It is widely believed that skilled immigrants create less assimilation problems and are more desirable in modern knowledge-based economies than unskilled immigrants. Whereas unskilled workers migrating on a permanent basis into major countries of immigration (unlike the temporary importation of workers legally under the gastarbeiter programs of postwar Europe or the Bracero program of the United States for agricultural workers) are typically entering illegally, or have entered legally and stayed on illegally, the entry of skilled workers therefore has been through legal mechanisms. Equally, international migration of the skilled from the developing to the developed countries is increasingly a feature of the legal-immigration systems of many developed countries.

The resulting focus on skilled migration raises a host of questions, for both “receiving” and “sending” countries, many of which are addressed in this volume. This overview provides a systematic, if brief, look at the different contributions in the volume and the important insights they provide on the phenomenon, its prospects, possibilities and problems.

Developed Countries Shift Legal Immigration towards Skilled Immigrants

The shift towards skilled immigrants in the legal immigration systems is by now a well-documented phenomenon. As Lynn Caroly and Constantin Panis argue in Chapter 2, a forecast of the developments in the supply of and demand for skilled labour in the United States suggests that robust demand for skilled labour will continue to outstrip its supply.
So, we can expect that the shift in immigration systems towards skilled immigrants will continue. Perhaps the most reluctant country to make this shift has been the United States which has traditionally relied on family-unification and refugee admissions for the bulk of its legal immigrants. This does not mean that the skill composition will not rise over time, even among the familial categories. E.g. when the family preference categories allow entry of brides married abroad to holders of green-cards for permanent residences or naturalized citizens, economic incentives operate to raise skill levels. This is because when a young man, for instance, goes home to choose from among several potential brides (all unknown to him) who respond to matrimonial advertisements and line up to marry him, he will pay attention to what the bride will add to his family income, this leading to his preferring a better educated, skilled bride. But, the bulk of the growing skilling of legal immigrants comes from simply a shift of immigration quotas in favour of what the US system calls Professional, Technical and Kindred (PTK) immigrants under the so-called Third Preference quotas. In addition, the United States has temporary skilled immigrants coming under a relatively small H1(b) visa program. In both cases, prior approval by the Labor Department is necessary so that the skilled immigrants are sponsored by employers and certified as essential (and hence non-competitive) for the employer in question.

As for other countries, chiefly Australia and Canada, they have what is known as the “point” system. This is more of a “supply-determined” system where skilled immigrants qualify to come in whereas the US system is based on labour certification and employer-sponsorship and is “demand-determined”. During the last year of the failed immigration reform in US Congress in 2008, an attempt was made to change the US
system in the direction of the Australia-Canada points system; but the failure of the reform meant also the failure of the proposed skilled-immigration change.

Chapter 5 by Susan Martin, B. Lindsay Lowell and Micah Bump systematically describes and analyzes how “Labor Department certified” immigration of the skilled is handled in the United States, differently from the “points” system of Australia and Canada (though the recently failed immigration reform would have shifted the US system towards the Australian-Canadian system). This work is nicely complemented by the careful analysis of selection criteria and the insightful empirical examination of the effects of these criteria on the actual skill composition of immigrants in a comparative analysis of the US and Australia systems in Chapter 6 by Guillermina Jasso and Mark Rosenzweig.

At the same time, Chapter 7 by Sherry Glied and Debo Sarkar offers an important analysis of how professional societies, in their case the American Medical Association, can effectively condition and restrict inflows, virtually acting as gatekeepers. When Sarkar was my Columbia student, I asked him to investigate a hypothesis I had come up with, that the entry examinations for foreign medical graduates might be made more or less restrictive depending on the state of medical earnings in the US: tightening when earnings were under pressure and relaxing when the conditions improved. At my suggestion, he worked with my colleague, Sherry Glied who is a far better econometrician than myself, and the result is intriguingly in conformity with what I had hypothesized. This paper is very important in so far as it shows how, when skilled immigrants are involved, professional societies have the possibility of not merely

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1 These authors also have a useful discussion of the different ways in which “skills” are defined in the legislation, making international comparisons tricky.
lobbying for restrictions but also are able, in cases, to apply “prior restraint” by manipulating professional qualification procedures. It has a counterpart in the recent studies of outsourcing x-rays to be read by radiologists in Bangalore rather than in Boston. It turns out that the radiologists in foreign countries who do this must be board-certified, so that despite the huge scare that most radiology would be outsourced, this has not happened and no radiologists in the US have lost their jobs and their average income remains exceptionally high.

