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Show Me the Money (and Opportunity): Why Skilled People Leave Home — and Why They Sometimes Return

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The classic example of "brain drain" is well known: an overworked doctor from an impoverished country that does not have enough people with medical skills migrates to a developed country in search of better pay and conditions. The result: the origin country has lost one of its most valued people.

This article describes our recent work to better understand both brain drain — the departure of skilled migrants from their place of origin to another country — and brain circulation, defined here as skilled people returning to their home countries.

The work uses a fairly broad definition of "skilled migrant," which refers to people who have either tertiary education or work experience that provides them with equivalent skills. This means we examine all categories of professionals, not only the doctors and nurses who are sometimes most associated with the term brain drain.

We have examined a range of evidence that finds that five factors — wages, employment, professional development, networks, and socioeconomic and political conditions — drive skilled people to migrate.

We also identify three reasons that motivate the highly skilled to return: improvement of the situation at home, the feeling of belonging to one's culture and society, and the achievement of a specific goal.

Our final typology looks not only at the broad trends but also explores how motivations vary across different contexts and groups of migrants. For example, a potential migrant fresh out of university will be more willing to migrate for a reason that is less important to a potential migrant who is midway through his career.

It should be noted that the studies we examined were produced prior to the recent financial crisis and onset of recession in most countries, meaning that little insight is provided into how trends might have changed. Where possible, however, potential implications of the recession are drawn out.

This research does not take a particular view on the circumstances under which brain drain damages development — or indeed if brain drain should be a policy priority at all. Our research is not intended to contribute directly to the vigorous debate on brain drain's impacts. Rather, we seek to better understand what drives skilled people to move, leaving the assessment of when and how governments might try to intervene to other analyses.

Methodology

Economists frequently use sophisticated data analysis to try to explain the degree of brain drain that a country experiences. Much of this work has supported traditional economic theories of migration, which state that wage differentials are very important in triggering flows.

These techniques provide insight into the general conditions that could potentially lead to brain drain. However, they are less able to explain skilled migrants' motivations. Some of these motivations will have greater importance than others, depending on the characteristics of the migrants and the context in which the migration is taking place.

Surveys that ask actual migrants about their reasons for moving — or potential migrants about their migratory intentions, though bearing in mind that intentions do not always translate into action — are better able to address this problem.

By comparing individuals' responses, we can draw out which factors seem to be most important across all respondents. This approach also allows us to examine the micro characteristics (e.g., skill level or age) and macro characteristics (e.g., the political or economic environment they are living in) that might distinguish one subgroup of respondents from another.

Most surveys focus on potential emigrants in one country. To understand larger trends, we analyzed 11 papers that surveyed skilled migrants and potential migrants from 28 countries in Eastern Europe, Asia, Latin America, the Caribbean, South Asia, and Africa between 1997 and 2008. Their samples were not nationally representative but usually were generated by focusing on specific institutions and professions and by using the "snowball" methodology in which referrals from initial subjects generate additional subjects.

What Drives Brain Drain?

While a diverse range of motivations lie behind skilled migrants' intentions to move, it is possible to draw out five common factors:

- Wages
- Employment
- Professional development
- Networks
- Socioeconomic and political conditions in countries of origin

Our analysis tells us, however, that these five factors are not of equal importance to all potential skilled migrants. The priority given to each issue typically depends firstly on the skill and profession of the migrant, and secondly on how far they have progressed in their career.

Wages

Wage differentials emerge as perhaps the most important cause of brain drain, as economic theories would expect. Groups that highlighted wages as a key motivating factor included students and those working in professions like health care, where the wage differential between countries is wide and where skills are easily transferable.

For example, one survey of final-year university science students in Macedonia by economist Verica Janevska found that the opportunity to earn more was the main reason students wanted to emigrate. In addition, a Southern African Migration Project (SAMP) survey of migration intentions of final-year university students in a variety of programs in six Southern African Development Community countries found that in Botswana and Swaziland, higher remuneration ranked first, while in Namibia it was second.

Several surveys of health professionals point to higher income as a key motivating factor for migration. For example, in a survey of physician migration across Colombia, Nigeria, India, Pakistan, and the Philippines by sociologist Avraham Astor and colleagues, 91 percent of all respondents rated desire for higher income as highly significant.

