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**Brain drain and beyond:
returns and remittances of highly skilled migrants**

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Global Commission on International Migration

In his report on the ‘Strengthening of the United Nations - an agenda for further change’, UN Secretary-General Kofi Annan identified migration as a priority issue for the international community.

Wishing to provide the framework for the formulation of a coherent, comprehensive and global response to migration issues, and acting on the encouragement of the UN Secretary-General, Sweden and Switzerland, together with the governments of Brazil, Morocco, and the Philippines, decided to establish a Global Commission on International Migration (GCIM). Many additional countries subsequently supported this initiative and an open-ended Core Group of Governments established itself to support and follow the work of the Commission.

The Global Commission on International Migration was launched by the United Nations Secretary-General and a number of governments on December 9, 2003 in Geneva. It is comprised of 19 Commissioners.

The mandate of the Commission is to place the issue of international migration on the global policy agenda, to analyze gaps in current approaches to migration, to examine the inter-linkages between migration and other global issues, and to present appropriate recommendations to the Secretary-General and other stakeholders.

The research paper series 'Global Migration Perspectives' is published by the GCIM Secretariat, and is intended to contribute to the current discourse on issues related to international migration. The opinions expressed in these papers are strictly those of the authors and do not represent the views of the Commission or its Secretariat. The series is edited by Dr Jeff Crisp and Dr Khalid Koser and managed by Rebekah Thomas.

Potential contributors to this series of research papers are invited to contact the GCIM Secretariat. Guidelines for authors can be found on the GCIM website.

Introduction

What consequences do the recruitment immigration policies of the developed world and the strongly increasing international migration of the talented have on the societal problems of the developing world? Elaborating this significant question - presented by many academics in the international migration arena today - the demanding scholar should inquire as to the ultimate consequences of the international migration of the educated. It is to hypothesize that emigrating for better career avenues in the developed world – both acutely and without return - may finally lead to a hybrid of problems, both acute and long-standing, in the more vulnerable sending countries.

This article endeavours to specifically focus on acute, emigration-induced problems, and on the lack of, and limitations to, migrant return and remittances for the small, developing and vulnerable sending country.

Increasing international labour migration

According to a recent report by the UN, international migration is a vast phenomenon that continues to increase. The total number of international migrants, i.e. those residing in a country other than where they were born, was 175 million in 2000, or about 3 percent of the world population. In absolute terms, this global number is about twice as large as it was in 1970, and exceeds the 1990 estimate by some 21 million (United Nations 2002).

What is more, global migration today particularly consists of labour migration of the educated from developing to those developed countries that are in need of labour force (OECD SOPEMI 2002). In comparison, asylum-related migration is only 9 % of the 175-million figure and decreasing according to the UNHCR (2004). According to the UN, most of the world's migrants live in Europe (56 million), Asia (50 million) and Northern America (41 million). Almost one in 10 people living in the more developed regions is a migrant. In contrast, about one in 70 people in developing countries is a migrant (United Nations 2002).

This vast, growing movement of people is basically a positive thing: notably, the international labour migration of the highly skilled from the developing world to the developed world is at best a healthy and recommended "win-win" phenomenon, not only for the individual and the receiving country but also for the developing sending country.

Still, particularly for a vulnerable sending country, the benefits of such migration have their limitations, some of which are already visible and have been analyzed, some of which are still unknown, and finally some of which have not been sufficiently nor objectively examined. This article will elaborate on these contemporary aspects of migration from return, remittances to developing countries in Africa and Asia that might lessen the actual benefits of the migration of the highly skilled.

Three specific aspects of global migration that may diminish the "win-win" point of departure are focused on more closely: a) the acute consequences of large flows of highly skilled immigrants with families from critical branches of a poor and small country to a developed country, within a short period of time, b) the actual probability of permanent return to a sending country and c) the occurrence, the continuity and the actual macroeconomic effects of remittances to a sending country. How often is global migration actually a win-win scenario?