It is also of interest to ask whether the public attitudes towards skilled and unskilled migration are different and whether individuals are less opposed to immigration when the ratio of skilled to unskilled migrants is high. The argument is that the average citizen will feel less threatened by skilled immigrants, for assimilation reasons and because the skilled immigrants are not perceived as a drain on the fiscal situation. Gordon Hanson, Kenneth Scheve and Matthew Slaughter examine this issue in Chapter 8 for the United States, using the data for different US states, and find that the skilled-to-unskilled composition of immigrant inflows does matter in shaping public attitudes toward immigration policy.

The fiscal consequences of skilled immigration, and perceptions thereof, are relevant to public attitudes on immigration, and it is interesting to see what they are. In Chapter 4, David Wildasin offers a sophisticated analysis of this issue in the wider setting of interactions among fertility, migration and fiscal policies, drawing together the empirical and theoretical findings from several theoretical and empirical studies, relating especially to Western Europe. Wildasin emphasizes the fiscal implications of age-imbalanced demographic structures in advanced economies, the impacts of these age
imbalances on age-sensitive expenditure and revenue systems, and the prospects for fiscal
adjustment along demographic, tax, and expenditure policy margins in a global economy
classified by increased competition for mobile capital and labor.

These analyses are set against the historical backdrop of early postwar European
experience with skilled immigration by Alan Winters in Chapter 3. As I expected, with its
officers decimated as much as the foot-soldiers, Europe was characterized by inflows of
skilled people, not just the unskilled gastarbeites.

**Developing Countries: Two Templates**

But what about the developing countries? At one time, in the 1960s, there was
massive concern in the media and among policymakers in many countries including
India, about the costs of the “brain drain”. Today, that is no longer the dominant
narrative. We have moved on in our understanding of the phenomenon of out-migration
of the skilled form the developing countries. As it happens, the emigration, permanent or
temporary, of the skilled form the developing countries fits today two alternative
templates.

**The “Brain Drain” Template:** On the one hand, there are countries in Africa which
regard the outflow of their skilled nationals (whether through stay-on after education
abroad or through physical out-migration) as a threat: recalling the refrain in India and
elsewhere in the 1960s about the problems raised by the “brain drain”. On the other hand,
there are countries today, like India again which is now a rapidly rising world economic
power after wide-ranging economic reforms, which regard emigration of their skilled
nationals as an opportunity.
As it happens, if only the present-day participants in the debate, such as the former physician (but not social scientist) Lincoln Chen at Harvard and tangentially (as part of his unscientific exhortations for more aid regardless of absorptive capacity in Africa)² the activist Jeffrey Sachs at Columbia, were to familiarize themselves with the massive discussion of these issues in the 1960s and 1970s, by Harry Johnson, me and other international economists, they would know, for instance, that even when countries “need” skilled manpower, the ability to absorb it is quite another matter and one would therefore have a very different and nuanced view of the skills shortage in the African countries worrying about the “brain drain”.

Thus, the older literature recognized, after the early alarms, that salary structures and incentive mechanisms often do not reward the skilled. Also, professionals often out-migrate because the social legislations such as divorce and family laws are rooted in old cultures and conflict with the needs of the modern classes. Again, bureaucracies interfere with the free functioning of these classes. Thus, in India, academics such as myself had to get permission from the Ministry of Finance bureaucrats to attend scientific conferences abroad. I recall being asked why I was invited to a particular Conference, to which I reacted icily: well, because I am smarter than you. Of course, I knew the top bureaucrat in the Ministry so there was no risk attached to my retort! And then you also get the extreme versions where, as was the case with Soviet Jews, many were denied the visa to go abroad, especially to Israel, ostensibly because their skills were deemed essential

² Sachs seems to be unmindful of the enormous literature in the 1960s and 1970s on the various ways in which foreign aid may be unproductive or counterproductive. Thus, at the time, there were serious econometric studies of concerns that foreign aid, even when given so as to supplement domestic savings, may actually substitute for them, leading to “dependence”, some even going so far as to describe it as part of the malicious design of neo-colonialists. Again, as today, the question was extensively discussed whether food aid would harm domestic agriculture and set development back.
whereas they were simultaneously displaced from their work as soon as they applied for an exit visa.

This dissonance between need and effective demand led some of us to recognize at the time that the concept of a “brain drain” had to be handled with care; and that the policy responses had to be sophisticated and informed, else they could easily be unproductive, even counterproductive. Thus, it was quite fashionable for many then, as many now, to ask for a restraint on such outflows of the skilled from the developing countries. This restraint was considered seriously by social scientists and policymakers in the developing countries. E.g. a famous economist in India wrote saying that no one under the age of forty should be allowed to emigrate! The rich countries of destination such as the United States were also shamed into enacting “return” visa arrangements, such as Exchange Visitor visas which required that skilled nationals visiting or working under them were to return for two years before they could re-apply for entry. Today, the literature on the African brain drain eerily asks for similar restrictions, urging Canada, UK and US not to let in doctors, nurses and other professionals from Africa.

