Executive Summary

The migration of skilled workers from developing countries is a persistent trend, and policymakers in both sending and receiving countries must adjust to — and take advantage of — this mobility. Skilled migration is often thought to have overwhelmingly negative effects on countries of origin. Yet recent research and policy experience challenge this assumption and offer a more nuanced picture. Countries of origin and destination can in fact benefit from skilled migration when it is correctly structured. Conversely, policy efforts to curb the emigration of skilled nationals may have unintended costs for origin countries, in addition to being ethically problematic.

Emigration has several overlooked benefits for countries of origin. Even if migrants do not return to their countries of origin, they transfer money, skills, technology, and even democratic ideas; their stories can inspire investments in education in sending countries; and they expand their own life opportunities in ways not possible without moving. Furthermore, many skilled workers are actually underemployed or unemployed in their country of origin, so in many cases emigration can alleviate labor market pressures in developing countries.

Restricting skilled nationals’ ability to leave their countries of origin has not been shown to yield the intended benefits, and brings substantial costs. To take the example of African health-care workers, there is no evidence that blocking international movement has reduced broad measures of morbidity or mortality. One sign of this is that broad health measures are worse in African countries that have experienced the least emigration of health workers. In general, skilled worker shortages in developing states are not the result of migration, and instead have structural causes that go beyond the emigration of workers.

Therefore, reducing migration flows will not alleviate shortages of skilled workers in developing countries, and instead may actually produce worse developmental outcomes. While national policy efforts have thus far principally been focused on limiting the outflow of skilled nationals, a more promising policy approach would be to plan for a world in which people move, rather than constrain the skill flow between them. Partnerships for skill flow between origin and destination can maximize the benefits to both.
I. Introduction

Skilled workers are migrating more than ever before. In 2000, 24 percent of immigrants to Organization for Economic Co-operation and Development (OECD) countries had a university degree; by 2010, 29 percent had one. Migration to non-OECD countries is getting more skill-focused as well. This migration of skilled workers is a trend that will continue, and it puts pressure on policymakers at both origin and destination. At the origin, policymakers must find ways to build the country’s human resource base to support public service, academia, and the private sector; in a world where many skilled workers leave. At the destination, policymakers face pressure to resolve skill shortages in some sectors and to raise the skill-selectivity of migrant admission, just as they face pressure to protect domestic workers from competition in the labor market.

Are these policymakers opponents? Must there be conflict between the interests of destination-country policymakers (who desire skilled migration) and the interests of origin-country policymakers? “Yes,” begins the conventional wisdom. This idea was captured by British journalists exactly 50 years ago, when they gave a rhyming name to the idea that a gain of skilled workers to a destination country must inflict loss on the origin country: “brain drain.” If this is true, the principal policy question becomes how to slice the pie of skilled labor between the conflicting desires of origins and destinations. In other words, how can these countries work together to ethically limit skilled migration, negotiating benefits to each against costs to the other?

The leading answers to this question include imposing limits on the international recruitment of skilled workers, promoting national self-sufficiency in skill creation, encouraging policies that make it easier for skilled workers to find work at home, and taxing destination countries or migrants to compensate origin countries for losses.

Recent research and policy experience challenge the “brain drain” view. New evidence suggests that destination countries can benefit from skilled migration — if it is correctly structured — with much less cost and more substantial benefit to origin countries than is commonly seen. Although policy efforts to counteract brain drain may have small benefits, they also sometimes have unintended costs and can be ethically problematic. In contrast, more promising policy efforts seek to create partnerships for skill flow between the origin and destination, maximizing the benefits to both.

II. Evolving Views and Evidence: What Do We Know?

The emigration of workers from developing countries has long been controversial. But emigration is not just a one-way trip; we can also look at this phenomenon as a more fluid “skill flow” that goes both ways. Many migrants return, and even those who do not usually transfer financial and social goods back to their countries of origin. However, much conventional wisdom prevents policymakers from seeing skilled migration as a two-way flow. They fear that when skilled workers leave for another country, they take with them all of the social and financial capital that the
sending country has invested in their education and professional training, and leave behind a shortage of skilled workers.

In contrast to how it is generally perceived, skilled migration generally has small costs and large benefits to developing countries of origin (as discussed below). Acting to suppress these movements can be a short-term expedient for increasing human capital stocks in migrant-origin countries. But this suppression can also interrupt important material benefits, in addition to being ethically complex.

A. The Costs of Skilled Migration

In contrast to common assumptions, skill shortages in developing countries are the result of a complex mix of structural factors, which persist whether workers stay or emigrate. These factors are rooted in the broader challenges of development.

