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# **Migration and Development: Mutual Benefits?**

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Research Department  
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# Introduction and summary

## Introduction

This volume presents the proceedings of the conference “Migration and Development: Mutual Benefits?”, organised jointly by the Agence Française de Développement (AFD) and the European Development Research Network (EUDN), and held on 8 November 2006.

The debates addressed the links between migration, trade, investment and aid, the brain drain and migrants’ remittances, all of which are now crucial issues for migration in the context of globalisation. Among the main topics, the discussions sought to answer the following questions: which policies and reforms would most likely ensure that these migratory flows benefit countries of origin, receiving countries and migrants themselves? Are migration, trade and investment complements or substitutes? What are the interactions between policies and migration flows, or between policies, aid flows and trade? What are the micro- and macroeconomic impacts of migrant remittance flows? Is the brain drain a curse or a boon for developing countries? Maurice Schiff, Frédéric Docquier, Jeff Dayton-Johnson and Ricardo Faini presented four papers on specific aspects of this debate.

This introduction provides a synthesis of these presentations and the ensuing commentary.

## **Migration, investment and trade: substitutes or complements? (Maurice Schiff, The World Bank)**

Schiff's paper begins with a theoretical review of the notions of substitution and complementarity. It is assumed throughout the paper that developing countries mostly export from labour-intensive sectors employing low-skilled workers. Two basic theories come into opposition. The first (put forward by R.A. Mundell) holds that trade is a substitute for migration and investment. Trade develops inversely to factor movements (labour or capital) and, by liberalising trade, host (developed) countries incite source (developing) countries to increase their exports of labour-intensive goods, thus raising employment, wages and investment. This leads to a decline in migration. This relationship assumes conditions of perfect competition, no domestic distortions, constant returns to scale and identical homothetic preferences. The second theory (that of J.R. Markusen) holds that trade and factor movements are complements. Suppose that country C1 has a technological advantage in the labour-intensive good X: the good will be exported to country C2, which has no technological advantage for producing this good. The wage rate in C1 rises, thus encouraging migration from C2 to C1: migration and trade are thus complementary.

The nature of the relationship between migration, investment and trade (MIT) depends, in fact, on several variables. First, the level of tariff barriers, the extent of trade liberalisation and the elasticity of wages come into play. Returning to the previous example, but assuming this time that country C2 applies tariffs, the price of the imported labour-intensive good rises, as does C2's wage rate. This may encourage migration from C1 to C2. The increase in the labour supply in C2 then allows both good X and good Y to be produced endogenously, resulting in a reduction of trade. There is a tariff rate threshold above which migration and trade are substitutes. Below this threshold, they are complements.

The MIT relationship also depends on income in the source country, the level of educational attainment of its inhabitants, the distance separating the source and host countries, and whether there is a well-organised migrant network or extensive diaspora. Migration costs (the cost of moving, finding a job, housing, etc., and the cost and time required for obtaining a visa) are not generally taken into account in such models. An increase in income or in low-skill wages as a result of liberalisation can help would-be

migrants to pay the costs of their migration, in which case there is a complementarity effect. (Above a certain wage level, of course, the incentive to migrate disappears.) Similarly, a well-organised network or large diaspora can help future migrants to meet the costs of migrating. Remittance flows can also help to absorb these costs and thus constitute a factor in the migration of low-skilled workers. A share of these remittances is invested in human (education, health care, etc.) and physical capital: in most cases, therefore, migration and domestic investment are complements.

The nature of foreign direct investment (FDI) also affects the MIT relationship: horizontal FDI (replicating productive capacity rather than centralising it with a view to export) implies substitution between trade and FDI, whereas vertical FDI (international division of labour) creates trade in intermediates. Finally, social integration policies adopted by the host country influence the MIT relationship. Social exclusion in the areas of education or health, for example, may lead an immigrant population to react in a way that is contrary to the interests of the general social welfare.

The implications for migration, trade and investment policies are many:

- (i) Trade liberalisation policies, aimed among other things at countering low-skilled immigration, will merely encourage low-skilled workers from poor countries to immigrate, while discouraging skilled workers. Countries that introduce immigration quotas will be confronted with illegal immigration.
- (ii) Foreign aid aimed at discouraging migration produces the opposite effect if the country is poor, as this aid will help future migrants to bear the costs of migration.
- (iii) Helping a country to develop its infrastructure and technology or to reduce administrative costs may also encourage migration, contrary to the aims originally targeted.
- (iv) Taxing labour income encourages skilled workers to leave the country, but discourages unskilled workers from migrating (as they are unable to assume migration costs). Exports of goods requiring unskilled labour increase, as do imports. Trade increases as qualified workers migrate (complements), and unskilled workers remain (substitutes).
- (v) The relationship between these variables calls for some kind of policy co-ordination to maximise the benefits of economic policy. Although multilateral co-operation would seem the most effective, multilateral trade agreements are

hard to achieve and show just how complex this type of co-operation can be. There is no multilateral organisation that deals with international migration, since national sovereignty is an underlying issue in the design of migration policies. Co-operation on migration at supranational level (bilateral or multilateral) could be facilitated through trade agreements, since the partners involved are already used to negotiating with each other and the gains from factor liberalisation could be distributed fairly.

In his commentary on this paper, Jaime de Melo (University of Lausanne) points out that the theorem of factor price equalisation was unrealistic. Even if production factors were fully liberalised, wage equalisation would not occur because other explanatory factors for wage rates come into play: exogenous factors (re-evaluation, massive entry of China and India with their social dumping) and endogenous factors (culture etc.). André Sapir (Université Libre de Bruxelles) notes that Schiff's analysis does not cover non-tradeable goods and services (catering, hotel industry, etc.). Schiff focuses on economic mechanisms without taking into account political considerations, such as integration policies and immigration policies with visa allocation, or cultural aspects (more difficult to quantify).

To conclude, using models as a basis for optimal trade, migration and investment policy design is no easy matter. These models do not endorse the conclusion that the development of poorer countries is a necessary step for limiting migration. A large number of factors, some of which are not measurable, must be taken into account. Nonetheless, the paper brings out the need for policy co-ordination at both national and international levels.

### **Brain drain and inequality across nations** **(Frédéric Docquier, Université Catholique de Louvain)**

In Docquier's view, although estimates of the impact of the brain drain on source countries abound, these have hitherto been based on intuition rather than reliable data.

Skilled migration is indeed difficult to measure, as statistics have not been harmonised and the underlying concepts are far from clear. The notion of an "immigrant"

can be defined on the basis of nationality or place of origin, and the concept of “brain” on the basis of educational attainment, total years of schooling or type of occupation. To measure the brain drain, one must also take into account the increase in the average level of education, the size of the populations supplying the brain capital and the proportion of skilled workers within these populations. Thus, India sends a greater number of brains abroad than Belgium, but Belgium sends more than Malawi, as Belgium has a higher proportion of skilled workers.

For his analysis, Docquier uses a database of skilled immigrant stocks residing in the 30 OECD countries. In this database, a skilled migrant is defined as a person born in a foreign country and having a tertiary diploma (this level of educational attainment represents 4 to 5 per cent of developing country populations). These data on migrant stocks (from census data) are aggregated, then compared to the original populations so as to define the rate of skilled migration.

What do these data reveal?

- (i) There is a relationship between the average emigration rate and country size: the smallest countries are more open to migration than the large countries.
- (ii) Middle-income countries are more open to migration (inverted U-shaped relationship between the average rate of skilled migration and income levels).
- (iii) The regions most affected are the Caribbean and Pacific, followed by Central America and sub-Saharan Africa.
- (iv) Only 20 per cent of skilled immigrants residing in OECD countries live in a European country (EU15). At first glance, the EU seems to play a backseat role in the brain drain, as its immigration policies are more oriented towards family reunification and asylum seekers. Yet, as Docquier points out, the EU attracts most of the skilled migrants from sub-Saharan Africa, and thus has a very strong regional impact on the brain drain.

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This data set can be criticised, particularly as it does not take into account the immigrant's age of entry into the host country. This makes it difficult to determine whether the cost of education is borne by the sending or receiving country. In contrast, the data set constructed by Docquier and other researchers does take age of entry (after age 12, 18 or 22) into account. This data set shows that using data without age-of-entry restrictions leads to over-estimation of the intensity of the brain

drain. The two data sets, however, show an identical ranking for countries suffering from the brain drain.

Refining the data by including age of entry also makes it possible to analyse the brain drain from strategic sectors such as the medical sector. On the basis of place of education (an admittedly imperfect indicator), a strong correlation can be seen between the overall brain drain and the medical brain drain. Among the 30 most affected countries, half are in sub-Saharan Africa, where the shortage of doctors is already worrying. For Peter Quartey (University of Ghana), what needs to be analysed is the shortage – subsequent to migration – of the entire medical profession, including nurses. For Quartey and Khalid Sekkat (Université Libre de Bruxelles), wage differentials for doctors should also be taken into account, as well as living conditions in the country of origin. According to Quartey, the HIV prevalence rate in Ghana causes doctors to emigrate with their families, which in turn, as Docquier also notes, has a negative impact on HIV care.

How can the brain drain be analysed in the longer run? For Docquier, South-North and North-North migration is part of the globalisation process. In terms of migration to developed countries, the number of skilled immigrants has considerably increased in response to demand (increasingly selective immigration policies) and supply (high demographic growth and improved education levels in the South). Over the long run, from 1970 to 2000, the overall brain drain rate nonetheless remained stable (7.5 per cent increase), but regional disparities are high: brain drain is on the rise in sub-Saharan Africa and Central America, but has decreased in the Middle East. Khalid Sekkat notes on this count that brain drain studies focus on emigration to OECD countries, whereas an increasing number of skilled workers emigrate to other countries in the South, mainly in the Persian Gulf.

How can economic theory explain the brain drain? Under certain market conditions, allocation of labour resources at global level can prove efficient. The problem is that this type of analysis assumes the absence of externalities, whereas human capital is in fact affected by strong externalities: the social output of human capital is higher than its private output. Since the 1970s, the brain drain has thus been interpreted as the transfer of human capital from the South to the North, resulting in lower human capital for the South and reinforcing inequality across nations. This was notably the analysis

of Bhagwati and Harmada (1974), who concluded that the brain drain generated under-employment. More recent analyses show, however, that a brain gain seems possible, as migration of skilled labour can have a positive impact on the sending country thanks to remittances, return migration, network externalities, diasporas and reduced corruption in the country of origin. Skilled migration is thus not necessarily detrimental to the origin country, although it is beneficial for only about 15 per cent of such countries, particularly large countries such as India, Brazil and China.

In conclusion, insufficient and imperfect data make it difficult for economists to provide guidance for policy makers. Khalid Sekkat asserts that skilled workers would not necessarily have the opportunity to exercise their professions in their countries of origin, an observation that qualifies somewhat the importance of the brain drain. As one of the conference attendees pointed out, however, the fact that skilled workers might emigrate dissuades governments from investing in education. For many attendees, the issue of the brain drain raises the question of migration policy co-ordination between North and South countries. Could a possible solution be a Bhagwati tax – paid by Northern countries to those in the South – in order to compensate the education costs borne by the latter to the benefit of the former? For Jean-Michel Debrat (AFD), migration must be understood in the light of inequalities, and what is necessary is solidarity between countries.

### **Immigration, development and policy trade-offs (Jeff Dayton-Johnson and Theodora Xenogiani, OECD Development Centre)**

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Dayton-Johnson and Xenogiani put forward an original approach: they adopt the perspective of a policy maker in a Northern country in the position of having to make trade-offs between several objectives when deciding on migration policy. Pursuant to the adoption of the Millennium Development Goals, a first, almost universal, policy-making objective is to reduce poverty and promote growth in developing countries. A second objective is that of balancing supply and demand in the domestic market for skilled or unskilled labour, and a third, that of promoting social cohesion at home. Other objectives such as trade or security could be considered, but the authors choose to focus on these three well-documented objectives to illustrate the problem of policy coherence.

To achieve these objectives, policy makers have three policy tool kits to work with: migration policies (quotas, visas, asylum seekers, foreign students, family reunification, border controls etc.), social policies (redistribution, housing, education, health, social assistance etc.) and development co-operation policies (loans, grants etc.), including technical assistance to developing countries.

This seeming simplicity (three objectives, three instruments) masks a certain complexity that appears when the interactions among the effects of these policies are taken into account: a given objective can be variously affected by different policy instruments. For example, a policy to foster growth in developing countries may be impacted negatively by the brain drain and positively by official development assistance (ODA). Conversely, a given policy instrument may have contrasting impacts on the various objectives targeted. For example, attracting low-skilled or unskilled workers may help to achieve the objective of boosting growth in the South, but it may also increase the amount of investment required to maintain the same level of social service delivery at home.

Approaching the subject from this standpoint, the authors examine the impacts of various immigration measures on the objectives of: *i*) development; *ii*) labour-market regulation; and, *iii*) social cohesion. Regarding the objectives of development and poverty reduction, it appears that the most favourable policies involve, first, attracting the least skilled labour, since: *i*) this labour supply is basically sourced from the poorest populations; *ii*) the departure of these workers opens up employment opportunities for low-skilled individuals remaining at home; and, *iii*) these workers transfer more money per person to the home country than wealthier immigrants, and these remittances obviously have positive effects on consumption and investment in human and physical capital. In the same vein, the OECD countries should thus focus their recruitment policies on the poorest countries. Finally, in close partnership with source countries, host countries should give greater attention to circular migration schemes with multiple-entry visas and efficient mechanisms for transferring pensions and other social benefits to the immigrant's home country.

With respect to the objective of balancing labour-market supply and demand, the effects of migration policies differ depending on the country. Their impact on wages is generally weak: slightly negative in the United Kingdom and Greece, and slightly



positive in Italy and Spain, which are both characterised by a shortage of job offers in the sectors which the natives consider unattractive (such as tourism, farming and construction). The impact on employment also varies from one country to another due to two opposite effects: on the one hand, immigrants can replace natives in their jobs, and on the other, the same immigrants can create their own jobs or companies and help to create other jobs through their demand for goods and services. Lastly, some more qualitative aspects deserve mention: for example, immigrant labour, particularly in the domestic services sector, has helped to relieve women of household-related tasks and resulted in a significant increase in female labour force participation in certain countries (notably in Greece and Spain).

Lastly, from the standpoint of social cohesion, studies show that economic integration (through employment) is the most powerful driver of successful social integration. In those countries where immigrants readily find employment (e.g. the United Kingdom), the public costs of achieving a given level of social cohesion are limited. Conversely, in countries where their economic integration is a more sensitive matter (e.g. France, the Netherlands and Belgium), the cost of social policies may well increase.

Dayton-Johnson thus identifies the difficult trade-offs facing policy makers in OECD countries. Which course should be followed? Attract the least skilled immigrants (beneficial for development objectives) to the detriment of job security for the least skilled natives (negative effect on the job market)? Attract the highly skilled for the benefit of the receiving country, but to the detriment of the sending country? Encourage low-skilled immigration with the risk of increasing the cost of social cohesion? Or, lastly, aim for full integration of immigrants (cohesion objective), who then run the risk of severing ties with their home country (ties which are vital to the maximisation of migration's positive effects on development)?

To facilitate the task of policy makers, the authors suggest greater mobilisation of migrants' diasporas, whether these networks are formal or informal, or located in sending or receiving countries. Diaspora networks may serve as valuable relay points for diffusing information (on labour-market opportunities, access to social services, etc.), and are better informed about their members than outsiders. They are thus more likely to overcome the classic problems of information asymmetry (lack of investment, shortcomings in credit or insurance, etc.). Accordingly, mobilising these networks

could help to improve the working of the labour market and reduce the cost of social integration, as well as to channel remittances more effectively and establish a dual or transnational culture.

Pierre Jacquet (AFD) notes that this information-packed, high-quality paper has opened up valuable avenues of thought. He then goes on to mention those points he sees as questionable: *i)* the arbitrary choice of three objectives, given that many other equally legitimate ones could have been considered (security, equilibrium of the social budget, public health, etc.); *ii)* insufficient attention paid to the complexity of the mechanisms and trade-offs, and particularly to the impacts of the brain drain or migrants' remittances, which are more ambiguous than the paper would imply; it would be useful to quantify the trade-offs and examine them from a long-term perspective; and, *iii)* the difficulty of achieving coherence in a area such as immigration policy, where objectives, priorities and instruments remain vague. Jacquet pushes this line of thought to the point of envisaging incoherence as being, ultimately, a driver of research and the learning process! He also takes the opportunity of calling both for patience as a necessary condition for knowledge-building, and for clear-sightedness from policy makers, who are forced, due to insufficient knowledge, to navigate though incoherence without falling into the trap of bilateralism.

Jacques Ould Aoudia (French Ministry of Finance) offers insights on various aspects of the study, specifically concerning the nature of migrants' transfers and their impact on source countries. These transfers comprise not only monetary remittances but also cultural and social transfers, and the impact of the latter is no less important. Moreover, they vary greatly from one region or network to another, whence the importance for policy makers of examining social practices in detail. Whether these transfers are made at family, individual or collective level, they remain private initiatives that public policies can accompany or facilitate, but in no way incite. Current thinking on migration issues too often tends to forget this aspect of the real world, in which the wide dispersion of social practices makes national-level aggregates and balanced public action difficult to achieve.

The discussion was then opened to the floor: Lawrence Haddad (Institute for Development Studies) encourages the authors to rationalise the agenda on the role of diasporas by identifying mechanisms that would effectively help to resolve the policy trade-offs discussed in the paper. Natasha Iskander (University of New York), in a

much-noticed comment, warns against idealising diasporas and suggests refocusing the debate on regulation of labour markets, given that these are now recognised as being transnational. The debate on diasporas runs the risk of pushing aside the question of labour demand on these markets. Focusing the debate on diasporas might also lead to privatisation of what should be matters of public policy: managing employment at international level, developing human capital, delivering basic services and possibly thinking about the citizenship status of transnational workers.

### **Migration and remittances: the impact on countries of origin (Riccardo Faini, University of Rome)**

Faini's interest lies in what place migration holds in the present context of globalisation, and more specifically in how migration impacts on countries of origin. This leads him to explore the links between migration and development.

He begins with a reminder of three key facts about migration: *i*) migration is markedly absent from the current globalisation process (between 1990 and 2000, the migration rate from countries in the South remained basically unchanged, even though, given the population growth differential, the share of immigrants in the populations of Northern countries rose over this period); *ii*) there are still pronounced differences in the price of labour at the international level, which would not be the case if labour mobility were totally free; *iii*) the real distribution of the gains of migration is still uncertain: who are the real "winners" – the host country, the country of origin or migrants themselves?

From the host country's point of view, it is commonly perceived that the net welfare impact of unskilled immigration is, at best, low, but that its impact on redistribution is high. On the other hand, the welfare impact of skilled immigration is high, which has recently led receiving countries to design immigration policies in favour of skilled immigrants.

What happens from the sending countries' point of view? Restrictions on unskilled immigrants deprive these countries of a powerful lever for convergence, whilst the brain drain depletes the most talented segment of their labour force. Emigration thus means that these countries suffer a net welfare loss.

A key factor here is the amount of remittances sent by migrants to family members in the home country, which can to some extent compensate for the negative effect of migration. These transfers improve debt indicators, are more stable than other capital flows, have a counter-cyclical effect, reduce poverty, improve capital output, savings and investment and have a positive impact on entrepreneurship.

What, however, are the consequences of a bias in favour of skilled immigration? Using a simple analytical framework, Faini shows that, once the assumption of a homogeneous labour force is set aside, the links between migration and development become highly ambiguous from both a theoretical and an empirical point of view.

Emigration of skilled workers could ultimately prove beneficial for sending countries by virtue of four vectors:

- (i) the migration of elites could give workers a greater incentive to acquire training, thereby inducing higher levels of education, or brain gain, in the sending country;
- (ii) the amount of remittances that skilled workers would be likely to make could foster development in their home countries;
- (iii) the potential role of skilled migrants or diasporas in promoting trade and international capital flows; and,
- (iv) their role in transferring skills upon return to their countries of origin.

Empirical studies show, however, that although skilled migrants earn more than unskilled workers in the host country, they tend to transfer less money. The former are most often from better-off families, stay longer in the host country and more readily undertake family reunification.

According to Faini, there is no clear or final answer to the question of knowing whether those who stay behind win or lose. He does find, however, that remittances have a positive effect on growth in the country of origin and that skilled migrants tend to transfer proportionally less than unskilled workers. He concludes that policies favouring skilled workers could thus be detrimental to growth in source countries given the lower levels of remittances that would ensue.

In her comments, Flore Gubert (DIAL) returns to the ambiguous links between migration and development, as revealed by both theoretical and empirical studies.

Dispelling these uncertainties would require a good deal more research, but like Faini, she points out that the brain drain does not necessarily lead to a brain gain. The main pitfall for further study in this area is the continuing lack of harmonised cross-country data.

Microeconomic studies bring to light certain phenomena, however, that are masked by cross-country analyses. First, there are winners from the brain drain: large countries and newly industrialised countries that have successfully established a scientific and technical base to foster their growth and the subsequent return of migrants. Second, it is now agreed that the insurance function of remittances to families remaining in the home country sheds light on the individual motivations of migrants either to make such transfers or to stay in the host country. It also largely explains why little use is made of these funds for productive investment. Remittances are unlike other forms of capital, and their leverage effective is clearer for fighting poverty than for fostering growth.

Jean-Christophe Dumont (OECD) picks up on the correlation between skilled migration and incentives for education in the source country. He lays particular emphasis on the need: for multidimensional approaches to promote the mobility of migrants and students, despite host countries' reluctance to return to policies in favour of temporary migration; for the adoption of ethical principles, e.g. by drawing up a code of international recruitment; and, for initiatives to stimulate investment in source countries.

This session concluded with the assessment that although migration may serve as a redistribution instrument and an advantage for development, it is not a prerequisite for development. Above all, it must be addressed within a political rather than simply economic framework, which must highlight the importance of both migration policies in receiving countries and sending countries' policies on education, labour markets and financial systems.

## **The concluding session: cross perspectives**

The final panel helped to broaden the debate, supplementing a purely economic approach to migration issues with viewpoints from political scientists, geographers and policy makers.

Jean-François Bayart (CERI) provides a political scientist's point of view on an issue that he regards as eminently political. In his view, we are currently experiencing two major disjunctions: *i)* Although the international markets for capital, goods and services are increasingly integrated, the international labour market is still highly compartmentalised. This disjunction is potentially explosive in the long run. *ii)* Policies for restricting and controlling migratory flows are contrary to social practices (study grants, pilgrimages, tourism, etc.). Most of the recent ideas in this area (co-development, “chosen” immigration, etc.) are disconnected from social realities and are taken up by policies concerned with “public safety” and giving preference to the native-born over immigrants. This distorted relationship between regulations and actual social practices has several consequences. It leads to suspicion and the criminalisation of migratory movements, which entails a diplomatic, economic, hegemonic, philosophical and political cost. It also creates a mistakenly sordid image of migrants, which runs the risk of pushing immigrant populations into communitarianism: Chinatown is a pure product of restrictive migration policies. Finally, it promotes conventional discourse and policies concerning migration management, which precludes taking advantage of certain types of migration that are highly profitable for the host country (temporary migration, informal cross-border trade as in Iran and Afghanistan).

Starting from this observation, Bayart invited the attendees to think about two unresolved questions: *i)* Are we experiencing a restructuring of capitalism with regional South-South specialisation between labour-supplying countries (e.g. Cambodia, Myanmar) and “growth centre” countries that make use of this labour force (e.g. Malaysia)? *ii)* How long will the migration debate continue to be depoliticised? The North does bear some responsibility in the production of poverty and refugees.

Jean-Michel Debrat (AFD), taking the floor not only in his capacity as Deputy Executive Director of AFD but also as a geographer, points out that migration is the oldest phenomenon in history: the world as we know it was forged by migration. He shows that, by overlaying several maps, population movements can be anticipated and explained. For example, the map showing each country's human fertility index reflects the population's perception of its chances of survival and future prospects, and thus gives an indication of their wish to emigrate. In some parts of the globe, the replacement of generations is no longer ensured. Africa, which has not yet begun its demographic transition, is very clearly seen to be a reservoir of migrants. This absence of future prospects also is evident on maps showing zones where the soil is becoming infertile,

where there is a shortage of water, or where conflicts are developing. This observation also holds good for maps that show areas of high employment concentration and replacement rates for the working population. Jean-Michel Debrat concludes by emphasising that the most significant determinant of an individual's opportunities in life is his/her place of birth, and that migration born of despair and the search for work always becomes settler migration.

Jean-Pierre Garson (OECD) provides a run-through of topical news items relating to immigration, mentioning the thousands of abandoned migrants who are desperately trying to flee their countries and risking death in the sole hope of reaching El Dorado. Concurrently, a growing number of OECD countries are feeling threatened by the presence of foreign communities who find it extremely difficult to integrate and whose children do not always manage to enter or stay on the job market. Finally, migration to OECD countries has risen considerably over the last 20 years.

Against this backdrop, Garson underlines the links between migration and development, and attempts to define more precisely the nature of the benefits to be shared and among whom these are to be shared.

What is there to be shared? Even if immigrants account for only a very small percentage of the population, immigration has often been at stake in negotiations that go far beyond the question of migration strictly speaking. Examples are to be found of bilateral negotiations concerning the establishment of military bases in return for fewer restrictions on migration. Similar cases involve concessions on extraction of mineral resources and exploitation of other raw materials. The gains should be shared between employers, host countries and source countries. As for migrants, they try to reap as much benefit as they can from these situations. Making a rapid list of the possible gains, one can see that extraordinary progress has been made since the mid-1970s in OECD countries as regards migrants' economic and social rights. This includes not only equal treatment between immigrants and nationals in the areas of employment and social protection, but also citizenship and the lowering of administrative barriers to acquisition of the nationality of the host country.

With whom is it to be shared? Sharing the gains and the responsibilities means removing all the obstacles that hinder development, as well as old mechanisms that

no longer work. Would it not be advisable to give greater weight to the initiatives of young people (regardless of whether they are immigrants, members of the diaspora or candidates for return), to propose new forms of foreign aid for their countries' development and to integrate this aid into a regional geopolitical perspective, with enhanced co-operation that would underpin co-development between the origin and host countries? Regional and federal authorities could then bolster these initiatives and help to drive development that is sustainable. It is time to stress the limits of the role that migration can play in development and to make sure that, although this role is limited, it can still support a development process that is grounded on vital economic and social reforms.

Finally, Roberto Villarreal-Gonda, Under Secretary for Urban Development and Territorial Organisation, Mexico, offers the view of a policy maker who faces high emigration of the Mexican population to the United States. After a reminder that migration is of the utmost importance to the world's public policy agenda, he goes on to endorse some of the previous speakers' main conclusions: *i)* avoid simplistic approaches as a basis for policy making; and, *ii)* step up efforts to collect more empirical evidence in order to inform policy thinking. Insofar as social capital, depreciation of physical capital, and depletion of natural or environmental capital are not taken into account, the overall gains of migration may well be over-estimated. Lastly, the fact that migration deeply affects both host and source countries would support the case for reinforced co-operation, negotiated internationally, in order to strengthen institution-building on both the sending and receiving sides.



# Introduction et synthèse

## Introduction

L'AFD et le réseau de chercheurs européens EUDN (European Development Research Network) ont organisé le 8 novembre, une conférence sur le thème « Migrations et développement : des avantages partagés ? ».

Les débats ont porté sur les liens entre migrations, commerce, investissements et aide, la fuite des cerveaux ou encore les transferts de fonds des migrants, qui sont devenus des enjeux cruciaux des migrations dans le contexte de la mondialisation. Parmi les principales questions abordées, les discussions ont tenté de répondre aux interrogations suivantes : quelles politiques mettre en œuvre pour que ces flux migratoires soient favorables aux pays d'origine, aux pays d'accueil, et aux migrants eux-mêmes ? Migrations, commerce et investissements sont-ils complémentaires ou substituables ? Quelles sont les interactions entre les politiques et flux migratoires et les politiques et flux d'aide et de commerce ? Quels sont les impacts micro et macro-économiques des transferts de fonds des migrants ? La fuite des cerveaux est-elle un fléau ou un avantage pour les pays en développement ? Maurice Schiff, Frédéric Docquier, Jeff Dayton-Johnson et Ricardo Faini ont présenté quatre exposés abordant des aspects spécifiques de ce débat.

## **Migrations, investissement et commerce : substituabilité ou complémentarité ? (M. Schiff, Banque mondiale)**

Maurice Schiff a commencé son exposé par des rappels théoriques, portant sur les notions de substituabilité et de complémentarité. Pour l'ensemble de l'exposé, nous supposons que les pays en développement exportent globalement dans des secteurs intensifs en main-d'œuvre, hébergeant des salariés peu qualifiés. Deux théories s'opposent. La première stipule que le commerce est substituable aux migrations et aux investissements (Mundell, 1957). Le commerce évolue de manière opposée aux mouvements de facteurs (main-d'œuvre ou capital) et le pays d'accueil (développé), libéralisant son commerce, incite les pays sources (en développement) à augmenter leurs exportations de biens (de contenu en main-d'œuvre important), donc l'emploi, les salaires et l'investissement. L'incitation à la migration diminue dès lors. Cette relation est valide en concurrence pure et parfaite, en l'absence de distorsions, à gains d'échelle constants et dans le cas de préférences homothétiques. La seconde théorie suppose que le commerce et les mouvements de facteurs sont complémentaires (Markusen, 1983). Supposons que le pays C1 dispose d'un avantage technologique en X, biens intensifs en main-d'œuvre : le bien X sera exporté vers le pays C2, ne disposant pas d'avantage technologique pour la production de ce bien. Le taux de salaire  $w_1$  dans C1 est à la hausse, encourageant des migrations de C2 vers C1 : migrations et commerce sont alors complémentaires.