Elite labour migration: risks to the sending country

Proportionally, the world's very poorest do not migrate as much as the more educated (e.g. O'Neill 2003). On the contrary, recent global migration has increasingly consisted of the movement of people with secondary education; 88 per cent of immigrants to the OECD countries have a minimum of secondary education (Carrington and Detragiache 1998, 21-23). According to the Institute for Public Policy Research (2004) some 40 percent of tertiary-educated adults from Turkey and Morocco, and nearly a third from Ghana, have emigrated to OECD countries; over half of tertiary-educated adults from the Caribbean live in the USA, including 75 percent of tertiary-educated Jamaicans and Haitians; over 10 percent of Mexico's tertiary-educated population lives in the USA, along with 30 percent of its doctoral graduates; and, the proportion of secondary-educated Nicaraguans and El Salvadorians living abroad amounts to 40 and 50 percent respectively.

Hence, global labour migration is increasingly becoming a movement of the educated with their families, which means that at least initially, the sending country loses a considerable part of its vocational elite upon emigration. But why would this cause severe problems? Unless in clear surplus, this elite may consequently create a enormous vacuum draining the sending country of its driving force for development and well-being. This vacuum is presumably minor and more temporary for such giants as China and India, and a more permanent and occasionally life-threatening one in sub-Saharan Africa or in politically and demographically more vulnerable countries such as Pakistan and Turkey. Let us first look at the political issues and threats to infrastructure caused by excessive emigration of elites from Africa. Following this, we will look more closely at vulnerable countries in Asia.

Africa in particular is rapidly losing its elite. For example within the health sectors of some African countries, a total of 12 per cent of experts left in 2003 alone, accelerating the circle already started 30-40 years ago. Already between 1960 and 1987, Peter Stalker estimated that Africa had lost 30 per cent of its educated labour force (Stalker 1994). Africa has lost a third of its skilled professionals in recent decades and has had to replace them with 100,000 expatriates from the West at a cost of USD 4 billion a year, according to the Regional Industrial Review 2001 report.

Such money, primarily directed at survival, is used at the expense of any secondary needs for money, such as research or development. Consequently, as development may slow or grind to a halt altogether, there is an increasing chance of an *ill-circle*

being created: the excessive migration of elites slows development so that such elite migrants may not return at all.

The stability of entire countries may be at stake: According to one African migrant, Philip Emeagwali - one of the major developers of the internet - a stable, educated African middle class will ensure that political power is transferred "by ballots instead of by bullets". However, the constant migration of professionals with technical expertise, entrepreneurial, managerial and medical skills makes it difficult to create an African middle class. The remaining two-tier class system is a significant problem for Africa: "...a massive underclass that is largely unemployed and very poor, and a few very rich people that are mostly corrupt military and government officials...".

According to Philip Emeagwali, the international mobility of educated people may thus give rise to instability, poor leadership and endemic corruption, making it easier for the military to overthrow a democratically elected government. Hence, if skilled migration from Africa is large in number from critical professional branches, downright societal unrest and conflict seem possible. At least indirectly, heavy migration of the occupational elite may under appropriate circumstances be a partial cause for acute African misery, particularly that of Sub-Saharan Africa.

In addition to social instability, existing brain outflow over the last year or two – regardless of whether return later occurs or not – has jeopardised such critical sectors as health or education in countries such as Ghana, Tanzania, Zambia and Malawi. Deficits, in the health sector in Africa for example, are likely to cause diminished performance, again leading to stagnating and declining services through to the declining utilization of health services in general.

Let us focus more closely on Malawi, from where a strong outflow of health personnel has occurred lately. It is, according to Reidar Odeh, (2002) not quite excluded that these people might come back. However, a later return may not be sufficient for the survival of this AIDS-torn country: The average life span in Malawi has fallen to 36, due to AIDS, and in the near future, AIDS may further kill half of today's educated elite, particularly from the sectors of education and health (PANA Daily Newswire 22.9.2003).