Similarly, a 2004 study in which economist Binod Khadria interviewed returned doctors and nurses in India found better income prospects overseas as a significant reason driving migration, with nurses highlighting it as the most important reason.

In geographer Abel Chikanda's 2002 survey of health professionals in Zimbabwe, 77 percent of respondents gave pay as a key reason to migrate. Recent research on Polish and Bulgarian natural scientists based in Germany and the United Kingdom show similar findings.

The focus students place on wages may simply reflect the fact that they were living on low incomes while studying and were keen to enjoy a better standard of living. However, more interestingly, it may also demonstrate the importance of wages to skilled people

generally.

University students are on the cusp of becoming "brains," as their education gives them a high level of skills and knowledge. As a result, surveys of general student populations allow us to look at the motivations of the complete "set" of the highly skilled, before any have had the chance to depart. The fact, then, that wages emerge as a key factor for students shows the importance of wages in migration decisions.

Wages are also likely to be important in professions such as engineering and computer programming where skills are more easily transferable. This makes it feasible for would-be migrants to move directly into high-wage positions in the destination country.

In the health sector, some developed countries, particularly the United Kingdom, have actively recruited doctors and nurses from developing countries to address skill shortages. Such practices exacerbate this trend. About one in three of the 71,000 hospital medical staff working in the UK National Health Service in 2002 obtained their primary medical qualification in another country, according to the UK Department of Health.

In contrast, prospective migrants who work in industries where either the knowledge or the skills are less transferable (e.g., the legal field or advertising, which can be very culturally specific) are unlikely to be able to earn — at least in the short term — the wages on offer to similarly qualified local people. For these individuals, their expertise, credentials, or both would not be recognized, making wage differentials less important in the decision to migrate.

Employment

The priority skilled migrants give to employment opportunities varies strongly according to where they are in their career.

Students are more likely to give employment as a very high priority for migrating compared with those who are already qualified. For example, the SAMP survey of students in southern Africa reveals that the desire to be in employment or have job security follows closely behind higher income opportunities; students in Lesotho and Namibia ranked employment ahead of wages.

In contrast, Khadria found that only 11 percent of return IT professionals in Bangalore gave securing employment as a reason for going abroad. In the same 2002 survey, nurses and doctors ranked employment as the sixth and seventh priorities, respectively, as motivations for emigration.

On the whole, skilled migrants who are already working say other factors are more important to them as motivations for migration.

Professional Development

For a skilled would-be migrant who is already employed, access to professional development opportunities, such as better training and more varied experiences, can be a strong reason for leaving. Unsurprisingly, relatively new entrants to the labor market, as well as those in mid-level positions looking to make their next career step, were most interested in and felt they had the most to gain from working abroad.

Skilled people across a range of sectors highlighted the importance of professional development as a reason to migrate. Indian IT professionals ranked "gaining experience" as the top motivating factor for going abroad, and 37 out of 45 respondents in the 2003 study by Khadria agreed that "knowledge and skills gained overseas through higher education and on the job training are highly useful for current jobs in Bangalore."

Indian doctors also ranked higher education as the most important draw. Just under 75 percent of doctors said in Khadria's survey that they were planning to go abroad to "get jobs with better training opportunities," and just over 40 percent said their purpose for going abroad was to get "medical experience not easily available in India."

Many skilled migrants also mentioned the state of working environments when describing their decisions to migrate. Access to the latest technology, for example, remained a critical factor for those working in the health, science, engineering, and IT sectors. For

instance, the Macedonian study revealed that young scientists and science teachers ranked poor facilities and poor resources higher than income remuneration as reasons for intending to emigrate.

In Zimbabwe, the state of the working environment ranked highly as a reason for health-care workers to want to migrate (just after wages and other economic considerations). Those Chikanda surveyed in 2002 felt Zimbabwe suffered from a lack of resources and facilities, heavy workloads, and insufficient opportunities for promotion and self-improvement.

Similarly, when Chikanda asked Zimbabwean health personnel which factors would encourage them to stay, their answers corresponded strongly to the initial reasons given for leaving: better salaries (77 percent) and better fringe benefits (71 percent), followed by more reasonable workloads (60 percent), and improved facilities and resources (64 percent).