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En réalité, la nature des relations « migrations, investissement et commerce » dépend de plusieurs variables : tout d'abord, du niveau des droits de douane, de l'étendue de la libéralisation et de l'élasticité des salaires. Reprenons l'exemple précédent, mais désormais le pays C2 applique des droits de douane : le prix du produit importé, intensif en main-d'œuvre, augmente, ainsi que le taux de salaire de C2. Cela peut favoriser des migrations de C1 vers C2. L'offre de travail numéraire en C2 permet dès lors de produire de manière endogène le bien X, en plus d'Y : le commerce diminue. Migrations et commerce sont substituables à partir d'un certain seuil de droit de douane. En dessous de ce seuil, ils sont complémentaires.

La relation évolue également en fonction du revenu du pays d'origine, de la qualification de ses habitants, de la distance entre pays d'origine et de la présence d'un réseau bien organisé, d'une diaspora nombreuse. Les coûts de migration ne sont

pas pris en compte dans les modèles (coût de déménagement, de recherche d'emploi, d'habitation... ainsi que le coût et le temps nécessaire pour l'obtention d'un visa). Une augmentation du revenu ou l'augmentation des salaires peu qualifiés suite à la libéralisation peut aider les futurs migrants à supporter les contraintes financières et à immigrer : il y a alors complémentarité. Au-delà d'un certain seuil de salaires, il n'y a en revanche plus d'intérêt à migrer. De même, un réseau bien organisé ou la présence d'une diaspora peut favoriser les futurs migrants à s'affranchir des coûts de migration. Par ailleurs, les transferts financiers facilitent l'absorption des coûts de migration et sont donc un facteur de migration des salariés peu qualifiés. Une partie de ces transferts est investie en investissements en capital humain et physique (éducation, santé...) : dans la plupart des cas, migration et investissements domestiques sont complémentaires.

La nature des investissements directs étrangers (IDE) joue également sur les liens entre migrations, investissement et commerce : les IDE horizontaux (la réplication des activités au lieu d'une centralisation des activités avec exportation) viennent se substituer au commerce, les IDE verticaux (avec une division internationale du travail) sollicitent le commerce intermédiaire. Enfin, les politiques d'intégration sociale mises en place dans le pays d'accueil influencent cette relation. Les exclusions sociales dans le domaine de l'éducation ou de la santé peuvent amener les migrants à réagir dans un sens contraire au bien-être social.

Les implications en termes de politique migratoire, commerciale et d'investissement sont nombreuses :

- (i) les politiques de libéralisation, dont l'une des motivations est de contrer l'immigration de travailleurs peu qualifiés, ne pourra qu'encourager l'immigration des salariés peu qualifiés des pays pauvres et décourager celle de salariés qualifiés. Les pays imposant des quotas feront face à une immigration illégale ;
- (ii) les aides de la communauté internationale visant à désinciter les migrations ont l'effet opposé si le pays est pauvre : l'aide aidera les futurs migrants à supporter les coûts de migration ;
- (iii) aider un pays à développer ses infrastructures, ses technologies ou diminuer les coûts administratifs peut encourager également les migrations, contrairement aux buts initiaux recherchés ;

- (iv) établir une taxe sur les revenus du travail encourage les travailleurs qualifiés à quitter le pays, mais diminue l'incitation à migrer pour les travailleurs peu qualifiés (ils ne peuvent assumer les coûts de migration). Au final, les exportations de biens nécessitant une main-d'œuvre peu qualifiée augmentent, les importations également. Le commerce augmente en même temps que les salariés qualifiés migrent (il y a complémentarité) et les salariés peu qualifiés restent (il y a substitution) ;
- (v) La relation entre ces variables appelle à une coordination nécessaire en vue d'un ensemble optimal de politique économique. L'échelle de coopération multilatérale est la plus efficace, néanmoins la difficulté de sceller un accord commercial multilatéral témoigne de la complexité d'une telle coopération. Il n'existe pas d'institutions traitant de migrations internationales, compte tenu de la dimension de souveraineté sous-jacente dans la définition de politiques migratoires. Enfin, les accords de migration à l'échelle supranationale (bi ou multi) pourraient être facilités par la conclusion d'un accord commercial : les partenaires ont déjà l'habitude de négocier et une distribution équilibrée des gains de la libéralisation des facteurs pourraient se réaliser.

Suite à cette présentation, Jaime de Melo (Université de Lausanne) a souligné le caractère peu réaliste du théorème d'égalisation des salaires. Même avec une libéralisation totale des facteurs de production, les salaires ne s'égalisent pas car d'autres facteurs explicatifs du taux de salaire entrent en jeu : des facteurs exogènes (réévaluation, entrée massive de la Chine et de l'Inde avec leur dumping social) et endogènes (culture...). André Sapir (Université Libre de Bruxelles) a précisé que l'étude de M. Schiff n'incluait pas les biens non échangeables (restauration, hôtellerie...). La vision de M. Schiff est limitée aux sciences économiques ; il ne prend pas en compte les considérations politiques (politiques d'insertion, d'immigration avec mise en place de visas) ou culturelles (difficilement quantifiables).

En conclusion, l'utilisation des modèles pour orienter les décideurs publics vers un ensemble optimal de politiques commerciales, migratoires et d'investissement n'est pas si aisée. Ces modèles ne permettent pas de conclure à la nécessité de développer les pays pour limiter les migrations. Un grand nombre de facteurs sont à prendre en compte, dont certains ne sont pas quantifiables. Néanmoins, l'exposé montre la nécessité de coordination entre ces politiques, au niveau national et international.

## Fuite des cerveaux et inégalités entre les nations (F. Docquier, Université Catholique de Louvain)

Pour Frédéric Docquier, si l'impact de la fuite des cerveaux sur les pays d'origine connaît de nombreuses estimations, ces dernières ont, dans le passé, davantage été fondées sur des intuitions que sur des données.

En effet, les migrations de travail qualifié sont difficiles à mesurer : les statistiques ne sont pas harmonisées et les concepts sous-jacents mal définis. Ainsi, la notion d'immigré peut-elle être définie sur la base de la nationalité ou du lieu d'origine et celle de cerveau, d'après le niveau de diplômes, les années de scolarité ou l'exercice de certaines professions. En outre, pour mesurer la fuite des cerveaux, il faut prendre en compte l'augmentation du niveau moyen d'éducation mais aussi la taille des populations pourvoyeuses de cerveaux et la proportion des travailleurs qualifiés dans ces populations. Ainsi, l'Inde envoie-t-elle, en nombre, davantage de cerveaux que la Belgique mais la Belgique en envoie plus que le Malawi puisque la part des qualifiés dans la population belge y est plus importante.

Frédéric Docquier exploite ici une base de données sur les stocks de travailleurs qualifiés résidant dans les 30 pays de l'OCDE. Dans cette base, un migrant qualifié est défini comme une personne née à l'étranger et diplômée du supérieur (niveau de diplôme qui représente entre 4 et 5% des populations des pays en développement). Ces données de stock de migrants (issues de données de recensement) sont agrégées puis rapportées aux populations d'origine afin de définir un taux de fuite des cerveaux.

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Que nous disent ces données ?

- (i) le taux de migration moyen est lié à la taille du pays : les pays les plus petits sont plus ouverts que les grands ;
- (ii) le taux d'ouverture est plus fort dans les pays à revenu intermédiaire (relation en U inversé entre le taux de migration moyen et le revenu) ;
- (iii) les régions les plus affectées sont les îles des Caraïbes et du Pacifique puis l'Amérique centrale et l'Afrique subsaharienne ;
- (iv) seuls 20% des migrants qualifiés résidant dans des pays de l'OCDE vivent dans un pays européen (Union européenne à 15). A première vue, l'UE participerait peu à la fuite des cerveaux ayant opté davantage pour une politique migratoire

de regroupement familial et d'asile politique. Pourtant, Frédéric Docquier observe que c'est l'UE qui attire le plus les migrants qualifiés issus de l'Afrique subsaharienne : l'UE a ainsi un impact régional en termes de fuite de cerveaux très important.

Cette base de données peut être critiquée. En particulier, elle ne prend pas en compte l'âge d'arrivée du migrant sur le territoire d'accueil. Il est alors difficile de déterminer lequel des pays, d'accueil ou d'origine, a supporté le coût de l'éducation. Dans la base de données construite par Docquier et d'autres chercheurs, l'âge d'entrée (après 12, 18 ou 22 ans) est pris en compte. Cette base montre que la fuite des cerveaux est surestimée par des données non retraitées mais que le classement des pays qui pâtissent de la fuite des cerveaux demeure identique.

Affiner le traitement des données prises en compte permet également d'analyser la fuite des cerveaux dans des secteurs stratégiques : le secteur médical en est un. Sur la base, certes imparfaite, du lieu de formation, on observe une forte corrélation entre fuite des cerveaux et fuite des cerveaux « médicale ». Parmi les 30 pays qui en souffrent le plus, la moitié sont des pays d'Afrique subsaharienne où la pénurie de médecins est déjà préoccupante. Pour Peter Quartey (Université du Ghana), c'est la pénurie consécutive aux migrations de l'ensemble de la profession médicale, infirmiers compris, qui doit être analysée. Pour ce dernier et Khalid Sekkat (Université Libre de Bruxelles), les différentiels de salaires des médecins sont aussi à prendre en compte ainsi que les conditions de vie dans les pays d'origine. Le taux de prévalence du SIDA au Ghana incite les médecins à émigrer avec leurs familles, selon Peter Quartey, ce qui a en retour, d'après Frédéric Docquier, un impact négatif sur le traitement du SIDA.

Dans une perspective de plus long terme, comment analyser la fuite des cerveaux ? Pour Frédéric Docquier, les migrations Sud-Nord et Nord-Nord sont une composante de la mondialisation. Parmi les migrations vers les pays développés, le nombre des migrations qualifiées a beaucoup augmenté sous l'effet de la demande (politiques d'immigration de plus en plus sélectives) et de l'offre (une croissance démographique importante et une augmentation du niveau d'éducation dans les pays du Sud). Sur une longue période, de 1970 à 2000, le taux de fuite des cerveaux demeure néanmoins stable (augmentation de 7,5%), mais les disparités régionales sont fortes : il augmente pour l'Afrique subsaharienne et l'Amérique centrale alors qu'il baisse pour le Moyen-

Orient. Khalid Sekkat note à ce propos que les analyses de la fuite des cerveaux se focalisent sur les migrations vers les pays de l'OCDE, alors que de plus en plus de migrants qualifiés émigrent vers d'autres pays du Sud, notamment vers ceux du Golfe Persique.

Comment la théorie économique explique-t-elle la fuite des cerveaux ?

Sous certaines conditions de marché, l'allocation des ressources de main-d'œuvre au niveau mondial peut être efficace. Mais une telle analyse suppose l'absence d'externalités. Or le capital humain se caractérise par d'importantes externalités : le rendement social du capital humain est supérieur à son rendement privé. La fuite des cerveaux a ainsi été interprétée depuis les années 1970 comme un transfert de capital humain du Sud vers le Nord qui entraînerait une baisse du capital humain au Sud et renforcerait les inégalités entre nations. Telle fut l'analyse de Bhagwati et Harmada (1974) notamment, pour qui la fuite des cerveaux crée du sous-emploi. Pourtant, des analyses plus récentes montrent qu'un *brain gain* semble possible. Les migrations de travail qualifié peuvent en effet avoir un impact positif sur le pays d'origine via les transferts de fonds de migrants, les migrations de retour, les externalités de réseau et les diasporas, ainsi que la réduction de la corruption dans le pays d'origine.

Les migrations de travail qualifié ne sont donc pas nécessairement défavorables pour le pays d'origine. Toutefois, elles sont favorables pour seulement 15% environ des pays d'origine, à savoir les grands pays tels que l'Inde, le Brésil et la Chine.

En conclusion, des données insuffisantes et imparfaites rendent difficile la tâche des économistes de fournir des recommandations politiques. Pour Khalid Sekkat, garder à l'esprit que les travailleurs qualifiés n'auraient pas nécessairement eu l'opportunité d'exercer leur profession dans leur pays d'origine permet de nuancer l'importance donnée à la fuite des cerveaux. Toutefois, comme l'a remarqué un participant de la conférence, la possibilité de voir ses travailleurs qualifiés partir, réduit l'incitation de l'Etat à investir dans l'éducation. Pour de nombreux participants, la question de la fuite des cerveaux soulève celle de la concertation des politiques migratoires entre pays du Nord et du Sud. Une taxe à la Bhagwati, payée par les pays du Nord aux pays du Sud pour compenser le coût de l'éducation que les seconds supportent pour le profit des premiers, est-elle la solution ? Pour Jean-Michel Debrat (AFD), les migrations doivent être appréhendées dans l'optique des inégalités : une solidarité entre territoires s'impose.

## **Immigration, développement et arbitrages entres politiques (J. Dayton-Johnson et T. Xenogiani, Centre de Développement de l'OCDE)**

Jeff Dayton-Johnson et Theodora Xenogiani adoptent une perspective originale : celle du décideur politique d'un pays du Nord en position de devoir arbitrer entre plusieurs objectifs au moment de prendre des décisions en matière de politique migratoire. Réduire la pauvreté et dynamiser la croissance dans les pays en développement constituent un premier objectif quasi-universel suite à l'adoption des ODM. Deuxièmement, assurer l'équilibre de l'offre et de la demande sur le marché du travail domestique, qualifié ou non qualifié. Troisièmement, assurer la cohésion sociale de son pays. D'autres objectifs pourraient être mis en balance (objectifs commerciaux, objectifs de sécurité,...) mais les auteurs ont choisi de se concentrer sur cette première série de trois objectifs bien documentés dans la littérature pour illustrer le problème de la cohérence des politiques.

Les instruments politiques permettant d'atteindre ces objectifs sont au nombre de trois également : ceux qui relèvent des politiques migratoires (quotas, visas, demandeurs d'asile, étudiants, regroupement familial, contrôle des frontières, ...) ; ceux qui relèvent des affaires sociales (redistribution, assistance, sécurité sociale, logement, éducation, santé, ...) ; enfin, ceux qui relèvent des politiques d'aide publique au développement (APD) (prêts, dons, ...) et de l'assistance technique aux pays en développement.

Cette apparente simplicité (trois objectifs, trois séries d'instruments) cache une certaine complexité dès lors que les interactions dans les effets des politiques sont prises en compte : un même objectif peut être diversement affecté par différents instruments politiques. Ainsi, une politique qui vise à favoriser la croissance dans les pays en développement pourra être affectée négativement par la fuite des cerveaux et positivement par l'APD. Réciproquement, un même instrument politique peut avoir des impacts contrastés sur les différents objectifs listés. Par exemple, attirer des travailleurs peu ou pas qualifiés peut contribuer à atteindre l'objectif d'accélération de la croissance au Sud mais risque d'accroître le montant des investissements nécessaires pour maintenir le même niveau de prestations en matière de services sociaux.

A la lumière de ce cadre d'analyse, les auteurs ont balayé les impacts de différentes mesures migratoires sur les objectifs (i) de développement, (ii) de régulation du marché



du travail et (iii) de cohésion sociale. Concernant l'objectif de développement et de réduction de la pauvreté, il ressort que les politiques les plus favorables consisteraient d'abord à attirer la main d'œuvre la moins qualifiée car 1. cette main d'œuvre provient pour l'essentiel des familles les moins aisées ; 2. son départ crée des opportunités d'emplois pour les autres personnes peu qualifiées sur place ; 3. elles transfèrent plus d'argent par tête dans leur pays d'origine que les plus riches et les transferts de fonds sont réputés avoir des effets positifs à la fois sur la consommation et l'investissement en capital physique et humain. Dans le même esprit, les pays de l'OCDE devraient donc orienter leur politique de recrutement vers les pays les plus pauvres. Enfin, en partenariat étroit avec les pays d'origine, les pays d'accueil devrait organiser des flux de migrations circulaires avec des visas à entrées multiples et des mécanismes efficaces de transfert des retraites et autres prestations sociales.

Au regard de l'objectif de régulation de l'offre et de la demande sur le marché du travail, les effets des politiques migratoires diffèrent selon les pays. Leur impact sur les salaires tout d'abord est globalement faible : plutôt négatif au Royaume-Uni et en Grèce, plutôt positif en Italie et en Espagne, pays caractérisés par un déficit d'offre de travail dans certains secteurs jugés peu attractifs par les natifs comme le tourisme, l'agriculture ou le BTP. L'impact sur l'emploi là encore varie d'un pays à l'autre du fait de deux effets opposés : d'un côté les immigrés peuvent remplacer des natifs dans leurs emplois, de l'autre ces mêmes immigrés peuvent également créer leurs propres emplois, leurs entreprises, et contribuer à la création d'autres emplois via leur demande de biens et services. Enfin, certains aspects plus qualitatifs méritent d'être soulignés : par exemple l'offre de travail des immigrés, notamment dans le secteur des services domestiques, a contribué à soulager les femmes de travaux domestiques et permis une hausse significative de l'offre de travail des femmes dans certains pays (particulièrement en Grèce et en Espagne).

Enfin, du point de vue de la cohésion sociale, les études montrent qu'une bonne intégration économique (par l'emploi) est le premier déterminant d'une intégration sociale réussie. Dans les pays où les migrants trouvent facilement un emploi (par ex. au Royaume-Uni), le coût budgétaire pour atteindre un niveau donné de cohésion sociale reste limité. A l'inverse, dans les pays où leur intégration économique est plus délicate (par ex. en France, aux Pays-Bas ou en Belgique), les coûts des politiques de cohésion sociale risquent de s'accroître.

Jeff Dayton-Johnson pointe donc bien les arbitrages difficiles auxquels doivent faire face les politiques des pays de l'OCDE : attirer les moins qualifiés (bénéfique en termes de développement) au détriment de la sécurité de l'emploi des natifs les moins qualifiés (négatif pour le marché du travail) ? Attirer les plus qualifiés au bénéfice du pays d'accueil mais au détriment des pays d'origine ? Favoriser l'entrée des immigrants peu qualifiés au risque d'accroître les coûts de cohésion sociale ? Enfin, viser une intégration complète et définitive des migrants (objectif de cohésion) au risque de rompre la relation avec le pays de départ (au contraire nécessaire pour maximiser les retombées de la migration en termes de développement) ?

Pour faciliter la tâche des politiques, les auteurs suggèrent de mobiliser davantage les diasporas, qu'il s'agisse de réseaux formels ou informels présents dans les pays d'origine et d'accueil. Ces réseaux peuvent constituer un précieux relai d'information (sur les opportunités d'emploi, d'accès aux services sociaux, ...) et ont eux-mêmes de meilleures informations sur leurs membres que le reste de la société, et sont donc plus susceptibles de surmonter les problèmes classiquement liés aux asymétries d'information (manque d'investissement, défaillances des marchés du crédit ou de l'assurance,...). Mobiliser les réseaux pourrait donc permettre d'améliorer le fonctionnement du marché du travail et réduire le coût de l'intégration sociale, mieux canaliser les transferts et aider à la formulation d'une culture de double ou trans-nationalité.

Pierre Jacquet (AFD) souligne la qualité, la richesse et l'ouverture de la contribution de Dayton-Johnson avant d'en pointer les éléments selon lui discutables : (i) le choix arbitraire de trois objectifs alors que beaucoup d'autres tout aussi légitimes auraient été pu être envisagés : sécurité, équilibre des comptes sociaux, santé publique... ; (ii) l'insuffisante prise en compte de la complexité des mécanismes et des arbitrages : en particulier, les impacts de la fuite des cerveaux ou des transferts des migrants sont plus ambivalents que l'exposé ne le laisse penser. Quant aux arbitrages, ils gagneraient à être quantifiés et à être davantage situés dans des perspectives de long terme ; (iii) Pierre Jacquet doute de la possibilité d'une cohérence quand les objectifs, les priorités et les instruments sont aussi flous qu'en matière de politique migratoire. Il va jusqu'à voir dans l'incohérence le moteur d'un processus de recherche et d'apprentissage finalement bénéfique ! Il en profite pour appeler à la patience, nécessaire pour la construction de connaissances, et à la clairvoyance des responsables politiques, qui, faute de connaissances suffisantes, doivent continuer de loupoyer dans l'incohérence tout en évitant l'écueil du bilatéralisme.

Jacques Ould Aoudia (Ministère des Finances) modère et éclaire certains aspects de l'étude, notamment sur la nature et l'impact des transferts sur les pays de départ. Les transferts ne sont pas seulement financiers mais aussi culturels et sociaux, et leur impact n'est pas moins essentiel. De plus, ces impacts sont extrêmement variables d'une région et d'un réseau à l'autre, d'où l'importance pour les politiques publiques d'aller dans le détail des pratiques sociales. Qu'ils soient effectués au niveau familial, individuel ou collectif, les transferts restent des initiatives d'ordre privé que les politiques publiques ne peuvent qu'accompagner ou faciliter, en aucun cas susciter. Les réflexions sur les enjeux de migrations tendent trop souvent à oublier cette réalité d'un éclatement des pratiques sociales qui rend difficiles aussi bien les agrégations au niveau national que le calibrage de l'action publique.

La parole est à la salle : Lawrence Haddad (Institute for Development Studies) encourage les auteurs à rationaliser l'agenda sur le rôle des diasporas en identifiant bien les mécanismes qui contribueraient efficacement à la résolution des arbitrages politiques soulevés dans l'exposé. Natasha Iskander (Université de New York), dans une intervention remarquée, met en garde contre l'idéalisation des diasporas et invite à recentrer le débat sur la régulation des marchés du travail, étant acquis que ceux-ci sont devenus transnationaux. La discussion sur les diasporas risque d'évacuer le côté de la demande de travail sur ces marchés : les migrants sont aussi « appelés ». Concentrer la discussion sur les diasporas risque également d'aboutir à la privatisation de ce qui devrait relever de politiques publiques : la gestion des emplois au niveau international, le développement du capital humain, la fourniture de services sociaux fondamentaux, et peut être une réflexion sur la citoyenneté des travailleurs transnationaux.

## **Migrations et transferts de fonds : impact sur les pays d'origine** **(R. Faini, Université de Rome)**

Riccardo Faini s'intéresse à la place tenue par les migrations dans le contexte actuel de mondialisation et, plus particulièrement, à leur impact sur les pays d'origine, explorant ainsi les liens entre migration et développement.

Il commence par rappeler trois grands traits : i) les migrations sont les grandes absentes de la mondialisation contemporaine (entre 1990 et 2000, le taux d'expatriation

en provenance des pays du Sud est demeuré parfaitement stable même si, étant donné le différentiel de croissance démographique, cette stabilité recouvre une augmentation de la part des immigrants dans la population des pays du Nord) ; ii) les différences de prix de la main-d'œuvre restent extrêmement marquées à l'échelle mondiale, ce qui ne serait pas le cas si la liberté de circulation était totale ; iii) il y a incertitude sur la répartition réelle des bénéfices de la migration : qui, du pays d'accueil, du pays d'origine ou des migrants eux-mêmes sont les « gagnants » ?

Du point de vue du pays d'accueil, la perception commune est que l'effet net de bien-être de l'immigration non qualifiée est, au mieux, réduit, mais que son impact redistributif est important. Par contraste, l'effet de bien-être de l'immigration qualifiée est élevé, d'où l'évolution récente des politiques migratoires des pays receveurs en faveur des migrants qualifiés.

Qu'en est-il du point de vue des pays d'origine ? Les restrictions à l'émigration non qualifiée privent ces pays d'un puissant levier de convergence, tandis que la « fuite des cerveaux » draine la part la plus talentueuse de leur main-d'œuvre. L'impact net sur le bien-être de l'émigration est donc négatif.

Le rôle clé est alors joué par l'ampleur des transferts de fonds des migrants vers les familles restées au pays, susceptibles de contrebalancer l'effet négatif de la migration. Ces transferts en effet améliorent les indicateurs d'endettement ; sont plus stables que les autres flux de capitaux ; ont un effet contracyclique ; réduisent l'incidence de la pauvreté ; améliorent le rendement du capital, l'épargne et l'investissement ; ont un effet positif sur l'entrepreneuriat.

Mais quelles sont les conséquences du biais en faveur de l'émigration qualifiée ? A l'aide d'un cadre analytique simple, R. Faini montre toute l'ambivalence des liens entre migration et développement tant sur le plan théorique que sur le plan empirique, dès que l'on abandonne l'hypothèse d'homogénéité de la main-d'œuvre.

L'émigration des travailleurs qualifiés pourrait *in fine* s'avérer bénéfique pour les pays de départ en vertu de quatre vecteurs :

- (i) la migration des élites pourrait inciter davantage de travailleurs à se former et induire de ce fait une amélioration du niveau d'éducation (*brain gain*) dans le pays d'origine ;

- (ii) l'ampleur des transferts de fonds que les travailleurs qualifiés seraient susceptibles de réaliser en faveur du développement de leur pays d'origine ;
- (iii) le rôle potentiel des migrants qualifiés ou des diasporas dans la promotion du commerce et des flux internationaux de capitaux ;
- (iv) leur rôle dans le transfert des connaissances à l'occasion de leur retour au pays.

Toutefois, il ressort d'études empiriques que les migrants qualifiés tendent à moins transférer, en dépit du fait qu'ils gagnent davantage dans le pays d'accueil, que les migrants non qualifiés. En effet, ils sont souvent originaires de familles plus aisées, restent plus longtemps dans le pays d'accueil, pratiquent plus volontiers le regroupement familial.

D'après R. Faini, aucune réponse claire et définitive n'est donc apportée à la question de savoir si ceux qui restent perdent ou gagnent. Il trouve en effet que les transferts exercent un effet positif sur la croissance des pays de départ et que les migrants qualifiés tendent à transférer relativement moins que les migrants non qualifiés. Il en conclut que les politiques en faveur des travailleurs qualifiés pourraient être néfastes pour la croissance dans les pays de départ compte tenu de la baisse des transferts qui en résulterait.

F. Gubert (DIAL) revient, dans son commentaire, sur cette ambivalence des liens entre migration et développement, telle qu'elle ressort des travaux aussi bien théoriques qu'empiriques. Lever les incertitudes nécessitera encore bien des travaux, mais comme R. Faini, elle pointe le fait que le *brain drain* n'est pas forcément un *brain gain*. Le principal écueil pour aller plus loin reste celui de la disponibilité de données harmonisées, tenant compte de l'hétérogénéité des pays.

Toutefois, les études micro-économiques montrent un certain nombre de faits masqués par les analyses transversales. En premier lieu, il existe des gagnants du *brain drain* : les grands pays, les NPI, qui ont su établir un socle scientifique et technique ayant favorisé leur décollage, et le retour ultérieur des migrants. En second lieu, la fonction d'assurance des transferts des migrants pour les familles restées au pays fait désormais consensus. Elle éclaire les motivations des individus à transférer ou à rester, et explique largement la faible utilisation de ces fonds pour l'investissement productif. Les transferts ne sont pas des capitaux comme les autres et leur avantage est plus net en matière de lutte contre la pauvreté que de levier de croissance.

J-C Dumont (OCDE) revient sur la corrélation entre migration qualifiée et incitation à l'éducation dans les pays d'origine. Il insiste surtout sur la nécessité d'approches multidimensionnelles visant à favoriser la mobilité des migrants et des étudiants – en dépit des réticences des pays d'accueil à revenir à des politiques favorisant les migrations temporaires ; de l'adoption de principes éthiques, via par exemple l'élaboration d'un code international de recrutement ; et enfin d'initiatives visant à stimuler les investissements dans les pays d'origine.

Cette séance conclut sur le fait que les migrations peuvent être un instrument redistributif et un atout pour le développement, mais pas une condition. Surtout, elles doivent être traitées dans un cadre politique et pas seulement économique, mettant en exergue tant l'importance des politiques migratoires des pays d'accueil que celle des politiques locales en matière d'éducation, de marchés du travail et de systèmes financiers.

### **Panel final : Regards croisés.**

Le panel final a permis d'élargir les débats et de compléter le traitement purement économique de la problématique des migrations par le point de vue de politologues, de géographes ou de décideurs politiques.

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Jean-François Bayard (CERI) a présenté le point de vue du politologue sur une question qu'il considère comme éminemment politique. Selon lui, nous assistons à deux grandes disjonctions : (i) alors que le marché international des capitaux et des biens et services est de plus en plus intégré, le marché international du travail demeure très cloisonné. Cette disjonction est à terme potentiellement explosive ; (ii) les politiques de limitation et de réglementation des flux migratoires sont à l'opposé des pratiques sociales (bourses d'études, pèlerinage, tourisme,...). La plupart des théories (codéveloppement, immigration choisie, ...) sont déconnectées des réalités sociales et récupérées par des politiques dites « sanitaires » et par le fondamentalisme. Ces distorsions entre les réglementations et les pratiques réelles ont plusieurs conséquences. Elles entraînent une mise en suspicion et une criminalisation des mouvements migratoires qui représentent un coût diplomatique, économique, hégémonique, philosophique et politique. Elles génèrent aussi une représentation misérabiliste des migrants qui conduit

à une communautarisation des immigrants. China Town est un pur produit des politiques de réglementation. Enfin, elles favorisent les discours et politiques convenues en matière de gestion des migrations, qui interdisent de profiter de certaines migrations très profitables pour le pays hôte (migrations pendulaires, commerce de valise généré par les businessmen et autres commerçants – par ex. en Iran, Afghanistan).

Sur la base de ce constat, Jean-François Bayard invite les participants à réfléchir à deux questions ouvertes : (i) assistons-nous à une recomposition du capitalisme et à une spécialisation régionale Sud-Sud entre des pays réservoirs de main-d'œuvre (ex. Cambodge, Myanmar) et des pays « pôles d'activité » utilisateurs de cette main-d'œuvre (ex. Malaisie) ? (ii) Pendant combien de temps le débat sur les migrations continuera-t-il à être dépolitisé ? Il existe une responsabilité du Nord dans la production de la misère et des réfugiés.

