Tackling the Roots of the Brain Drain

By Robyn Iredale

Robyn Iredale argues that without political action, developed countries will continue to get the lion’s share of human resources from the developing world.

Human capital is the most important form of wealth for a modern nation. Countries with the most intellectual resources achieve the highest rates of economic growth and the fastest development in science and technology. But knowledge produces more than economic riches: it is also a vital ingredient for dealing with many of the social and environmental aspects of life today.

In the drive for human capital, many industrialised countries are giving priority to policies aimed at attracting highly skilled immigrants. Among them are the United States, the United Kingdom, Canada, Germany, Japan, Singapore, Hong Kong and Australia. The number of skilled immigrants who settle permanently in these countries is not rising. But there is a significant level of temporary movement of highly skilled labour from some developing countries, particularly in information technology (IT), medicine, nursing and teaching.

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The policies that encourage such movement shamelessly target highly trained science and technology personnel, particularly from developing countries. There may be a number of factors motivating the policymakers: high demand (for instance, in the IT sector), inadequate training facilities, and national trends in choice of career – in engineering, teaching and nursing, for example. Whatever the case, political action aimed at correcting this situation is urgently required at both the national and international level.

Keeping people ‘in the loop’

Industrialised countries need to address the national issues underlying their demand for highly skilled labour, not just resort to tapping the professionals of developing, low-wage countries. Once these people have moved, they place a high value on remaining ‘in the loop’ of their profession, and see anything that takes them out of that loop as regressive in terms of their career and job satisfaction. This makes them reluctant to return home unless they can anticipate substantial economic and professional opportunities.
Student migration is also rising, as are the number of visas that enable overseas students to study on a ‘fee-paying’ (rather than a scholarship) basis, and then transfer to a work or permanent residence visa. Universities in the United States, Canada, the United Kingdom and elsewhere have become meccas for young people ambitious to join fellow graduates and others in the academic network [1].

Yet the ‘right’ of these countries to keep them is arguable. Countries on the receiving end generally take the perspective of Michael Maibach, government affairs director at the US Intel Corporation, who has said: “If America’s universities educate the world’s best and brightest, [then] America’s industry should have the ability to hire them. Let’s staple a green card to engineering PhDs” [2].

Such an overtly predatory approach to the human resources of often less developed countries is unacceptable, particularly as they have been trained at no cost to the receiving country’s taxpayers. Most have finished their basic education and training in their home country, and most have paid for their own further education and training abroad.

Meanwhile many professions, such as accountancy, actuarial science and information technology, are internationalising their codes of ethics and training. This makes it easier for individuals trained in these professions to move between countries. It also means that a ‘Western’ education is seen as a relatively secure way of entering these professions, thus boosting demand for a degree from the developed world.

These trends raise the question of whether developing countries are actively benefiting from the increased ‘circulation’ of highly skilled professionals. And if not, what can they do about it?

The downside of current migration patterns

It would actually appear that in the current scenario developing countries are losing out. The net loss of human capital from poorer regions is not being offset by a return of skilled workers, immigration from other countries, networks or other diaspora schemes. Unless they can either reverse some of the flow, or find ways of joining major knowledge networks, the sustainable development of these nations will be increasingly threatened.

Transitions in the patterns of migration by skilled individuals are quite different from those in overall migration. In skilled migration, for example, there is no point at which skilled emigration stops, and is replaced by skilled immigration.

However, the two processes may co-exist. Brain drain in one period may come to be accompanied – but not entirely replaced – by the opposite process of ‘brain reversal’ at a later stage. It may also lead to ‘brain circulation’ or short-term movements as the
national economy becomes more integrated into the global one [3].

But this process is not automatic. And a developing country may become stalled at the brain drain stage. This makes it important to understand why highly skilled personnel in science and technology migrate, and to formulate the policies and strategies that will address ensuing problems.

How countries compare

Within the context of brain drain, countries can be grouped into a number of broad categories. The first includes those that have experienced a significant brain drain, with little brain circulation or few returnees. This category includes many developing countries in South and East Asia, such as Indonesia, Pakistan, Bangladesh and Sri Lanka.

Latin American countries are finding it hard to hold on to skilled individuals

Research on the Pacific region shows that many countries there are also being negatively affected by skilled emigration, experiencing low productivity and morale, and declining health and education services. Latin America, Eastern Europe, Central Asia and most of Africa provide a similar picture.

The second category includes countries experiencing a more modest level of brain drain, together with some returnees and temporary inflows of non-nationals. These include the more industrialised Asian countries – such as Japan, South Korea, Hong Kong, Malaysia and Singapore – as well as South Africa.

A number of other countries can be included in this category. A ‘reversal of the brain drain’ began in China in the mid-1990s, mainly involving students. It has grown as open-door policies allowing non-nationals to study and work there gain momentum, and entry into the World Trade Organisation becomes a reality.

In India the brain drain, while significant, is not seen as problematic. Emigrants or non-resident Indians are genuinely seen as potential returnees, and are also considered to be assets – as a potential source of investment funds, as providing links with overseas firms, and as monitors of the flow of knowledge through overseas networks. Like India, the Philippines has an excess of skilled labour, and currently sees advantages in sending them abroad – but on a temporary basis. In Vietnam, a reversal of the brain drain started tentatively in the late 1990s, spurred on by the culture’s emphasis on extended families, national pride and political pressure. But the sluggishness of the economy, the impact of Asia’s financial crisis and the slow rate of reform of state-owned enterprises and the government sector, all discourage potential returnees.
The third category includes countries that experience significant brain drain as well as large numbers of returnees and high levels of brain circulation. Taiwan is one.

Taiwan: a country to emulate

As its economy took off in the 1980s, Taiwan started to attract back skilled emigrants. Between the 1950s and the 1990s, around 20 per cent of student emigrants returned. They were encouraged by a range of policies – from providing incentives and covering the costs of moving back, to support for business development, such as the creation of science parks that form hubs of innovative, cutting-edge technology and manufacturing [4].

The 1990s saw the full opening up of the country’s economy. Returnees have helped change its culture into one that is dynamic, open and less bureaucratic. There has been a growing realisation that returnees faced by excessive bureaucracy, poor equipment and working conditions, and unfavourable social environments, are unlikely to stay. And there is more awareness that Taiwan’s returnees want to keep in touch with their business and professional colleagues overseas.

For some developing countries, Taiwan could offer a useful model for long-term management of brain drain. The country’s experience shows that relevant policies must be wide-ranging, covering economic, environmental, social and political aspects. And strategies need to be developed for making knowledge networks more productive for countries whose skilled professionals leave to work overseas.

The need for international action

National policies are clearly essential to addressing this issue. But there is also room for a more overarching role. To achieve this an international organisation must step forward and take the lead in a difficult task, namely to encourage receiving countries to stop tapping the skills of poorer regions – and to consider compensating them for loss of skilled personnel.

Traditional attempts at compensation have failed. But the former Committee on Science and Technology in Developing Countries of the International Council for Science proposed one concept that deserves attention [5].

This is the establishment of an Intellectual Resources Management Fund (IRMF) to address two issues in developing countries: losses from brain drain, and improving the standards of science and technology professionals. Monies collected from receiving countries that benefit from skilled immigration would be used towards additional training, exchanges and collaboration, and better working conditions in the developing world.
The fundamental obstacle to initiating such approaches is a lack of political will – at both national and international levels. But without action, the highly skilled in science and technology will continue to move on to richer economies, with only a small number of developing countries peripherally tied into this system. The remainder will be relegated to the margins, and their basic infrastructure and social services – in particular health and education – will deteriorate even further.

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References


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