It is interesting that a migrant's perceptions of their career prospects at home appear to influence whether they intend to move permanently. In India, for example, the majority of nurses Khadria surveyed had no plans to return, which appears to be related to their feeling that their career paths were limited in India. However, Indian doctors, who reported feeling their prospects were good in India, were more inclined to go abroad temporarily.

IT-professional returnees in the city of Bangalore said in Khadria's survey that the most important reason for returning to India, after family reasons, was "recognition of India as an emerging IT power in the world" and because they viewed Bangalore as the "corridor for the international mobility of IT professionals."

Prospects for professional development and success can therefore not only determine whether to migrate in the first place but also whether to return.

Networks

Several surveys highlight the importance of social and professional networks in shaping the desire to leave, as well as to return home. For some potential migrants, networks makes the person realize he could migrate; for some, networks, particularly close family abroad, become a reason to move; and for others, networks make the possibility of migrating a reality. These reasons make networks an important facilitator of migration for many kinds of skilled people, not just those in particular professions or at particular stages of their career, as was the case for the three factors already discussed.

Khadria investigated sources of inspiration distinct from reasons for migration. Indian doctors and nurses said friends overseas were the most important source of inspiration for intended emigration, after self-motivation. In addition, 25 percent of Indian nurses said having relatives living in the host country was a motivating factor for going abroad.

The role of family networks in inspiring or sanctioning migration is clearly visible among highly educated students in sub-Saharan Africa. For example, in Lesotho, 47 percent of the students SAMP surveyed indicated that their families would encourage them to leave Lesotho, while only a third said their families would discourage them. However, the majority of students (70 percent) said the ultimate decision was in their hands, with only 10 percent saying their spouse or parents would make the decision.

As for intentions to return home, networks of family, friends, and colleagues exert a significant pull for some skilled migrants. Indian IT professionals gave family as the most important factor in return. One respondent told Khadria that "his parents were getting older and nobody was there to look after them in India."

Moreover, several surveys that questioned skilled migrants about their return intentions highlighted family as the principal reason. For example, economists Nil Demet Güngör and Aysit Tansel's 2002 investigation of Turkish students' return intentions indicated that having family support strongly encourages return to Turkey.

Socioeconomic and Political Conditions

Many surveys emphasized the importance of the wider socioeconomic and political climate at home in influencing an individual's intention to migrate (with some skilled

migrants forced to depart their country of origin as asylum seekers or refugees). In Janevska's study, students, teaching staff, and researchers in Macedonia cited political instability as a motivation to leave.

A 2004 World Health Organization survey of migration intentions among South African health professionals found that 38 percent of respondents commonly cited violence and crime or lack of personal safety as motivations for emigration.

In some other African countries, the risk of contracting HIV figures more prominently as a reason for leaving. Almost half of the students interviewed in Namibia as part of the SAMP survey said the prevalence of HIV/AIDS might influence their decision to move. In Uganda and Senegal, 85.3 percent and 70 percent, respectively, of health physicians Magda Awases and colleagues surveyed in 2001 and 2002 worried about contracting HIV through work-related incidents.

Socioeconomic and political conditions also appear to influence the length of time migrants intend to stay away for. For example, the SAMP survey of Lesotho revealed a widespread belief that Lesotho's economic conditions were not going to improve in the foreseeable future. Not surprisingly, three-quarters of students said those who left Lesotho permanently are better off than when they were in Lesotho — a sentiment that is likely to have increased the level of emigration from the country.

In contrast, the Namibia SAMP survey found that only 27 percent and 22 percent of respondents were dissatisfied with their own circumstances and national economic conditions, respectively. This may partly explain why even the minority who would like to emigrate tend to see it as only a temporary option.

It is notable, however, that while the circumstances in destination countries must play a role in driving migration (indeed, it is only by gathering information about circumstances elsewhere that potential migrants can really evaluate the situation at home), few migrants explicitly cited circumstances in the destination country, such as public safety or opportunities for their children, as reasons to move. Socioeconomic and political conditions at "home" seem more important.

Reasons for Return

Researchers and policymakers traditionally viewed brain drain as permanent. In the last decade, they have begun to observe and recognize that skilled migrants often return, or move back and forth between different destinations, a phenomenon sometimes called "brain circulation." The surveys we examined give three insights into these kinds of movements.

