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# **Skilled Migration: Boon or Bane?** The Role of Policy Intervention

Ronald Skeldon

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### ABSTRACT

Often highly skilled migration from developing to Western countries is conceptualized as "brain drain" and as detrimental for development. However, recent research and policy development challenges mainstream assumptions of brain drain, insisting that skilled migration is a more complex phenomenon. In this paper, the evidence for the migration of the skilled either to prejudice or to promote development will be examined. The terms "brain drain" and "brain gain" immediately introduce into the debate value judgements, which are either negative, that migration is bad for countries of origin, or positive, that migration is good and can be used to promote development. The evidence for each is conflicting and the adoption of such judgemental terms obscures factual analyses. The paper argues that rather than focussing on the consequences of the migration, policy should focus more on the causes and particularly on training and education policies.

## CONTESTED IMPACTS OF THE MOVEMENT OF THE SKILLED

Over forty years ago, a seminal volume on "the mass migration of top-level manpower from underdeveloped countries to the wealthy nations of the West", was published: The Brain Drain (Adams 1968).1 The various authors highlighted two quite different approaches to the issue, each of which had equally different policy implications, the internationalist or cosmopolitan approach (most specifically, Johnson 1968) and the nationalist approach (most specifically, Patinkin 1968). The former saw the movement of the skilled in terms of global development; that the skilled were deployed to countries where they could be most productive and increase global output that would ultimately help countries of both origin and destination. The latter adopted a narrower focus, seeing the needs of individual countries as paramount, and particularly developing countries of origin. The loss of skilled personnel was likely to prejudice their chances of development.

The intervening period has seen much continued debate on both of these approaches, with a major addition to the argument: that the actual exodus of the skilled is likely to lead to more, not fewer, skilled workers in countries of origin (Mountford 1997, Stark 2004, Stark and Fan 2007). Counterintuitive though this argument might at first seem, the logic is based upon the fact that school leavers may specifically choose training that can lead to a job overseas. However, not all will be able to migrate owing to the increasing numbers in the chosen fields and restrictions on their migration as a result of the policies of destination-countries. Thus, developing countries are left with more people trained in these skills at the end of a period than they otherwise would have. This interpretation might be thought of as part of the internationalist approach, but it is likely to bring more immediate development in the form of increased human capital than the longer-term development to origin countries envisaged through the increased global output model. However, broad-ranging reviews of the available evidence of the time suggested that a more nuanced approach was required. Although beneficial effects might be seen in some specific areas, overall there is reason to be "suspicious" of these benefits (Commander et al. 2004, Kangasniemi et al. 2004, also Lucas 2005).

In this paper, the evidence for the migration of the skilled either to prejudice or to promote development will be examined. The terms "brain drain" and "brain gain" immediately introduce into the debate value judgements, which are either negative, that migration is bad for countries of origin, or positive, that migration is good and can be used to promote development. The evidence for each is conflicting and the adoption of such judgemental terms obscures factual analyses. In agreement with Clemens (2009), it is recommended here that a more neutral term such as "skilled migration" should be adopted in an attempt to desensitize the debate. The various impacts that migration has are likely to vary across space and time and it is incumbent upon the analyst to examine these in the context of evolving systems of population movement. Such an approach takes us beyond simple positive or negative associations between migration and development in general, and skilled migration and its consequences in particular.

<sup>&</sup>lt;sup>1</sup> The quotation is from the dustwrapper

Despite the internationalist approach and what might be called the "revisionist" approach described above, it remains the narrower, brain drain interpretation that dominates the debate on the migration of the highly skilled. Recent expressions of this point of view include those of Schiff (2006), Kapur and McHale (2005) and UNC-TAD (2007), while the headline to an article in the left-of-centre Guardian newspaper in the United Kingdom by the respected columnist Larry Elliott captures the essence of this thinking: "Brain drain must be stopped if poor countries are to be helped" (6 December 2004). While Elliott's article argues the case for the retention of all skilled migrants in order to boost economic growth, it is in the area of health professionals that the debate has been at its most vociferous. The developed economies of the West or North are accused of "poaching" the doctors and nurses who are deemed vital to the achievement of the Millennium Development Goals in health. These are to reduce child mortality by two thirds by 2015, to reduce maternal mortality and to combat the spread of major diseases, especially HIV/AIDS and malaria. Developing countries might just be able to lose skilled accountants, bankers or artists but they cannot afford to lose those who are critical to populations living a long and healthy life. In this way, the health sector is seen to be "exceptional" in the movement of the skilled (for example, Akire and Chen 2004). One group even goes so far as to raise the question whether active recruitment of health workers from sub-Saharan countries should be viewed as an international crime on the basis that it creates social alarm (Mills et al. 2008).

