Think Again: Brain Drain

The movement of skilled workers from poor countries to rich ones is nothing to fear. In the long run, it will benefit both.

BY MICHAEL A. CLEMENS, DAVID MCKENZIE | OCTOBER 22, 2009

"Allowing skilled emigration **is stealing human capital from poor countries."**

No. Many of the same countries courted by the United States through aid and trade deals complain bitterly of the "brain drain" of their doctors, scientists, and engineers to the United States and other rich countries. If correct, these complaints would mean that current immigration policy amounts to counterproductive foreign policy. Thankfully, however, the flow of skilled emigrants from poor to rich parties can actually benefit both parties.

This common idea that skilled emigration amounts to "stealing" requires a cartoonish set of assumptions about developing countries. First, it requires us to assume that developing countries possess a finite stock of skilled workers, a stock depleted by one for every departure. In fact, people respond to the incentives created by migration: Enormous numbers of skilled workers from developing countries have been induced to acquire their skills by the opportunity of high earnings abroad. This is why the Philippines, which sends more nurses abroad than any other developing country, still has more nurses per capita *at home* than Britain does. Recent research has also shown that a sudden, large increase in skilled emigration from a developing country to a skill-selective destination can cause a corresponding sudden increase in skill acquisition in the source country.

Second, believing that skilled emigration amounts to theft from the poor requires us to assume that skilled workers themselves are not poor. In Zambia, a nurse has to get by on less than $1,500 per year — measured at U.S. prices, not Zambian ones — and a doctor must make ends meet with less than $5,500 per year, again at U.S. prices. If these were your annual wages, facing U.S. price levels, you would likely consider yourself destitute. Third, believing that a person's choice to emigrate constitutes "stealing" requires problematic assumptions about that person's rights. The United Nations Universal Declaration of Human Rights states that all people have an unqualified right to leave any country. Skilled migrants are not "owned" by their home countries, and should have the same rights to freedom of movement as professionals in rich countries.

"It's a waste of money to train people who just plan to emigrate."

Not really**.** The belief that skilled emigrants must cause public losses in the amount of their training cost is based on a series of stereotypes. First, large numbers of skilled emigrants are funded by themselves or by foreign scholarships. A survey of African-born members of the American Medical Association conducted by one of the authors found that about half of them acquired their medical training outside their country of birth. Second, many skilled emigrants serve the countries they come from for long periods before departure. The same survey found that African physicians in the United States and Canada who were trained in their country of birth spent, on average, over five years working in that country prior to emigration. This constitutes a substantial return on all investment in their training.

Third, there is the stereotype that skilled migrants send little money to their home countries, as they tend to come from elite families and bring their immediate families with them when they leave. But new research reveals this to be simply unfounded. Skilled migrants also tend to earn much more than unskilled migrants, and on balance this means that a university-educated migrant from a developing country sends *more* money home than an otherwise identical migrant with less education. The survey of African physicians mentioned above found that they typically send home much more money than it cost to train them, especially to the poorest countries. This means that for a typical African country as a whole, even if 100 percent of a physician's training was publicly funded, the emigration of that physician is still a net plus.

Fourth, it is simply not true that all higher education in low-income countries must take place under massive public subsidy. When publicly subsidized higher education is the only way for someone who is not already wealthy to acquire higher education, that person's emigration necessarily means that the subsidy emigrates too. But even in very low-income countries, there are alternative ways of financing higher education. One is to create ways for students to pay up front for their own training, as Makerere University in Uganda has done, but many African universities do not. Another is for the government to give student loans so that students can pay for their own training after the fact, which Kenya has done, but many African governments do not. Both of these break the necessary link between the departure of a worker and the departure of a public subsidy.

In the Philippines, training of the vast majority of nurses who leave the country is financed by the students themselves, the recruiters, or the foreign employers, not by the public; there is no reason whatsoever why similar professional schools could not be established throughout Africa.

"Skilled migrants who leave for a rich country never come back."

False. A striking example comes from recent research in the Pacific, which has amongst the highest rates of skilled emigration globally. Consider Tonga, a small island nation with a population of only 100,000, where skilled workers might stereotypically be thought to have little incentive to go back. Even in this case, by age 35, just over a third of the nation's academic brightest who had migrated after high school were already back working in Tonga. And in Papua New Guinea, half of the most academically skilled migrants had returned home by their early 30s.