Jean-Michel Debrat (AFD) intervient à son tour, non seulement en tant que Directeur adjoint de l'AFD, mais également en tant que géographe. Il rappelle que les migrations sont le phénomène le plus ancien de l'histoire. Le monde a été créé par les migrations. Il propose de superposer plusieurs cartes, permettant de prévoir et d'expliquer les mouvements de populations. Par exemple, la carte du monde représentant l'indice de fécondité humaine de chaque pays, donne une certaine perception des possibilités de survie et d'avenir des hommes et donc du désir d'émigration. Alors que certaines parties du monde n'assurent plus le renouvellement des générations, l'Afrique, n'ayant pas entamé sa transition démographique, apparaît très explicitement comme un réservoir de migrants. Cette absence d'avenir se lit également à partir de cartes mettant en évidence les zones où la terre s'appauvrit, où l'eau manque, où les conflits se développent. Ce constat est aussi valable pour les cartes mettant en évidence, au plan national, les bassins d'emplois et les taux de renouvellement de la population active. Jean-Michel Debrat conclut en soulignant que le facteur le plus structurant pour un individu (pour son espérance de niveau de vie) est son lieu de naissance et que les migrations de désespoir et de travail deviennent des migrations de peuplement.

Jean-Pierre Garson (OCDE) passe en revue les faits d'actualité, relatifs à la question de l'immigration. Il mentionne les milliers de laissés pour compte fuyant désespérément leur pays avec comme seul espoir le risque de mourir pour gagner *l'eldorado*. Parallèlement, un nombre croissant de pays de l'OCDE se sentent menacés par la

présence de communautés étrangères qui éprouvent d'importantes difficultés à s'intégrer et dont les enfants n'arrivent pas toujours à accéder au marché du travail ou à s'y maintenir. Enfin, les migrations vers les pays de l'OCDE ont connu une forte croissance au cours de ces vingt dernières années.

Dans ce contexte, et en mettant l'accent sur les liens entre migrations et développement, Jean-Pierre Garson tente de préciser la nature des avantages à partager et avec qui les partager.

Partager quoi ? Même si les immigrés ne représentent qu'un pourcentage très faible de la population, l'immigration a souvent fait l'enjeu de négociations qui vont bien au-delà du phénomène migratoire proprement dit. Il existe des exemples de négociations bilatérales qui portent sur la possibilité d'installer des bases militaires en contrepartie d'une libéralisation des mouvements migratoires. Il en va de même dans le domaine des exploitations de ressources minières et autres matières premières, contre un peu de libéralisation des mouvements migratoires. Les avantages peuvent également être partagés entre les employeurs, les pays d'accueil et les pays d'origine — les migrants, quant à eux, essayant de tirer le maximum de bénéfices de ces situations particulières. Dans l'inventaire rapide des avantages, il y a eu une formidable progression des droits économiques et sociaux des immigrés dans les pays de l'OCDE depuis le milieu des années 1970, qui inclut non seulement l'égalité de traitement quand au droit du travail et à la protection sociale entre les immigrés et les nationaux, mais aussi la citoyenneté et l'assouplissement des procédures d'acquisition de la nationalité des pays d'accueil.

Partager avec qui ? Partager les avantages et les responsabilités, c'est faire sauter tous les blocages qui entravent le développement et les anciens mécanismes qui ne fonctionnent plus. Ne serait-il pas plus opportun de donner davantage de poids aux initiatives des jeunes, ayant émigré ou pas, diaspora ou candidats au retour, de proposer des formes nouvelles d'aide au développement de leur pays, et de les inscrire dans une optique géopolitique, régionale, dans le cadre d'une coopération renforcée pour le codéveloppement entre les pays de départ et les pays d'accueil ? L'appui des autorités régionales et fédérales viendrait alors se greffer sur ces initiatives et impulser un développement durable. Il est temps de souligner les limites du rôle que la migration peut jouer dans le développement et de faire que si ce rôle est limité, il puisse néanmoins appuyer un processus de développement basé sur des réformes économiques et sociales indispensables.



Enfin, Roberto Villarreal-Gonda, Secrétaire d'Etat pour le Développement Urbain et l'Aménagement du Territoire, du Gouvernement mexicain, a exposé le point de vue d'un décideur politique confronté à une forte émigration de sa population vers les Etats-Unis. Il a rappelé que le sujet des migrations est de première importance sur l'agenda politique international et repris à son compte certaines des principales conclusions des interventions précédentes : (i) évitons les approches simplistes comme fondements de décisions politiques et (ii) intensifions les efforts pour collecter des évidences empiriques permettant de poursuivre la réflexion. Dans la mesure où nous ne prenons pas en compte le capital social, ni la dépréciation du capital physique et naturel et/ou environnemental, il se peut que les bénéfices totaux des migrations soient surévalués. Enfin, le fait qu'à la fois les pays d'accueil et d'origine soient profondément affectés par les flux migratoires plaide en faveur d'une coopération renforcée, négociée au plan international, permettant un renforcement des institutions des deux côtés.



# Migration, Investment and Trade: Substitutes or Complements?

by

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## **1. Introduction: motivation and policy implications**

The nature of the relationship between migration, investment and trade (MIT) has long been of interest to economists, one reason being its importance for policy design. Whether a policy change affecting one of the MIT variables results in a positive or negative change in the other variables, and whether the direction of change in these variables is considered desirable, should be matters of concern to policy makers and should inform their decisions.

This can be illustrated with a simple example. Suppose a host country in the North liberalises its trade policy, resulting in an increase in exports by a migrant-source country in the South<sup>1</sup>. If migration and trade are substitutes, migration will decline

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<sup>1</sup> The sending country can of course generate a similar increase in exports by liberalising its own trade policy.

following trade liberalisation in the host country, source country or both. This may be viewed favourably by the host country, particularly in the case of unskilled migrants<sup>2</sup>.

If migration and trade are complements, migration will increase. However, the host country may be unwilling to accept additional migrants, particularly unskilled ones, because of the perceived budgetary impact of providing public services<sup>3</sup> as well as the potential social costs. It might therefore envisage further restrictions on immigration. Since the migration-related consequences of trade reform are likely to affect the benefits of that reform for the host country, they may also affect the country's decisions on the degree of trade liberalisation.

## **2. MIT policies**

Two classic papers in this literature are Mundell (1957) and Markusen (1983). Mundell uses the Heckscher-Ohlin framework to show that international trade and factor movement are substitutes. Markusen (1983) presents five models in which he assumes identical relative endowments and then changes in succession each of the other assumptions of the Heckscher-Ohlin model. He obtains complementarity between trade and factor movement in each of his models.

Additional results have been obtained since. First, the complementarity result obtained under free trade in Markusen (1983) does not necessarily hold in the case of protection. Schiff (2006) has shown that complementarity obtains at low tariffs in Markusen's models but that substitution obtains at high tariffs. Second, models that build on the Heckscher-Ohlin framework by adding features characterising the South-North migration process can generate complementarity for some migrants and substitution for others (Lopez and Schiff, 1998). Third, the MIT relationship is not invariant to the types of policy changes in source and host countries that are being examined, nor to the types of shocks to which these countries are subject.

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<sup>2</sup> This is not entirely clear because of conflicting interests regarding unskilled migration in host countries. Employers and skilled labour may favour immigration because it reduces unskilled labour costs, while unskilled native workers favour restrictions on immigration because unskilled migrants have a negative impact on their income.

<sup>3</sup> Note, however, that migrants pay indirect taxes and that registered migrants pay income taxes.

### 3. Substitution between migration and trade: Mundell and the Heckscher-Ohlin model<sup>4</sup>

The classic paper on substitution between factor movement and trade is Mundell (1957). Based on the Heckscher-Ohlin model, Mundell shows that:

- (i) an increase in trade barriers reduces trade and raises migration; and
- (ii) an increase in migration barriers reduces migration and raises trade.

Assuming that the South is labour-abundant, it will export the labour-intensive good and import the capital-intensive good. An increase in trade barriers in the South will raise the price of the capital-intensive import-competing good and – according to the Stolper-Samuelson theorem – raise the rental rate of capital and lower the wage rate, causing an increase in migration. Similarly, an increase in trade barriers in the North lowers the price of the South's export sector, reduces its trade and wage rate, and thus raises migration. Thus, trade and migration are substitutes.

The same result holds under capital mobility, or under mobility of both labour and capital. Either tariff raises the rental rate of capital in the South, resulting in an increase in the movement of capital. Thus, trade and the movement of capital are substitutes.

In a Heckscher-Ohlin model with social capital entering the utility function, Schiff (2002) identifies four types of externalities and shows that – regardless of whether the externalities are internalised – the source country always gains from trade liberalisation while the host country always benefits from restrictions on migration, particularly if these restrictions come in the form of a migration tax.

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#### 3.1. Policy debate and implications

Mundell concludes with some possible implications of his substitution result. For instance, he asks whether the growth of protection in the late 19th century in land-abundant (and labour- and capital-scarce) North America, which lowered wages and the return to capital in countries exporting to the United States, might have caused the

<sup>4</sup> Although this section and the next are concerned with migration, the analysis also applies to the movement of capital.

observed large inflows of labour and capital. He also asked whether and to what extent the high tariff barriers between the United States and Canada in the 1950s stimulated US investment in Canada.

As a matter of fact, much of the debate over migration seems to be based on Mundell's substitution result. Examples include statements made by Mexico's President Salinas and by some EU politicians in the early 1990s<sup>5</sup>. Analyses of migration from Eastern to Western Europe seem to have assumed substitution as well<sup>6</sup>.

One likely reason is that the result makes such intuitive sense. The opening up of host countries to trade will raise production of export goods, employment and wages in the source country and will therefore reduce migration. Second, since labour services can be exported either by exporting goods in which labour services are embedded or by exporting labour directly, reducing the export of labour services through one channel (e.g. trade) will increase the exports of source countries through the other channel (migration).

#### 4. Markusen's complementarity models

Markusen (1983) challenges Mundell's result of substitution between trade and factor movement. He presents five models in which he assumes identical relative factor endowments in the two countries. He then changes in succession each of the other basic assumptions underlying the Heckscher-Ohlin model, namely identical technologies, constant returns to scale, perfect competition, absence of domestic distortions and identical homothetic preferences.

5 To assuage the US Congress' concerns before the 1994 vote on NAFTA, Mexico's President Salinas stated that NAFTA would help Mexico "... export more goods, not people" (Schiff, 1996, 2000). Similarly, with Western European concerns about immigration from Eastern Europe following the demise of the Soviet bloc, Germany's Foreign Minister Kinkel stated that opening Western European markets to goods from the East was an absolute priority (*Financial Times*, 24 March 1994, "Bonn and Paris Plan EU Ostpolitik", by Quentin Peel).

6 A CEPR (1992) study found that a move to a liberal trade regime between the European Union and the Central and Eastern European countries (CEECs) would raise demand for labour in the CEECs by 6-10 per cent, that capital flows to the CEECs would rise as well, and that both of these effects would lower migration from the CEECs to the European Union. Similarly, Zimmerman (1994, 1995) argued that the substantial migration pressure from the East and South could be reduced by exporting capital and liberalising trade. The same recommendation is found in Layard *et al.* (1992). In contrast, Burda (1995) has argued, based on the hysteresis model, that concern over East-West migration is exaggerated.

#### 4.1. Complementarity in Markusen's models

Markusen showed that trade and factor movement are complements in each of the five models he presents. This can easily be explained by changing the first assumption of identical technologies and assuming that one country, denoted by C1, has a technological advantage in one sector (X) relative to the other country C2, and that the two have the same technology in the other sector (Y)<sup>7</sup>. In this case, trade is due to differences in technology rather than in endowments.

If technologies were identical, there would be no trade because the countries would be identical, as would goods and factor prices. Assume now that C1 benefits from technological improvement in X. Trade takes place, with C1 exporting X and importing Y. Assuming arbitrarily that X is labour-intensive (assuming the opposite does not affect the results), it follows that the wage rate  $w_1$  in C1 is now higher than  $w_2$  in C2. This leads to migration from C2 to C1. The increase in the supply of labour in C1 results – according to the Rybszcynski Theorem – in an increase in the output of X, a decrease in that of Y, and therefore in an increase in trade. Thus, migration and trade are complements<sup>8</sup>.

#### 4.2. Substitution in Markusen's models

Mundell's substitution result was obtained by examining the impact of changes in both migration policy and trade policy. This is not the case for Markusen's analysis, which assumed free trade and did not examine the impact of changes in trade policy. Schiff (2006) examined the latter and showed that Markusen's complementarity result need not hold in the case of tariffs, as shown below.

Where technology is identical, there is no trade and tariffs have no impact. With superior technology in C1's labour-intensive sector X, C1 exports X and imports Y, and vice versa in C2. A tariff in C2 raises the price of its labour-intensive import sector X and raises its wage rate relative to that in C1.

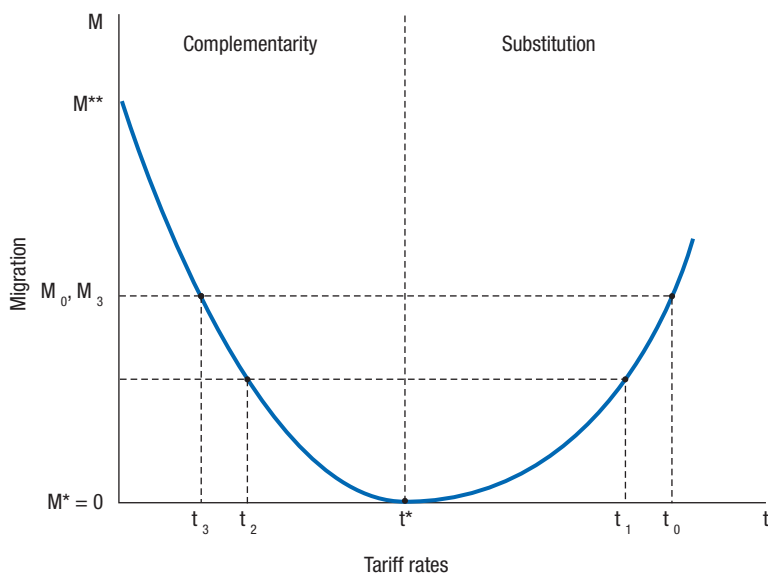
<sup>7</sup> Country C1 is in fact assumed to have a Hicks-neutral technological advantage in sector X.

<sup>8</sup> This effect on trade is reinforced by the movement of capital in the opposite direction, as this movement increases the output of the capital-intensive export sector Y in C2.

If tariffs in C2 are high enough, their positive impact on wages  $w_2$  may outweigh the positive impact of C1's superior technology on wages  $w_1$  in C1. Thus,  $w_2$  may end up being higher than  $w_1$ , resulting in migration from C1 to C2. The increase in the labour supply in C2 raises the output of its labour-intensive import-substitute good X, reduces the output of its capital-intensive export good and reduces trade. Thus, migration and trade are substitutes.

These results are depicted in Figure 1, where the tariff rate  $t^*$  is the rate at which the two opposite effects are equal, resulting in equal wages in the two countries and no migration. Complementarity holds at lower tariffs ( $t < t^*$ ) and substitution at higher tariffs ( $t > t^*$ ).

Figure 1.  
Relationship between migration and trade in Markusen's models



Note:  $t = t^* : W_1 = W_2$   
 $t < t^* : W_1 > W_2$   
 $t > t^* : W_1 < W_2$



### 4.3. Policy implications

Assume that a host country plans to liberalise its trade policy in order to increase its welfare. It is concerned over the migration consequences of its trade liberalisation policy but has not conducted studies on what these consequences might be. Trade liberalisation might either increase or decrease migration flows, depending on tariff levels, the extent of trade liberalisation, the technology gap between the two countries and the elasticity of relative wages with respect to tariffs.

Consequently, devising an optimal trade policy requires analysis of the relationship between trade and migration. Once the direction and extent of the relationship is determined, authorities seeking to maximise social welfare would determine the optimal degree of trade liberalisation as a function of the social costs and benefits of the various trade liberalisation scenarios and their associated migration levels.

## 5. Migration costs and financing constraints

Two features not included in the above models are migration costs and financing constraints<sup>9</sup>. Migration costs include the actual moving cost, the cost of searching for a job, the cost of housing and sustenance until a job is found, lawyers' fees, and the time and money cost of obtaining a passport and visa (which may entail travelling to some other city), and so on.

Empirical evidence regarding these costs is limited. The few studies available report relatively high costs. For instance, based on a new data set for some 120 countries, McKenzie (2005b) finds that in 10 per cent of sending countries, passport costs amount to over 10 per cent of these countries' per capita income. Adams (1991, 1994) reports high costs of migration to the Gulf for potential emigrants from Pakistan and Egypt, in part because some of the host countries require them to pay a fee before entering.

9 Their impact on the skill composition of migration was first examined in Lopez and Schiff (1998).

These costs are likely to be much lower in sending countries that are located close to the host countries and have large networks of migrants there. For instance, networks can help to reduce migration costs by: *i)* providing temporary housing and food; *ii)* helping migrants find a job; *iii)* helping them with administrative matters; and, *iv)* helping to finance travel and other migration costs.

Mexico would be a prime example of such a sending country because it shares a border with the United States and has immigrant networks that are among the largest and best organised in that country. This may explain how very low-skilled Mexicans – including rural people who typically have not completed primary education – are able to pay for the cost of migration to the United States. The same logic applies to migration to the United States from Central America, and to Western Europe from Turkey and from Central, Eastern and Southern Europe. It also applies to cases where host-country employers pay the migration costs<sup>10</sup>.

In contrast, migration costs are likely to be particularly important for people in poor source countries that are located far from the host countries and do not benefit from extensive and well-organised networks. This would seem to apply to unskilled individuals from countries in Central Asia, much of sub-Saharan Africa and parts of South Asia, which are located far from economically attractive host countries.

### **5.1. Assumptions: Distant and proximate countries**

The rest of the paper assumes that the constraint on the financing of migration costs is binding for unskilled workers located in countries that are distant from the rich destination countries, is not binding for unskilled workers located in proximate countries, and is not binding for skilled workers in either distant or proximate countries. The model used in the rest of the paper is the two-by-two Heckscher-Ohlin model. The factors of production are skilled and unskilled labour; the source country is abundant in unskilled labour and the host country in skilled labour.

<sup>10</sup> Workers from poor Southern states of Mexico, such as Chiapas, typically are unable to pay for migration costs. However, Morrison and Zabin (1994) showed that these workers are able to migrate when hired by employers to work in the agricultural export sector (fruits, vegetables) in Northern Mexico, with employers paying for travel costs. While in the North, they learn about opportunities across the border and are likely to migrate after a few years.

## 5.2. *Distant countries*

The ability to pay for migration costs is a binding constraint on unskilled labour from distant countries. Migration costs are assumed to vary from one individual to another, owing, for example, to differences in location, access to migrant networks, or knowledge of the host-country language and the informational cost associated with such knowledge. Since trade liberalisation in the host or source country raises the source country's unskilled wage rate, it enables more people to pay the costs of migration, and hence more will migrate. Thus, introducing migration costs and financing constraints for unskilled labour in the Heckscher-Ohlin model results in complementarity between unskilled labour migration and trade (Schiff, 1994). On the other hand, source-country skilled wages decline, and hence skilled migration increases. Thus, skilled migration and trade are complements as well.

Economic historians have noted that migration to the United States in the 19th century came not from the poorest Southern European countries but from relatively richer Northern countries. This occurred even though wage differentials with the United States were smaller for the latter (Hatton and Williamson, 1992; O'Rourke and Williamson, 1995), pointing to the ability to finance migration costs as a determining factor.

Further empirical evidence comes from a World Bank (1994) study showing that Moroccan emigrants were mainly not from the income groups below the poverty line, which suggests that the financing constraints on migration may be binding. A similar finding is obtained by Freeman (1993) for migration from El Salvador to the United States.

## 5.3. *Evidence of complementarity for long-distance internal migration*

Internal migration entails some of the same costs as international migration, including transport costs, the cost of finding a job and the cost of housing and sustenance until a job is found. One might thus expect results similar to those for international migration, particularly for the larger developing countries where such costs may constitute a barrier to migration.

This result is obtained by Reed (1994), who looks at the impact of income and wealth shocks on internal migration between distant regions of Brazil. She examines the case of migration from north-eastern Brazil, the country's poorest region, to São Paulo, its most populated and richest state. She finds that positive shocks in income as well as in wealth in the north-east result in greater migration flows, and concludes that migration from that area is limited by credit constraints.

This result is also obtained in two studies on Russia, the world's largest country. Based on a panel of bilateral migration between 78 regions in Russia for 1992-1999, Andrienko and Guriev (2004) find that migration is constrained by a lack of liquidity and that an increase in source-region income raises interregional migration, especially for the poorest regions. Brown (1997) obtains a similar result with respect to wage income. Andrienko and Guriev conclude that because of the financing constraint, up to one-third of Russia's regions are locked in a poverty trap.

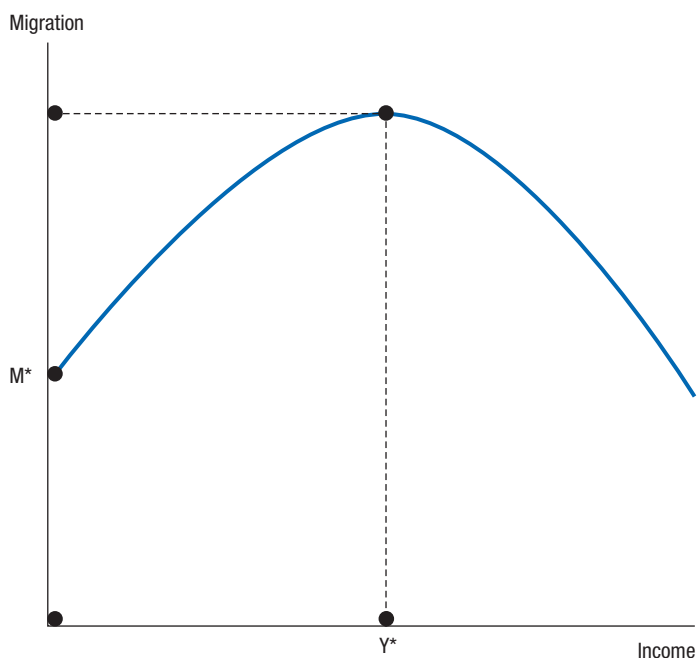
#### **5.4. Proximate countries**

In this case, financing constraints are binding for neither skilled nor unskilled labour. Since trade liberalisation raises (lowers) the unskilled (skilled) wage rate, migration of both types increases. Thus, labour and trade are substitutes.

#### **5.5. Migration and income**

Given the financing constraint on low-income and poor households, an increase in income should increase their migration (with complementarity between income and migration), whereas an income increase should reduce migration for higher-income households (substitution). This expected result was found by Faini and Venturini (1993), though at the aggregate rather than at the individual or household level. The authors show that migration from Southern to Northern Europe exhibits complementarity with source countries' income at low levels of income and substitution at high levels of income. This is illustrated in Figure 2, where migration rises with income for income  $Y < Y^*$ , reaches a maximum of  $M^*$  at income  $Y^*$ , and then declines as income increases further. Other studies have also found an inverted-U relationship between migration and income.

Figure 2.  
Income and migration



## 5.6. Policy implications

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This section examines the implications of the relationships between migration and trade and between migration and income.

### 5.6.1. Migration and trade

Host countries have been trying to contain or reduce unskilled-labour immigration and to favour the immigration of skilled labour. Trade liberalisation is one of the policies considered to reduce the inflow of unskilled migrants. The analysis provided in this section suggests that, where migration costs are high and the ability to pay for them is limited, trade liberalisation is likely to increase unskilled-labour migration and reduce

skilled-labour migration. In other words, its effect on the skill composition of migration may be precisely the opposite of that desired by host countries.

Moreover, the increased outflow of unskilled people means that countries that have immigration controls (such as numerical quotas) for unskilled labour may well experience an increase in illegal migration.

### 5.6.2. Migration and income

One of the objectives of foreign aid has been to improve the economic situation in source countries and thereby reduce the incentive to migrate. The analysis above, however, indicates that migration first rises with income and declines later on. Thus, if the sending country is poor (with income  $Y < Y^*$ ), the effect of foreign aid would be precisely the opposite of that intended.

## **6. Exogenous shocks**

This section examines the effects of exogenous shocks in transport technology or other trade- and migration-related costs (e.g. customs and administrative requirements for migration), income taxes, production technology, demand for public goods and remittance intermediation costs.

### **6.1. Technological progress in the transportation sector**

#### 6.1.1. Trade costs

Assume that a developing source country is labour-abundant relative to the host country. An exogenous reduction in trade costs raises the price of a country's exports and lowers the price it pays for imports, resulting in an increase in its terms of trade. This leads to an increase (decrease) in the output of the exportable (import-competing) good, and both exports and imports increase. Moreover, both the increase in the export price and the reduction in the import price result in an increase (reduction) in the unskilled (skilled) wage rate, implying an increase in the migration of both skilled and unskilled labour. Thus, trade and labour migration (unskilled and skilled) are complements.

### 6.1.2. Migration costs

A reduction in international migration costs implies an increase in the incentive for skilled labour to migrate and the ability of unskilled labour to pay for migration costs. Thus, migration of both types of labour increases. The impact on trade is ambiguous, as is the relationship between trade and the migration of either type of labour. To determine the impact on output and trade, one would have to know the elasticity of migration of skilled and unskilled labour with respect to migration costs.

### 6.1.3. Policy implications

A host country whose objective is to reduce unskilled labour migration from a given source country might help the latter to develop its transport infrastructure and technology and/or improve its customs administration, thereby reducing transport and trade costs. Under the standard assumption of substitution between migration and trade, the host country would expect this reduction in trade costs to lead to a reduction in migration. The analysis above suggests, however, that migration and trade are complements. The result would thus be the opposite of what the host country intended (i.e. an increase in migration) in the case of unskilled labour, though probably not in the case of skilled labour.

The policy recommendation arising from these results is that host countries should undertake rigorous, detailed studies of the impact of trade policy on migration and foreign direct investment before introducing any reform of their trade policy or other MIT reform.

## **6.2. Taxes on labour income**

Consider a source country with abundant unskilled labour producing two goods, X and Y, with X being intensive in unskilled labour and Y intensive in skilled labour. The allocation of government revenue to X and Y is assumed to be identical to that of the private sector. An increase in income tax reduces the after-tax wage rate of skilled and unskilled labour, resulting in an increase (decrease) in the migration of skilled (unskilled) labour. This also increases the factor endowment difference, i.e. it increases the basis for trade, and results in a reduction (increase) in output of the importable (exportable)

good. Thus, both imports and exports increase, implying that skilled labour and trade are complements, while unskilled labour and trade are substitutes.

### 6.2.1. Policy implications

This analysis indicates that source countries' authorities should think hard before raising taxes because of a potential adverse impact on the skill composition of migration: an increase in income taxes may result in a greater (smaller) exodus of skilled (unskilled) workers. Note also that a progressive tax system would be worse than a flat rate as far as the brain drain is concerned.

## **6.3. Technology shock**

Consider a model with two goods, X and Y, and two factors, skilled and unskilled labour. The exportable X is intensive in unskilled labour and the importable Y is intensive in skilled labour. Assume now that the North benefits from an exogenous positive productivity shock that raises labour productivity and wages. This results in South-North migration of skilled labour<sup>11</sup>. This raises (reduces) the output of the exportable (importable) good, increasing both exports and imports. Thus, exports, imports and trade are complementary to skilled labour migration.

## **6.4. Remittance intermediation costs: impact on migration and domestic investment**

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With competition for the remittance business increasing over time, remittance intermediation costs have declined. For instance, remittance fees have fallen by nearly 60 per cent since 1999 in the US-Mexico corridor (World Bank, 2006, Chapter 6). Remitting funds to the household back home is an important objective for most potential migrants. A reduction in remittance intermediation costs raises the gains from migration, and hence raises the level of migration.

Remittance flows are likely to increase as well. First, they increase for those migrants who already reside in host countries because: *i*) the lower cost of remitting raises the

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11 Unskilled labour does not migrate because its ability to finance migration is unchanged.



optimal level of remittances for altruistic migrants; *ii*) the same holds for self-interested migrants, because the lower cost of remitting increases the profitability of their investment projects; and, *iii*) the higher level of migration also results in an increase in remittance flows.

As shown in Adams (2005), McKenzie (2005a), Yang (2005) and Lopez Cordova (2004), part of the remittances are invested in education, health, housing, small businesses and so on. Thus, migration and domestic investment are complements in this case. The same result holds for a reduction in the cost of remitting funds within a country, say from urban to rural communities, with respect to internal migration and investment by the household.

In fact, any policy or economic shock that increases migration is also likely to raise the level of remittances and the level of investment in human and physical capital. In other words, migration and domestic investment are likely to be complements in most cases.

## 7. Foreign direct investment

This section examines the relationship between trade and both horizontal and vertical foreign direct investment (FDI), the impact of regional integration agreements (RIAs) on FDI and exports by non-member multinationals to RIA markets, and the impact of RIAs on FDI and trade between member countries.

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### 7.1. Horizontal and vertical FDI

Horizontal FDI – whether undertaken for tariff-jumping reasons or because of advantages of presence – implies substitution between trade and FDI. Vertical FDI associated with fragmentation of production creates trade in intermediates where none existed previously. For instance, FDI and production of intermediates by a multinational in a foreign country may result in exports from the host to the home country or other countries. Similarly, production in a foreign country may be accompanied by exports of intermediates from the home to the host country, these intermediates being used as inputs in the final goods produced in the host country. Thus, horizontal FDI and trade are substitutes, while vertical FDI and trade are complements.