However, as a large proportion of doctors and nurses have already embarked for Great Britain, there will presumably be an acute shortage of health personnel in the near future: Who will then ward the patients and inform about safe sex against a further spread of AIDS? A similar trend is going on in South Africa, another country heavily affected by AIDS. According to Adepoju, the emigration of doctors and nurses from South Africa is occurring at a time when their services are urgently needed in the overstressed health sector. (Adepoju, 2004)

What makes the Malawian health personnel case - repeated in many other Sub-Saharan countries- even more ironic is that it is in grave contradiction with the goals of today's developmental programs initiated by the Western world. According to a 2004 report by the British Parliament,

It is unfair, inefficient and incoherent for developed countries to provide aid to help developing countries to make progress towards the Millennium Development Goals (MDGs) on health and education, whilst helping themselves to the nurses, doctors and teachers who have been trained in, and at the expense of, developing countries. (The United Kingdom Parliament, 2004)

Also in certain Asian countries, particularly those more vulnerable than India, China or the Philippines, even the relatively temporary emigration of the highly skilled is seen as a direct and acute problem that slows down or halts current development.

In Pakistan, over 30 per cent of agricultural researchers and experts have recently migrated from government departments dealing with agricultural production and environmental development (Asia Africa Intelligence Wire 16.2.2002). If we think of Pakistan as a country of low labour productivity, with half the labour force employed in agriculture (Regional Surveys of the World 2002, 1125), a constant 30 per cent shortage in governmental expertise on agriculture development is likely to critically hamper decent economic growth and the consequent improvement in avenues for democratic stability, and this in the immediate future, regardless of a possible return a couple of years later: A proper post-Musharraf democracy should be established today. Some years from now, upon the possible return of the elite, the right momentum for democracy may already be gone.

Integration and return: a zero-sum game?

In the above section, we looked at the challenges of excessive emigration, although not excluding the chance that the Tanzanian teacher or the Pakistani agricultural expert may one day return home. As brain outflow and the relentless to and fro of the occupational elite is significantly risky for the developing country, it is to presume that altogether without return, such problems may become permanent. In this chapter, the focus is on the temporary migration of the educated (brain outflow) that leads to a lack of return, becoming permanent migration (brain drain).

Let us consider two aspects that presumably decrease the propensity of return, namely optimal integration in the host country and the weakening of the sending country due to migration: Could it legitimately be argued that where there is interplay of optimal integration in the host country and minimal improvement at home, brain drain is likely?

First, to what extent does integration in the host country negatively correlate with a propensity to return permanently? Recent research discloses that immigrants often wish to stay in the host country if the determinants of positive integration are there: job, family, some social networking and a feeling of belonging to the host country. The economists Amalie Constant and Douglas Massey looked in 2002 at guest workers in Germany, and they found out that they only return home when they lose access to German jobs, have strong social and economic ties to the sending country and lack social, political or psychological ties to Germany. When practical

integration is there, i.e. full-time work, family, a feeling of German identity and German citizenship, the probability of return is .00015 (Constant and Massey 2002).

It is possible that specifically the highly educated are more mobile than such general "guest worker categories". Still, the Italian economist Riccardo Faini (2003) has come to the conclusion that success in the host country, including integration, makes return essentially less likely. In the case of the "positive selection" (i.e. labour immigrants chosen by their occupational and integrative potential) of immigrants to the host country in the first place, Faini found out that the few that do return would be the least successful ones (Faini 2003, 9). Therefore one might also question the actual benefit of the return of the less successful to the sending country.

What makes this improbability of integrated and successful immigrants returning significant is that the major labour immigration countries, such as Canada, Australia and New Zealand, systematically do their best to find immigrants that do integrate and succeed; In the explicit point systems, the immigrating family, a waiting job and the personal characteristics that contribute to optimal integration - such as language skills - are increasingly preferred (Tanner 2003). These are precisely the similar factors that Constant and Massey see as diminishing the chance of the guest worker returning home from Germany. Even in such high-profile labour immigrant countries as the United States, where the point system is not that transparent, similar factors of smooth integration are carefully focused.