The debate has long moved from academic circles into the policy realm. As early as 2001, the United Kingdom's Department of Health

in England introduced a code of practice for international recruitment of health workers, a code that was strengthened in 2004 (Buchan and McPake 2007). Active recruitment by the state-run National Health Service is not allowed from 154 countries unless specifically through government-to-government agreements as in the case of India and the Philippines (OECD 2004). Commonwealth and global codes of recruitment of health workers are being considered and similar protocols for other professions such as teachers have also been adopted by international organizations (see Mills et al. 2008: 687, Commonwealth Secretariat 2004). The basic idea is the same: to attempt to restrict the movement of the skilled from developing countries of origin to developed countries of destination on the assumption that, if the skilled were to remain in their home countries, development, however defined, would not be prejudiced but promoted.

Yet, no matter how intuitively appealing this point of view is, the evidence to support the case is weak. To return to the early work edited by Adams, the introductory statement highlights that the "drain from Asian nations, particularly Taiwan and Korea, is most serious ... over 90 per cent of Asian students who arrive for training in the United States never return home" (1968: 1). While the latter part of the quotation was true at the time, subsequent events, which have seen the two economies emerge as among the more advanced in the world, should immediately raise questions about any easy association between the exodus of the skilled and a lack of development. Quite the reverse: the incorporation of the skilled into transnational circuits of mobility linking Taiwan and Korea with the most advanced economy of the time became an integral part of their economic development. Growth of real GNP

per capita in Korea during this period of pronounced brain drain in the second half of the 1960s was on average 10 per cent per annum (Kim 1997: 88). The average growth of the high-performing East Asian economies of Japan, Hong Kong, Korea, Singapore and Taiwan between 1960 and 1985 was faster than for the rest of East Asia, roughly three times faster than Latin America and South Asia and five times faster than sub-Saharan Africa (World Bank 1993: 2). Of the five Asian economies, Taiwan grew fastest and Korea fourth fastest. However, to see this development as primarily a function of migration would be to embark upon a path of extreme reductionism. Migration, like the shifts in the other two demographic variables of fertility and mortality, was but a part of the overall transformation of these economies and societies.

Nevertheless, given the above, the critical question surely remains why one would want to introduce controls on the movement of the skilled to help to promote development. One might argue that the East Asian case is different from those in sub-Saharan Africa, and it unquestionably is. Nevertheless, is it so distinct as to warrant an entirely different approach to migration and development? The argument seems to fail to take into account the very obvious point that skilled migrants are by definition very able people. They have access to considerable social capital in terms of linkages to potential destinations and, if they want to migrate, they will find a way of doing so, legally or illegally. Hence, such programmes are likely to be largely ineffective in the long term and could easily be counterproductive if attempts to control or limit the movement of the skilled force them to seek informal channels of migration through which they cannot practise their skills legally in destination economies.

### **MIGRATION AS FREEDOM**

Perhaps the most trenchant critic of attempts to introduce controls on the movement of the skilled more generally is Michael Clemens. In a rigorously forensic article (2009), he critically arrays the evidence against the standard brain drain argument from an economic point of view, drawing upon examples from around the world and specifically from sub-Saharan Africa. The essence of his argument is to expand the range of choice available to skilled workers, following Sen's (1999) emphasis on development as freedom, and that means allowing the skilled to move rather than introducing barriers to their movement. This stems from what might be his most important point that what "is clear is that there are reasons to doubt that skilled migration can be unconditionally considered even as a proximate cause of skill depletion" (Clemens 2009: 34).

Freedom to move is considered to be a basic human right. Article 13 of the 1948 Universal Declaration of Human Rights states that: 1, everyone has the right to freedom of movement and residence within the borders of each state; and 2, everyone has the right to leave any country, including his own, and to return to his country. However, it does not include the right to live in any country of choice, hence the central importance of immigration policy. That is, the right to move internationally is subject to constraints, legal constraints as well as the more practical constraints such as the material basis on which to fund the movement. The legal right to move from origins to destinations is one clear distinction separating internal and international migrations, although one not always followed by all countries, and clearly material constraints also affect internal movements. The authors of the article that raises the question whether the active recruitment of health workers should be viewed as a crime also recognize that health workers have the right to move (Mills et al. 2008: 687). The broader question they raise, as well as others before them (Bueno de Mesquita and Gordon 2005; Mensah et al. 2005, for example) is the right to health of those who are left behind. The exodus of the skilled, or the right to move of some, appears to deprive others of the right to a decent standard of living.