This analysis is supported by Blonigen (2001), who examined the relationship between exports from Japan to the United States and Japanese production in the United States (the latter being associated with past and current FDI). Using data on automobiles and auto parts, he finds that Japan's automobile production in the United States and its exports of automobiles to the United States (horizontal FDI) are substitutes, while Japan's automobile production in the United States and its exports of auto parts to the United States (vertical FDI) are complements.

## ***7.2. Regional integration agreements: impact on foreign FDI and exports***

What about the impact of an RIA on FDI and exports of non-member firms to the RIA? First, a larger market provides an incentive for non-member firms to invest in an RIA member country and exploit the economies of scale available. The increase in non-member firms' horizontal FDI would be likely to reduce their exports to the RIA.

Second, market integration within the RIA is likely to result in increased competition among firms selling in the RIA market and thus in lower prices, both for goods exported to the RIA and for goods produced there. According to Chang and Winters (2002) and Schiff and Chang (2003), this analysis holds in the case of exports to MERCOSUR. These authors found that the prices of foreign exports to Brazil fell as Brazil's tariffs on exports from Argentina were reduced, an impact that would be likely to apply to goods produced in the RIA as well. The increased competition associated with the formation of an RIA would make the RIA less attractive both for non-member firms' exports and for goods produced in the RIA, resulting in a decrease in both.

Consequently, the impact of an RIA on non-member firms' exports to the RIA is negative, while the impact on non-member firms' investment in the RIA is ambiguous.

## ***7.3. Regional agreements: impact on member countries' FDI and exports***

What about investment by a member country? In the case of a North-North RIA, member countries would be better able to exploit economies of scale and would expand their investments in partner countries, resulting also in increased trade between them. The European Union is a perfect example, with both trade and FDI between member countries increasing over time. The same phenomenon would also be likely

to take place in South-South agreements, though the impact on FDI would probably be weaker, especially if trade barriers between member countries are only partially liberalised or if trade is impeded by other barriers or regulations.

In the case of North-South agreements, production in the South is likely to be cheaper for at least part of the production chain. This is the case for NAFTA, where US investments in Mexico increased significantly after the agreement was signed. The output of intermediates resulting from vertical FDI in the Southern partner country would increase trade back to the partner in the North or to other destinations, resulting in an overall increase in trade.

The above implies that an RIA would lead to an increase in FDI and trade by member-country firms. In other words, trade and FDI would be complements in this case.

## 8. Trade in services and Mode IV

International (domestic) exports of services may require the temporary presence of persons from the source country (region). This implies complementarity between international (internal) migration and international (domestic) trade<sup>12</sup>. International trade in such services is known as Mode IV (General Agreement on Trade in Services – GATS). In the current Doha negotiations within the World Trade Organisation (WTO), industrial host countries have been reluctant to expand its applicability much beyond the movement of professionals within multinationals.

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One of the major concerns of host countries in the North is that temporary migrants may stay in the host country and disappear into the illegal economy, particularly in the case of unskilled or low-skilled labour. Mode IV might be an effective way to deal with this problem. Consider a source-country firm selling labour services for the construction sector. The host country would set a rule that if one or more workers did not return with the rest of the crew, the firm concerned would no longer be allowed to do business in

<sup>12</sup> Winters *et al.* (2003) simulate the benefits of temporary migration (including Mode IV) that results in a 3 per cent increase in the OECD labour force. They find that these benefits are larger than those obtained from establishing free trade in the world.

the host country. Firms would therefore have an incentive to screen potential workers carefully and to monitor their behaviour closely after they are hired. Moreover, workers would have an incentive to monitor one another, because the misbehaviour of one of them would hurt them all. This is similar to the principle underlying the loans granted by the Grameen Bank.

## **9. Diasporas: relationship between migration and trade and between migration and FDI**

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The issue of diasporas and their impact on trade has been examined in detail by Rauch (1996, 1999, 2001) and by Rauch and Casella (1998). By reducing the information costs of natives in host countries and increasing trust between host and source countries, diasporas reduce transaction costs and increase (two-way) trade.

Diasporas may be defined as groups of migrants who share one or more important characteristics and who live in places that differ from their place of origin. The characteristic they share may be their country or region of origin, ethnicity or religious origin.

Diasporas can increase trade between three sets of locations: *i*) between source and host countries; *ii*) between different host countries if people from the same source country, source region, ethnic origin or religious group migrate to more than one host country (e.g. Chinese communities in South Asia); and *iii*) between different regions of the source country in the case of internal migration. Gould (1994) found that immigrants' links with their country of origin does have an impact on US trade with that country.

Second, by working in host countries, migrants typically provide natives not only with business contacts but with information about investment opportunities in source countries, laws and regulations, and differences in culture and ways of doing business. The result should be an increase in FDI. This is shown empirically for the United States by Javorcik *et al.* (2006), who find that an increase in migration from a specific source country to the United States raises FDI from the United States to that source country. Moreover, most of the effect is associated with skilled-labour migration. Migration of unskilled labour has no significant impact on subsequent FDI. Similar findings are obtained by Kugler and Rapoport (2005).

Thus, diasporas increase international trade as well as FDI, implying that migration and trade, as well as migration and FDI, are complements.

## **10. Migration: positive and negative impact on investment in education**

A reduction in prohibitive migration barriers results in international migration and remittances. The latter have been found to raise investment in education (Cox Edwards and Ureta, 2003; Adams, 2005; Yang, 2005; McKenzie, 2005a; Lopez Cordova, 2004). Thus, migration and investment in education are complements in this case.

This result may not hold in all cases. Assume that for level of education  $E$  there is a threshold level  $E^*$  below which migrants have access only to unskilled jobs in the host country. In other words, an increase in the level of education  $E$  within the range  $0 < E < E^*$  has no impact on the types of jobs a migrant can obtain in the host country. This seems to be the case for migration from rural Mexico to the United States. Migrants from rural Mexico work essentially in unskilled jobs in sectors such as agriculture, construction and hospitality services, and the job choices obtained in the United States seem invariant to increases in the level of education within the range  $0 < E < E^*$  found in the rural areas of Mexico. On the other hand, the types of jobs they obtain in urban areas of Mexico improve with education.

Thus, those who plan to migrate to the United States – possibly because they benefit from a network of migrants in the United States – will tend to invest less in education and to work before migrating. Indeed, McKenzie (2005a) finds a negative impact of migration to the United States on rural education in Mexico. Thus, in the case of migration from rural Mexico to the United States, international migration and investment in education are substitutes.

## **11. Social integration policy**

MIT policies are likely to be interrelated with social integration policies. First, stronger social integration policies – such as improved access to health and

education – increase the benefits of migration and should result in an increased flow of immigrants. Hence, host countries that improve their social integration policies should take into account the likely increase in migration and its associated increase in public expenditures.

Second, natives of host countries may practise some form of social exclusion *vis-à-vis* immigrants and extract net resources from them. The political economy of social exclusion has been examined by Gradstein and Schiff (2006).

Natives may extract net resources from the immigrant group through some form of discrimination in terms of access to employment, education, health or other public goods<sup>13</sup>. Excessive extraction of resources, however, may lead the immigrant group to engage in some form of revolt, an outcome that is not in the natives' interest.

Assume that migration and trade are substitutes (complements). Trade liberalisation will then lead to a decrease (increase) in migration and hence to a decrease (increase) in migrants' relative power. This reduces (increases) the likelihood of revolt and results in less (more) favourable social integration policies by reducing (liberalising) access to public goods.

The fact that the benefits of MIT policies are affected by social integration policies and vice versa implies that these policies should be co-ordinated and that they should be determined jointly.

## **12. Domestic and international co-operation**

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This section examines three issues: *i*) whether a host country should co-ordinate its MIT policies; *ii*) whether international co-operation on MIT policies should take place between source and host countries; and, *iii*) whether international co-operation should take place at the bilateral, regional or multilateral level.

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<sup>13</sup> For instance, temporary migrants pay contributions for pensions and health insurance but receive no benefit from these contributions once they return home. This is particularly true for pensions, since migrants may have consumed health services while residing in the host country. A number of pension portability schemes are being envisaged.

### 12.1. Domestic co-operation

Reliable information on the direction and extent of the impact of a change in trade policy on migration and investment is crucial for the design of sound trade policy in the host country. Similarly, if a host country envisages reforming its immigration or foreign investment policy, reliable information on the impact of changes in immigration policy on foreign investment and trade, and of changes in foreign investment policy on migration and trade, is crucial for the design of a sound immigration policy.

Given the second-best situation, it follows that a change in one of the MIT policies generates externalities in the sense that it affects the benefits of the other policies. Consequently, if the gains from the policy change are to be maximised, decisions on changes in one policy should not be the exclusive purview of the authorities dealing with that policy (e.g. trade policy determined in the trade ministry). Rather, the host country needs to co-ordinate the changes in its migration, investment and trade policies.

### 12.2. International co-operation

Source countries are likely to have different preferences than the host country. The former may view additional emigration of unskilled labour favourably because of the benefits of remittances, especially: *i*) if their foreign exchange reserves are low; *ii*) if they are unable to generate enough jobs for a young and fast-growing population; and, *iii*) if emigration has a strong impact on wages and poverty reduction (over and above the poverty impact of remittances). Thus, they are likely to be more willing to implement a programme of trade liberalisation if migration and trade are complements than if they are substitutes.

If host-country trade policy reform results in an increase in *skilled* labour migration, this is likely to be viewed by that country as an additional benefit of its change in trade policy. The source country, however, is likely to view it as a cost and to adjust its policies in order to minimise that cost (such as improving economic and other conditions for skilled workers). The host country, in turn, is likely to adjust its policies in order to maximise its benefits (for example, by strengthening the preference for skilled migrants in its immigration policies).

Thus, the gains from source-country policy changes are affected by policy changes in the host country, and vice versa. Since policy changes in one country are likely to generate externalities at both the domestic and international levels, it follows that source and host countries should benefit from both domestic and international co-operation on their MIT policies.

### ***12.3. International co-operation: bilateral, regional or multilateral***

It has been argued that, migration being a global issue, it should be tackled at the global or multilateral level. The question is whether co-operation at the multilateral level is superior to co-operation at the bilateral or regional level. We will start with trade policy reform.

#### *12.3.1. Trade policy*

Co-operation in the area of trade policy is difficult for two reasons. First, it typically entails redistribution of income and wealth from powerful interest groups to the rest of society, and these groups are likely to invest substantially in preventing such policy reform from taking place. Second, it entails issues of sovereignty, as the power to determine a country's trade policy is delegated to some external entity.

Multilateral co-operation on trade policy is certainly more difficult than bilateral and regional co-operation. Multilateral organisations for trade policy negotiation (the General Agreement on Tariffs and Trade, or GATT, followed by the WTO) go back some 60 years. In the recent multilateral trade negotiations, however, success has become even harder to achieve. One of the reasons given for the proliferation of bilateral and regional trade agreements is dissatisfaction with the pace of the Uruguay and Doha Rounds.

#### *12.3.2. Migration policy*

No organisation such as the WTO exists in the case of international migration, and such an organisation is unlikely to emerge. The main reason is that immigration involves much deeper issues of national sovereignty than trade: a country's population and its characteristics (values, history, language, etc.) constitute a fundamental aspect of the country's identity, and no country would give control over such important aspects of



its sovereignty to some multilateral organisation. Host countries have also been concerned with the impact of migrants on the quality of public health, education and other services, as well as the budgetary impact of providing migrants with these services.

Regional co-operation on migration might be considered between a host country and members of a regional trade agreement (RTA) among source countries, or between a source country and members of an RTA among host countries. The latter case would seem more likely to succeed, but even so, co-operation on migration within an RTA is not likely in the near future. Even the European Union, which is by far the world's most integrated RTA, has yet to establish a common immigration policy.

Bilateral co-operation between a host country and its most important source country would seem to be the option most likely to succeed. Given the negative externalities generated by unilateral decisions, both sides could benefit from such co-operation. Moreover, a bilateral agreement would be more likely to tackle sensitive social, economic and/or identity issues than would regional or multilateral agreements.

Such an agreement would also be more likely to deal with such issues as the screening of, and exchange of information about, potential migrants. Migration would then be conditional on satisfying agreed-upon conditions (e.g. no criminal record), with repeat migration conditional on good behaviour in previous temporary migration episodes.

Migrants would have a greater incentive to return when their contract period ends because of the likelihood of repeat migration and because governments have detailed information about them (which is a fundamental difference with illegal migrants, whose identity and even presence is not known). Such an agreement exists between Mexico and Canada for migrants who work part of the year in Canada's agricultural sector. Co-operation on screening would be more difficult at the regional level and most likely unfeasible at the multilateral level.

Areas where multilateral co-operation might be able to succeed include: *i)* exchanges of information and analysis on policies and country experiences; *ii)* the establishment of norms regarding the rights of refugees, as well as preventing and combating the

smuggling of migrants and trafficking in human beings; and *iii*) monitoring of countries' compliance with and enforcement of these norms.

The UN General Assembly held a High-Level Dialogue (HLD) in September 2006, where it was agreed to create a Global Forum on Migration (GFM). The GFM might serve as a venue where some of these issues could be addressed.

#### **12.4. Policy implications**

This section has argued that bilateral co-operation agreements between source and host countries are more likely to work – in terms of implementation, breadth and depth of agreements, and likelihood of success – than regional agreements, and are certainly more likely to succeed than multilateral agreements.

### **13. Concluding comments**

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This paper has examined the relationship between migration, investment and trade for a large variety of policy changes and exogenous shocks. One contribution of the paper is that it examines the MIT relationship not only under policy changes in the MIT variables, but also under policy changes in other variables as well as under exogenous shocks. A second contribution is to show that the relationship between the MIT variables is much more complex than might appear at first glance, and that it may depend on:

- (i) the skill level of prospective migrants;
- (ii) the distance between source and host countries;
- (iii) the basis for trade (endowments, technology, imperfect competition, other distortions, increasing returns, etc.);
- (iv) the level of and changes in tariffs and other forms of protection in host and source countries;
- (v) whether trade is in goods or services;
- (vi) whether FDI is vertical or horizontal;
- (vii) whether FDI is between members of a North-South regional trade agreement (e.g. NAFTA, FTA between the European Union and Mexico, Chile, etc.), between members in the South (e.g. MERCOSUR, SACU), or from the North

- to a South-South agreement (e.g. United States and European Union to MERCOSUR);
- (viii) whether the exogenous shock affects trade costs, migration costs or income tax; and
  - (ix) the role of diasporas in the promotion of trade and FDI between host and source countries.

Consequently, individual countries need to conduct careful empirical studies to determine which conditions apply to their own case, in terms of the nature, type and strength of the relationships between the MIT (and social integration) variables and their welfare implications. Only after drafts of these studies have been circulated, reviewed and thoroughly revised should an optimal package of policies be designed.

A third contribution is to show that, given the interdependence between MIT policies, host and source countries would benefit from co-operation at the domestic and international levels in setting such policies.

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by  
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In an increasingly globalised world, where barriers to the movement of goods and capital are falling and migratory pressures increasing, the relationship between trade, trade policy, investment and the movement of people – or migration – deserves increasing attention. In his survey, Maurice Schiff covers a broad range of issues and policy implications. Using the standard model, a two-factor (skilled and unskilled labour), two-country (host and source) Heckscher-Ohlin (H-O) model with several plausible extensions to include migration costs and financing constraints for the unskilled, Schiff shows that the “standard” result, namely that trade and migration are substitutes, no longer holds under a wide variety of plausible environments.

Schiff’s taxonomic approach is useful because it warns us that, even within the ambit of this simplest of all trade models, it is hard to predict the effects of increased integration. In keeping with Schiff’s conclusions, Robertson (2005), examining labour market integration under NAFTA, finds no evidence of an economically significant increase in convergence rates for wages between Mexico and the United States, even though, according to theory, one would expect that the massive increase in incoming FDI to Mexico should have raised Mexican real wages relative to those in the United States.

Another useful aspect of Schiff’s survey is his references to recent microeconomic evidence indicating that the links between migration, investment and trade (MIT) are complex and context-specific. The complexity of these relationships leaves room for further comment<sup>1</sup>.

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<sup>1</sup> For example, Trefler (1993) has argued that allowing for differences in technology is useful when studying the determinants of migration flows. More recently, Davis and Weinstein (2002) observe the economy of the United States and argue that high-skilled labour, low-skilled labour and capital simultaneously seek to enter the US economy because of its technological superiority with respect to the rest of the world. Staying within stylised models, Findlay (1982) has shown that migration can give rise to a negative surplus via a terms-of-trade loss.

I argue here that it is useful to start from a broader perspective, and suggest that shifting from the H-O model to the factor-specific Ricardo-Viner (R-V) model as the basic framework is only marginally more complex, while yielding a more realistic platform since it allows for an “immigration surplus” and hence distributional conflicts. This leads to political-economy issues, which I view as the most challenging issue in the discussion. I elaborate on two extensions to Schiff’s paper: *i)* the choice of model; and, *ii)* political-economy aspects, both of which bring into focus another literature that has addressed the issues raised in Schiff’s survey. The last section presents some thoughts on the MIT relationship.

## 1. The broader picture

By and large, the observed patterns of migration have proved resistant to econometric analyses. It is easy to see why when one uses a two-dimensional framework with “push” (source country) and “pull” (destination country) factors applied to the various motives for migration. Economic and geographic motives include, on the push side, low wages, high fertility, lack of health care and education, and on the pull side, the prospect of higher wages and an improved standard of living. On the political front, insecurity, poor governance, human rights abuse and corruption are motives on the push side, while safety, security and political freedom are at work on the pull side. Social and cultural factors are also at work: on the push side, discrimination based on ethnicity, gender and language; on the demand side, family reunification, trust and freedom from discrimination<sup>2</sup>.

As an example of the interplay of these push and pull factors, Figure 1 shows the huge population change resulting from migration flows over the 1989-2003 period for

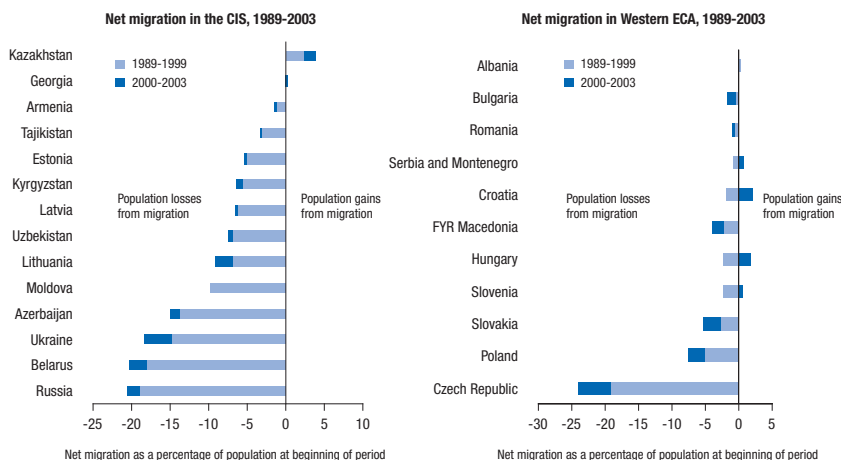
2 Hillman and Weiss (1999b) introduce cultural affinities in a Tiebout (1956) locational model, the idea being that locational choice can become a perfect substitute for a competitive market in the provision of collective goods (i.e. cultural preferences), so that Pareto-efficiency of the market for the public good is restored. In this type of model, efficiency will be reached if there is competition among locations, and locational choice is exercised in the manner of the market decision, so that there is no exclusion of people who are willing to pay a price for admission to a jurisdiction. Hillman and Weiss remark that in this framework, if there is no possibility of competitive replication to ensure that there will be no exclusion (for instance, if there were alternative communities whose characteristics would make them perfect substitutes for the communities one is excluded from), efficiency is preserved by the possibility of discriminatory pricing to compensate those present for their entry. In a similar vein, Docquier and Rapoport (2003) view discrimination as a rent-extraction opportunity for host countries.



the CIS (Commonwealth of Independent States) and Western ECA (Europe and Central Asia) countries respectively. It is clear that non-economic factors were predominant during the years immediately following the break-up of the Soviet Union. Even in the more recent period, however, when economic factors came back into play, migration flows were still very large. Although socio-cultural aspects must still have loomed large in these flows<sup>3</sup>, the economic factors emphasised in the literature must have also been at work. One can also surmise that if immigration policies in the OECD countries were less restrictive (as they probably still are in Russia and the former CIS), migration flows would have been much larger than observed.

Returning to the narrower economic determinants, in a world where immigration flows are restricted by host-country policies it is useful to look into the determinants

Figure 1.  
**Net migration in Eastern Europe and the former Soviet Union, 1989-2003**

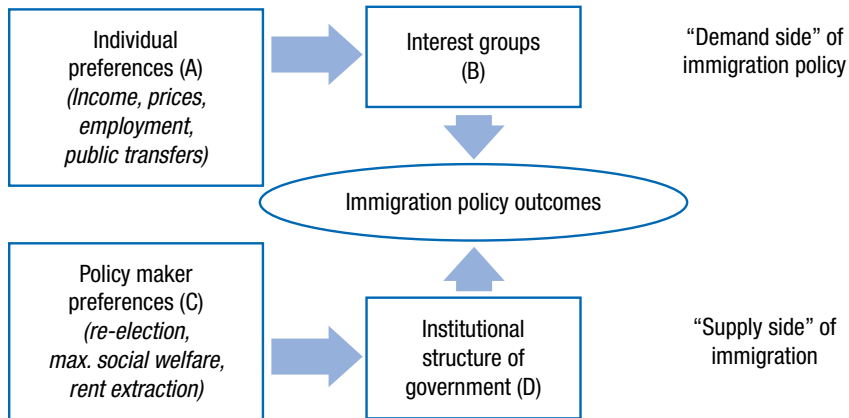


Source: World Bank (2006).

3 Cultural clustering effects must also have been an important determinant of these recent flows. As mentioned above, characteristics linked to the host country, such as language and personal contacts, may offer more appealing employment opportunities on particular labour-market segments where demand comes from employers having a similar cultural background as migrants. The empirical support for cultural clustering is provided by, among others, Buch *et al.* (2006), who find that "Germans migrate to foreign countries which were the destination of German migration in the past and which have a significant presence of German firms". They conclude that integration of markets is shaped to a significant degree by cultural factors and to a lesser degree by regulations.

of these policies. Figure 2 adapts Rodrik's (1995) framework for trade policies to immigration. According to this framework, both demand and supply factors enter into the selection of policies, hence the usefulness of studying the determinants of host citizens' attitudes towards immigrants. Studying policies in host countries seems all the more appropriate because the economic forces driving decisions in destination countries have become stronger in recent decades: reduced transaction and communication costs, greater opportunities for risk diversification, and often growing wage and income differentials.

Figure 2.  
Determinants of attitudes towards immigration



Source: adapted from Rodrik (1995).

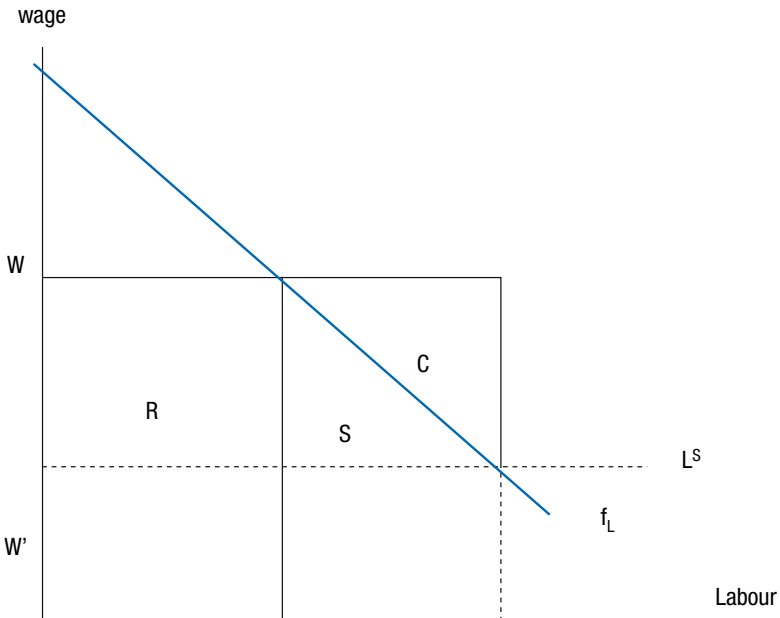
## 2. Which basic model?

A model that contains the elements identified in Figure 2 has yet to be developed. While the simple two-factor model is a useful heuristic to motivate some of the empirical results reported by Schiff, it is not clear that it provides the most appropriate starting point. Indeed, in Schiff's H-O model, if the country is small (i.e. it is a price-taker in international markets) and if it continues to produce both of the goods in the model after immigration or capital flows, factor rewards would remain unchanged, yet the standard view is that immigration involves an "immigration surplus".

Consider then the standard framework used by labour economists (who reason in a closed-economy setting) displayed in Figure 3, where the arrival of  $L^*$  immigrants (with no capital) lowers the wage from  $W$  to  $W'$ . The gain stems from the fact that all immigrants are paid their value marginal product, which is determined by the last immigrant: the difference between the wage and the marginal product is reaped by domestic capital owners, who also gain from the redistribution of area  $R$  away from domestic resident labour.

If immigration is infinitesimal, then the efficiency gain,  $S$ , is a second-order effect, whereas the first-order redistribution effect explains why there will be opposition to capital-poor immigration. (This situation would correspond to the case considered by Schiff for a price-taking open economy when an increase in labour does not lead to a change in production patterns.)

Figure 3.  
**Immigration surplus and conflict**



By contrast, when immigration is finite, there is an efficiency gain, and hence an “immigration surplus”. Note, however, that if the host country wishes to implement a redistribution scheme to compensate for the wage loss, the arrival of  $L^*$  immigrants produces a loss for resident labour equal to area C (which is equal to area S if the marginal productivity schedule,  $f_L$ , is linear). Since there will be pressure for a compensation policy, area S mirrors the aggregate costs of protecting the poorest workers against income loss<sup>4</sup>.

In this simple closed-economy model, the benefits outweigh the losses resulting from income redistribution effects because immigration alters factor returns, and as long as the government does not seek to compensate residents, there is a surplus. This simplest of models also has the merit of suggesting that the distributional impact of immigration is emphasised in the public debate because income transfers exceed welfare gains.

A similar outcome, where migration gives rise to a distributional conflict, would be obtained in the medium-term R-V specific-factors model, which is the favoured model for studying the distributional implications of trade events that give rise to conflicts (see Hillman and Weiss, 1999a). In addition to being arguably a more relevant framework for studying the links between trade, migration and FDI, since it does not result in factor-price equalisation (FPE) through trade as in the H-O model, the R-V model allows for a more nuanced array of predictions, including some potential answers to several political-economy puzzles (see below).

The presumption in much of the discussion on MIT is that factor movements affect factor returns. If they did not, assimilation of immigrants would be easier, although there might still be opposition to immigration on cultural grounds. What then is the evidence concerning the impact of migration on wages?

Analysing the 1980 and 1990 US censuses, Borjas *et al.* (1999) find, after controlling for other factors, that immigration has a negative effect on wages which increases in

<sup>4</sup> Wildasin first (1992, 1994) and subsequently Razin and Sadka (1995) pointed out that immigration will raise the costs of income redistribution. This occurs because, in the presence of factor mobility, redistributive policies entail inter-jurisdictional externalities, since it is no longer a question of a local public good: redistributive policy from mobile towards fixed factors will be thwarted as mobile factors move (the poor flock in and the rich leave).

magnitude with the area covered, suggesting that immigrants may push natives out of the area or attract investment. Hanson and Slaughter (1999), using data for 15 large states in the United States and 40 industries, find that endowment changes are absorbed mostly by output mix changes, as the latter broadly match the former after controlling for other intervening factors such as skill-biased technical change. They also find that relative FPE holds across states, so that all the states experience common relative-wage responses. It is not clear, however, whether the adjustment process takes place mainly via inter-state trade flows or via inter-state investment and migration flows. Finally, modified factor-content calculations by Trefler (1997) suggest that the wage effects at the bottom of the education distribution are very strong.

In sum, if one interprets the evidence broadly, immigration does have some effect on wages, suggesting the existence of an “immigration surplus” (along with distributional conflicts) and thus justifying a more flexible framework than the standard H-O model.

### 3. Political economy

If one accepts that immigration does have some effect on wages, and hence that there is likely an “immigration surplus”, the main issue in the debate over MIT becomes one of attitudes towards immigrants, and hence of acceptance by natives of increased numbers of immigrants. The reason becomes apparent if one asks the following question: if labour and capital were indeed apersonal factors of production, why should there be more opposition to an increase in the number of immigrants than to a reduction in protection, both of which would have the same effect on wages?

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Let us consider the direct-democracy approach in the R-V model, which is arguably the model best suited to represent the way preferences concerning immigration are formed by the population at large. This is probably due to people’s perception that the absorbing immigrants will involve, among other things, changes in their wages<sup>5</sup>. The

5 Scheve and Slaughter (1999) find that less skilled workers are significantly more likely to prefer limiting immigrant inflows into the United States, and that individuals form their opinions in accordance with their interests as labour-force participants. Scheve and Slaughter’s results also reject the “area analysis” framework used by labour economists, according to which immigrants exert pressure on the wages of similarly skilled natives residing in gateway communities where immigrants settle, but are in keeping with the “factor proportion analysis” where the pressure on wages is nationwide, as in the multi-cone H-O and R-V trade models.

time-frame of the specific-factors model with short-term rents also probably corresponds to the time-frame envisaged by many voters when they form an opinion on immigration policy<sup>6</sup>. According to the R-V model, then, individuals with higher skill levels should be more likely to be pro-immigration in countries with high per capita GDP and less likely in those with low per capita GDP. As shown by Mayda (2006) and O'Rourke and Sinnott (2006), these predictions are broadly consistent with an analysis performed by the 1995 International Social Survey Programme (ISSP). An analysis of attitudes and actual voting patterns on policy towards immigration in the Swiss direct-democracy context also confirms these conjectures (see Melo *et al.*, 2004).