As such "positive selection" is a natural prerequisite for a successful immigration policy, and as positive selection leads to better integration (Tanner 2003), leading to the reduced likelihood of return, it can be argued that the more successful the immigration policy, the less the chance of immigrant return, and, although the majority of returnees are not necessarily the brightest ones, returnees are few and principally those that have not made it in the host country.

Based on this logic, it seems that as concerns return, global labour migration is often a zero-sum game: Integration and the potential to succeed professionally - aspects increasingly stressed in the point systems of modern immigration policies in the developed world - seem to considerably lessen the probability of return.

Another aspect that makes return to the original sending country more improbable today is the lack of economic or political progress in the sending country during the time abroad, creating better avenues for career and well-being (Kwok and Leland 1982). A recent development, supporting Kwok and Leland, has been visible in Bangladesh in 2001, where a large number of returning migrant scientists re-migrated, as there were no jobs vacant in their academic fields, because of the shrinking of these fields, again a causality of heavy migration (The Independent 17.7.2001).

Hence, emigration may weaken the country, feeding the vicious circle of lessening returns. According to Beine, Docquier and Rapoport (2003), brain drain has significant negative effects for a country, from which the per cent of emigration is above 20. Such development has been visible in some branches of Sub-Saharan Africa, particularly concerning teachers and doctors from Nigeria, Ghana, Zambia,

Tanzania and Malawi. Generally in Africa, according to Philip Emeagwali, the professionals migrating out of Africa include those with technical expertise, entrepreneurial, managerial and medical skills. Such migration leads to a severe lack of doctors, and consequently the poor are forced to seek medical treatment from traditional healers while the elite fly to London for their routine medical checkups. A shrinking and weakening medical sector is making return ever less lucrative (Interview with Philip Emeagwali).

In sum, although there is no extensive academic evidence on the causality between expert emigration, host country integration/sending country stagnation and the probability of return, the following trends of contemporary international migration will further lessen return:

First of all, immigration policies of those developed countries in need of labour are carefully searching for well educated people who can be integrated. The higher the level of education of the individual and the better the integration, the less the chance of return. Secondly, partly resulting from the modern, integrative policies of Canada and Switzerland for example, the educated in the developing world are also increasingly responding to such invitations, taking the family along, and wishing to integrate.

Third, due to a consequent increasing outflow and destination country integration of the educated, the chances of the sending country suffering and economic stagnation are increased. In the case of African doctors, for example, a shrinking and weakening medical branch is making these countries ever less lucrative for expatriate return.

Return does exist, contributing considerably to the well-being and development of many economies, such as India and Taiwan. But many economies lack and will lack the ultimate, constructive benefits of migrant return.

The occurrence, consistency and societal effects of remittances

Even in the case of permanent migration, remittances may compensate for some loss of the educated. Global monetary remittances to the sending country are a currently increasing, vast phenomenon. In 1999, the officially registered remittances to developing and former communist countries came to over \$65 billion (Stalker). In 2002, this amount had risen to \$80 billion, with estimates that unofficial flows included, the total amount might be between \$100 and \$200 billion (Sander 2003). In 2001, the total of officially transferred remittances was 40 per cent higher than all official development aid (Obadina 2003). According to O'Neill, remittances have grown both in nominal terms and relative to source countries' GDPs, far outpacing growth in official development assistance (O'Neill 2003).

Remittances and the academic interest in them have grown while questions about how best to capture ideal development impact remain; However large the annual global remittances per se, there is mutually contradictory evidence about individual consistency and the ultimate benefits to the sending country of remittances. It is

argued that individual remittances do essentially diminish over time, due to host country integration and citizenship (goals particularly pursued by today's developed countries in need of workforce). What is more, remittances are typically used ineffectively as concerns macro economy, for private daily consumption, health expenses and real estate maintenance and investment (e.g. Sander 2004). In fact, due to the increased liquidity of the ones receiving remittances, the prices within (for example, the health sector) may rise, therefore decreasing parity. Based on the above, there is doubt whether remittances ultimately relieve poverty and income gaps on a macro economic level. Finally, remittances in general may increase enterprising sluggishness and excessive international dependence in the sending country.