Many factors constrain households’ ability and willingness to access additional education: low returns to education in an impoverished economy, the effect of poor nutrition on cognition, cronyism in school and post-school placements, and limited formal-sector jobs for graduates are just the beginning. Likewise, many factors constrain public and private supply of additional education: inadequate tax revenue for well-supported public education, corruption in public training systems, and policy and other barriers to private education are some of many. Low demand and low supply reinforce each other, and education quality is often very low. These constraints are largely unaffected by stopping people from moving. Thus, skilled emigration from developing countries is generally not a major cause of skill shortages, though there may be exceptional cases.

Even if destination countries somehow could somehow force the reversal of all skilled migration to date, this would do relatively little to address critical skill shortages broadly among origin countries. For example, all African-born doctors and nurses working in OECD countries in 2007 constituted only 12 percent of the World Health Organization’s estimated shortage of health workers in the region. The same figure for Southeast Asia is 9 percent.4

This is an important reason why a 2007 study of African health-care professionals found no significant effect of migration of nurses or doctors on a variety of health indicators including infant mortality, child mortality, vaccination rates, child respiratory infection and treatment, and HIV prevalence and treatment.5 The roots of skill shortages lie in complex problems of economic and institutional development that are largely beyond the reach of migration policy. Partly for this reason, the countries in Africa with the lowest rates of physician and nurse emigration are those with the worst overall health conditions — such as with the highest child mortality rates — not the best.5

The financial effects of skilled migration, too, are often much smaller than conventionally believed. Researchers have estimated the total financial cost of physician emigration from sub-Saharan Africa, by summing the training costs of all African-trained doctors who have ever immigrated to the principal destination countries. Their highest estimate is that this cumulative sum would be offset by a one-time payment of US $2 billion.7 In the last five years alone, OECD countries gave $206 billion in development assistance to sub-Saharan African countries. That is, if any such debt is construed to exist, it is paid by three weeks of typical aid flows to sub-Saharan Africa. Moreover, these
calculations overestimate the true financial cost of medical immigration. They ignore the direct and multiplier effects of remittances by emigrant physicians, as well as any service that these migrants provided at the origin before emigrating; while including the cost of their education before medical school — back to first grade.

Finally, acting to limit the movement of skilled workers is ethically problematic, and could be viewed as another kind of “cost.” According to international law and norms, skilled workers have the unconditional right to leave the countries they come from, and to be free from impediments to that departure.8 Following from this, any limits on international recruitment impinge upon these rights, as recruitment is simply the provision of information to potential skilled migrants about jobs abroad. Preventing people from acquiring information about a job limits their freedom to get that job.

In contravention of these norms, the Member States of the World Health Organization adopted a nonbinding Global Code of Practice in the International Recruitment of Health Personnel in 2010, in which they agreed to “discourage active recruitment of health personnel from developing countries facing critical shortages of health workers.”9 Individual destination countries have responded to these guidelines with national legislation banning recruitment from certain countries.

B. The Benefits of Skill Flow for Countries of Origin

The term skill flow refers to the movement of skilled workers (both temporary and permanent) and the movement of unskilled people to acquire skills abroad. Skill flow benefits origin countries in many ways. Even if migrants do not return to their countries of origin, they transfer money, skills, technology, and even democratic ideas; their stories can inspire investments in education in their countries of origin; and they expand their own life opportunities. All these benefits are interrupted when governments impose limits on migration. More specifically:

- **Skill flow seeds new industries and transfers technology.** AnnaLee Saxenian of the University of California, Berkeley has documented how the development of new industries in Taiwan, India, mainland China, and Israel depended on international networks of skilled emigrants from those countries.10 William Kerr of Harvard University has shown that ideas for new patents tend to travel to developing countries through skilled workers from those countries living abroad and working at centers of research.11 This effect is not contingent on return migration.

- **Skill flow causes more investment in education.** Many youths in developing countries invest in education precisely because it gives them the option to access high-wage jobs abroad. We have evidence of this effect from studies of the Philippines and Fiji, as well as survey evidence from students in several countries.12 Because an important portion of this investment would not have occurred without the migration option, this effect tends to substantially offset human-capital losses to emigration.

- **Skilled migration raises remittances more than less-skilled migration.** Contrary to conventional wisdom, skilled migrants are as likely to send remittances as their less-skilled peers. And when they do remit, they send larger amounts.
Thus, more educated migrants in general remit greater amounts to their countries of origin than do less skilled migrants. African-trained physicians in the United States and Canada, over the years, typically send a cumulative amount that greatly exceeds the cost of their medical training.