#### 4. MIT once again

The R-V model can also be used to bring FDI into the picture in the presence of labour migration. Taking a historical perspective, Hatton and Williamson (2006) observe labour and capital flows, finding that migrants and international capital flows have often moved in the same direction rather than in opposite directions. They argue that capital flows have typically mitigated the effects of international migration on real wages, in both the past and the present, and helped to stave off restrictive immigration policies in the late 19th century.

Let us assume that, in today's context, migration flows are largely exogenous, i.e. determined by political-economy considerations in host countries, while FDI flows are endogenous and respond to risk-adjusted return differentials. Ilevs (2006) considers a two-sector model with skilled and unskilled labour, unskilled labour being the intensive factor in the non-traded goods sector (high-skilled labour being specific to the export sector). Under these assumptions, the inflow of high-skilled immigrants always induces an inward flow of FDI. On the other hand, if domestic non-traded goods and imported goods are sufficiently weak substitutes in consumption, low-skilled migration will cause an outflow of capital.

<sup>6</sup> Hillman and Weiss (1999b) suggest that voters probably find the H-O model appealing when formulating trade policy, because it captures the indirect effect of labour (via embodiment in imports), and the R-V model when formulating immigration policy, since immigrants compete directly with domestic labour. Grether *et al.* (1999) show that the R-V model also allows for asymmetric impacts between trade and labour immigration that result in the same change in wages.

It is likely to be difficult to obtain direct evidence on MIT from macro data (for an attempt, see Faini, 2005), and micro studies are likely to yield more insights because it will be easier to control for confounding factors at the micro level. Nonetheless, according to recent estimates of large emigration rates of skilled labour in small, vulnerable countries (see Docquier *et al.*, 2007), the outflow of high-skilled individuals is particularly disastrous for these vulnerable economies and would be compounded by an outflow of productive capital. In contrast, low-skilled emigration may, in this set-up, result in net FDI inflows if non-traded and imported goods are weak substitutes.

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# Brain Drain and Inequality across Nations

by  
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## 1. Introduction

International migration is a diverse phenomenon, and its impact on countries of origin and destination has attracted increased attention from policy makers, analysts and international agencies. Migratory pressure has increased in recent years and is expected to intensify further in the coming decades, given the rising gap in wages between developed and developing countries and their differing demographic futures. Understanding and measuring the consequences for migrants, host countries' residents and those left behind is a major and complex task.

This paper tackles the migration issue from two particular angles. First, it focuses on the implications for sending countries (typically developing countries). A large strand of the literature analyses the effects of migration on welfare in host countries and on attitudes towards migrants. The main objective of this paper, in contrast, is to design policy recommendations to increase the well-being of the world's poorest, although the current state of knowledge inclines me to be highly cautious.

Second, it examines the very controversial issue of skilled migration. Many recent studies present unskilled migration as generating huge gains for migrants, their families and sending countries. Indeed, since unskilled migration relaxes labour market constraints in countries of origin and induces large amounts of remittances, there is little

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doubt that it should be seen as an explicit component of the development policy of the rich world<sup>1</sup>. In contrast, the emigration of skilled workers is usually blamed for depriving developing countries of one of their scarcest resources, human capital. Although many studies emphasise positive feedback effects of the brain drain (in the form of remittances, return migration, diaspora externalities, quality of governance and increasing returns to education), international agencies and many analysts have considered these effects to be negligible and disregarded them.

Until recently and despite many case studies, nobody had been able to estimate the cost of the brain drain and the size of its feedback effects for sending countries, because there was no reliable data set documenting the brain drain for a large set of countries and over a period of years. The debate therefore remained essentially theoretical. Today, fortunately, we have a more accurate vision of the size and intensity of the brain drain thanks to new data sets offering harmonised and original data on migration stocks and rates by educational attainment.

This paper aims to provide a comprehensive and accurate picture of the brain drain and an updated survey of existing empirical and theoretical studies. The analysis offers a mixed view of the consequences of skilled emigration on sending countries, with conclusions and policy recommendations that are sometimes in opposition to preconceived ideas. Let us take three examples:

Many have argued that the rise in the international mobility of labour has been small compared to the extraordinary increase in trade, foreign investment and communication. Pritchett (2006) recently talked about the “globalisation of everything but labour”. The data show that the change in the proportion of international immigrants residing in the more developed countries is very similar to the change in trade. An increasing proportion of these migrants originates from developing countries. Hence, South-North migration is an essential component of globalisation.

The educational structure of international migration is increasingly skill-biased. Many believe that this structural change has increased the brain drain from developing

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<sup>1</sup> The Commitment to Development Index (CDI) computed by the Center for Global Development, an independent US think tank that works to reduce global poverty and inequality, rewards immigration of unskilled people. See <http://www.cgdev.org>. See also the 2006 edition of the World Bank's *Global Economic Prospects*, which is devoted to international migration.

countries, and consider it as a by-product of increasingly selective immigration policies conducted in the major immigration countries. The analysis in this paper reveals that the increasing number of skilled migrants is also strongly related to increasing demographic size and sharp rises in educational attainment in developing countries. In relative terms, the average brain drain has remained highly stable over the last three decades.

Migration of skilled workers is seen as depriving the sending country of one of its scarcest resources (i.e. human capital), and hence as impoverishing sending countries while offering handsome profits to receiving countries. Many think that eliminating the brain drain would reduce inequality across nations. The analysis herein reveals that a limited but positive rate of skilled migration (say, from 5 to 10 per cent of the native skilled labour force) is very likely to be beneficial for both sending and receiving countries. Unfortunately, many poor regions, such as sub-Saharan Africa and Central America, are well above that “optimal” threshold.

The rest of the paper is organised as follows. Section 2 provides many alternative measures of the brain drain and discusses its determinants, while Section 3 analyses its long-run trends in an increasingly open world. The traditional arguments against the brain drain are reviewed in Section 4. Section 5 examines the range of feedback effects through which the brain drain exerts a positive impact on sending countries. Section 6 concludes.

## 2. Current data on the brain drain

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This section reviews a large set of complementary data on the intensity and distribution of the brain drain. After a description of the general methodology used to compute new and original data sets, the results are discussed.

**Data sources and methodological issues.** National statistics in countries of origin do not offer an accurate picture of emigration. There is a broad consensus that emigration data, when available, are incomplete and imprecise. Hence, the only way to capture the structure of emigration is to collect immigration data in the most important host countries. This is a complex task given the lack of harmonised and consistent data on the international immigration stock in receiving countries.

The United Nations Population Division (UNPD) evaluates on a regular basis the number of international immigrants by region and country of destination. However, the UNPD provides no detail on the structure of immigration by country of origin and educational level. For the industrialised countries, OECD statistics provide data on the structure by country of origin (country of birth or citizenship) but report the number of immigrants only for the major emigration countries and give no detail about their educational level. To capture the brain drain, it is therefore necessary to construct new, original data sets.

The first serious effort to put together harmonised international data sets on migration rates by educational level is due to Carrington and Detragiache (1998, 1999). They used 1990 census data for the United States and other OECD statistics on international migration to construct estimates of emigration rates at three educational levels for some 60 developing countries. The emigration “rate” of skill  $s = l, h$  from country  $i$  at time  $t$  is defined as the ratio of emigrants ( $EM_{i,t}^s$ ) to natives, i.e. residents ( $N_{i,t}^s$ ) and emigrants ( $EM_{i,t}^s$ ):

$$m_{i,t}^s = \frac{EM_{i,t}^s}{N_{i,t}^s + EM_{i,t}^s}$$

Although Carrington and Detragiache’s study initiated new debates on skilled migration, their estimates suffer from a number of limitations. The two most important were: *i*) they transposed the educational structure of US immigration to immigration to the other OECD countries (transposition problem); and, *ii*) immigration to European Union (EU) countries was estimated on the basis of OECD statistics reporting the number of immigrants for the major emigration countries only, which led to underestimation of immigration from small countries (under-reporting problem).

In Docquier and Marfouk (2006), we generalise this work and provide a comprehensive data set on international skilled emigration to the OECD. The construction of the database involves three steps: *i*) collection of census and register information on the structure of immigration in all OECD countries (this solves the transposition and under-reporting problems noted for Carrington and Detragiache); *ii*) summing over source countries, which makes it possible to evaluate the stock of immigrants from any given sending country to the OECD area by educational level; and, *iii*) comparing the

educational structure of emigration to that of the population remaining at home, which makes it possible to compute emigration rates by educational attainment in 1990 and 2000<sup>2</sup>. This data set (labelled DM06) is the cornerstone of this section.

***The world distribution of the brain drain.*** The DM06 data set provides many insights on the distribution of the brain drain. To understand the sources of this phenomenon, it is helpful to use a simple multiplicative decomposition of the skilled emigration rate (see Docquier, Lohest and Marfouk, 2006): “skilled emigration rate” = “average emigration rate” x “schooling gap”.

The first multiplicative component is the ratio of emigrants to natives, i.e. the average or total emigration rate. It reflects the degree of openness of the sending country. The second multiplicative component is the proportion of skilled individuals among emigrants divided by the same proportion among native-born individuals. This ratio reflects the schooling gap between emigrants and natives.

What do the data reveal? Table 1 summarises the data for various country groups in 2000. Countries are grouped according to demographic size, average income (using the World Bank classification) and region.

Although large countries send more migrants abroad than small countries<sup>3</sup>, we observe a decreasing relationship between emigration rates and country size: an increase in population at origin generates a less-than-proportional increase in emigration. Hence, the average emigration rate is about 7 times higher for small countries (population less than 2.5 million) than for large countries (population greater than 25 million). From the last two columns, we can see that these differences cannot be attributed to higher “schooling gaps” in small countries. Small countries simply tend to be more open to migration. In the whole sample, the correlation between average emigration rates and the log of native population sizes (emigrants are included in the native population to avoid endogeneity problems) amounts to -56 per cent.

2 Similar work has been conducted by Dumont and Lemaître (2005), who provide emigration rates for about 100 countries in 2000. The correlation between the Docquier-Marfouk and Dumont-Lemaître estimates varies from 91 to 88 per cent, depending on the human capital indicators used for residents.

3 In absolute numbers, the main emigration countries are the largest ones (such as Mexico, Turkey, India, China, Philippines), whilst the smallest diasporas originated from small countries (such as Palau, Vanuatu, Tuvalu, Nauru, Maldives).

Table 1.  
Data by country group in 2000

By country size	Rate of emigration			Share of skilled workers	
	Total	Skilled	Educ. gap	In residents	In migrants
Large countries (pop. > 25 million)	1.3%	4.1%	3.144	11.3%	36.4%
Upper middle (25 million > pop. > 10 million)	3.1%	8.8%	2.839	11.0%	33.2%
Lower middle (10 million > pop. > 2.5 million)	5.8%	13.5%	2.338	13.0%	33.1%
Small countries (pop. < 2.5 million)	10.3%	27.5%	2.666	10.5%	34.7%
<b>By income group</b>	<b>Total</b>	<b>Skilled</b>	<b>Educ. gap</b>	<b>In residents</b>	<b>In migrants</b>
High-income countries	2.8%	3.5%	1.238	30.7%	38.3%
Upper middle-income countries	4.2%	7.9%	1.867	13.0%	25.2%
Lower middle-income countries	3.2%	7.6%	2.383	14.2%	35.4%
Low-income countries	0.5%	6.1%	12.120	3.5%	45.1%
<b>By region</b>	<b>Total</b>	<b>Skilled</b>	<b>Educ. gap</b>	<b>In residents</b>	<b>In migrants</b>
AMERICAS	3.3%	3.3%	1.002	29.6%	29.7%
<i>USA and Canada</i>	0.8%	0.9%	1.127	51.3%	57.9%
<i>Caribbean</i>	15.3%	42.8%	2.807	9.3%	38.6%
<i>Central America</i>	11.9%	16.9%	1.418	11.1%	16.6%
<i>South America</i>	1.6%	5.1%	3.219	12.3%	41.2%
EUROPE	4.1%	7.0%	1.717	17.9%	31.7%
<i>Eastern Europe</i>	2.2%	4.3%	1.930	17.4%	34.2%
<i>Rest of Europe</i>	5.2%	8.6%	1.637	18.3%	31.0%
<i>incl. EU15</i>	4.8%	8.1%	1.685	18.6%	32.5%
<i>incl. EU25</i>	4.9%	8.7%	1.789	17.6%	32.8%
AFRICA	1.5%	10.4%	7.031	4.0%	30.9%
<i>North Africa</i>	2.9%	7.3%	2.489	7.5%	19.6%
<i>Sub-Saharan Africa</i>	1.0%	13.1%	13.287	2.8%	42.5%
ASIA	0.8%	5.5%	7.123	6.3%	46.8%
<i>East Asia</i>	0.5%	3.9%	8.544	6.3%	55.5%
<i>South Central Asia</i>	0.5%	5.3%	10.030	5.0%	52.5%
<i>South-East Asia</i>	1.6%	9.8%	5.980	7.9%	51.4%
<i>Near and Middle East</i>	3.5%	6.9%	1.937	11.4%	22.9%
OCEANIA	4.3%	6.8%	1.578	27.8%	45.0%
<i>Australia and New Zealand</i>	3.7%	5.4%	1.479	32.7%	49.2%
<i>Other Pacific countries</i>	7.6%	48.7%	6.391	3.1%	35.2%

**Source:** Docquier and Marfouk (2006).

Regarding income groups, the highest emigration rates are observed in middle-income countries, where people have incentives to emigrate and can afford to pay moving costs. High-income countries (low incentives) and low-income countries (where liquidity constraints are likely to be more binding) exhibit the lowest rates. The apparent



pattern is therefore that of an inverted U-shaped relationship between income levels and skilled migration. Such an assertion should be econometrically tested, as it is strongly dependent on average country size in each group<sup>4</sup>. However, there is a strong relationship between the level of development and the schooling gap. It is natural that the proportion of educated individuals among emigrants increases with the general level of education of the native population, but an increase in the educational level of natives generates a less-than-proportional increase in the educational level of emigrants. Hence, the schooling gap decreases as human capital at origin increases. The correlation rate between the schooling gap and the proportion of educated people among natives amounts to -90 per cent.

In terms of regional distribution, the regions most affected by the brain drain are the Caribbean and the Pacific (which consist of relatively small island countries), sub-Saharan Africa and Central American countries. The difference between skilled and total emigration rates is especially large in Africa.

**Endogenising skilled migration rates.** Docquier *et al.* (2006) use OLS, SURE and IV regression models to examine the joint determinants of average emigration rates and schooling gaps and thus to explain regional disparities in the brain drain.

They put forward many significant determinants of these two components. The degree of openness increases with countries' smallness, natives' human capital, political instability, colonial links and geographic proximity to the major OECD countries. The schooling gap depends on natives' human capital, on whether the destination countries have quality-selective immigration programmes, on distance and on religious fractionalisation at origin. Geographic proximity and natives' human capital have ambiguous effects on the brain drain (they increase openness and reduce the schooling gap). The brain drain is stronger in countries which are not too distant from the OECD and where the average level of schooling of natives is low.

Taken together, these results enable us to understand the causes of the brain drain. Small islands in the Pacific and the Caribbean clearly suffer from their smallness and proximity to OECD countries. Proximity is also a key determinant of the Central

<sup>4</sup> The largest countries of the world belong the low-income group whilst the smallest countries are in the upper-middle-income group.

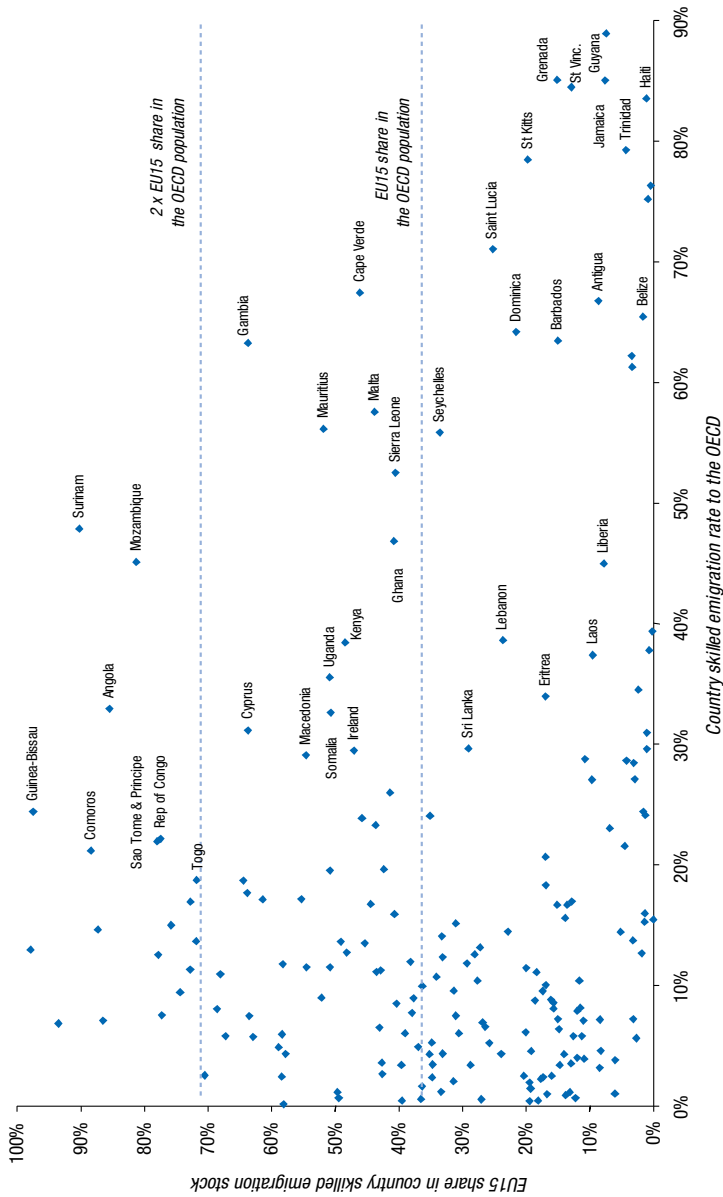
American brain drain. Sub-Saharan African countries combine various disadvantages, such as a low level of development, high political instability and religious/ethnic fractionalisation. These results show that the brain drain has multiple possible causes. Many of them (such as proximity to OECD countries, historical links, country size and fractionalisation) cannot be affected by public intervention, while others (such as political indicators and human capital accumulation) could be controlled by such means.

**The European Union is an important actor.** Using DM06 data, Docquier *et al.* (2005) analysed the impact of the EU15 (European Union with 15 members) on the international mobility of skilled workers. Compared to other OECD countries, the average skill level of EU15 immigrants is low. The EU15 plays an important role in the brain drain debate, however, because it attracts a considerable proportion of African migrants. It is thus an important source of brain drain for countries that are strongly concerned by human capital shortages. It is worth noting that the EU15 experiences a large deficit in its exchanges of skilled workers with the other traditional immigration countries (about 2.4 million European skilled workers live in the United States, Canada and Australia). This deficit is compensated by importing human capital from developing countries. Figure 1 illustrates this impact of EU immigration on the human capital losses of developing countries. It compares country-specific skilled emigration rates (X-axis) and the European contribution to these losses, measured as the share of the EU15 in the brain drain (Y-axis). We consider that the EU15 contribution is high (respectively very high) when the share of skilled emigrants living in the EU15 exceeds the share of the EU15 (respectively twice the share of the EU15) in the total OECD population. Similarly, we consider that countries suffering from the brain drain are those experiencing a loss higher than 20 per cent.

We observe that the EU15 contribution is high in 75 cases, and very high in 20 cases. Some of these countries are strongly affected by the brain drain (The Gambia, Cyprus, Cape Verde, Sierra Leone, Mauritius, Seychelles, Malta, Ghana, Somalia, Uganda, Kenya). The EU15 is the main source of human capital flight from Suriname, Mozambique, Angola, Sao Tome and Principe, Republic of Congo, Guinea-Bissau, Togo and the Comoros.

**Brain drain and child migration.** Counting all foreign-born individuals as immigrants independently of their age at arrival, both the Carrington-Detraggiache and

Figure 1.  
Contribution of the EU15 to the international brain drain



Source: Docquier, Lohest and Marfouk (2006).

Docquier-Marfouk data sets fail to account for whether education has been acquired in the home or in the host country<sup>5</sup>. This leads to potential over-estimation of the intensity of the brain drain as well as to possible spurious cross-country variations in skilled emigration rates (Rosenzweig, 2005).

The data set of Docquier and Marfouk (2006) can be seen as providing an upper bound to brain drain estimates. In contrast, Rosenzweig (2005) suggests that only people with home-country higher education should be considered as skilled immigrants. This may be considered a lower-bound measure of the brain drain. Indeed, except for those who arrived at a very young age, most of the immigrants who then acquired host-country tertiary education arrived with some level of home-country pre-tertiary schooling. In addition, some of them would still have entered higher education in the home country in the absence of emigration prospects.

Beine, Docquier and Rapoport (2006) use immigrants' age of entry as a proxy for where they acquired their education. Data on age of entry are available from a subset of receiving countries, which together represent more than 75 per cent of total skilled immigration to the OECD. Using these data and a simple gravity model, the authors estimate the age-of-entry structure of skilled immigration to the other OECD countries. This allows them to propose alternative measures of the brain drain by defining skilled immigrants as those who left their home country after age 12, 18 or 22, and to do so for both 1990 and 2000. These corrected skilled emigration rates, which can be seen as intermediate bounds to the brain drain estimates, are by construction lower than those computed without age-of-entry restrictions by Docquier and Marfouk (2006).

For the year 2000, 68 per cent of the global brain drain is accounted for by emigration of people aged 22 or more upon arrival (the figures are 78 per cent and 87 per cent for the 18- and 12-year-old thresholds, respectively). For some countries, there is indeed a substantial difference between the corrected and uncorrected rates. However, cross-country differences are generally maintained in the corrected data sets, resulting in extremely high correlation levels between the corrected and uncorrected rates.

<sup>5</sup> Mexican-born individuals who arrived in the United States at age 5 or 10 and then graduated from US higher education institutions later on are counted as high-skill Mexican immigrants.

Table 2.  
Top 30 most affected countries – Various definitions

Population above 0.25 million			Population above 4 million		
Country	BD0+	Country	BD22+	Country	Country
Guyana	89.0%	Guyana	81.9%	Haiti	Haiti
Jamaica	85.1%	Jamaica	74.6%	Sierra Leone	Sierra Leone
Haiti	83.6%	Haiti	73.7%	Ghana	Mozambique
Trinidad Tobago	79.3%	Trinidad Tobago	67.5%	Mozambique	Ghana
Cape Verde	67.4%	Gambia	60.4%	Kenya	Kenya
Barbados	63.5%	Cape Verde	55.5%	Laos	Uganda
Gambia, The	63.2%	Sierra Leone	48.4%	Uganda	Somalia
Fiji	62.2%	Barbados	47.5%	Angola	Angola
Bahamas	61.3%	Mauritius	45.1%	Somalia	Sri Lanka
Malta	57.6%	Fiji	44.5%	El Salvador	Rwanda
Mauritius	56.1%	Malta	44.1%	Sierra Leone	Laos
Sierra Leone	52.5%	Mozambique	43.7%	Nicaragua	Rwanda
Suriname	47.9%	Bahamas	42.3%	Hong Kong	Afghanistan
Ghana	46.8%	Ghana	42.3%	Cuba	Nicaragua
Mozambique	45.1%	Liberia	37.7%	Papua N.G.	Croatia
Liberia	45.0%	Suriname	36.7%	Vietnam	Hong Kong
Lebanon	38.6%	Kenya	33.4%	Rwanda	Croatia
Kenya	38.4%	Uganda	30.7%	Honduras	Malawi
Laos	37.4%	Somalia	29.9%	Guatemala	Hong Kong
Uganda	35.6%	Eritrea	27.9%	Croatia	Papua N.G.
Eritrea	34.0%	Lebanon	27.4%	Afghanistan	Cuba
Cyprus	33.2%	Angola	26.4%	Dominican Rep	Vietnam
Angola	33.0%	Sri Lanka	24.1%	Portugal	Honduras
					Togo
					Zambia

**Source:** Beine, Docquier and Rapoport (2006).

**Note:** BD means brain drain.

Table 2. (cont.)  
**Top 30 most affected countries – Various definitions**

Population above 0.25 million			Population above 4 million								
Country	BD0+	Country	BD22+	Country	BD0+	Country	BD12+	Country	BD18+	Country	BD22+
Somalia	32.6%	Macedonia	24.1%	Togo	18.7%	Togo	17.8%	Dominican Rep	15.7%	Slovakia	14.4%
El Salvador	31.0%	Rwanda	23.9%	Malawi	18.7%	Portugal	16.4%	Slovakia	15.4%	Guatemala	14.1%
Sri Lanka	29.6%	Ireland	23.3%	Cambodia	18.3%	Slovakia	15.9%	Zambia	15.1%	Portugal	13.1%
Nicaragua	29.6%	Bosnia Herz	21.9%	Senegal	17.7%	Zambia	15.7%	Portugal	14.7%	Dominican Rep	12.8%
Ireland	29.5%	Laos	21.9%	Cameroon	17.2%	Cameroon	15.5%	Cameroon	14.6%	Senegal	12.5%
Macedonia	29.1%	Cyprus	21.3%	Morocco	17.0%	Senegal	15.5%	Senegal	14.1%	Serbia Mont.	12.3%
Hong Kong	28.8%	Afghanistan	20.4%	Zambia	16.8%	Cambodia	14.8%	Morocco	13.4%	Cameroon	12.3%

**Source:** Beine, Docquier and Rapoport (2006).

**Note:** BD means brain drain.

Table 2 gives the stock and rates of skilled migration in the 30 most affected countries (in relative terms, or brain drain intensity<sup>6</sup>). The left panel reports the results for countries with population above 0.25 million, while the right panel reports results for countries with population above 4 million. The brain drain appears to be very strong in small countries, with emigration rates as high as 80 per cent in some Pacific or Caribbean islands. Controlling for age of entry does not significantly affect the rankings, although it does reduce the intensity.

For countries whose population exceeds 4 million, the top of the list mainly includes middle-sized countries from all regions: Africa (Sierra Leone, Ghana, Mozambique, Kenya), Central America (Haiti, El Salvador, Nicaragua, Cuba), South and South-East Asia (Laos, Sri Lanka, Hong Kong, Vietnam), and Europe (Portugal, Slovakia).

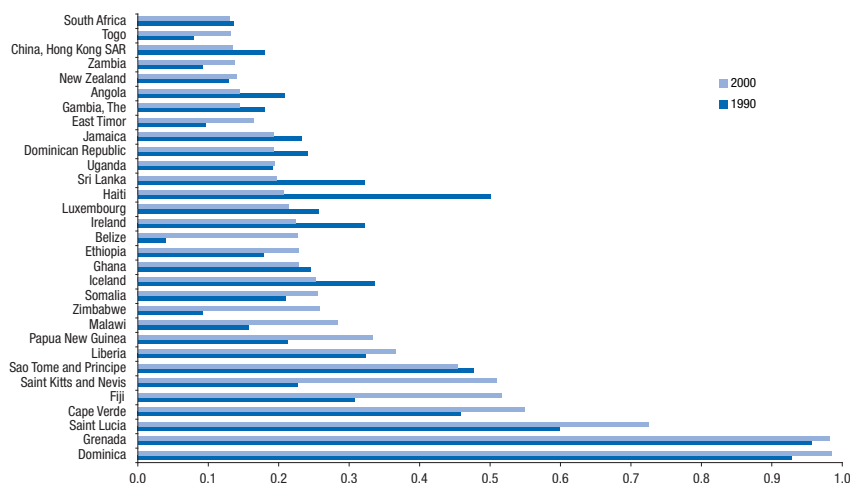
***Brain drain and occupational shortages.*** General emigration rates may mask substantial occupational shortages (e.g. among engineers, teachers, physicians, nurses and IT specialists). In many poor countries, shortages are particularly severe in the medical sector, where the number of physicians per 1,000 inhabitants is far below the acceptable threshold of 2 defined by the World Health Organization. The brain drain of physicians and nurses to countries such as the United States, Australia, Canada and the United Kingdom is one of the many causes of this shortage. To illustrate this phenomenon, Docquier and Bhargava (2006) collected annual data on doctors with foreign qualifications working in the 16 main OECD countries<sup>7</sup> from 1991 to 2004. Aggregating these data and comparing them to the total number of doctors who qualified in their home countries, the authors compute medical emigration rates for all the world's countries.

The correlation between the medical brain drain and the corrected general brain drain of the 22+ group (those who were likely to qualify before emigration) is about 41 per

6 In absolute terms, the main international suppliers of skilled migrants are large countries such as the United Kingdom (1.441 million), the Philippines (1.126 million), India (1.037 million), Mexico (0.923 million), Germany (0.848 million) and China (0.816 million). In proportion to their skilled labour force, these countries are moderately affected by the brain drain.

7 In a very recent study, Clemens and Pettersson (2006) have compiled a data set of the cumulative bilateral net flows of African-born physicians and nurses to the nine most important destination countries. The criterion of being African-born – instead of African-qualified, as in Docquier and Bhargava (2006) – leads to more pessimistic measures (see <http://www.cgdev.org/content/publications/detail/9267/>).

Figure 2.  
Countries most affected by the medical brain drain



Source: Docquier and Bhargava (2006).

cent, and the elasticity of medical brain drain with respect to general brain drain 46 per cent. However, many observations are far from the general trend. Some countries, despite moderate general rates of skilled migration, suffer from a strong medical brain drain. Figure 2 presents the medical brain drain observed in the most affected countries. Small countries are strongly affected, including some industrialised countries with efficient education systems (Ireland, Luxembourg). Among the affected countries, we have 13 African countries (Cape Verde, Sao Tome and Principe, Liberia, Ethiopia, Somalia, Ghana, Uganda, Malawi, Zimbabwe, Gambia, Zambia, Togo, South Africa), where the health-care shortages are particularly severe. Clearly, the medical brain drain can be blamed for depriving sub-Saharan countries of many of their health professionals.