Let us first look at the continuity and consistency of remittances. In 2000, economists Lowell and De La Garza surveyed the continuity of the cross-border traffic of remittances between Mexico and the United States, one of the liveliest borders in the world as concerns migration. They have found out through wide quantitative studies, that although single individual remittances did increase over time, both the quantity of senders and the total of all remittances sent in a given time did actually decrease.

A one per cent increase in the period of stay in the United States diminished the probability of sending remittances by 2 per cent. Getting U.S. citizenship further lessened the chance of sending money back to Mexico. What is more, the better the education of the immigrant, the less probable it was that he/she was remitting. Every extra year in education diminished the propensity to send money back by 7 per cent. Even less probable was if the family had joined the immigrant (Lowell and De La Garza 2000 18).

As was the case for return to the sending country, the contemporary trend in international migration - namely the global movement of the educated, families reunification, movement to a developed country which favours permanent settlement of educated migrants - includes precisely such factors that also according to Lowell and De La Garza simultaneously diminish the probability of remitting: family integration, permanent residence and high migrant education. An even stronger development is visible e.g. in Pakistan, from where net emigration has increased, but to which the total amount of remittances has downright decreased in recent years (Pakistan & Gulf Economist 3.8.2003).

Although a lot of further inductive analysis is needed, it looks as if today's trends of international migration - well-off immigration countries tempting the educated with his family to leave the developing country for optimal destination country integration - will in the future both increase non-return migration and simultaneously decrease the relation of total remittances to the amount of emigrants.

Elaborating this idea even further, if the U.S.-Mexico trend continues to develop, it would be academically interesting to presume that, in international migration generally, even the absolute amount of remittances will later start to diminish, unless a) there is a continuous surplus (not causing brain drain) of labour migrating, thus acutely compensating for the lessening remittances of the integrated, or b) unless sufficiently effective international measures are taken to support maintaining the

contacts of the migrant elite with the sending country. But: a) constant surplus is apparently possible only in the largest emigration countries such as China, India and Mexico, and b) as concerns wider international measures, nothing very practical *supra* or *intra* IOM, ILO, UNHCR and OECD is acutely (2004) in sight. The emerging Berne Initiative, Global Commission on International Migration and World Migration Organization as sketched by Jagdish Bhagwati are as yet mere ideas and consultative bodies. Thus, the presumed prerequisites for keeping up the global remittances seem not to be in sight.

Another, equally important question is who and how do the remittances actually benefit as concerns the sending country. Two factors are interplaying here; As a) international migration is increasingly becoming migration of the elites and b) as remittances are basically used on personal expenses, health and real estate investments of the home families, it follows that a lot of remittances are used by and near the families of the elites, with only a limited amount of the money having to do with the better performance of the whole macro economy.

Even if some infrastructural development is visible (e.g. as noted by Andrade-Eekhoff and Silva-Avalos in 2004) it should still be questioned, how remittances would decrease income gaps and enhance the situation of the poor. Again, if income gaps rather widen than get narrower, this is on the long run apt to lead to a sharpening of the societal situation, rather than to development. Little research is out as yet concerning this subject.

What about the developmental effect of remittances? O'Neill presents the key issue:

There is debate that rather than promoting the structural changes needed for development, remittances may actually delay them while creating unsustainable local and family economies. This argument draws a parallel to natural resource windfalls and posits that migration's potential is squandered if it raises incomes without boosting human capital and institutional capacity. According to this line of thought, migration may rob developing countries of their most motivated and innovative people, delaying institutional change (O'Neill 2003).

The developing country receiving remittances may thus go on living in illusion of development. Upon the sudden cessation of remittance flows, for any, yet unknown reason, the acute disclosure of such defective structures and the actual lack of human innovation might cause serious societal problems in the sending country concerned.

Simultaneously with sustaining the partly false illusion of development, assets coming from the outside may cause innovative sluggishness, excessive international dependency and increasing "materialism". In Africa, even the relatively developed countries such as Egypt and Morocco are highly dependent on remittances from Europe and North America. According to Glytsos, the collecting together of imported material, due to remittances, has caused backwardness in Egypt's own economy (Glytsos 2002 19).