- **Skill flow spreads democracy.** Antonio Spilimbergo of the International Monetary Fund finds that countries become more democratic when larger numbers of their students acquire higher education in democratic countries. He proposes several possible mechanisms for this relationship, including the transfer of ideas, information, identity, and money by foreign-trained individuals that might serve to interrupt repressive activities.

- **Skill flow typically massively improves migrants’ opportunities.** Skilled migrants’ own welfare, scarcely mentioned in some cost-benefit analyses, matters. Opportunity for low-income people from developing countries does not cease to have value the moment they step across a border. And the acquisition of knowledge or skill does not abridge the right to move. Software engineers, academics, and health workers moving from low-income to high-income countries can typically raise their and their families’ real standard of living by hundreds of percentage points.

### III. Unintended Consequences and Gaps in the Evidence

Even in the absence of opportunities to leverage their skills in foreign labor markets, individuals may still choose to take advantage of opportunities to increase their incomes by moving abroad. If regulations prevent them from utilizing their skills, these migrants will end up underemployed, performing lower-skill jobs in destination countries. This is a loss both to them and to the destination country, which misses out on their skills.

Policies that aim for destination countries to achieve “self-sufficiency” in particular industries, imply — by definition — an underlying goal of zero net immigration within certain job categories. Other than for protectionist ends, it is not clear why any country should set its ideal policy outcome as zero net immigration. Such a goal assumes that migration has negative effects on the whole for destination and origin countries, which as discussed above is far from the case. The evidence currently available indicates that migration benefits both destination and origin countries, but of course, critical questions remain.

While evidence exists on the benefits of skill flow, there is no reliable evidence in the research literature that stopping skilled migration — without addressing its causes — helps development. Stopping migration without addressing the reasons for migrating requires, by definition, the use of force. The research literature contains no example of an accepted case where forcing people to reside in one geographic area, against their demonstrated will, has caused development there.

There are numerous constraints on skilled workers’ movement, some adopted for ostensibly altruistic reasons, some for reasons of domestic politics. The United Kingdom has a nationally mandated “Code of Practice for International Recruitment” for all National Health Service employers. This code of conduct lists 150 countries that “should not be recruited from” based on their “economic status and the number of health workers available.” However, there is no evidence that this ban substantially
What types of bilateral agreements allow for skill flow on terms most advantageous to both origin and destination? Are there ways to shift the costs of skilled emigrants’ education away from origin-country taxpayers, while maintaining skilled workers’ freedom of movement? How can policymakers in both countries foster links between skilled migrants and nonmigrants that are most conducive to the transfer of technology and capital? How can destination governments effectively negotiate between employers and consumers who need skilled labor and the groups that represent skilled laborers’ interests?

IV. Conclusions and Recommendations

Policymakers should avoid measures that seek to limit or tax skilled migrants’ decisions without their consent and without altering the reasons that they choose to move. These measures do certain harm to migrants, countries of origin, and countries of destination, without clear benefits to the countries of origin. Such policies include recruitment bans, “self-sufficiency” policies (which, by definition, set the global ideal as zero migration), and taxes on migrants or the places they go.

Rather than try to build an immobile world, policymakers should plan for an increasingly mobile world. A more promising agenda is to better understand the role of destination-country and origin-country policy in shaping the many benefits of skilled migration to all involved. We are only beginning to understand these links.

We need to know more. Has the growing skill-selectivity in international migration induced more or different education investment in migrant-origin countries? For example, how do details of skill-selective “points” systems at the destination affect human-capital investment at the origin?

That said, what we do know suggests two clear ways to plan for an increasingly mobile world. First, apart from migrants’ decisions, policymakers should make the best use of workers who do not choose to migrate. In the health sectors of low-income countries, this can imply meaningful incentives to provide primary care in slums and rural areas; focusing training efforts on prevention and basic primary care rather than higher-level tertiary care; giving providers the medicines and tools they need to practice effectively; and dismantling domestic barriers to independent practice by well-trained nurses. In academia this can imply meritocratic appointments at national academic centers, guarantees to freedom of expression, fostering partnerships and exchanges with foreign research centers, and regional centers of excellence so that non-migrants are less isolated from colleagues abroad.

Second, policymakers in important pairs of origin and destination countries should sit down together and design bilateral partnerships to foster skill creation and skill flow. People continue to invest in skill only in settings where the rules are known and trusted up front. Without mutual trust and dialogue, bilateral relationships degenerate toward unilateral and unpredict-
able measures such as recruitment bans, “self-sufficiency,” and punitive taxes. These bilateral agreements must address the specific contexts of different sectors, and provide for mutual recognition of qualifications and experience. In many cases they should also include new mechanisms to finance the training of mobile professionals — so that the cost of educating people who move does not fall exclusively on taxpayers at the origin.