Estimating random effects models for sub-Saharan African countries, Bhargava and Docquier (2006) show that lower wages and higher HIV prevalence rates are key determinants of the medical brain drain. Countries with higher physicians' wages experience lower emigration rates. This finding supports the responses of physicians from sub-Saharan African countries (Awases *et al.*, 2003): the percentages of health professionals reporting that higher salaries are a motivation for emigration from Cameroon, Ghana, South Africa, Uganda and Zimbabwe were, 68, 85, 78, 84, and 77



per cent, respectively. The second result shows that working conditions also play an important role. The elasticity of the medical emigration rate with respect to the HIV prevalence rate (0.07) is robust across specifications. Thus, a doubling of HIV prevalence rate implies an increase of around 15 per cent in the medical brain drain. While this might seem a relatively small magnitude, it can make a great difference in countries averaging only 0.15 physicians per 1,000 people.

### 3. Long-run trends

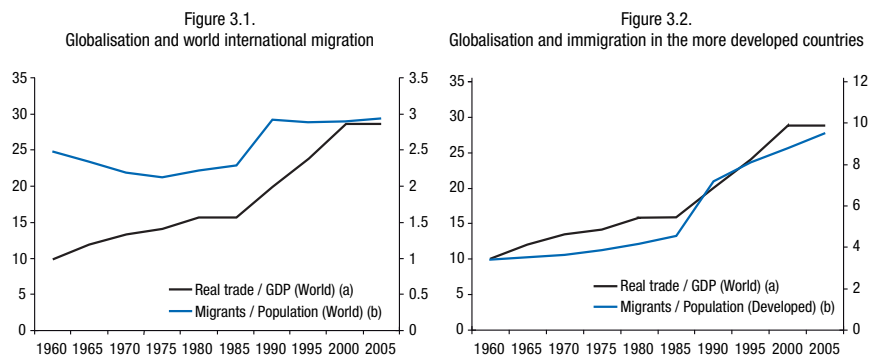
Analysing change in international skilled migration over time is an even more complex task since it is extremely difficult to expand the time series dimension of the previous data sets. This section builds on some recent longitudinal studies, summarising their main results and contradicting some preconceived ideas.

***South-North migration is an important component of globalisation.*** The UNPD evaluates on a regular basis the number of international immigrants by region and country. This number increased from 75 million in 1960 to 190 million in 2005 (i.e. by 2.1 per cent per year). As a percentage of the world population, the rate of migration rose only from 2.5 to 2.9 per cent over the period and was extremely stable between 1990 and 2000 (see Figure 3.1). As the world trade/GDP ratio increased from 10 to 30 per cent over the same period (from 20 to 30 per cent between 1990 and 2000), many have argued that the international mobility of workers was little affected by globalisation. They explain this paradox by anti-immigration sentiments and policies in the rich world, nourished by highly contentious labour and immigration studies.

This common belief is invalidated, however, by more detailed data. The UN regional immigration data reveal that the proportion of immigrants residing in the most developed countries has tripled since 1960 and doubled since 1985, following the same growth pattern as the trade/GDP ratio. The average annual growth rate of immigrant populations in developed countries amounts to 3 per cent between 1960 and 2005 (4 per cent between 1985 and 2000), much more than the native population growth rate (0.5 per cent). Thus, Figure 3.2, in which the destination region is restricted to the developed countries, shows that the mobility of labour responded to globalisation with the same intensity as the mobility of goods and services. Many of these new migrants originated

from developing countries. Hence, South-North migration is an essential component of globalisation.

Figure 3.  
International migration in a globalised world



**Sources:** (a) Barriel, M. and M.R.W. Dean (2004), "Why Has World Trade Grown Faster than World Output?", Bank of England Quarterly Bulletin, available at <http://ssrn.com/abstract=700072>.

(b) United Nations Population Division, available at <http://esa.un.org/migration/>.

**The number of skilled migrants has increased.** Case studies and anecdotal evidence suggest that the number of skilled migrants is much larger than it was two or three decades ago<sup>8</sup>. The annual average growth rate of skilled immigration stocks in the six major receiving countries between 1975 and 2000 can be estimated at 6 per cent, twice as high as the growth rate of total immigration. This trend is usually explained by increasingly "quality-selective" immigration policies introduced in the late 1980s and early 1990s in major immigration countries such as Australia, New Zealand, Canada and the United States<sup>9</sup>.

The trend is confirmed by the data set of Docquier and Marfouk (2006). The number of foreign-born individuals of working age living in OECD countries increased from 42 million in 1990 to 59 million in 2000. Skilled workers are now much more likely to

<sup>8</sup> For example, Haque and Jahangir (1999) indicate that the number of highly skilled emigrants from Africa increased from 1,800 a year on average during the 1960-75 period to 4,400 during 1975-84 and 23,000 during 1984-87.

<sup>9</sup> In EU countries, immigration policies are less clear and still oriented towards traditional targets such as asylum seekers and applicants requesting family reunion. There is some evidence, however, that European countries are also leaning towards quality-selective policies.

engage in international migration. From 1990 to 2000, the number of skilled immigrants increased from 12.4 to 20.4 million, while the number of unskilled migrants increased only from 18.8 to 21.5 million over the same period.

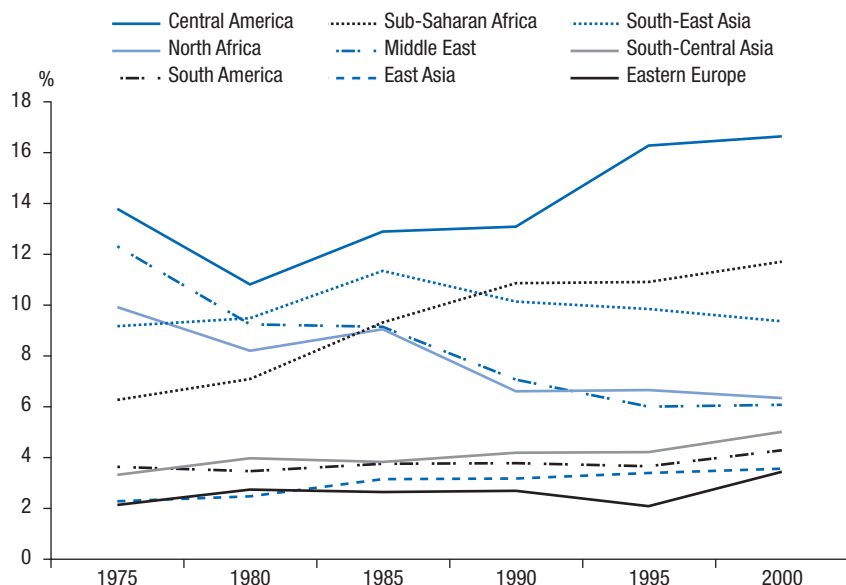
***In relative terms, the brain drain remained stable.*** Although globalisation and selective immigration policies are undoubtedly important, the increasing number of skilled migrants must also be related to two important changes at origin: *i)* the size of developing country populations has increased hugely; and, *ii)* all countries in the world (even the poorest) have experienced a remarkable rise in education attainment. Hence, contrary to common belief, it is not obvious at all that the relative intensity of the brain drain has increased over the last decades.

The Docquier-Marfouk data set shows a minor increase in the average rate of skilled migration between 1990 and 2000 (from 5.0 to 5.4 per cent) at the world level. Simultaneously, although an increasing proportion of migrants originated from developing countries, the average skilled emigration rate of the latter decreased from 7.7 to 7.4 per cent.

Is this still true if we take a longer time horizon and compare the current situation to that prevailing in 1975? Using the same methodology as in DM06 but focusing on the six major destination countries (United States, Canada, Australia, Germany, United Kingdom and France), Defoort (2006) computed skilled emigration stocks and rates from 1975 to 2000 (one observation every five years). Figure 4 presents skilled emigration rates by region using this longer perspective. At the world level or at the level of developing countries as a whole, the average skilled migration rate has been extremely stable over the period.

Some regions experienced an increase in the intensity of the brain drain (Central America, Eastern Europe, South Central Asia and sub-Saharan Africa), while significant decreases were observed in others (notably in the Middle East and North Africa). It suggests that the increased openness and quality-selective rules observed in developed countries evolved concurrently with the supply of skills in developing countries. It is uncertain whether the rise in the number of skilled migrants is primarily explained by out-selection policies at destination, migrants' self-selection or a mix of these two effects.

Figure 4.  
Long-run trends in skilled emigration



Source: Defoort (2006).

#### 4. The brain drain: a threat for developing nations

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Why should the brain drain be harmful for sending countries? This section explains and summarises the traditional literature on the implications of the brain drain for sending countries.

***In an ideal world, free labour mobility is efficient.*** One the most fundamental results in economics is the “first welfare theorem” demonstrated by Kenneth Arrow and Gerard Debreu, which says that, under some restrictive conditions, a competitive market economy leads to a Pareto-efficient general equilibrium, i.e. maximises the size of the pie to be shared among all the parties concerned. This theorem is usually seen as an analytical confirmation of Adam Smith’s “invisible hand”, implying that Pareto efficiency can be obtained with very little government action<sup>10</sup>.

<sup>10</sup> The function of government can be restricted to that of protecting property rights and allowing trade and factor mobility.

As far as the brain drain is concerned, it typically means that when (skilled or unskilled) individuals take decisions that are good for them, an efficient allocation of resources is obtained. In particular, if skilled workers are moving to rich countries, they contribute to increasing the total amount of welfare at the world level. The rest is a matter of redistribution.

This optimistic view must be qualified by two arguments. First, the economic concept of efficiency is not the only thing that a society might care about. In particular, the theorem says nothing about the equity of the outcome. When redistribution is impossible or costly, some groups can be adversely affected even though the brain drain unambiguously increases the size of the pie to be shared. This argument should not be decisive in the long run, except where there is very strong complementarity between skilled and unskilled workers on the labour market or where the fiscal cost of education is large and entirely borne by residents at origin.

***The importance of human capital in developing countries.*** A more important problem is that the theorem requires a set of conditions which may not necessarily reflect the workings of real economies: *i)* markets exist for all possible goods; *ii)* markets are perfectly competitive and all agents are price-takers; *iii)* transaction costs are negligible; and, *iv)* there are no externalities. Where our basic issue – the brain drain – is concerned, we can reasonably fear the existence of strong externalities. Recall that an externality occurs when private decisions engender costs or benefits to agents other than those making the decision. The new growth literature has stressed the existence of strong externalities related to human capital and education (see Lucas, 1988; Azariadis and Drazen, 1990), showing that the social return to human capital exceeds the private return.

Alternatively, human capital can be measured by workers' average number of years of schooling, by the proportion of workers having a given diploma or by the average literacy level of workers. It is commonly accepted that human capital accumulation induces positive externalities of various sorts (technological, fiscal, civic, etc.). In particular, the appealing Schumpeterian theory of growth shows that human capital is a key factor of innovation and technology adoption<sup>11</sup>. In affecting the rate of technological

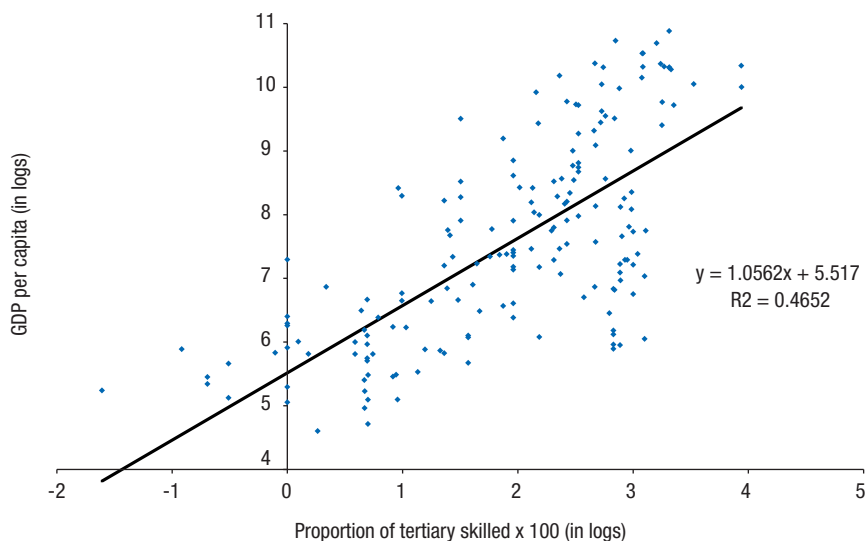
11 See Benhabib and Spiegel (2005), building on Nelson and Phelps (1966).

innovation and adoption, human capital affects the long-run gap with respect to the leading economies: the smaller an economy's human capital, the greater is the gap with respect to the leading economies.

These externalities explain why governments subsidise education. Consequently, the brain drain, by impacting on the level of human capital at origin, is usually seen as inducing serious social losses of welfare for those left behind and as increasing inequality at world level.

A glance at cross-country data shows that the relationship between human capital and output per worker is strong. In Figure 5, human capital is measured as the proportion of workers in the labour force having tertiary education. Human capital data are taken from the revised data set of Barro and Lee (2000). The cross-sectional static elasticity between output per capita and human capital is highly significant and amounts to 1.06, a value well above the commonly used value for the private elasticity of GDP to human capital.

Figure 5.  
**Human capital and GDP per capita** (average 1995-2005)



**Source:** Human capital data from Barro and Lee (2000); GDP per capita data from *World Development Indicators* (2006).

**Ex post, the brain drain reduces the average level of schooling.** This argument is central in the traditional literature on the brain drain. As generations of economists and other social scientists have argued, the emigration of the most talented workers is likely to reduce the average level of human capital of the labour force. Other things being equal, such a decrease in human capital has a direct negative impact on output per capita. It also induces redistributive effects from low-skill to high-skill workers.

In the medium and long terms, however, a decrease in human capital seriously affects the country's capacity to innovate and to adopt modern technologies. Hence, the brain drain impacts negatively on total factor productivity and increases the distance to the frontier.

The early economic literature of the 1960s (for example, Grubel and Scott, 1966; Johnson, 1967) tended to downplay the negative externalities imposed on those left behind. During the 1970s, a new school of thought (for example, Bhagwati and Hamada, 1974; McCulloch and Yellen, 1975, 1977) delivered more or less the following messages: *i)* the brain drain is basically a negative externality imposed on those left behind; *ii)* it is a zero-sum game in which rich countries get richer and poor countries get poorer; and, *iii)* at policy level, the international community should implement a mechanism whereby international transfers could compensate the sending countries for the losses incurred, for example in the form of an "income tax on brains" (or "Bhagwati tax") to be redistributed internationally. Modern theories of endogenous growth have considerably revised the analysis of the relationships between education, migration and growth. Unsurprisingly, the first models to address the issue of the brain drain in an endogenous growth framework also emphasised its negative effects (e.g. Miyagiwa, 1991; Haque and Kim, 1995).

**More pernicious mechanisms.** The effects described in these arguments, based on the existence of technological externalities related to human capital accumulation, may be reinforced by other, more pernicious mechanisms.

Bhagwati and Hamada (1974) developed a seminal model in which the increasing international integration of the market for skilled workers induces a loss for poor countries. The authors did not use the externality argument presented in the previous section, assuming instead that educated elites bargain for high wages. Greater

integration of the skilled labour market makes international skilled wages observable and induces the educated elite to bargain for higher wages ("our Joneses keeping up with their Joneses"). Unskilled workers adjust their wage requirements to skilled wages. Hence, the greater integration of the skilled labour market generates some leapfrogging effects on low wages ("our Joneses keeping up with our Joneses"). In conclusion, although skilled emigration reduces unemployment of the educated and stimulates education, it also has two detrimental impacts: higher public education expenditures and taxes; and higher wages and unemployment of the uneducated. In sum, Bhagwati and Hamada derive the conditions under which integration induces a decrease in per capita income in poor countries.

Bhagwati and Hamada (1974) recognised that migration prospects increase the expected returns to human capital and hence encourage students to study more intensively. Nevertheless, the risk is that students could opt for internationally applicable diplomas. Among others, Lucas (2004) reports that the choice of major field of study (medicine, nursing, maritime training) among Filipino students responds more to shifts in international demand than to national needs. When foreign and national countries have different needs, the prospect of migration can lead to important shortages in some sectors. Specific shortages can be strongly harmful for developing countries.

This effect can be reinforced by the fact that individual governments have fewer incentives to provide internationally applicable education when graduates leave their country. Poutvaara (2004) addresses this important issue in a theoretical model where the possibility of a brain drain distorts the provision of public education away from internationally applicable education towards country-specific skills. Country-specific skills may include tertiary education with national emphasis, such as degrees in law and certain humanities disciplines, as well as secondary education, which is less mobile. Correspondingly, internationally applicable education may include, in addition to science-based, commercial and other internationally applicable degrees in tertiary education, those secondary degrees (such as nursing degrees) which are internationally mobile. In the end, this distortion of educational provision means that countries educate too few engineers, economists, nurses and doctors, and too many lawyers. Poutvaara shows that such an outcome could be avoided by introducing graduate taxes or income-contingent loans, to be collected also from migrants. By giving the providers of internationally applicable education a stake in efficiency gains earned elsewhere,



graduate taxes would encourage sending countries to invest more in such education. In a similar vein, Bhargava and Docquier (2006) show that the medical brain drain induces a greater number of deaths due to AIDS. In the long run, this may reduce life expectancy, with possible depressing effects on investment in physical and human capital.

## 5. The brain drain: a source of positive feedback effects

The traditional literature supports the view that skilled migration, by reducing human capital at origin, is unambiguously detrimental for those left behind. This is the case if the migrants' contribution to the economy is greater than their marginal product and/or if the education of skilled emigrants was largely funded by taxes on residents.

The recent literature is less pessimistic. While recognising the importance of human capital for economic development, it puts forward a set of channels through which the brain drain may have a positive effect on the sending economy. These include a range of "feedback effects" such as remittances, return migration after additional knowledge and skills have been acquired abroad, the creation of business and trade networks, the effects of migration prospects on human capital formation, the effects on governance and ethnic discrimination. This section offers a non-technical discussion of these mechanisms and summarises the existing empirical evidence.

**Ex ante, the brain drain stimulates human capital accumulation.** The main criticism of the brain drain is that it deprives the sending country of one of its scarcest resources, human capital. A recent wave of theoretical contributions (Mountford, 1997; Stark *et al.*, 1998; Vidal, 1998; Beine *et al.*, 2001; Stark and Wang, 2002) demonstrates that skilled migration can create more human capital *ex ante* than is lost *ex post*. These papers all develop probabilistic migration models in which the probability of migration depends on the attainment of a given educational requirement, which is observable, rather than on individuals' ability, which is not perfectly observable (i.e. migrants are assumed to be randomly selected among those who satisfy some kind of prerequisite with informational content regarding their ability – in our case, education).

They all reasonably assume that the return to education is higher abroad and that skilled workers have a much higher probability of emigrating than unskilled workers (an

hypothesis which is strongly supported by the data). Hence, migration prospects can raise the expected return to human capital and induce more people to invest in education at home<sup>12</sup>. *Ex ante*, more people opt for education. *Ex post*, some of them will leave. Under certain conditions detailed in these models, the incentive effect (or brain effect) dominates that of actual emigration (or drain effect), which creates the possibility of a net brain gain for the source country.

What is the empirical evidence on this “prospect” channel? In a cross-section of 37 developing countries, Beine *et al.* (2001) found that migration prospects have a positive and significant impact on human capital formation at origin, especially for countries with low initial GDP per capita levels. This first study was imperfect, since the authors used gross migration rates as a proxy measure for the brain drain due to the lack of comparative data on international migration by educational level. In a subsequent study, Beine *et al.* (2003) used the Carrington-Detragni estimates of emigration rates for higher (tertiary) education as their measure of brain drain; with or without instrumentation, they again found a positive and highly significant effect of migration prospects on gross human capital formation, this time in a cross-section of 50 developing countries. By contrast, Faini (2003) finds a negative but not significant effect of tertiary emigration on domestic enrolment in higher education, a finding he attributes to would-be migrants’ decision to pursue their studies abroad. Faini acknowledges, however, that these results must be taken with caution as they are based on enrolment data, which are known to raise measurement problems.

Very recently, Beine *et al.* (2006), using DM06 data, found evidence of a positive effect of skilled migration prospects on gross (pre-migration) human capital levels in a cross-section of 127 developing countries. They obtain an elasticity of human capital growth (log-change in the proportion of tertiary-skilled individuals among natives) to skilled emigration prospects in the neighbourhood of 5 per cent. This elasticity is very stable across specifications and estimation methods. This is non-negligible for countries where the average proportion of educated persons is typically between 5 and 10 per cent.

12 Bhagwati and Hamada (1974), as well as McCulloch and Yellen (1977), accounted for such incentive effects in their pioneering works.

Similar qualitative results are obtained through alternative brain drain estimates controlling for whether migrants acquired their skills in the home or in the host country<sup>13</sup>. Finally, Beine *et al.* (2006) also found a positive effect of skilled migration on youth literacy. The only result that is not clear-cut emerged when human capital is measured by school enrolment rates, confirming Faini's findings. In that case, the results depend on the specification used<sup>14</sup>. Overall, within the limits of a cross-sectional analysis, their results point to a robust, positive and sizeable effect of skilled migration prospects on human capital formation in developing countries.

Beine, Defoort and Docquier (2006) estimated a similar equation in a panel setting (six observations per country), controlling for unobserved heterogeneity and for the endogeneity of the emigration rate. They also found a significant incentive effect in developing countries. This result is essentially driven by a strong incentive effect in low-income countries.

Relying on their baseline model, Beine *et al.* (2003) use counterfactual simulations (equating the skilled emigration rate to the unskilled emigration rate) to estimate the net effect of the brain drain for each country and region. They find that the brain drain stimulates human capital accumulation among residents in some countries. It appears that the countries experiencing a positive net effect (the "winners") generally combine low levels of human capital (below 5 per cent) and low rates of skilled migration (below 20 per cent), whereas the "losers" are typically characterised by high rates of skilled migration and/or high enrolment rates in higher education.

There appear to be more losers than winners, and the former tend to lose *relatively* more than the latter gain. However, the main "globalisers" (e.g. China, India, Brazil) all seem to experience non-negligible gains. As shown in Table 3, the net effect for developing countries as a whole is driven by the situation of the largest countries: it is positive and amounts to 3.3 million skilled residents<sup>15</sup>. In contrast, the situation of

13 See the data presented in Section 2.

14 They find no evidence of an incentive effect of skilled emigration when using their baseline log-linear specification. The coefficient associated to the skilled emigration rate is never significantly different from zero. However, with alternative functional forms for the incentive effects, the effect of skilled migration becomes significant, with a negative impact on tertiary schooling and a positive impact on secondary schooling. The latter result is consistent with a scenario in which skilled migration prospects lead more students to invest in secondary schooling at home to obtain and then exercise the option of studying abroad at the higher level, an interpretation the authors do not want to push too far given the lack of robustness of the results.

15 The gain in large countries (population above 25 million) amounts to 4.3 million. Hence, altogether, medium-sized and small countries lose about 1 million skilled workers.

Table 3.  
**Brain drain and human capital in developing countries**  
**Counterfactual experiment: skilled emigration rate = unskilled emigration rate**

	Observed no. of skilled (Yx1000)	As % of labour force (y=Y/LF)	Counterfactual no. of skilled - (Y'x1000)	As % of labour force (y' = Y'/LF)	Brain drain in absolute number [(Y-Y')x1000]	Brain drain as % of labour force (y-y')
<b>By country size (in 2000)</b>						
Large (>25 million)	97370	4.9%	93081	4.6%	4288	0.2%
Upper middle (from 10 to 25)	11968	6.6%	12066	6.6%	-97	0.0%
Lower middle (from 2.5 to 10)	6525	8.1%	7104	8.7%	-578	-0.6%
Small (<2.5 million)	632	6.3%	946	9.1%	-313	-2.8%
<b>By income group (in 2000)</b>						
Upper middle	26917	11.0%	26064	10.6%	853	0.4%
Lower middle	29990	10.9%	30356	10.9%	-367	0.0%
Low-income	59589	3.4%	56776	3.2%	2813	0.2%
Least developed	6801	2.4%	6939	2.5%	-137	0.0%
<b>By region</b>						
China	20508	2.7%	19067	2.5%	1441	0.2%
India	23060	4.8%	21547	4.5%	1514	0.3%
Indonesia	5199	5.0%	4748	4.6%	451	0.4%
Turkey	2816	8.5%	2757	8.3%	59	0.2%
Other Middle East	5494	8.8%	5478	8.7%	16	0.1%
Other Asian	23927	6.9%	24045	6.9%	-118	0.0%
ASIA	75510	4.4%	72163	4.2%	3347	0.2%
Egypt	3131	10.7%	2929	10.0%	202	0.7%
Other North Africa	2264	6.7%	2322	6.9%	-58	-0.1%
Nigeria	1245	3.1%	1247	3.1%	-2	0.0%
South Africa	2071	10.4%	1997	10.0%	74	0.4%

**Source:** Beine, Docquier and Rapoport (2006).

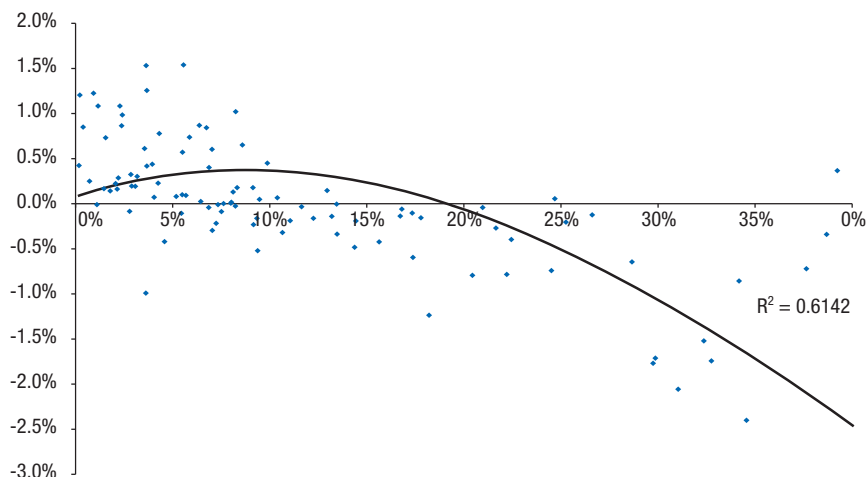
Table 3. (cont.)  
**Brain drain and human capital in developing countries**  
**Counterfactual experiment: skilled emigration rate = unskilled emigration rate**

	Observed no. of skilled (Yx1000)	As % of labour force (y=Y/LF)	Counterfactual no. of skilled - (Y'x1000)	As % of labour force (y'=Y'/LF)	Brain drain in absolute number [(Y-Y')x1000]	Brain drain as % of labour force (y-y')
Other sub-Saharan	3164	1.8%	3387	1.9%	-222	-0.1%
Sub-Saharan Africa	6480	2.8%	6630	2.8%	-150	-0.1%
AFRICA	11870	4.0%	11876	4.0%	-5	0.0%
MIDDLE EAST-N. AFRICA	13705	8.7%	13486	8.5%	219	0.2%
Mexico	5111	11.3%	5290	11.6%	-180	-0.3%
Caribbean	1545	9.3%	2304	13.1%	-759	-3.8%
Other Central American	1498	10.3%	1665	11.2%	-167	-0.9%
Central America	8154	10.7%	9259	11.9%	-1105	-1.2%
Brazil	7313	8.4%	6688	7.7%	625	0.7%
Argentina	3970	19.7%	3678	18.2%	292	1.5%
Other South American	7410	13.8%	7232	13.3%	177	0.5%
South America	18693	11.6%	17598	10.9%	1095	0.7%
LATIN AMERICA	26846	11.3%	26856	11.2%	-10	0.1%
TOTAL	116495	5.1%	113196	5.0%	3299	0.2%

**Source:** Beine, Docquier and Rapoport (2006).

many countries in sub-Saharan Africa (-0.150 million skilled workers) and Central America (-1.150 million) is extremely worrisome. Figure 6 gives the reduced-form impact of the brain drain on residents' human capital. A quadratic adjustment function provides a good fit for the effect ( $R^2 = 46\%$ ).

Figure 6.  
Simulated contribution of skilled migration rate (X-axis) to human capital (Y-axis)



Source: Author's calculations.

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**Skilled migration induces remittances.** Migrants' remittances constitute an important channel through which the brain drain may generate positive indirect effects for source countries. It is well documented that workers' remittances often make a significant contribution to GNP and are a major source of income in many developing countries<sup>16</sup>. The amounts are such as to have a strong impact on poverty and economic activity. They impinge on households' decisions in terms of labour supply, investment, education (Hanson and Woodruff, 2003; Cox Edwards and Ureta, 2003), migration of relatives, occupational choice and fertility, with potentially important aggregate effects. This is especially the case in poor countries where capital market imperfections (liquidity constraints) reduce the set of options available to members of low-income classes.

<sup>16</sup> According to the World Bank's *Global Economic Prospects* (2006), recorded remittances in developing countries amounted to about US\$175 billion in 2005, roughly the same amount as foreign direct investment and about three times as large as official development assistance.

It is a theoretically unclear whether educated migrants would remit more than their uneducated compatriots. On the one hand, the former may remit more because of higher income or to meet their implicit commitment to reimburse their families for funding of education investments; on the other, educated migrants tend to emigrate with their families, on a more permanent basis, and are therefore less likely to remit (or are likely to remit less) than someone moving alone on a temporary basis.