This argument seems to confound individual rights on the one hand and state responsibilities on the other. Although one can argue that one state has no right actively to deprive another of its skilled personnel, the root of the issue remains whether the exodus of the skilled actually does impact negatively on states of origin, and that is not at all clear. The issue of the individual versus the state is further complicated by the role of transnational organizations that facilitate and often control the migration of the skilled in the first place. International headhunting companies trawl the world for talent and will place the skilled where they are most needed. Transnational corporations transfer skilled staff to where they are needed, often without the individual having much say where he or she is posted. The United Nations, its specialized agencies and other international organizations provide a stepping stone for national officers to move transnationally. For a useful discussion of this issue, see Coicaud (2008). Hence, the focus on individual freedoms needs to be viewed within the system of international constraints.

This question also highlights two tensions within the whole skilled migration/brain drain discussion in particular, and much of the population and development debate in general (Skeldon 2008). First, a tendency exists to essentialize migration into a "thing" in its own right: that it exists "out there" and somehow independently of other elements in the economic, political and social life of a state and its broader environment. Migration does exist as a "thing" to the extent that it is a measure of the number of people who move, however defined by the definitions of what constitutes "a migration". However, that measure is the result of thousands of individual decisions, moulded by the prevailing norms of the time, which are the result of prevailing economic, political and social conditions at local, regional and global levels. It is not an entity separate from its context that can easily be manipulated independently from the factors that cause the movement in the first place. Second, it is very easy to place the blame on migrants for ills that are much deeper rooted in the economy and society. Migrants are an easy target for criticism from populations at both origins and destinations. Again, perceived problems are essentialized around the cause of "migration", whereas the migration is more a consequence of fundamental change in economy and society.

### PATTERNS OF SKILLED INTERNATIONAL MIGRATION<sup>2</sup>

The definition of the skilled is itself not straightforward. Migrants tend to be positively selected from the communities from which they come and an argument might exist that, throughout history, migrants have always been relatively skilled compared with the populations from which they come. How-

 $<sup>^2</sup>$  The following sections up to the discussion on page 11, update and expand ideas first mooted in Skeldon (2005) and Skeldon (2009a).

ever, modern convention, partly affected by data availability, assumes that the skilled are those with post-secondary education, that is, those with some qualification at the tertiary level. Thus, some people who might be considered to be highly skilled, such as footballers or other athletes, will not appear in the statistics for the highly skilled unless they also attended a tertiary institution.

One of the basic features of the skilled international migration system is that it is dominated by migrants from the developed world itself, plus a relatively small number of middle-income developing economies. This is entirely to be expected as the majority of poor developing countries lack the institutional capability to generate large numbers of highly skilled in the first place. Hence, around the year 2000, skilled migration tended to be dominated by movements from developed economies themselves, with the United Kingdom, Germany, Korea, and Canada among the top ten countries with the largest number of skilled migrants outside their borders. The United Kingdom was ranked first in this data set with 1.44 million skilled migrants outside its borders (the data set from Docquier and Marfouk 2006: 175). It is perhaps worth keeping in mind that the term "brain drain" was first applied to describe the loss of doctors and scientists from the United Kingdom mainly to North America in the 1960s. Evaluations since that time have suggested that little evidence exists to suggest a serious braindrain effect, skilled emigrants being more or less balanced by skilled immigrants with little deterioration in quality (Hatton and Price 2005: 164). The other major sources of skilled migrants are the middle-income developing countries of the Philippines, India, Mexico, China, Vietnam and Poland, with the United States coming in as the eleventh most important source of the highly skilled.

In terms of skilled health workers, the proportion of foreign doctors seems to represent about one-in-four of the total number practising in the United States, the United Kingdom, Canada and Australia (Mullan 2005: 1811). Within that proportion, some three-quarters of UK foreign doctors were from "lower-income" countries, some 60 per cent of the foreign doctors in the United States were from such countries with the proportions for Canada and Australia 43.4 and 40.0 per cent, respectively. Amongst these lower-income countries, India, the Philippines, Pakistan, China, South Africa and Egypt figured prominently (Mullan 2005: 1812). Almost 60,000 doctors from India, for example, by far the largest number of foreign doctors from any source, were practising in the four destination countries at the time of the survey taken from records relating to the period 2002-2004. This number represents about one tenth of the number of doctors in India itself. About 8 per cent of the United Kingdom's doctors were registered in the United States, Australia and Canada at the time, emphasizing the interchange of skilled migrants that continues with development. It is also noteworthy that South Africa, one of the important sources of doctors to the developed world, saw the number of doctors increase during this emigration by about 4.5 per cent a year to reach 30,740 in 2001 (OECD 2004: 122).