In the United States, more than 20 percent of foreign students receiving Ph.D.s already have firm commitments to return to their home countries at the time of graduation, and many more will likely return in subsequent years. Of course there is large variation across countries: Migrants are much more likely to return to booming economies with good job prospects, as is seen by the flows of Indian tech workers back to India in the last decade. But even in cases where few migrants return, those that do may be particularly motivated by a desire to help their home country and may return to key leadership positions. One recent calculation finds that since 1950, 46 current and 165 former heads of government received their higher education in the United States.

"The emigration of doctors kills people in Africa."

Hardly. Allowing or encouraging doctors to leave Africa for rich destination countries can reduce the number of doctors within the countries they come from, although even this is not clear if more people undertake medical training with the hope of migrating. However, the level of medical care provided by doctors in Africa depends on a vast array of factors that have little or nothing to do with international movement — such as scant wages in the public health service, poor or absent rural service incentives, few other performance incentives of any kind, a lack of adequate medical supplies and pharmaceuticals, a mismatch between medical training and the health problems of the poorest, weak transportation infrastructure, or abysmal sanitation systems.

To illustrate just one of these — the lack of rural service incentives — policies that limit international movement choices per se do not change the strong incentive for African physicians to concentrate in urban areas far from the least?served populations. Nairobi is home to just 8 percent of Kenya's population, but 66 percent of its physicians. More Mozambican physicians live in the capital Maputo (51 percent) than in the entire rest of Mozambique, though Maputo comprises just 8 percent of the national population. Roughly half of Ethiopian physicians work in the capital Addis Ababa, where only one in 20 Ethiopians lives.

This and the many other barriers to domestic effectiveness of physicians may explain why, across 53 African countries, there is no relationship whatsoever between the departure of physicians or nurses and poor health statistics as measured by indicators such as child mortality or the percentage of births attended by modern health professionals. If anything, the relationship is positive: African countries with the largest number of their physicians residing abroad in the rich country are typically those with the *lowest* child mortality, and vice versa. This suggests that whatever is determining whether or not African children live or die, other factors besides international migration of physicians are vastly more important. Fiddling with immigration or recruitment policies of destination countries do precisely nothing to address those underlying problems.

"Skilled emigrants build trade and investment ties."

Not always. Just as fears about possible negative effects of brain drain are typically overblown, so is the hype over the ability of countries to tap their diaspora to set up trade and investment. The well-known case of emigrants in Silicon Valley facilitating the growth of the Taiwanese, Chinese and Indian information technology industries is an important example demonstrating that high-skilled workers abroad can have transformative impacts on home country industry. But unfortunately, this is the exception rather than the rule.

In particular, skilled migrants from small islands and from sub-Saharan Africa, where highly skilled emigration rates are the highest, are not likely to be engaging in trade or investment. New surveys find that less than 5 percent of skilled migrants from Tonga, Micronesia and Ghana have ever helped a home country firm in a trade deal, and when they have, the amounts of such deals have been modest. Few migrants from these countries had made investments in their home countries — at most they had sent back amounts of US$2,000-3,000 to finance small enterprises.

However, skilled workers do engage with their home countries in a number of other ways apart from remittances. They can be an important source of tourism for their home countries; more than 500,000 visitors to the Dominican Republic each year are Dominicans living abroad. They are also tourism promoters: 60-80 percent of skilled migrants from four Pacific countries and Ghana advise others about traveling to their home countries. They indirectly spur trade, through consuming their home country's products, and they transfer knowledge about study and work options abroad. The lack of involvement in trade and investment therefore largely reflects a lack of productive opportunities at home, not a lack of interest on the part of migrants in helping their home countries.

Conventional wisdom once held that the wealth of a country declined when it imported foreign goods, since obviously cash was wealth and obviously buying foreign goods sent cash abroad. Adam Smith argued that economic development — or the "wealth of nations" — depends not a country's stock of cash but on structural changes that international exchange could encourage. In today's information age, the view has taken hold that human capital now rules the wealth of nations, and that its departure in any circumstance must harm a country's development. But economic development is much more complex than that.

But thanks to new research, we have learned that the international movement of educated people changes the incentives to acquire education, sends enormous quantities of money across borders, leads to movements back and forth, and can contribute to the spread of trade, investment, technology, and ideas. All of this fits very uncomfortably in a rhyming phrase like "brain drain," a caricature that would be best discarded in favor of a richer view of the links between human movement and development.

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