At an aggregate level, Faini (2006) shows that migrants' remittances decrease with the proportion of skilled individuals among the emigrants and concludes: "this result suggests that the negative impact of the brain drain cannot be counterbalanced by higher remittances". This does not imply that remittances by skilled migrants are negligible, especially if the proportion of temporary migrants increases. For example, Kangasniemi *et al.* (2004) show that nearly half of Indian physicians working in the United Kingdom remit income to their home country, and that these transfers average 16 per cent of remitters' income.

***Return migration and brain circulation are good for growth.*** Although little is known about the magnitude of return migration, the fact that some migrants accumulate knowledge and financial capital in rich countries before spending the rest of their careers in their countries of origin may have beneficial effects on productivity and technology diffusion.

Domingues Dos Santos and Postel-Vinay (2003, 2004), for example, argue that a beneficial brain drain could emerge even if the share of educated workers decreases<sup>17</sup>. This is shown in a setting where growth is exogenous at destination and endogenous at origin, with the sole engine of growth being knowledge accumulation embodied in migrants returning from the more advanced country. Their argument is based on knowledge diffusion, that is, on the idea that the advanced technology spillovers to the developing country are effected by returning migrants. To the extent that returning emigrants contribute to the diffusion of the more advanced technology they experienced abroad, their return is therefore a potential source of growth for their home countries.

17 Stark *et al.* (1997) also elaborate on the possibility of a brain gain associated with a brain drain in a context of imperfect information with return migration.

Are skilled migrants inclined to return? A recent and comprehensive survey of India's software industry stressed the importance of temporary mobility (strong evidence of a brain exchange or brain circulation), with 30-40 per cent of the higher-level employees having relevant work experience in a developed country (Commander *et al.*, 2004). In their survey on medical doctors working in the United Kingdom, Kangasniemi *et al.* (2004) also found that "many" intend to return after completing their training.

Many other studies, however, tend to show that return migration is limited among the highly skilled. Borjas and Bradsberg (1996) demonstrated that, in general, return migration is characterised by negative self-selection and is rare among the highly skilled unless sustained growth in the home country precedes their return. For example, less than one-fifth of Chinese Taipei PhDs who graduated from US universities in the fields of science and engineering returned to Chinese Taipei in the 1970s (Kwok and Leland, 1982); this proportion rose to about one-half to two-thirds in the course of the 1990s, after two decades of impressive growth in this country. A recent survey shows that a large fraction of the companies in the Hsinchu Science Park in Taipei were started by returnees from the United States (Luo and Wang, 2002). Figures for Chinese and Indian PhDs graduating from US universities in the same fields during the 1990-1999 period are similar to those for Chinese Taipei or Korea 20 years ago (stay rates of 87 per cent and 82 per cent, respectively). Thus, according to these papers, return skilled migration appears to be relatively limited, and is often more a consequence than a trigger of growth.

***The skilled diaspora facilitates technology transfers.*** A large sociological literature emphasises that the creation of migrants' networks facilitates the further movement of persons<sup>18</sup> and the movement of goods, factors and ideas between the migrants' host and home countries. Such "diaspora externalities" are now analysed by economists in the field of international trade. In many instances, and contrarily to what one would expect in a standard trade-theoretic framework, trade and migration appear to be complements rather than substitutes<sup>19</sup>, as ethnic networks help in overcoming information problems.

18 See Massey *et al.* (1994); Carrington *et al.* (1996); Kanbur and Rapoport (2004).

19 See Gould (1994); Rauch and Trindade (2002); Rauch and Casella (2003).



A pertinent question in the same vein is whether FDI and migration are substitutes (as one would expect) or complements. Using cross-section data, Docquier and Lodigiani (2006) find evidence of important network externalities in a dynamic empirical model of FDI-funded capital accumulation. Their analysis confirms that business networks are mostly driven by skilled migration. Skilled migration thus stimulates aggregate FDI inflows to the country of origin. For 114 countries over the period 1990-2000, the elasticity of the FDI-funded capital growth rate with respect to skilled migration is around 2 per cent. These network effects are stronger in democratic countries as well as in countries exhibiting an intermediate corruption index<sup>20</sup>. The authors provide a panel extension with 83 countries and four periods, which confirms the existence of business network externalities. The elasticity of the capital growth rate to the stock of skilled emigrants obtained in the panel setting is between 2 and 3 per cent. Using bilateral FDI and migration data, Kugler and Rapoport (2006) also find strong evidence of complementarity between FDI and skilled migration, with an average elasticity of 3 per cent.

Diaspora externalities thus appear to constitute an important channel through which the brain drain positively affects sending countries. Even when the brain drain depresses the average level of schooling, it is likely to increase FDI inflows. The size of the diaspora matters: business externalities are likely to be stronger in large countries, whereas small countries are less likely to benefit from skilled diasporas.

***Skilled migration can affect the quality of governance.*** A few studies examine the impact of skilled migration on governance, corruption, rent-seeking and ethnic discrimination.

In a political economy model of ethnic discrimination in developing countries, Docquier and Rapoport (2003) assume a rent-extraction basis for discrimination. They model discrimination as a financial penalty levied on educated minority members and equally redistributed among majority members. There are, therefore, two sources of ethnic inequality in their model: on the one hand, discrimination lowers the return to human capital for the minority group, which in turn decreases the number of minority

20 Very corrupt regimes have great difficulty in attracting foreign investment. Networks are less important in "clean" countries where informational costs are much lower.

members who invest in education. Focusing on the impact of migration prospects on the level of rent-seeking from the majority's perspective, they get the following results:

- First, taking the closed economy (no mobility) as a benchmark case, they find the intuitive result that if there are unlimited exit options to a discrimination-free country (full mobility case), such migration prospects are likely to protect the minority via a decrease in the equilibrium domestic level of discrimination (providing that migration costs are sufficiently low). Under such circumstances, investment in education is fostered among the minority, and ethnic inequality decreases.
- Second, the equilibrium discrimination rate under full mobility is shown to be such that the minority member with the highest level of ability is indifferent as to whether to emigrate. Consequently, no migration outflows are observed at equilibrium when there is free international mobility.
- Third, compared to the free migration case, the authors find that highly restrictive quotas are likely to increase the level of discrimination imposed on the minority group, thus inducing emigration of its members. In such cases, immigration restrictions have the paradoxical effect of increasing ethnic discrimination in the source country and creating migration flows, which would otherwise have remained latent.

Extending the corruption model of Murphy *et al.* (1991), Mariani (2006) develops a new mechanism through which the brain drain reduces corruption in the origin country. Agents have two career possibilities: acting as rent-seekers or engaging in productive activities. Opting for the latter, individuals have the possibility of exporting their human capital to a rent-free foreign country. Hence, the probability of migration reduces the relative return to rent-seeking, thus decreasing the fraction of skilled workers who opt for parasitic activities.

When education and self-protection investments are substitutes, it is possible that the intensity of corruption increases with the migration rate. Otherwise, the optimal skilled emigration rate is positive.

The stylised facts presented in Mariani's paper confirm such a relationship between skilled migration and the allocation of talents. Specialisation in productive fields (measured by the proportion of students in science and engineering) is positively

correlated with the lagged skilled emigration rate. Specialisation in rent-seeking fields (measured by the proportion of students in law, theology and religion) is negatively correlated with the brain drain. Obviously, the causality between the brain drain and the allocation of talents is questionable and needs to be tested. Nonetheless, this disciplining mechanism offers another channel through which a limited amount of skilled migration can be beneficial for growth.

## 6. Conclusion

It is more than likely that skilled migration has some positive effects on developing countries. Are these effects significant and sufficiently large to turn the brain drain into a brain gain? Recent empirical studies based on aggregate data suggest that they are of significant size. Hence, if we are primarily concerned with raising the development of the poorest countries, the optimal skilled emigration rate is limited but positive in many cases. This optimal skilled emigration rate varies across countries and depends on many factors such as population size, political environment, education policy and level of development.

From the macroeconometric studies reviewed in this paper, it seems that the average threshold emigration rate above which the brain drain becomes harmful for development can be cautiously estimated at 15 per cent in developing countries. The optimal emigration rate (which maximises country gains) probably lies between 5 and 10 per cent. It is noteworthy that about 23 per cent of developing countries exhibit a brain drain of less than 5 per cent (41 per cent exhibit a brain drain of less than 10 per cent). Many of these countries (including most large and middle-sized countries) are drawing reasonable benefits from the mobility of their skilled labour force. On the contrary, the majority of countries in sub-Saharan Africa and Central America are well above this threshold and suffer from the brain drain. Clearly, an analysis by occupation and sector would be desirable to account for specific shortages.

What do the theoretical and empirical findings teach us that can guide policy making? First, to the extent that the immigration policies of destination countries can discriminate among migrants of different origins and occupations (a condition which undoubtedly raises legal and moral questions well beyond the scope of this survey), it

would be possible to design quality-selective immigration policies minimising the losses and/or maximising the gain from labour mobility. This could be coupled with specific incentives for return migration to the countries most negatively affected by the brain drain, thereby promoting international co-operation and brain circulation.

Second, leaving aside the “feasibility” issues (see Desai *et al.*, 2004), it is not obvious that a general Bhagwati tax would benefit the source country. A tax on brains would have a beneficial impact on human capital formation at origin only in the case of a detrimental brain drain (compensation principle). In the case of a beneficial brain drain, in contrast, such a tax could harm the migrants’ home country. As for immigration policy, the “fair” tax rate on brains varies across countries. Small and low-income countries (the expected losers) clearly deserve a larger share of the pie than large middle-income countries (the expected winners).

All of these policy recommendations need to be validated by further empirical work. Although new data sets can now be used to assess the magnitude of these effects, these data rely on many assumptions and are available for a limited number of years. Hence, the empirical literature remains too scanty to guide policy making. In particular, due to data limitations, existing empirical studies are based on cross-sectional regressions and suffer from the bias of omitted variables/unobserved heterogeneity and of small sample size, making it very difficult to solve potential endogeneity problems. It is crucial at this stage to extend the empirical research on the growth effects of highly skilled migration for source countries. It would be helpful to conduct new micro surveys explicitly aimed at capturing the relationship between emigrants and their countries of origin, to collect more data and case studies on the sectoral impact of the brain drain, and to improve the time dimension in available macro data sets and the quality of human capital indicators for residents. International agencies should clearly devote more time and human resources to these problems.

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by

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*".... International migration is an activity that carries significant risks and costs. As such, although migration is certainly rooted, at least in part, in income and wealth inequalities between sending and receiving areas, it does not necessarily reduce inequality in the way intended by many migrants. Much depends on the distribution of these costs and benefits, both within and between sending and receiving countries and regions. Also important in terms of the aggregate impact of migration on sending societies is the selectivity of migration itself. Clearly if most migrants were to come from the poorest sections of society, and they were to achieve net gains from migration, this would act to reduce economic inequality at least, all other things being equal. But migrants are not always the poorest, they do not always gain, and other factors are not equal." (Black et al., 2005)*

## **1. Introduction**

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Migration brings enormous benefits to both sending and receiving countries, particularly when it is well managed. This is not to say that migration does not entail costs to both parties, but the costs could be minimised if migration were well managed and co-ordinated. The focus of current debate, however, has been skewed towards the negative impacts of migration on development. While some have argued that under-development is a cause of migration, others hold the view that migration causes developing countries to lose their highly skilled nationals and suffer from the attendant socio-economic effects. Although there is a measure of truth in each of these assertions, properly managed international migration holds enormous potential for the development of the countries concerned. Migration can lead not only to brain drain but also to brain gain. This brain

gain may be supplemented by increased flows of remittances from migrants to their home countries, which corroborates the view that migration can lead to improvements in well-being. Migration has two other important effects: it leads to inequality both across and within countries. Frédéric Docquier's paper discusses the former.

## 2. Migration and inequality across countries

The paper discusses migration in terms of its implications for sending countries, its welfare impacts in host countries and attitudes towards migrants. It also considers the issue of skilled migration, particularly the consequences of skilled emigration for sending countries, based on a survey of existing theoretical and empirical studies. Docquier begins with a discussion of the intensity and distribution of the brain drain, noting that a major problem facing researchers on migration is the inaccuracy or unavailability of emigration data in sending countries, which means they must rely on immigration data in the most important host countries. He examines the world distribution of the brain drain, finding that the highest emigration rates are observed in middle-income countries "where people have incentives to migrate and can afford to pay moving costs". People in high-income countries have low incentives to emigrate, while low-income countries are liquidity constrained and therefore tend to have low migration rates. This observation corresponds to the "migration hump" literature (Martin, 2006; de Haan, 2006), which argues that as the economy improves and incomes increase, migration increases rapidly, hits a maximum point and begins to decline with improvements in income within the economy. Another important observation made by the author is that the source of regional disparity in the brain drain can be explained by size and also by natives' human capital. These two factors have a strong positive effect on emigration and a decreasing impact on the schooling gap. This observation explains why the brain drain is huge in poor regions of sub-Saharan Africa and South Asia. Moreover, the average skill level of immigrants to the EU15 is lower than that of other OECD countries, but it must be added that this is country-specific: as some countries' immigrant populations have high literacy rates, such an aggregation can be misleading.

Another important issue raised in the paper is that overall emigration rates may hide key skill shortages, particularly in the medical sector. Although a strong correlation is observed between general brain drain and the emigration of medical personnel, certain

countries with low emigration rates tend to have high rates of medical brain drain. In Ghana, the emigration rate is high and is close to the proportion of medical students having expressed the intention to migrate (estimated around 61 per cent by Anarfi *et al.*, 2006). The author argues that the high emigration rate among medical professionals is mainly due to lower wages and higher HIV prevalence rates, but it should be added that medical emigration induces second-round emigration of medical professionals: such emigration leads to unfilled staff vacancies, so that those remaining in post are overworked to meet the demand for health services; these medical personnel become overstressed, and one of the many options available to them is to migrate. Other factors contributing to the medical brain drain are the lack of enabling factors and logistics.

The paper also shows that the mobility of labour responded to globalisation with the same intensity as the mobility of goods. The number of skilled migrants has increased, and the skilled migration rate is estimated to have grown twice as fast as total immigration over the 1975-2000 period. This has been attributed to the increasing use of “quality-selective” migration policies such as the United Kingdom’s highly skilled migrant worker programme and the United States’ D-V Visa Lottery. The major effect of skilled migration on sending countries is to worsen the already considerable skills gap while also saddling poor countries with the cost of training these skilled individuals.

The author discusses inequality in terms of the increased intensity of the brain drain in Central America, Eastern Europe, South Central Asia and sub-Saharan Africa, while significant decreases were observed in the Middle East-North Africa region. It remains uncertain, however, whether out-selection policies in destination countries contributed to this trend. Consequently, the paper discusses whether the brain drain is a threat to developing countries. It is argued that migration of skilled workers to rich countries leads to improvement in welfare at the world level and that “the rest is a matter of redistribution”. The major policy failure here is how to ensure that the gains are fairly distributed from rich to poor countries. This is where market forces fail to operate, and intervention is needed to ensure that migration benefits both sending and receiving countries, as well as both migrant and non-migrant households.

Noting the strong relationship between human capital and output per worker, the paper argues that the emigration of the most skilled workers is likely to reduce the

average level of human capital in the labour force, and consequently output. This argument holds only when migration is not managed; well-managed migration will ensure that additional skilled manpower is trained to replace those who leave and that the cost of training is borne by the migrant. Moreover, return migration will minimise the effect of skilled emigration, not to mention that the skills acquired by unskilled workers have a positive impact on their countries of origin. Migrants also contribute significantly to education and training in their countries of origin, which raises the average level of schooling. In a survey of 166 recipients of migrants' remittances in Accra, 27 per cent stated that the funds were meant to pay the school fees of migrants' relations (Quartey, 2006a, 2006b). The author's statement that "*ex post*, the brain drain reduces the average level of schooling" thus needs to be qualified.

Docquier's discussion of a school of thought that arose in the 1970s also highlights the inequality issue by arguing that the brain drain is a zero-sum game, with rich countries getting richer and poor countries getting poorer. It is important to add that the inequality between rich and poor countries has been exacerbated by rich countries' "quality-selective" policies, which favour skilled migration but are harsher for the unskilled. While developing countries would rather encourage the migration of the unskilled, there should be a middle ground in which both rich and poor nations can benefit. It has been proposed that the gain should be redistributed internationally through the "Bhagwati tax", but this will work only for skilled migration, not for unskilled migrants or illegal migrants, who are also potentially forces to be reckoned with.

Lucas (2004) finds that Filipino students' choice of major field of study (medicine, nursing etc.) largely depends on shifts in international demand, rather than on national needs, and that this can lead to significant shortages in some sectors. This finding should not be generalised. What is more important in students' career choices is the availability of jobs in the chosen career and the level of remuneration. When these are inadequate, students migrate to seek greener pastures. This is not to say that people do not base their career choices on migration prospects, but rather that conditions on the local labour market are a major decision parameter.

The paper also re-emphasises an important issue: that the brain drain has many positive feedback effects, such as remittances, return migration and trade networks. In effect, it stimulates human capital accumulation, since migration prospects raise the

expected return to human capital and consequently promote investment in education at home. It should be added that, as mentioned above, migrants pay for the cost of educating their relations at home, and a number of return migrants, including football players, invest in education. Thus, migration prospects are not the only factor explaining increases in human capital formation. Unfortunately, these factors are not easily isolated using cross-sectional analysis.

A major observation is that skilled migrants remit less. This is supported by Faini (2006), for whom this result suggests that the “negative impact of the brain drain cannot be counterbalanced by higher remittances”. This does not mean that the less skilled are more likely to remit funds than the skilled, but rather that migrants’ legal status largely determines what proportion of migrants remit money and in what amounts. Two channels are important here: first, illegal immigrants or migrants with irregular legal status are mostly less skilled and therefore tend to remit through informal means, which are often not captured by official statistics; second, these groups are less likely to hold assets or invest in the destination country, tending to remit money to their relations to invest on their behalf or build their social capital.

After asserting that return migration and brain circulation are good for growth, the author is quick to add that they can lead to negative self-selection unless preceded by sustained growth. However, many have argued that only a few migrants return while they are still of working age and that those who do are caught in the “skills trap”, whereby they cannot put to effective use what they have learnt or the skills they have acquired. Skilled migration does facilitate technology transfer through foreign direct investment (FDI) flows, but the network effects favouring countries of origin are stronger in democratic countries and countries with lower corruption indices. What about unskilled migration and FDI effects? Unskilled migrants acquire skills, and those with irregular status in particular tend to invest more in the country of origin. FDI by migrants tends to be more linked to poverty reduction than multinationals’ investments in many developing countries; FDI flows to these countries have been in the extractive sector, and many have had little impact on the communities and countries in which they operate.

Skilled migration can affect the quality of governance, since migrants learn more about democratic cultures and processes, transparency and accountability. The

permanent or temporary return of migrants, both skilled and unskilled, affects the quality of governance in the country of origin.

### 3. Concluding remarks

Docquier's paper explores the inter-relationships between the brain drain and inequality, finding that migration brings potential benefits to both sending and receiving countries. It also finds significantly high inequality between rich and poor nations as a result of skilled migration. In discussing migration and inequality, it is important to define the type of inequality one is investigating before elaborating on the pass-through mechanisms. Inequality can take the form of income or wage inequality, a skills gap etc. The brain drain may either reduce or increase income inequality between rich and poor nations, depending on whether the gains from skilled migration are redistributed. It can also reduce or increase the skills gap, depending on whether migrants remit money or contribute towards education in the host country.

The brain drain can lead to worsening inequality within countries, and in particular between migrant and non-migrant households. While some researchers hold the view that remittance flows reduce income inequality between the rich and poor, others argue that the reverse is true, because it is the rich who can afford to have their family members migrate. For instance, Adams (1991), in a study based on a survey of 1,000 households in rural Egypt, used income data from households with and without migrants to determine the effects of remittances on poverty, income distribution and rural development. Adams found that although remittances were helpful in alleviating poverty, they also, paradoxically, contributed to inequality in income distribution. In contrast, Gustafson and Makonnen (1994) found that in Lesotho migrants' remittances actually decrease inequality. Chimhowu *et al.* (2004) take the view that remittances increase inequality at the local level, but that at the international level they help to reduce inequality by transferring resources from developed to developing countries.

The paper emphasises skilled migration, paying little attention to the unskilled. Unskilled migration also brings enormous benefits to both sending and receiving countries. The issue that arises is, what is the optimal threshold for the skilled migration



rate? The threshold of 5-10 per cent proposed in the paper is arbitrary, and no threshold is proposed for unskilled labour.

In conclusion, the brain drain can lead to inequality in wages, incomes, skills and so on if not well managed. One way of redistributing the gains from skilled migration to reduce inequality is to apply the so-called Bhagwati tax or to ensure that beneficiary countries contribute towards the training of these skilled migrants. A more recent approach to managing migration, particularly of the unskilled, has been through aid. Typical examples of such policies include France's co-development policy and more recently Spain's – and to a lesser extent Italy's – attempts to use aid to reward countries with good migration policies. These policies are aimed at providing jobs in high-migration areas to encourage people to stay home. A typical case is the Ghana District Industries Project, whereby two districts in each of the ten regions of Ghana will receive a grant from Italy (the proposal is yet to be approved).

The success of this scheme and other aid-for-migration policies depends on the size of the grant, how effectively it is utilised, the quality of jobs created and the commitments from both governments. Finally, if migration is to be managed successfully, there must be a comprehensive programme to educate or create awareness among citizens of sending countries about the benefits as well as the challenges of migration, especially illegal migration. A significant number of illegal migrants would have reconsidered their decision to migrate had they been made aware of the challenges facing them in receiving countries.

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# Immigration, Development and Policy Trade-Offs

by

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## **1. Introduction**

International migration, while it may not have reached the quantitative heights of the late 19th and early 20th centuries, has re-captured the attention of decision makers and public opinion around the world. In particular, the phenomenon of migration from low- and middle-income countries to high-income countries has emerged as a controversial concern for policy makers in North America and Europe. While some 3 per cent of the world's people live outside the country of their birth (versus perhaps 10 per cent a century ago), the foreign-born share of the population of developed countries is approximately 9 per cent; for OECD countries, the stock of migrants in 2000 was approximately 84 million, or 7.5 per cent of the population<sup>1</sup>.

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<sup>1</sup> Statistics for the OECD are from OECD (2006a); the other statistics cited in the paragraph are from the United Nations and are assessed in World Bank (2006), Chapter 2. These data do *not* indicate the share of foreign-born individuals from low or middle-income countries residing in high-income countries: a significant share of the foreign-born population of rich countries may have been born in other rich countries. These figures merely establish that richer countries (including many of the Gulf states) are proportionally speaking more popular destinations for migrants.

In addition to ever greater attention to international migration, much of which is concerned with the consequences of migration for the migrant-receiving countries, many observers are beginning to analyse the link between migration and economic development. That is, what are the consequences of migration for the developing countries where the migrants' journeys originate? This question has prompted reports touting the development potential of increased migration from poorer to richer countries. Of course, these studies recognise that there are both benefits and costs to migrants' home countries, and that the *net* gain to a given country's economy is a question for empirical research<sup>2</sup>.

If rich countries' migration policies have consequences for development in poor countries, this presents some difficulties for policy makers in the migrant-receiving countries. Rich countries' migration policies, after all, are in the first instance set with an eye towards domestic labour market conditions and perhaps social cohesion, but not towards reduction of global poverty (which is the domain of development co-operation policy, most notably foreign aid). This debate bears some resemblance to criticism of harm done to developing countries by rich countries' trade policies (including support for domestic agriculture that tends to distort international trade). In some circles, this debate is known as "policy coherence for development", and some OECD countries have established more or less formal arrangements to review the development consequences of policy decisions taken outside the sphere of development co-operation policies<sup>3</sup>. Just as some call upon rich countries to reform their trade policies to favour development overseas, a growing number of observers now point to migration policy as a lever to influence outcomes in developing countries.

While we discuss migration policy making in OECD countries in the context of policy coherence for development, this is not to say that all rich countries will want to reform migration policies to foster development elsewhere. Nevertheless, the quality of policy decisions can only be improved if greater attention is paid to the full range of the consequences of those decisions. Some societies will choose to give greater weight

2 On the huge potential gains of international migration, see, for example, Pritchett (2006) and World Bank (2006). The *net* gains from migration for developing countries are analysed in Katseli *et al.* (2006a).

3 On "policy coherence for development", see Dayton-Johnson and Katseli (2006), Fukasaku *et al.* (2004), Hoebink (2005) and OECD (2005b).

to development consequences than they might have previously (as is the case of Sweden or the Netherlands); others may choose differently.

The aim of this paper is to provide a framework for understanding the coherence issues that beset policy making in the realm of international migration. Ideally, policy makers and voters in rich countries would like to know, for example, whether higher wages for domestic low-skilled workers comes at a cost in terms of increased poverty in the developing world. What does the empirical evidence tell us about the trade-offs among policy objectives?

While we draw upon the experience of many OECD countries, our focus in this paper is largely on policy problems facing European migrant-receiving countries, particularly the EU15. Nevertheless, we address at various points the concerns of newer EU countries and non-EU countries in Europe, as well as those of other migrant-receiving OECD countries in North America, Asia and the Pacific<sup>4</sup>.

An OECD country might seek a broad range of policy objectives simultaneously; furthermore, there are various policy tools the country can use to pursue those objectives. To clarify and to delimit our discussion, we restrict attention to the following three policy objectives, recognising that this is arguably an *ad hoc* restriction:

**Reducing global poverty.** Virtually all countries have endorsed the Millennium Declaration to reduce global poverty, and most signed on more specifically to the Millennium Development Goals (MDGs), the general objective of which is to halve poverty globally by 2015. These commitments follow many decades of providing development assistance with the objective of reducing poverty and promoting growth and development in low- and middle-income countries.

**Balancing supply and demand in domestic labour markets.** Particularly important here is combating downward pressure on wages earned by, or upward pressure on unemployment among, relatively unskilled workers, in cases where demand

<sup>4</sup> Two very important countries of origin in migration flows, Mexico and Turkey, are themselves OECD countries. Though both are increasingly also destination countries for international migrants, the context of their migration policy making remains substantially different from that of other OECD countries. On Central American migration to Mexico, see Freije (2006).

lags supply. A second concern is filling key vacancies, especially among skilled segments of the labour market (e.g. teachers, doctors, nurses), where demand exceeds supply. Furthermore, there is evidence that supply deficits exist in low-skilled segments of the labour market as well (tourism, restaurants, care of children and the elderly, etc.).

**Promoting social cohesion.** Governments seek to reduce regional and inter-household inequalities, as well as providing social insurance against various forms of insecurity and multidimensional social assistance (e.g. cash transfers, housing, health care, education) to reduce domestic poverty and expand equality of opportunities.

To be sure, immigration has some bearing on other policy objectives: reduction of fiscal deficits, public health, national security. Nevertheless, the three objectives listed above, in addition to being among the most salient in public and academic debates surrounding immigration, are useful to illustrate the general problem of policy trade-offs in the immigration arena, as well as the more specific problem of trade-offs between overseas development and other policy goals. A fuller treatment of further policy trade-offs could be modelled on the approach used here.

To pursue these three objectives, policy makers have (at least) three policy tool kits:

**Development co-operation policies** include, notably, foreign aid (official development assistance and official assistance), as well as technical assistance and other forms of in-kind support.

**Migration policies** include visa regulations, quantitative targets, policies regarding family reunification, refugees and asylum seekers, rules regarding foreign students, border control and enforcement, use of amnesties and regularisations.

**Social policies** include housing, education, health and social assistance measures.

Note that the challenge is not one of using a single policy to achieve multiple objectives: there are three objectives and three policies. Tinbergen's (1952) classical admonition that policy makers will face a problem if there are fewer policy instruments than policy objectives is not the issue here. Indeed, as we will argue below, there will be a conceptually separable fourth policy tool kit, namely, encouragement of diasporas,

with which to address the same list of three objectives. Thus, the problem is not one of simultaneously seeking more than one objective with only one instrument.

The problem that underlies the debate surrounding policy coherence is instead that a given policy instrument affects outcomes in another policy domain. This raises a problem of complexity that is not always recognised in discussions about policy making. The effect of decisions taken in one ministry (say, home affairs) “spill over” into the policy domain that is the competence of another ministry (say, development co-operation). These spillovers call upon different parts of the bureaucracy to communicate and co-operate, tasks for which there may exist weak incentives (OECD 2005b).

Table 1.

**Complex interactions of migration, social cohesion and development co-operation policies**

POLICY INSTRUMENTS			Promoting social cohesion	Reducing international poverty
	Low-skilled	High-skilled		
<b>Migration policies</b>	---	---	Can impose costs on sectors such as education, health	Can affect labour markets in LDCs; recruitment of skilled leads to brain drain from poor countries
<b>Social policies</b>	Reduce adjustment and absorption costs; could increase inflows (“welfare magnets”)	Can increase demand for immigrant social sector workers	---	
<b>Development co-operation policies</b>	Can better diffuse the benefits of low-skilled migration; can ease “push” factors for emigration	Can perversely increase the supply of needed workers (brain drain of health and education workers)		---

To this problem of “domain spillover”, one might add the problem of interactions among policy instruments. Some combinations of policy instruments work as complements in their effect on a particular objective. Consider an example. It may be that more permissive immigration by an OECD country raises the flow of remittances to the developing world. This migration policy might be combined with increased but targeted aid to the migrants’ country of origin, which can help spread the benefits of those remittances more equitably<sup>5</sup>. In this case, a migration policy instrument (numerical targets) and a development co-operation policy instrument (foreign aid) work together in some optimal mix as complements.