The above data are important as they are based on the country where the doctors received their training and are hence a minimum estimate of the number of foreign doctors from these countries who would be at the destinations. An additional number born in the developing world will have migrated as students (or as accompanying family members) and received their training outside their country of birth, usually in the developed world. For skilled migrants in general, not just those in the health sector, it has been estimated that, at the end of the twentieth century, 55 per cent of those from Latin America and the Caribbean employed in the United States had been trained in the United States. Over 40 per cent of those from China and India had received their college degrees in the United States (United Nations 2006: 60). Some 68 per cent of the foreign-born scientists conducting research in the United States in 1999 had been trained in the United States (Johnson 2003: 6). In the case of medical personnel, even if basic training had been undertaken in the developing world, advanced training might have been completed in the developed world (Khadria 2003: 9). The majority of the estimated 300 Ghanaian doctors in Germany had been trained in Germany and had chosen to stay on after completing their studies (Nyonator and Dovlo 2005: 231). Where a long tradition of medical training exists together with a large number of medical institutions, as in India, it seems likely that the majority of doctors will be trained at source as the data cited above from Mullan (2005) show. Nevertheless, over the two years 1996/97 and 1997/98, over 1,500 Indian students left to pursue studies in medicine, pharmacy, dentistry and veterinary science (Khadria 2003: table 5). Of the 750 Egyptian-born physicians practising in Canada in 2001, only 195 had been trained in Egypt itself (Clemens 2007:16).

Of the above countries that appear as major suppliers of health personnel to major developed economies, all but South Africa have shown marked improvements in the basic health variables for which ready longitudinal data are available, specifically infant mortality and longevity (see tables 1 and 2). However, relating such basic variables at the macro level to the availability of health personnel is highly problematic and even at the micro level, were such data to be available, would still be deceptive. The improvement, or deterioration, in critical variables is not simply a function of the number of health workers. In terms of skilled workers, the agronomists who work to increase agricultural yields to improve the nutrition that will combat disease, the water engineers who work to supply safe drinking water, the sanitary engineers who build the sewerage systems, the transport engineers who improve communication that allow food to be taken from point of supply to where it is needed, and so on, are as critical as any skilled health worker in improving the health status of a population. To relate the state of a nation's health to the increasing emigration of medical professionals, or conversely, to their presence, is to take too narrow a view of how health is delivered to a population. It is not for one moment being suggested here that a country does not need doctors and nurses, simply that any crisis (or improvement) in the state of health in a country is unlikely to be the result of an exodus of skilled medical personnel. In a large country, these are a small proportion of the total number of health workers available but, more importantly, many more professionals are at the root of development in the health of a population and the achievement of the health-related Millennium Development Goals. Thus, in the current brain drain debate, the state of health of a population and the state of the health system in a population are being conflated. These are not the same thing.

| Country      | 1990 | 2000 | 2006 |
|--------------|------|------|------|
| China        | 37   | 30   | 20   |
| Egypt        | 67   | 40   | 29   |
| India        | 82   | 66   | 57   |
| Pakistan     | 100  | 85   | 78   |
| Philippines  | 41   | 30   | 24   |
| South Africa | 45   | 50   | 56   |

Table I. Selected countries of origin of health personnel; infant mortality rate, both sexes 1990-2006 (deaths per 1,000 live births)

Source: World Health Organization, Statistical Information System at: http://apps.who.int/whosis/data

Table 2. Selected countries of origin of health personnel: life expectancy at birth, both sexes, 1990-2006

| Country              | 1990 | 2000 | 2006 |
|----------------------|------|------|------|
| China                | 68   | 71   | 73   |
| Egypt                | 62   | 66   | 68   |
| India                | 58   | 61   | 63   |
| Pakistan             | 58   | 61   | 63   |
| Philippines          | 65   | 67   | 68   |
| South Africa         | 63   | 58   | 51   |
| Source: See table 1. |      |      |      |

# SPECIFIC ORIGINS OF THE SKILLED

A further complexity is introduced through a consideration of the specific place of origin in the country of origin. That is, rarely is information available on where in the origin country international migrants are from, just that they are from the country as a whole. However, almost certainly the majority of the skilled are from the principal cities. In Ghana, 46 per cent of public and private sector doctors are to be found in Greater Accra, with a further 23 per cent in the Asante region, in which the second largest city, Kumasi, is located (Nyonator and Dovlo 2005: 229). These areas, with but one-third of the total population, also encompass over two-fifths of the nurses in the country. Clemens (2009: 22) cites data to show that Nairobi, with just 8.3 per cent of the total population, is home to virtually two-thirds of the number of doctors and goes on to show similar patterns in Mozambique and Ethiopia. That is, the skilled health personnel are leaving from those areas where medical provision is best in countries of origin, not the areas of greatest need, which, in terms of achieving the MDGs, are in isolated rural areas. Of course, the counterfactual cannot be answered: had the medical personnel remained, would they have gone to work in the areas of greatest need?