One example of an arrangement to finance the training of skilled workers who migrate is the creation of a two-track technical school. Students at these schools would choose between an “away” track for working abroad and a “home” track for working in the country of training. An employer or group of employers could finance the away students’ training and a portion of the home students’ costs. The away student commits to working abroad and, after migrating to the destination country, pays off the cost of the training for herself and the home student. Alternatively, these schools could be financed through a sort of international apprenticeship system. Rather than paying higher training costs in their own countries, destination governments or employers could pay for apprenticeships in an away student’s country of origin and use some of the savings to finance home-track students. These arrangements could be flexible enough to work in a variety of contexts with a number of different occupations.18

But such arrangements should be agreed *ex ante* by all parties rather than imposed *ex post*. Such agreements should allow trained workers to pay back any social obligation either by limited periods of service in paying countries (not beyond a few years) or by “buying out” the social obligation at reasonable cost. Often, these bilateral agreements must inescapably involve multiple ministries — as they affect the planning and budgets of labor, health, education, immigration, foreign affairs, and development cooperation — as well as private-sector associations.

Policymakers can implement these recommendations as they consider bilateral agreements and treaties, as well as domestic legislation and guidelines that regulate international recruitment, taxes on skilled migrants, visa categories and quotas, and mechanisms of public finance for higher education.

A. Obstacles

Numerous obstacles stand in the way of such cooperation, but they can be overcome. The relevant responsibilities are often sharply divided between different ministries — with, for example, education ministries unable to affect migration policy and migration ministries unable to affect education finance. There is no international forum for supporting the negotiation of treaties of this kind, although the International Organization for Migration (IOM) or the Global Forum on Migration and Development (GFMD) might evolve into such a body.

Existing financial architecture is poorly suited to international education finance; for example, even excellent students from developing countries find it difficult to finance skill acquisition at major destinations. Mechanisms for the international recognition of skills and experience remain nascent and filled with hidden protectionism. It remains extremely difficult for policymakers to obtain data on skilled migration with adequate coverage,

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comparability, and frequency.

B. Who Can Act and Coordinate

Fostering skill flow for mutual benefit requires several critical partners. Ministers of education, health, immigration, foreign affairs, and development cooperation must work together, both within and between countries. International organizations such as the World Bank, World Health Organization, professional associations like the Philippines Nurses Association, and international research societies like the International Mathematics Union can help by convening new bilateral negotiations and helping policymakers learn from previous bilateral agreements elsewhere. National professional and research societies can also play a role, as can diaspora associations, such as the American Association of Physicians of Indian Origin (which is cooperating with the government of the Indian state of Maharashtra to register non-resident Indian [NRI] physicians for voluntary service in the state).

Labor unions and professional societies in destination countries must also be part of this discussion, since their interests are at stake and compromises are needed. And private-sector associations must be included from the beginning to help ensure that regulations do not become stifling and burdensome. Since firms themselves often span origins and destinations, their outlook can be truly global. The private sector can also be an important source of innovation, helping to develop win-win mechanisms that benefit migrants and institutions in origin and destination countries. Broad efforts to address issues involved in the flow of skills should involve the many different kinds of actors participating in and affected by the global flow of skilled migrants.
ENDNOTES

1. Throughout this note, the term skilled workers refers to workers with a postsecondary degree.


3. Ibid.


6. Clemens, “Do Visas Kill?”


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About the Author

Michael Clemens is a Senior Fellow at the Center for Global Development (CGD) where he leads the Migration and Development initiative. His research focuses on the effects of international migration on people from and in developing countries, and on rigorous impact evaluation for aid projects. He also serves as CGD’s Research Manager, directing the Center’s engagement with the academic research community through peer-review for Center publications, research seminars and conferences, and academic fellowship positions.

Dr. Clemens joined CGD after completing his PhD in economics at Harvard University, where his fields were economic development and public finance, and he wrote his dissertation in economic history. He has served as an Affiliated Associate Professor of Public Policy at Georgetown University, a Visiting Scholar at New York University, and as a Consultant for the World Bank, Bain & Co., the Environmental Defense Fund, and the United Nations Development Program. In 2013 one of his articles received the Royal Economic Society prize.
The Migration Policy Institute (MPI) is an independent, nonpartisan, nonprofit think tank dedicated to the study of the movement of people worldwide. The institute provides analysis, development, and evaluation of migration and refugee policies at the local, national, and international levels. It aims to meet the rising demand for pragmatic responses to the challenges and opportunities that migration presents in an ever more integrated world.

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