A similar, quite recent worry is presented in the Philippines, to which overseas workers last year sent through official routes a record of US\$7.6 billion, 6.3 per cent more than in 2002 and accounting for 16 per cent of current account receipts and 10 per cent of the gross domestic product. According to Dr. Albuero, associate director of research in the University of the Philippines' economics department,

There is a reluctance to go for bold reforms that would essentially try to absorb more labour because there are huge foreign exchange inflows that cushion the government's balance of payments... (South China Morning Post 17.2.2004).

Devesh Kapur of the UN (2004) goes even further. Not only do remittances cause widening income disparities, with simultaneous macroeconomic sluggishness, but remittances would even become a driver for further emigration and brain drain. Even though individual remittance money may have even contributed to some infrastructural improvements in the local community - in the form of schools, better houses, and even larger community and village improvements – the visible wealth has encouraged others to emigrate, too, leaving the community that was supposed to flourish - totally deserted. (Kapur, 2004)

Deducing from the above, remittances, despite their quantity and often positive effects, are no guarantee; Time and integration in the host country, in addition to advanced education and family reunification, are all apt to diminish the propensity to remit. With this logic, in order to maintain remittances, a continuous flow of new immigrants to the sending country is needed.

For India and China, with a surplus of educated workers, a proportion of skilled migration without return nor remittances is merely an expensive headache, whereas for regions such as Sub-Saharan Africa, or Pakistan and Bangladesh, where the educated surplus is not that clear any longer, a continuous and western world-induced recruitment of skilled workers may start causing damaging brain drain effects, consequences of which have already been considered in this article. Even without simultaneous significant brain drain, the sending country's over-reliance on remittances may increase sluggishness, false illusions of development, and such international dependency that may hamper the international credibility of this country.

Conclusion

In spite of this sceptical look at skilled emigration, return and remittances, there is likely to be plenty of situations where, ideally, merely the surplus of the educated leaves (such as from India and China), then either a) they stay in the host country for a limited time period, gather sufficient money, cumulate ideas and create networks, and then return, to utilize the money, ideas and networks for the good of the repatriate himself and for the sending country alike or b) such migrants stay longer in the sending country creating and maintaining networks, contacts and remittances to the sending country (e.g. Philippines).

Increasingly, however, such a story does not correspond with reality. First of all, there may not be a surplus of educated workers in the first place, as was seen in the agricultural research field in Pakistan, or in the health sectors of Sub-Sahara. Acute problems may occur, independent of return a couple of years later, as was seen in Malawi.

Secondly, return may not materialize, even in the long run, as the sending country has nothing more to offer than migration (Bangladesh and many African countries) or because of the nature of today's migration – permanent migration, family movement, - where the recruiting countries in need of labour choose to naturalize and integrate the immigrant (Canada and New Zealand). Even if return materializes, there are ever louder arguments that the returnees would be few and the less talented of the migration population. Ergo: lessening returns and lessening benefits of returning seem a trend in today's world.

Third, as concerns remittances, partly similar rules are in force; Today's trend, an effective immigration policy to recruit skilled workers, subsequent integration and citizenship all decrease the probability to remit. (United States and Mexico). Remittances themselves do not automatically fuel innovation and development. Rather, sluggishness and dependency may increase on a macro-level. (Morocco, Egypt and Philippines)

Based on the above analysis, let us return to the initial question: What consequences do the recruitment immigration policies of the developed world and the consequently strongly increasing international migration of the talented have on the societal problems of the developing world? The evidence above shows, that the demanding and ethically decent scholar should further inquire into the effects of migration on the sending country, the propensity and benefits of return, and the probability and positive developmental effects of remittances.

Indeed, better career avenues in the developed world - without return or with decreasing and non poverty-reducing remittances - may actually lead to serious problems in the more vulnerable countries. During the consequent instability, the poorest have the least social and economic "buffers", and they therefore tend to suffer most in the long term. Migration that started as the positive skilled migration may thus be contributing in the long run to a more sinister kind of migration, namely asylum, from regions where brain drain – induced political and economic instability is turning the region into turmoil. Particularly in regions such as Sub-Saharan Africa and parts of the Middle East, such development may occur within the coming years.