In addition, in virtually every developing country the process of urbanization is well developed in which rural-to-urban migration plays an important part. The process of redistribution of populations to towns and cities is a central part of development and making those populations more productive. While the vast majority of those who move out of villages could not be termed skilled in the sense that those who move internationally are skilled, or those with tertiary education, they do tend to have more education, as well as other resources, than those left behind. Internal flows of the more skilled exist in the same way as international flows and policies to "keep them down on the farm" have generally failed over all but the short term (see Skeldon 1990). Policy lessons exist to be learned from internal migration for those seeking to manage international population movements.

### **COSTS OF TRAINING**

The issue of compensation for skills "lost" to countries of origin has been proposed as a policy option (Bhagwati 1976, 2004). The ready assumption is that it is the state of origin that pays. For example, the basic cost of training of a British doctor in the state system in the mid-1960s was around GBP12,000 (about USD 33,600 at 1965 exchange rates) that was "lost" to Britain and "gained" by the United States if that person decided to migrate across the Atlantic upon completion of his or her studies (Last 1969: 31). In the developing world today, the cost of training may indeed be borne by the state of origin but it could also be funded through scholarships from another state or a private grant-awarding body or by the family of the student. Education is becoming increasingly privatized, with the cost of education both at home and overseas being covered by the family. The number of institutions training nurses in the Philippines more than doubled between 2003 and 2006 to some 460 centres, of which some 80 per cent were private (Acacio 2007). With respect to all students, not just those pursuing studies in medicine, it has been shown that 60 per cent of foreign students in the United States depended upon family or personal resources for their studies, a proportion that remained stable from 1979 to 2004 (Kritz 2006: 7). Of the balance, Kritz shows an increasing proportion paid by American universities from less than 10 per cent in 1979 to 25 per cent in 2004. With respect to postgraduate studies, American universities funded almost 45 per cent of foreign students in 2004. Such figures raise interesting questions about the whole issue of compensation and who should be reimbursed for the cost of generating skills. The state of origin may not be

the main source of funds covering the high costs of advanced training.

The issue of accreditation looms large in the medical field, and doctors and nurses may have to complete "bridging" courses that local medical authorities require to bring them up to acceptable destination-country standards. Opting to train in a medical school in a developed country clearly obviates this particular problem and, with most doctors still coming largely from elite families in developing countries, this appears to be the ideal strategy for that particular group. Doctors seem increasingly to belong to the transnational class (Sklair 2001), with more in common perhaps with their colleagues overseas than with their potential patients in poor urban or rural parts of their home countries. Even for those being trained within country of origin, the majority may come from the elite. For example, a survey of those entering medical and nurse training in Ghana showed that virtually twothirds of entrants had a father with tertiarylevel education (Anarfi and Kwankye forthcoming). Some 36 per cent of entrants had a mother educated at this level.

# **REVERSE MIGRATIONS**

The issue of the inmigration of doctors from other countries and the return on a temporary or longer-term basis of trained nationals is so often omitted from the analysis of the migration of the skilled. The easy answer assumes, incorrectly as shown earlier in this paper, that the major flows are from poor developing to wealthy developed countries. Flows exist in the other direction, often more temporary in nature but nonetheless significant in their developmental contribution. For example, since 1971, Doctors Without Borders (Médecins sans Frontières) has sent doctors, nurses and other medical and non-medical personnel to areas where there are humanitarian emergencies, as well as to areas where people are judged as being excluded from health services. Currently, voluntary personnel are working in almost 70 countries and each year personnel are involved in more than 3,400 missions. However, South-South movements are also important. Cuba, for example, is a source for "medical brigades", primarily to Venezuela and other countries in the Caribbean and Central American region but also to Ghana, South Africa and Zimbabwe. Some 450 Cuban health professionals were in South Africa around the year 2000 (OECD 2004: 128). These doctors often operate in the rural areas where local doctors are reluctant to take up positions. The 535 Cuban medical volunteers in Haiti were sent to compensate for the 90 per cent of local doctors who were estimated to be concentrated in the capital Portau-Prince.