But these proposals not merely ignore the difference between need and demand. They also ignore the fact that today, as the right to emigrate has become an important human right, it is ever more difficult to put obstacles in the path of those who wish to emigrate from a society.

So, the discussion of even African problems with skilled manpower cannot be cast, as many do, in a simpleminded lament and restrictionist format that the original “brain drain” literature often gravitated towards at the outset. Besides, as Nyarko and Easterly emphasize in Chapter 9 (as the 1970s literature did), personal incentives are
stacked in favor of emigration in many of the African countries that have outflows of skilled labor. From a policy perspective, the relevant questions then change. E.g. if people will not return from study abroad to work at home, or will leave soon after they return, how do we still get some value from them for their countries of origin? Can we get them to do short forays back home --- e.g. Ghanaian professors spending the summer on Educational Camps for local professors in Legon or even at Columbia? In short, we have to work with promiscuity since marriage is impossible. A variety of ways in which we can harness the goodwill of émigré nationals to reduce the handicap on skills would be useful.

Again, we have to spend a lot of money on educating Africans. True, for the foreseeable future, they will settle abroad because of inadequate governance and growth at home; and policies to get them to assist on a “promiscuity” basis, as outlined in the previous paragraph (and in other ways that I will presently mention), will help the African countries to get some value from them. Eventually, however, you can be sure that they will provide the augmented stock of nationals abroad that will return home maybe 15-20 years from now, once their home countries in Africa have taken off into sustained growth.

But, in the meantime, Africa is going to need skills for virtually every developmental problem of consequence. Thus, for example, doctors, nurses and extension workers are needed, even in a well-endowed and efficient country like Botswana, if diseases such as AIDS, Malaria, Yellow Fever and others are to be treated and also contained. But think also of trade which (despite the occasional skeptical statements of a handful of economists) is widely seen now to be an important handmaiden of growth. But
if exports are to increase, say in agriculture, these nations have to be prepared to cope with the inevitable invocation of Sanitary and Phytosanitary (SPS) standards to keep exports out. SPS standards may be cited to exclude imports for legitimate safety reasons; but every trade expert knows that, as tariffs and subsidies decline, the temptation to use SPS standards simply for protectionist purposes will be great and has already been indulged. Such illegitimate use of SPS standards can be challenged at the WTO in its Dispute Settlement Mechanism. But how are African countries going to be able to find the skilled experts in pesticides, bacteria, microbiology etc. to plead their cases? So, wherever you turn, you are going to find skills shortage as a critical impediment to development.

So, I have suggested that, using the demographic ageing of rich-country populations, we could fund a Gray Peace Corps which could take, at wages that include a hefty “tropical premium”, large numbers of skilled professionals of all types to the African nations during the years when we are training large numbers of their nationals who will mostly become the diaspora abroad. This diaspora can be mobilized to make contributions (in the “promiscuity” mode I just discussed) and will eventually find its way, in one way or another, to their home countries after their takeoff. The Gray Peace Corps, carefully designed and managed can fill the vacuum until the “reverse migration” of the diaspora begins, as it will, down the road as economic and social reforms take root and development take-off occurs. I am told that specific programs to take retired business executives to skills-short countries are in place in Europe and US. But the program I suggest would be far more extensive and would also require systematic planning cutting across very many different types of professionals and diverse countries.
The “Migration as an Opportunity” Template: Finally, in regard to the template where policymakers in countries like India today see export of their skilled professionals as an opportunity rather than a threat, the diaspora model is overwhelmingly the relevant one. Remittances, now a huge number for many countries with migrants abroad, are often cited as important. But they are largely from migrants from poor families. For the skilled migrants, while remittances can be identified in some data, they are far less important. This is because, by and large, the skilled migrants come from better-off families and the typical pattern therefore is not to send moneys home since the need to do so is much less. But what seems to be happening increasingly is that, when the diaspora is cultivated by the home countries through offer of dual citizenship and other rights, many want to use their wealth and income to finance primary education and medical hospitals, to fund NGOs, and to build research institutions and much else. So, the skilled generally tend to send “social remittances”; the unskilled send “family remittances”.