REFERENCES

- Adepoju, Aderanti. Changing Configurations of Migration in Africa. 2004. Migration Information Source. Washington D.C.
- Andrade-Eekhoff, K. & Marina Silva-Avalos, C. 2003. Globalization of the Periphery: The Challenges of Transnational Migration for Local Development in Central America. Working Document. FLACSO Asia Africa Intelligence Wire 16.2.2002
- Beine, Michel, Frederic Docquier and Hillel Rapoport. 2003. Brain Drain and LDC's Growth: Winners and Losers. *IZA Discussion paper series* No. 819. Bonn.
- Bloch, Alice. 2004. Making It Work: Refugee employment in the UK. Institute for Public Policy Research, London.
- Carrington, William J. and Detragiache, Enrica. 1998. How Big Is the Brain Drain? International Monetary Fund.
- Constant, Amalie and Massey, D.S. 2002. Return Migration by German Guestworkers: Neoclassical versus New Economic Theories, *International Migration*, 40/4, 2002.
- Emeagwali, Philip, interview, available at <http://emeagwali.info/interviews/brain-drain/education-in-africa-brain-drain-problem-worldnet-africa-journal.html>.
- Faini, Riccardo. 2003. The brain drain - An unmitigated blessing? Italian Ministry of Economy, Rome.
- Glytsos, Nicholas P. 2002. The Role of Migrant Remittances in Development: Evidence from Mediterranean Countries. *International Migration* 2002, Vol. 40 No 1.
- Kapur, Devesh. 2004. Remittances: The New Development Mantra? G-24 Discussion Paper Series, 29.
- United Nations Conference on Trade and Development. 2004.
- Kwok, V. and H. Leland. 1982. An economic model of the brain drain. *American Economic Review*, 72, 1982.
- Lowell, B. Lindsay and Rodolfo O. De La Garza. 2000. The Developmental Role of Remittances in U.S. Latino Communities and In Latin American Countries. Georgetown University. Washington.

Obadina, Tunde. 2003. The Brain Drain as a Source of Revenue, available at <http://allafrica.com/stories/200309180203.html>

Oderth, Reidar. 2002. Migration and Brain Drain - The Case of Malawi. WCP. New York 2002

OECD SOPEMI 2002. Trends In International Migration, Paris.

O'Neill, Kevin. 2003. Using Remittances and Circular Migration to Drive Development, Migration Policy Institute, available at <http://www.migrationinformation.org/feature/display.cfm?ID=133>.

Pakistan & Gulf Economist, 3.8.2003.

PANA Daily Newswire, 22.9.2003.

Regional surveys of the World, The Far East and Australasia 2002, Europa Publications London, 2002.

Sander, Cerstin. 2003. Migrant Remittances to Developing Countries. UK Department of International Development.

South China Morning Post, 17.2.2004.

Stalker, Peter. 1994. The Work of Strangers - A Survey of International Labour Migration, ILO, Geneva.

Stalker Peter, Stalker's guide to international migration. Available at http://pstalker.com/migration/mg_emig_4.htm

Tanner, Arno. 2003. Siirtolaisuus, valtio ja politiikka - Kanadan, Sveitsin ja Uuden-Seelannin työvoiman maahanmuutto ja politiikka 1975-2001. (Migration, policy and the state - labour immigration and policy in Canada, New Zealand and Switzerland 1975-2001) Directorate of Immigration and Ministry of Labour. Helsinki.

The Independent, 17.7.2001.

The United Kingdom Parliament, House of Commons. 2004. International Development – Sixth Report. London.

UNHCR, Asylum levels and Trends: Europe and non-European Industrialized Countries, 2003, 24.2.2004.

United Nations. 2002. Number of World's Migrants Reaches 175 Million Mark – Migrant Population Has Doubled in Twenty-Five Years. UN Press Release POP/844, 28.10.2002.