Perhaps of most critical importance in the current policy debate is the possible return to their home country of the skilled who have migrated. That is, those in the diaspora can return to promote development at home and in this way the community of skilled migrants outside a country can be "leveraged" for the benefits of countries of origin (Kuznetsov 2006). Place of training of the skilled was discussed earlier in the paper and it should not be thought that students do not return upon completion of their training. Incidence of return for countries in East Asia has been shown to increase with time. For Taiwan, for example, only about 5 per cent of students returned in the 1960s, increasing to up to one quarter by the 1980s as the economy developed (cited in Skeldon 1992: 35). It has been observed that the return of students from Latin America studying in the United States has been higher than those from Asia, with some 70 per cent of the 1996 cohort of PhDs returning to Brazil by 2001 (D'Acosta 2008: 59). Language may be a factor in helping to explain the high rates of return to Latin America but so, too, is the competition from Asian graduates, who make up the majority of foreign students in the United States. In 2008, ten of the top twenty countries of origin of foreign students in the United States were Asian accounting for some 350,476 students and more than half the total number of foreign students in the United States at that time (IIE 2009). Only three of the top twenty source countries were in Latin America, that is, Mexico, Brazil and Colombia, and only one was in sub-Saharan Africa, Nigeria. Mexico and Colombia implement programmes respectively to subsidize salaries upon the return of PhD students and to defray up to half of the costs of overseas study if they do return (Angel-Urdinola et al. 2008).

A policy option currently being discussed at high levels is circular migration.<sup>3</sup> Under this option, the short-term movement of skilled (and unskilled) workers is envisaged that will ensure that they are not "lost" to their home countries. Programmes to provide specialist training while they are in the developedcountry destinations will be provided that will help them upon their return. Circulation of the skilled from the diaspora back home is also envisaged under this policy that will seek to ensure that migrants do not lose residence rights or prejudice their pathway to citizenship at the destination country, should they choose to return home for periods of months or even years. The International Organization

<sup>3</sup> This is one of the themes at a Swedish EU Presidency meeting on migration in Malmö scheduled for October 2009, for example. for Migration has introduced a Migration for Development in Africa (MIDA) programme to help skilled migrants return home for longer or shorter periods to assist development. This programme has been specifically targeted at Ghana, Ethiopia and the Great Lakes Region of East Africa. The effectiveness of such programmes has yet to be fully assessed but two factors seem clear: first, that the net flow, initially at least, will remain in favour of the developed world; and, second, that large numbers will not begin to return until a viable environment exists at home where they can achieve an acceptable level of living and welfare. A clear message about the exodus of the skilled from poor developing countries is that a low salary is only one factor in encouraging workers to leave. Poor working conditions, lack of facilities, nepotism and few opportunities for promotion all contribute to a low morale in the health service in particular (Owusu 2005, and see the essays in Connell 2009b). These all lead to an exodus from the health sector and principally the public sector, but not from the country. For example, at a time when some 32,000 vacancies for nurses existed in the public health sector in South Africa, it was estimated that there were another 35,000 registered nurses within the country who were inactive or unemployed (OECD 2004).

Nevertheless, the resources and talent within the diaspora should be able to be channelled towards the development of home countries. Whether the initiative can come from external bodies or must emerge from within the diaspora itself may be a significant factor in their success and home-town associations may provide a useful framework for organizing and channelling diaspora energies towards development. Philanthropic motives also galvanize professionals in the diaspora. For example, in the United States, some 35,000 practitioners and 10,000 students are members of the American Association of Physicians of Indian Origin, which is a constant source of volunteers for service back home (Barré et al. 2003: 151). Hence, a significant potential number of short-term skilled health migrants to the poorer countries appears to exist that can bring health care on a longer or short-term basis to places where it is most needed and compensates, at least partially, for the lack of national health personnel in these areas. Perhaps as important would be their training role in institutions of higher learning where they may compensate for the alleged "skimming" of the best of the brightest by universities in the developed world by bringing home world-standard research and teaching skills if only for a temporary period.