First, it seems likely that if the original reasons for departure diminish in importance, many would consider returning. If new graduates were leaving a country in part because employment opportunities there were poor — why many left Poland in recent years, going to the United Kingdom and Ireland among other destinations, as a 2008 survey by political scientist Naomi Pollard and colleagues showed — then a substantial increase in employment opportunities in their country of origin might encourage them to return.

However, the change needs to be substantive to make a difference. Marginal differences in wages or slight improvements in professional opportunities appear unlikely to motivate migrants to return to their country of origin, particularly given the costs, financial and emotional, of moving — a point the recession has made clear. Most evidence suggests that few migrants have left the major countries of destination, even though the recession tended to be more severe there. This seems to be because circumstances in their places of origin had not improved enough to make return seem worthwhile.

Second, intending to return after achieving a specific objective, such as saving a certain amount of money, encourages return. In Jamaica, a Global Development Network and ippr study by Elizabeth Thomas-Hope and colleagues showed that 20 percent of migrants returned after achieving a certain goal they had set themselves before migrating.

Last, a feeling of belonging to the culture and place of origin also seemed to play an important role. The SAMP study found that the majority of Namibian students were keen not to migrate permanently, expressing a desire to want to help build their country.

There are similar findings in several of the other surveys, too. Economist Mari

Kangasniemi and colleagues discovered in their survey of foreign-born doctors in the United Kingdom that those who had come from low-income countries were particularly eager to return for this reason.

A Typology of Factors Driving Brain Drain and Brain Circulation

Having explored the roles of various factors in driving brain drain and encouraging brain circulation, we bring these together into a basic typology (see Table 1).

As well as highlighting key factors, the typology shows which factors are most important for which types of migrants, looking at age, professional experience and skill set, and the characteristics of the countries they come from.

Table 1. Factors Driving Brain Drain and Brain Circulation	
Motivational factor	Of particular relevance to which migrants?
Emigration	
Income remuneration: To take advantage of higher wages in the destination country.	Students in tertiary education; skilled professionals in sectors such as health and IT. Especially important where skills are easily transferable between countries.
Employment: To secure employment or attain job security.	Students in tertiary education and newly graduated professionals.
Professional development: To advance one's career by gaining work experience, training, and access to the best facilities and technologies.	Newly graduated professionals and people who have progressed somewhat in their career.
Personal and professional networks: These are sometimes a concrete reason to move (e.g., to join family) but often they inspire or facilitate migration.	Professional networks can be key to highly skilled and senior professionals across various sectors.
Political and economic circumstances in the homeland: These matter to the migrant above and beyond the direct impacts they have on their opportunities.	Migrants in countries where national socioeconomic and political circumstances are very poor and/or deteriorating fast. Newly graduated professionals without a well-rooted network may be particularly affected.
Return migration	
General improvement of the situation in the homeland (e.g. economic, political): The push factor that motivated the migrant to depart has declined in significance.	Relevant to most skilled migrants.
Feeling of belonging to one's culture and society: Some migrants' high degree of attachment to and their desire to develop their country makes them want to return.	Skilled migrants from low-income countries who tend to feel a great sense of commitment to their country's development; young professionals and students with no family ties in the destination country.
The intention to leave for a short period, usually to achieve a specific objective: To return after completing a contract or once a goal has been reached (e.g. mortgage investment, tuition fees, or a new business in the homeland).	Highly skilled migrants (e.g., consultants) holding a short-term contract, entrepreneurs, and those who leave family including spouses and children behind.

Conclusion

As the surveys cited here demonstrate, skilled people who leave their home countries are not motivated by the same forces, though wages seem important to most groups. It may be that the global economic downturn marginally blunted this motivation to migrate, but it seems unlikely that it will have dramatically affected skilled peoples' decision-making. Drops in wages in major countries of destination have only been relatively small compared to the structural wage differences that continue to exist between countries.

Policies dealing with brain drain — in both origin and destination countries — need to consider whose departures are of particular concern and address why they want to leave and what they hope to gain through migration. We hope the insights offered here will contribute to more nuanced and effective policies.

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