System on Migration*. Paris: OECD.
- Pritchett, Lant. 2004. "Boom Towns and Ghost Countries: Geography, Agglomeration, and Population Mobility." Working Paper 36, Center for Global Development, February, Washington DC.
- Rauch, James E. 2001. "Business and Social Networks in International Trade." *Journal of Economic Literature*, 39, December: 1177–1203.
- Saxenian, Anna-Lee. 1999. *Silicon Valley's New Immigrant Entrepreneurs*. San Francisco: Public Policy Institute of California.
- Saxenian, Anna-Lee. 2002. *Local and Global Networks of Immigrant Professionals in Silicon Valley*. San Francisco: Public Policy Institute of California.
- Schiff, Maurice. 2006. "Brain Gain: Claims About its Size and Impact on Welfare and Growth Have Been Greatly Overstated," in *International Migration, Remittances, and the Brain Drain*, eds. Maurice Schiff and Çağlar Özden. Washington D.C.: World Bank.
- Schiff, Maurice. 2007. "Optimal Immigration Policy: Permanent, Guest-Worker, or Mode IV?" mimeo, World Bank.
- Stark, Oded, and Yong Wang. 2002. "Inducing Human Capital Formation: Migration as a Substitute for Subsidies." *Journal of Public Economics*, 86, October: 29–46.
- United Nations Population Division. 2004. *Trends in Total Migrant Stock: The 2003 Revision*, POP/DB/MIG/Rev.2003. New York: United Nations.
- United Nations Population Division. 2006. *Migration Wallchart 2006*, E.06.XIII.6, October. New York: United Nations.
- Walmsley, Terri Louise, and L. Alan Winters. 2003. "Relaxing the Restrictions on the Temporary Movements of Natural Persons: A Simulation Analysis." Discussion Paper No. 3719, London: Centre for Economic Policy Research.
- World Bank. 2006. *Global Economic Prospects: Economic Implications of Remittances and Migration*. Washington DC: World Bank.
- Young, Helen, Abdul Monim Osman, Yacob Aklilu, Rebecca Dale, Babiker Badri, and Abdul Jabbar Abdullah Fuddle. 2005. *Darfur: Livelihoods Under Siege*, June, Feinstein International Famine Center, Medford MA: Tufts University.

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