### THE QUESTION OF SCALE

One might argue that the issue of any negative impact of the exodus of the highly skilled would not apply to the main source areas in middle-income developing countries but to those small poor countries from which quite small numbers of the skilled have left. The overwhelming number of countries with high proportions of skilled overseas is small and mainly consists of island countries. For example, over three-quarters of the skilled of Guyana, Grenada, Jamaica, St Vincent and the Grenadines, Haiti, Trinidad and Tobago, St Kitts and Nevis, Samoa and Tonga were estimated to have migrated (Docquier and Marfoulk 2006: 175-176). Losses of this magnitude might be seen to have a critical impact on such small, vulnerable economies which may be "the main losers from the brain drain" (Beine et al., cited in Clemens 2009: 19). However, Connell (2009a), in an analysis of the movements of health workers in and from the Pacific region, shows that the problems faced are very similar to those in larger developing countries. The overwhelming concentration of medical personnel in the few urban centres leaving peripheral areas understaffed, the difficulties of providing adequate accommodation and opportunities for promotion, and the exodus to the private sector all loom large. Also, much inter-island mobility exists, with governments in one country devising packages to attract health workers from other island countries, a South-South "poaching". The medical services throughout the Pacific have come to depend upon expatriate doctors from developed economies for the provision of specialist skills as well as on overseas volunteers to staff-isolated areas. Hence, again, inmigration on a temporary basis is a significant part of the equation.

Nevertheless, one problem, though not unique to the small islands, is particularly serious: a lack of school leavers with the necessary qualifications to continue on to tertiary education in health-related as well as other areas. With a small demand for such training, facilities are limited and only two medical schools exist in the island Pacific: one essentially to serve the largest country in the region, Papua New Guinea, and the other, and oldest medical school, in Fiji to serve the rest of the region. Many of the few who wish to pursue studies in medicine will move to the developed countries of New Zealand and Australia where some will remain and, even if they do return, tend to leave later due to the endemic problems in local medical systems. Ethnic unrest in Fiji was also a major factor in the exodus of doctors from that country. Thus, although small populations do have special vulnerabilities, the patterns of movement of the skilled and their impacts are not too dissimilar from those of larger countries.

They do have to be placed, however, within the context of the redistribution of populations towards urban areas nationally and metropolitan centres regionally. Throughout the Pacific, cultures of migration exist that have led to the transfer of populations to the developed countries around the region and the slow demographic growth of many islands within the region.

## DISCUSSION

This paper has attempted to review the debate surrounding the movements and impacts of skilled migration. The basic argument is in agreement with Clemens (2009) that the pejorative term "brain drain", or even its close euphemism "brain strain" (Lowell et al. 2004), be abandoned in favour of a more neutral term such as "skill flow", as suggested by Clemens himself, the "mobility of talent" (Solimano 2008), or simply just "skilled migration". The debate has generated much heat, but perhaps not so much light, simply because the idea of migration causing either a lack of development or an impetus for development is ultimately a smokescreen. Critically, the areas to be addressed, as far as policy is concerned, lie in what drives the migration in the first place. Attempts to resolve the issue by managing the migration in terms either of restricting the flow directly, or introducing barriers such as so-called ethical recruitment policies, are bound to fail and are just wrongheaded.

Equally, it is utopian to think that improving the salaries and working conditions in developing countries to approach those of the developed world in an attempt to address the underlying causes of the migration of the skilled is a realistic strategy. One estimate suggests that, uncontrolled for living costs, salaries in the United Kingdom are 13 times higher than those in Ghana, for example (McCoy et al. 2008: 678). In the short term, the majority of developing countries have neither the financial resources nor the administrative capabilities to realize such a strategy. Of course, this does not mean that strenuous attempts to improve conditions should not be made: they should. However, it would be unrealistic to expect that such attempts would be sufficient to eliminate the huge differences in conditions between developed and developing countries within a short period of time. It is also important to keep in mind that the majority of skilled circulate among developed countries themselves where differences in pay and conditions are not so extreme. This migration is part of the interchange of ideas and personnel required for a functional and dynamic modern economic, social and political system. Rather the solution must be a more pragmatic approach that accepts the "leakage" of a proportion of the "domestic" skilled while at the same time allowing the entry of sufficient numbers of skilled from other areas to support the provision of basic services, particularly in remoter and poorer areas. Thus, a relatively open rather than restrictive migration regime for the skilled needs to be in place. However, in support of this regime and of fundamental importance for policy, especially as far as achieving the Millennium Development Goals is concerned, are issues revolving around training.

The issue of training needs to be addressed from two directions: from appropriate levels and from funding. If countries choose to train workers to global levels, it must be expected that a number of those so trained will migrate globally. Surgeons trained to the highest standards will not be most effectively employed in remote areas where electricity supply, as well as all the back-up staff and materials, are in short supply. What is required is large numbers of workers with basic skills to deal with basic conditions in rural areas or poor urban settlements. Those recruited and trained locally are also likely to have higher retention rates than those recruited and trained in urban areas and sent to outlying districts. It is not being suggested that countries should abandon existing high-level training facilities but that more resources should be channelled towards this "second tier" of health workers in order to bring acceptable standards of health for all.