Nonetheless, along with the improved rights (e.g. dual nationality and voting rights) for the diaspora, I have suggested that the obligations of the diaspora also be increased in the form of a tax on citizens settling abroad. Originally, in 1973, I proposed this idea as a “brain drain tax”, now popularly known as the “Bhagwati tax”, much like the Tobin tax which relates to capital flows instead. There were several rationales proposed. First, that since immigration in a world of restricted entry, enabled one to earn “rents” (i.e. get the premium associated with restricted entry), this provided a source of revenue which could be tapped, without serious allocative inefficiencies, to be spent in

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3 There is a huge literature on this proposal by now. For the early discussion see in particular J. Bhagwati and Martin Partington (eds), Taxing the Brain Drain: A Proposal (I). Amsterdam: North Holland, 1976; Bhagwati (ed.), The Brain Drain and Taxation: Theory and Empirical Analysis (II). Amsterdam: North Holland, 1976; and Bhagwati and John Wilson (eds), Income Taxation and International Mobility, Cambridge, MA: MIT Press, 1989.
turn on social use of one kind or another. This aspect has appealed to many, even to this day, who are looking for proposals that would raise revenues for provision of public goods, for example, at the international level. But, as with all such proposals --- e.g. proceeds from mining manganese nodules underneath the high seas, the Tobin tax, the global-environmental carbon tax levied by an international authority--- , the political salience is limited for several reasons. E.g. why should India agree to having its national abroad taxed only to see the proceeds go into a Global Fund? Who would run the Fund? And so on.

So, I quickly shifted to other rationales. One appealing rationale came from the prevalent view that out-migration of the skilled would adversely impact “those left behind” (TLBs). Hence, those who migrated could be justly asked to compensate the TLBs. Indeed, if one decomposed (as I and Koichi Hamada did in some of our work) in simple models the “world” gains from migration, these gains would accrue to migrants and to the population in the receiving countries, whereas the TLBs would lose. But then the Bhagwati Tax proposal in that format raised heckles from human rights activists who wrongly thought of a parallel with exit taxes, and from economists who argued that there was no such adverse effect on TLBs because often the migrants had not been effectively utilized anyway.

Then again, another rationale was that the migrants ought to repay their educational costs to the countries from which they came. But this did not hold water in many cases because many migrants were “stay ons” who had been educated in universities in the countries to which they were migrating. If their education was paid for by the countries to which they had migrated, as was often the case with the US, why
should they pay taxes to India? [Today, that objection seems far less cogent as several highly-skilled migrants, whether temporary or permanent, come with exceptional education from leading educational institutions in key exporting countries such as India and South Korea, with that expensive education fully financed by the governments.]

The rationale that finally became the dominant one was a different one: that citizens settling/working abroad, as long as they were citizens, could be legitimately taxed as members of the community composed of the nation state. I.e. it was an attribute of citizenship that one owed a tax obligation. Many objected that, if you lived abroad, you derived no benefits: so why should you pay? But that implies that taxation should be benefits-related. By contrast, in a modern progressive state, taxation is de-linked from benefits and the rich pay more to provide for the poor and to provide a progressive share of the burden of providing public goods.

I discovered accidentally that this was in fact what the United States was doing: taxing by citizenship, not by residence (as the Europeans did). The US practice was the one that finally fitted neatly my thinking; and so the Bhagwati Tax took the final form of extension of income tax jurisdiction to nationals abroad. Many in the developing countries liked the proposal, as long as they mistakenly thought that I was advocating a tax to be paid by the US to India, to take an example. When they discovered that I was asking that the Indians in the US be taxed (until change of citizenship) by the US for India, their enthusiasm shrank greatly!

While the Bhagwati Tax became a hot issue, including in the United Nations, in the 1970s, I felt that it had little chance of being adopted and turned to other aspects of
immigration research. But now that the incomes of the skilled migrants have reached exceptionally high levels, and even a small surcharge levied on US income of Indian citizens in the US would raise sums of money that could add significantly to the Indian budget, for example, the issue has come back into economic research and public debate. One of the major participants in this revival is John McHale who has written an excellent analysis of the Bhagwati Tax in Chapter 10.

Equally, the analytical issues raised by public finance theorists who have looked at the issue of optimal income taxation when people can move out of one’s tax jurisdiction have addressed a great number of analytically interesting questions of tax design. There is a huge literature on the subject now, to which John Wilson has contributed massively. He provides an overview of the latest thinking on the subject among public finance theorists in Chapter 11.

Docquier and Rappoport, in Chapter 12, examine the Bhagwati Tax, and other issues concerning the impact of out-migration of the skilled, in alternative frameworks which supplement the Wilson analysis. Their analysis also provides an excellent survey of forty years of research on skilled out-migration. They additionally have up-to-date comparative data on the brain drain, as well as case-studies evidence which generally supports the view that outflows of skilled manpower are in practice beneficial, rather than harmful, to the source developing countries.