It is here that the question of funding becomes critical as well as the question whether the state should be the main source of support for providing the facilities that train large numbers of those who will leave. As seen above, significant numbers are already trained overseas in the developed world, often paid from private funds. Should, therefore, the private sector be more involved in funding tertiary education in developing countries of origin? Here, too, may be an important role for the diaspora communities to play: the support, on an individual and on a collective basis, of the advanced training that can only be most effectively employed at the global level. Thus, state funding can concentrate on mass lower level training for local markets that are essential to bringing basic health care for all. Diaspora sources could also set up scholarship funds to allow students from less-privileged backgrounds to access medical school. Any such approach could only function if the two systems envisaged, one training to global levels and the other to local markets, were effectively linked, the former to provide training and support on a short-term basis while those trained in the latter system would have the opportunity to extend their training to join the former if they wished.

### CONCLUSION

This paper has taken a more internationalist view to skilled migration and the "less alarmist" approach to the so-called "brain drain" advocated by Myint (1968) over forty years ago. In the subsequent forty years, we have seen areas that were supposedly drained of their brains in the 1960s becoming major destinations for both skilled and unskilled migrations by the 1990s. Patterns of migration change and areas of development expand. Clemens (2009: 13) takes as a first principle that people develop, not places, a useful slogan for any development agency. Nevertheless, people develop places, which in turn, attract more people. It is deceptive to separate people from place. Clemens and Pritchett (2008) provide a service by showing how the inclusion of the populations in the diaspora can increase the basic development indicators of national populations and how migration acts as a strategy to improve development indicators. However, such an approach accords precedence to transnational rather than national linkages. Not all migrants return, particularly when children are brought up in destination areas and migrants change their usual places of residence and citizenship. It seems questionable automatically to include their wealth with the populations of their country of origin. They have moved to more developed places and become part of those populations, albeit temporarily. If a trend towards convergence exists in immigration policy at present, it is towards increasing the proportion of skilled migrants admitted to both developed and developing countries. Some 44 per cent of the governments of high-income countries wished to raise their intake of skilled workers in a 2007 United Nations survey, for example (Facchini and Mayda 2009, table 9). A global competition for talent has emerged among the more developed countries in particular that we are unlikely to see reversed (Skeldon 2009b) and skilled expatriate populations will expand.

What we have witnessed in the recent past, and are continuing to witness, is the emergence of development and centres of excellence in areas outside the traditional confines of "the North". These are found not just in the demographic and rapidly developing giants of China and India but in cities in countries as diverse as Singapore, Thailand, Mexico, Brazil and South Africa. Health and education have emerged as global industries where the interchange of teachers, practitioners, patients and students between developed and developing countries in a global market is one of the dynamic trends of our time. One of the unknowns remains the citizenship of the skilled who ply their trades globally. They are highly mobile and may have multiple citizenship. A few will return to their home countries virtually irrespective of the conditions in areas of origin. Many more will return once there is something to return to. Some will remain in destination areas; and yet others will circulate within transnational channels across the expanding network of global cities. These are the true transnational citizens and members of a transnational capitalist class (Sklair 2001) with more in common with each other than with the majority of the populations in either origins or destinations. This class can but be enriched through an increasing multicultural membership from a diversity of origins. This group will also have a fundamental role to play in the development of all countries. It would seem invidious to devise policies that might restrict entry to this class for certain groups rather than seeking policies to broaden participation.

The contention of this paper has been that the discussion of the emigration of the skilled needs to be separated from debate on the state of the health (or education) sectors in developing countries of origin. It has been argued that policy needs to be directed primarily at the causes of the migration rather than the migration itself. Direct attempts to control or even manage the migration of the skilled are likely to be counterproductive. Specifically, it has been argued that greater attention should be directed at training policy. In sum, although the idea of a "brain drain" may be intuitive and politically expedient, the concern needs to be less about losing or gaining brains and more about addressing the very real development problems within the health (or education) sectors themselves. However, any improvement in these sectors is unlikely to see a cessation of the outmigration of the skilled. Rather, the incorporation of a country into regular circulatory flows among countries is likely to indicate that the country has attained a certain level of development that will bring benefits to both origins and destinations, as well as to the migrants themselves. At present, most of that circulation is within the developed world, and the aim should be to create the conditions that will see these systems of circulation extended to a broader range of countries and to a broader range of destinations.

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