Table 1 summarises the way that one set of policy instruments can affect the objectives of other policy instruments. As an illustration of the interpretation of this table, read across the row labelled “Migration policies”. For the purposes of this simple illustration, suppose that migration policies seek to influence the size and skill composition of immigrant populations. Thus the first two cells in this row are blank: it is assumed that migration policies for the low-skilled segment of the labour market seek to limit entry, while the policies for the high-skilled segment seek to promote entry. (Throughout the table, only the cases of “domain spillover” are made explicit, not the intended effects of policies.) These policies also affect social cohesion, however, by changing the demands on measures to integrate workers into the labour force (a concrete example: more language training might be necessary). Lastly, and central to the motivation for this paper, migration policies also have an impact on development outcomes in migrants’ home countries.

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Let us return for a moment to the question of “policy coherence for development”. Most analysts of policy coherence would look closely at each of the cells in the final column. That is, the objective is international development, and the research programme studies the effects of a range of policies and instruments upon that objective<sup>6</sup>. (Naturally, such an exercise might consider policies – for example, trade policies – other than those listed in the first column.) In this paper, however, we will look across the first row, studying the effects of migration policies upon various outcomes, including that of

5 For more discussion of the complementary role of aid and remittances, see Katseli *et al.* (2006b).

6 Many of the other papers presented at the AFD-EUDN conference for which this paper was prepared in fact follow a column-based approach in terms of Table 1: they look at the impact of non-aid policies on development outcomes.



international development. The paper adopts the perspective of an OECD-country migration policy maker interested in the practical trade-offs among different policy objectives.

One question not treated in this paper is that of productive complementarities between development and aid policies on the one hand, and migration policies on the other, in the pursuit of development objectives. We have addressed this question elsewhere (Dayton-Johnson and Katseli, 2006; Katseli *et al.*, 2006b). Briefly, the argument put forward is that aid can help to diffuse the development benefits of migration. Aid that finances communication and transport infrastructure, for example, serves to integrate labour markets in sending countries, allowing workers who remain behind to benefit from vacancies created by emigrants. Aid can also be directed to replenish the supply of skilled workers who emigrate and more generally to build capacity that increases incentives to retain them.

By “migration policies” we refer to the whole set of measures that governments take to influence the size and composition of immigrant inflows, including rules regarding the menu of visa options, bilateral and multilateral agreements with other countries regarding movement, the propensity to enact amnesties and regularisations, rules regarding refugees and asylum seekers, commitments to family reunification, border controls and other policing measures. This focus is admittedly oriented towards economic migrants, though it should be borne in mind that the immigration policies of many OECD countries are fundamentally closed to economic migrants. Even in those countries whose policies are organised around economic migration, a large share of immigrants enter through a non-economic door, i.e. as refugees, family members or asylum seekers. OECD (2005a) thus distinguishes between discretionary and non-discretionary migrants. The latter are those who enter a country by dint of the host country’s commitment to human rights, refugees, family reunification, etc. The focus of Table 1 is implicitly directed towards discretionary migrants (the concern is with regulating total numbers of migrants and targeting them by their skill level). Nevertheless, the presence of non-discretionary flows limits the effectiveness of a finely tuned immigration regime.

Even for discretionary migrants, observers are sceptical about the effectiveness of migration policy instruments. Human beings, migrants among them, are notoriously

difficult to control. People admitted under short-term arrangements may stay forever. Others denied legal entry altogether choose to enter irregularly. Indeed, the dividing line between discretionary and non-discretionary, or between economic and non-economic, migrants is not so easy to sketch in practice. The same migrants might appear as job seekers in one OECD country and refugees in another, depending on the incentives offered by immigration regimes to declare oneself as being of one type or another. It is no use calling oneself a job seeker at the gates of a country that explicitly accepts no job seekers. This is not necessarily to say that migrants are duplicitous: bona fide refugees may simultaneously be attracted to better labour market opportunities in their new home. That is, they are genuinely refugees *and* economic migrants. Among the irregular migrants, one might expect economic motives to predominate, but this need not always be the case (as with refugees not recognised by the country in which they have settled illegally).

As an example of the difficulty of separating economic factors from others, Freije (2006) provides an overview of the evolution of migration from Central America (chiefly Guatemala) to Mexico that highlights five temporally overlapping strata: long-standing seasonal migration to work on coffee and banana plantations in Soconusco, in the state of Chiapas; political refugees from the Guatemalan civil war, 1960-1996; transit migrants headed to the United States (not all of whom reach their intended destination); newer forms of economic migrants (textile workers); and trafficking. There are clear economic motives for some of this movement, and some movements are equally clearly those of political refugees, but the dividing line between categories is hard to draw, in particular because migrants who came as refugees established networks that allowed subsequent economic migration.

We devote a section to each of the three policy objectives listed above. Section 5 addresses the potential role of diasporas, an issue that has not been systematically explored until recently. How could policy makers encourage diasporas as a way of complementing migration policies and mitigating the trade-offs summarised in Table 1? Diasporas are networks comprising third-country nationals and their descendants resident abroad. Clearly, diaspora networks play an important role in the mobility of people. They can reduce the costs (to migrants themselves and to sending and receiving economies) associated with migration and generate important economic spillovers on both sides.

## 2. Reducing global poverty<sup>7</sup>

International migration provides substantial benefits to migrants themselves. More recently, observers have focused on the benefits that might accrue to the sending countries. The impact of migration can be positive, as in the case of benefits to low-skilled workers who remain behind and find jobs more readily; or negative, as in the case of degradation in the supply of key social services when teachers and doctors emigrate. Remittances – the money transferred home by migrants to family and friends – can promote consumption and investment in the sending economy. OECD-country migration policy regimes can enhance the benefits of these mechanisms; in particular, we will argue, the promotion of circular or repeated labour mobility can increase the net benefits of the mobility of low- and high-skilled workers and of remittances.

### 2.1 Low-skilled migration

What happens when low-skilled workers leave a poor country in large numbers? Consider two extreme scenarios. In the first, there is low unemployment and low underemployment. Emigration forces employers to raise wages; as a result, output may fall, at least in the short run. Workers with characteristics similar to the migrants' benefit from higher wages. Over the medium to long run, economic restructuring, to adapt to changes in labour supply, will tend to eliminate the output drop.

In the second scenario, a sizeable pool of unemployed or underemployed workers can substitute for migrants. In this case there is no output loss and the cost to employers is close to zero. Workers who remain behind benefit from increased employment or shorter unemployment spells.

Which scenario best approximates reality in the developing world? In some contexts, massive labour withdrawal has been accompanied by rising wages at home, perhaps partially induced by the emigration process. For instance, manufacturing wages in the Philippines have tracked recruitment of overseas workers remarkably closely, despite persistently high unemployment rates. In Pakistan, wages for both skilled and less skilled workers, particularly in the construction sector, have responded over time to the mass

<sup>7</sup> This section draws heavily upon Katseli *et al.* (2006a, 2006b).

movements of people to the Persian Gulf (Lucas, 2005). In earlier times, the mass deployment to South Africa of mine workers from Malawi and Mozambique induced rising labour costs to the dismay of estate owners at home (Lucas, 1987).

Such instances are probably not the norm, however. Table 2 presents some labour market indicators for a selection of major migrant-sending developing and transition economies<sup>8</sup>. With the exception of Croatia, these indicators suggest very considerable slack in the home labour markets of each of these countries. It seems probable that the withdrawal of low-skilled workers, even in large numbers, has done little damage to most of these countries' economies. Rather, these mass withdrawals have probably served to improve the lot of those left behind.

Table 2.  
**Labour market indicators since 1990: selected developing and transition countries**

		Real wage annual growth (%)	Average unemployment rate (%)
Macedonia, FYR	1995-2004	1.37	
Croatia	1991-2004	2.51	
Romania	1991-2004	0.40	8.9
Turkey	1990-2001		7.9
Morocco	1990-2003		18.1
Algeria	1990-2004		26.0
Tunisia	1994-2004		15.1
Suriname	1990-1994		13.3

**Source:** IMF, *International Financial Statistics* (October 2005)<sup>9</sup>.

Migration of low-skilled workers typically has a greater impact on poverty reduction in the countries of origin than does emigration of professionals, for three reasons<sup>10</sup>. First, low-skilled workers come from lower-income families and communities, who therefore benefit more directly from this migration. Second, as argued above, the withdrawal of

<sup>8</sup> Real wage growth in Table 2 is based on end-point comparisons, deflating reported wages by the consumer price index.

<sup>9</sup> At <http://www.imfstatistics.org/imf/ifsbrowser.aspx>.

<sup>10</sup> Tingsabadh (1989), Gustafsson and Makonnen (1993), Lachaud (1999) and Adams (2005).

low-skilled workers opens more opportunities for other low-skilled workers at home. Finally, low-skilled migrants tend to remit more per person than higher-skilled professionals, especially if they have left their families behind.

## **2.2 The high-skilled and brain drain**

The global competition to attract the best and the brightest is intensifying. While the average skill level of migrants to North America is substantially higher than that of migrants to Europe, most EU member countries have programmes to facilitate the entry of highly skilled migrants. In contrast to the case of low-skilled emigration, reckoning of the net benefits from emigration of professional and highly educated nationals is controversial. In particular, the loss of teachers, doctors and nurses disrupts the delivery of social services where they are critically needed, with very real public costs (including those related to the training of potential emigrants).

Quartey's (2006) study of international mobility of nurses from Ghana illustrates the depth of the problem. Even as OECD bilateral donors committed \$77.7 million for health-sector aid in Ghana in 2003, and \$36.1 million in 2004, many countries offered attractive conditions for nurses and other workers in the sector to migrate to the OECD<sup>11</sup>. Nurses and other migrants from Ghana respond to the incentives provided to them by OECD-country migration policy. Thus, a higher number of experienced Ghanaians are likely to be in the labour force in the United Kingdom, which favours economic migrants, than in the Netherlands, whose migration policy gives greater weight to family reunification and non-economic motives.

Nurses themselves derive substantial benefits from working abroad, but it is not immediately obvious that Ghanaian development is a net winner. In particular, the acceleration in the emigration of nurses has been contemporaneous with deterioration in some public-health indicators (most alarmingly, a rise in the infant-mortality ratio after decades of consistent decline). In such circumstances, it is not unreasonable to bemoan a brain drain. (Clemens and Pettersson [2006] have assembled a useful data

11 Data on aid commitments come from the OECD/DAC creditor reporting system (OECD, 2006c). Given that a substantial proportion of aid to Ghana is in the form of direct budget support, which can be used for the health sector, the monetary amounts reported here likely underestimate the DAC resources provided to the sector.

set on emigration of African health-care workers to eight OECD countries and South Africa.) Docquier's (2006) review argues that the evidence regarding the net effect of highly skilled emigration on sending countries is mixed, but that the effect is unambiguously negative for a large group of very low-income countries, notably in sub-Saharan Africa and Central America.

Human capital formation should not be considered entirely exogenous. The prospect of emigration for the highly skilled can, under certain conditions, encourage younger generations to acquire more education and hence increase the country's stock of human capital<sup>12</sup>. Moreover, development assistance policy can help transform a brain drain into a brain gain: a situation in which emigration of skilled workers brings net benefits to the country of origin. Spending in the health and education sectors, supported by foreign aid, can promote more skill creation in those sectors and, more important, replenish the supply of skilled people. Indeed, some skilled sectors in some sending economies (e.g. the Philippines) have seen an increase in training capacity, financed by a mix of public and private funds, that more than compensates for the emigration of trained local people. Such a response is observable in Ghana today, but it is not yet adequate to replenish the outflow of nurses.

At the same time, a highly educated diaspora could, in principle, provide benefits to the home economy (see Section 5), but the evidence remains weak and pertains more to upper-middle-income countries. The newly industrialised economies are better placed to take advantage of technologies transferred from overseas and any fresh skills of a returning diaspora. Typically, the poorer the country, the greater is the fraction of highly educated persons migrating to the industrialised countries.

Not all emigration of highly skilled persons proves harmful to the country of origin. This may be particularly true where highly skilled emigrants would be ineffectively deployed at home, where training costs are borne privately and where the prospect of emigration improves incentives for skill acquisition at home<sup>13</sup>.

<sup>12</sup> Beine *et al.* (2001); Stark (2005).

<sup>13</sup> On the incentives provided by emigration for increased human capital acquisition, see Stark (2005) and the references therein.

High-income countries' efforts to attract high-skilled migrants are unlikely to abate. However, a number of steps might be considered to manage flows of highly skilled migrants more effectively and limit negative impacts on countries of origin. These include improved monitoring of the migration of the high-skilled and an effective regime for enforcing ethical recruitment, particularly of doctors and nurses. For instance, the EU's recognition of the need for a comprehensive and coherent approach to the ethical recruitment of health-care workers, particularly from Africa, is a step in this direction. The UK Department of Health has developed ethical guidelines governing the international recruitment of health-care workers, and indeed banned recruitment from South Africa and some Caribbean countries altogether (Findlay, 2006).

Development assistance targeted to the replenishment of key workers must be more closely linked to recruitment efforts. The capacity of health and education sectors in developing countries to replenish or retain workers can be substantially improved through investments in service delivery systems, continuous training of personnel and better working conditions. For example, temporary recruitment of personnel can be associated with on-the-job training programmes and skill-replenishment schemes. Of course, these schemes can lead to unintended positive externalities for third countries, if migrants move with their skills to a third country rather than returning home (e.g. an African medical worker whose skills are upgraded in France, with French financing, and then migrates to Canada once her training is finished).

### 2.3 Remittances

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Remittances – money sent home by migrants to family and friends – are large, stable and growing over time<sup>14</sup>: from \$102 billion in 1995, they grew to an estimated \$232 billion in 2005. The share of global remittances flowing to developing countries has increased from 57 per cent of the total in 1995 (\$58 billion) to 72 per cent in 2005 (\$167 billion)<sup>15</sup>. These amounts (though subject to greater-than-usual doubts about data quality) exceed total official development assistance (ODA) and private capital flows to developing countries. Remittances thus constitute a final argument in favour of a pro-development migration policy.

<sup>14</sup> World Bank (2006); Lucas (2004).

<sup>15</sup> United Nations (2006).

Remittances promote economic expansion, by permitting increases in consumption and by generating multiplier effects (e.g. when remittance-financed house construction in a village increases income for local carpenters, builders, suppliers of materials, etc.). They can also help to mitigate risks and promote the welfare of individuals, in addition to contributing to the development of the aggregate economy. “Dutch disease” effects – negative effects on inflation and price competitiveness, possible consequences of surging inflows of foreign currencies – tend to be relatively small and limited to countries where remittances are especially large relative to the size of the economy.

The impact of remittances is heterogeneous across economies. While the evidence in favour of their poverty-reduction impact is reasonably robust, that impact is often highly localised in “migration corridors” – sub-regions of a national economy – and may be difficult to detect at the national level. Furthermore, different modes of remittance behaviour give rise to different economic impacts. Individual-to-family transfers often function as part of traditional solidarity networks (Sall, 2005); these may serve an insurance role. Individual-to-family transfers to finance investments (housing, trade, small enterprises, services) could have a more easily discerned effect on economic activity back home. Individual transfers for collective investments in local infrastructure are arguably highly efficient, but they are substantially less common than other transfer modes.

Other studies provide much greater detail on the development benefits of remittances and policy problems that they pose<sup>16</sup>. Our aim here is restricted to pointing out that remittance volumes are partly determined by OECD-country migration policies, particularly admission policies. The volume of flows is a function of the average skill levels of migrants, as noted above: remittances from low-skilled migrants reduce poverty more than those from high-skilled migrants, especially if the high-skilled migrants settle abroad permanently with their families. Moreover, the rate of remittance flows is likely a function of the duration of a migrant’s stay: under this hypothesis, shorter-term migrants maintain a stronger link to the home economy and therefore send more money home.

<sup>16</sup> A recent World Bank study (Fajnzylber and López, 2007) on remittances in Latin America concludes that the positive effects tend to be overstated. An IMF study (Rajan and Subramanian, 2004) argues that remittances, unlike aid inflows, might be less likely to cause Dutch disease effects; see the critique of the econometric strategy of the latter paper by Cogneau and Lambert (2006). See Katseli *et al.* (2006a) for a review of the evidence on the development impact of remittances and multiplier effects.



Although remittance flows are responsive to policy decisions, it bears repeating that these are private flows and that public policy can neither create them *ex nihilo* nor determine to what purpose such flows should be deployed. Policy makers can seek to facilitate transfers (by reducing their cost, and by increasing access to financial institutions in rural and remote areas); they can also encourage the creation of new financial instruments to favour economic initiatives. In a similar vein, foreign aid can be used to co-finance collective investments undertaken by migrants in their home countries.

## 2.4 Circularity

Observers of migration policy like to say that “nothing is so permanent as temporary migration”. Short-term labour recruitment schemes in many European countries have certainly given rise to long-term settlement unintended by policy makers. It is not surprising that some migrants admitted temporarily seek to stay longer. A view is emerging, however, that this behaviour might stem in part from the limited menu of options available to migrants. If migrants were offered repeated, circular migration schemes rather than a single-entry short-term visa, would some prefer the circular scheme to permanent settlement? A similar question might be asked about irregular migrants who stay in a host country because they fear they could not re-enter the host country if they ever ventured home: if they were more confident that they could come and go, might they do so rather than settling permanently (illegally or otherwise)? Are there genuinely temporary migrants out there?

That permanent migrants might indeed be frustrated temporary migrants is illustrated by the experience of migrants from the Kayes region of Mali to France. Gubert and Raffinot (2005) argue that the hardening of France's immigration policy in the 1970s prevented temporary migrants from being substituted by other family members, and thus led to much longer stays (as well as higher rates of family reunification).

Why might OECD policy makers with an interest in the economic development of emigration countries care about circular migration? First, because both seasonal and temporary<sup>17</sup> migrants tend to save more while working in OECD countries and transfer

17 For the purposes of this paper, seasonal employment refers to stays of less than a year's duration; all other types of employment with stays exceeding one year are referred to as temporary. Both seasonal and temporary migration can be repetitive if the same individual crosses borders more than once over time. Such repetitive migration, whether seasonal or temporary, is called circular.

more of their earnings home in the form of remittances. Return migrants may also bring freshly acquired skills to the home labour market, even if these skills are not always readily transferable to their country of origin<sup>18</sup>. Indeed, given the chance and with sufficiently low transport costs, many workers might prefer seasonal temporary migration over permanent relocation. This preference will be even greater if potential migrants are breadwinners with large families living in neighbouring countries. Given the lower costs of living in the migrants' regions of origin, this option offers substantial gains in their living standards; it also avoids the costs of migrants' separation from their families.

Stark *et al.* (2006) study the phenomenon of seasonal Polish migration to Germany, deriving conditions under which circular migration would be a migrant's unconstrained optimal choice. They show that actual cost-of-living differentials and costs of separation are such that many migrants will not necessarily become permanent migrants now that Poland has acceded to the EU and they are no longer constrained by regulations governing their work status. Borodak (2005) finds substantial evidence of circular migration by Moldovan migrants, many of them using tourist visas to engage in petty trading activities (these are called *chelnok* migrants, using the Russian word for "shuttle"). Evidence on circular migration in Kenya is provided by Agesa and Kim (2001).

Indeed, temporary employment schemes, with a variety of pre-admission and post-admission criteria, have proliferated in recent years. The International Labour Organisation (ILO) reports a plethora of temporary schemes in use by various OECD and developing countries<sup>19</sup>.

Pro-development circular migration policy, however, need not merely mimic traditional guest-worker programmes, which tend to stipulate the duration of stay and tie workers to a specific employer. Such schemes can introduce distortions and make migration management more difficult over time: businesses initiate investments on the presumption of a continuous supply of immigrant labour, while migrants have little incentive to change jobs or leave the country (Martin, 2006). Successful temporary programmes,

<sup>18</sup> Tan (1993) argues that these skills may not be employable upon return, as in the case of the Philippines.

<sup>19</sup> Abella (2006). The EU Communication on Migration and Development (European Commission, 2005) emphasises the importance of return migration for development of migrants' home countries.

in contrast, avoid the shortcomings of guest-worker schemes through flexible working arrangements, close supervision of recruitment procedures, clear admission criteria and protection of fundamental rights.

Multiple-entry visas – a key element of an effective circular migration regime – raise the likelihood that migrants will return to their home countries, and they encourage circularity by reducing the uncertainty surrounding re-entry into the OECD country in question. Mechanisms to transfer pension or social security contributions to an account in the home country, to be collected only by the migrant upon return (or by specified members of the family), will likewise encourage circular movement.

Another element of effective management of circular migration is active recruitment. Organised recruiting through intermediaries and contracting of projects involving migrant workers generally result in a higher return rate than does casual hiring of individual workers. However, reports of abusive and exploitative treatment of workers by intermediaries are common. Recruiting agents cannot be supervised by OECD countries alone; rather, this will demand bilateral intervention. Repeat contracting with agents, conditioned upon a good record of transparency, reliability and treatment of workers, could provide incentives for agents to improve conditions.

Moreover, for a greater impact on poverty alleviation, OECD countries might consider redirecting recruitment programmes for low-skilled workers toward lower-income countries. Among developing countries, the flows related to migration, like those related to trade and investment, are concentrated among the *least* poor countries. Aid, in contrast, flows disproportionately to the poorest countries (Cogneau and Lambert, 2006). If the poorest developing countries are to benefit from the full portfolio of development co-operation instruments (i.e. not just aid), then the benefits of migration must be extended to them.

How might this work? In this connection, the European Commission supports and funds non-mandatory pre-departure training and language courses (under local auspices) for would-be migrants. These programmes will assume added importance if workers are to be drawn from a wider set of countries. Migrants are more likely to move to countries where they speak the language, so locating a language-training programme in a given low-income country could strongly affect future migrant flows

from that country to some European destinations. (Training in English, however, would have hard-to-predict effects on migrants' choices of destinations.)

### **2.5 Summary: a pro-development migration policy**

This quick overview of emerging evidence provides strong support for the idea that OECD country migration policies can have strong effects on economic development in migrants' home countries. Moreover, deliberate articulation of those policies with trade and development-assistance policies can greatly improve the net benefits to developing countries.

For a greater development impact of migration policies:

**Focus on the low-skilled:** low-skilled workers remit more per person than high-skilled workers and their mobility has a greater impact on poverty reduction.

**Encourage circular movement:** this also raises remittance rates and, for the high-skilled, can reduce the costs of the brain drain.

**Give greater attention to recruitment from poorer countries:** if well designed, this will spread the benefits of migration to poorer countries, although it entails some risks.

## **3. Balancing supply and demand in domestic labour markets<sup>20</sup>**

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In principle, in the presence of unemployment, further immigration of low-skilled workers should lead to lower wages for low-skilled workers; if wages are sticky, because of minimum wage laws or for other reasons, the level of unemployment should rise. Against this theoretically informed expectation, there is considerable evidence that the impact of immigration on wages and unemployment is small and certainly not catastrophic. What is happening here? The answer to this question is of central importance to the policy maker who wishes to balance development and labour market objectives.

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<sup>20</sup> This section draws heavily upon Münz *et al.* (2006a, 2006b).

The opposing views regarding immigration and labour markets are embodied in the United States by two US economists, both of them immigrants: George Borjas, who argues that immigration has increased unemployment and reduced wages, and David Card, who argues that there has been little impact. Their dispute can hardly be seen as an esoteric academic controversy, as it has been the cornerstone of long articles on immigration in the *New York Times Magazine* and the *Los Angeles Times*<sup>21</sup>.

The research on unemployment in Europe tends to support Card's side in the conflict, though it may not always address the methodological doubts raised by Borjas. In general, empirical evidence shows that the impact on wages and employment is small on average, but tends to be slightly negative. This research says that immigrants do not depress wages or employment because they mostly take jobs avoided by natives (dirty, difficult and dangerous work; low-paid service jobs like child care and house cleaning; jobs in the underground economy) and in sectors with seasonal labour shortages (e.g. farming, road repair and construction, tourism-related services). That is, immigrants and native workers tend to be complements, not substitutes, in OECD economies. Moreover, these results suggest that economies of scale and spillovers (which increase productivity) as well as higher demand for goods and services (due to population growth through immigration) lead to additional employment creation and offset the potential downward effect on wages.

### 3.1 Wages

A meta-analysis by Longhi *et al.* (2005) of many studies found that a 1 per cent increase in the proportion of migrants in the labour force lowers wages by 0.1 per cent, though there is considerable variation around the mean. Country experiences provide some flavour of the variety of mechanisms linking immigration and wage effects. Research in Italy, for example, demonstrates a positive effect of immigration for natives' wages, especially in Northern Italy. This is attributed to labour shortages for specific jobs in specific sectors, which natives refuse to take, as well as to strong trade unions and centralised bargaining. Similarly, in Spain, there is a weak positive effect on wages. Research on the

21 "The Immigration Equation", *New York Times Magazine*, 9 July 2006; "Immigration a Force in the Economy," *Los Angeles Times*, 1 October 2006. Important examples of the work of Borjas include Borjas (1995, 1999, 2001, 2003) and Borjas *et al.* (1992); Card's important work includes Butcher and Card (1991), Card (1990, 2001), and Card and DiNardo (2000).

United Kingdom discerns no impact on wages, while in Greece there has been a very small negative effect (despite massive immigration) (Münz *et al.*, 2006b).

### 3.2 Employment

In a labour market in which wages do not fully adjust to changes in quantity, immigration will displace some native workers. The net impact may be non-negative, though, as immigrants create a number of jobs which offset the displacement effect. There are several mechanisms through which immigrants contribute to job creation, ranging from entrepreneurship, to increasing domestic demand for goods and services, to improving the efficiency of labour markets. There may be some “churning” in the short run, however, as the displacement effect acts more quickly than the induced job creation. Moreover, native displaced workers may not be readily re-employed as their skill levels may not match the skill requirements of available jobs. An extreme case arises when irregular or regular unskilled workers immigrate and are willing to work for a wage lower than the prevailing one. In this case natives are not displaced, but the sector is dominated by immigrant low-wage/low-cost labour.

Spanish research indicates a clear and significant positive effect on the employment rate and on female labour force participation. In Belgium, by way of contrast, new immigrants compete with immigrants who came during earlier periods seeking low-skilled jobs; the result is high unemployment rates among certain foreign-born groups (e.g. Congolese, Moroccans and Turks). In cases where there are negative effects upon employment of natives, these effects can be exacerbated by labour protection measures (firing costs, rigid wages, business entry costs, etc.) which decrease employment in the first place. Germany is a salient example: labour market rigidity and the comparatively low mobility of German workers aggravate the negative effects of immigration, particularly in the construction sector. The German experience illustrates that market regulations intended to protect native workers often have unintended consequences.

The distribution of employment gains and losses is not uniform: some groups are especially hurt while others benefit disproportionately. Less recent migrants (as in the Belgian evidence) and younger workers tend to be hurt by immigration. Women usually gain in terms of labour force participation, and this effect may be facilitated by the lower cost of child care, house cleaning and other service work provided by immigrants, which

in turn lowers the cost of entering the labour force. This is a genuine example of complementarity between native and immigrant labour, in that the introduction of the latter raises the productivity of the former; in other cases, authors use the term “complementarity” to mean only that immigrant and native workers do not compete for the same jobs, which is a weaker condition.

The US and European experiences differ, as do experiences within Europe. The impact of immigration on wages and employment is more likely to be negative in EU countries than in the United States (Münz *et al.*, 2006b). Results from Southern Europe (Greece, Italy, Spain) and the United Kingdom indicate negligible negative or even slightly positive effects, whereas in Germany, as already noted, rigid labour markets produce a stronger negative impact.

In the 1990s, the evidence on job creation for native workers pointed to small negative effects<sup>22</sup>, but recent data are more encouraging. In the EU15, for example, employment of nationals grew between 2000 and 2005 by 1.4 per cent, to reach 67 per cent; during the same period, immigrants’ share of total employment increased by over 40 per cent. Clearly, job creation occurs following immigration. Indeed, the highest employment increase for natives occurs in countries with primarily economic immigration and less regulated labour markets: from 56.0 to 62.5 per cent in Spain, from 56.4 to 59.8 per cent in Greece and from 64.7 to 67.0 per cent in Ireland.

### 3.3 Labour market efficiency gains

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Immigration may lead to improved efficiency in labour markets. Immigrants move to the most attractive regions, where salaries and employment opportunities are higher, inducing a convergence effect on wages and unemployment between regions and leading eventually to efficiency gains. At the same time, this movement reduces labour market shortages.

Labour market regulations and social standards are often inappropriate instruments for protecting native workers against low-wage competition by immigrants. The best instrument for reaching the Lisbon target of “greater social cohesion” while defending

22 See Angrist and Kugler (2003).

a given level of income for native workers might be wage subsidies. In addition, temporarily delaying wage subsidy payments to recent immigrants could prevent EU member states from acting as welfare magnets.

In the market for low-skilled labour in OECD countries, supply often outstrips demand; at least, this is a reasonable starting hypothesis in settings where unemployment rates regularly brush up against 10 per cent. In the market for high-skilled labour, in contrast, demand exceeds supply in some sectors (as evidenced by long waiting times in national health systems), which is one reason why governments so assiduously seek out such workers internationally.

Finally, any discussion of highly skilled migrants to the OECD countries should emphasise two interrelated benefits already mentioned with respect to low-skilled workers: that such workers are complementary to native workers, filling vacancies for which there are not enough native candidates; and that they contribute to the efficiency of the labour market.

#### **4. Promoting social cohesion**

A third policy objective for OECD-country decision-makers is social cohesion, a loosely defined concept or set of concepts. Social cohesion has been defined in the theoretical literature as a characteristic of relations among people that depends on the history of co-operative behaviour of the group in question and that in turn affects the incentives to behave co-operatively<sup>23</sup>. In more prosaic terms, social cohesion has to do with the quality of relationships, the density of formal and informal social networks, and the degree of trust and fellow-feeling among people (in a city, a province, a nation). For policy makers, the pursuit of social cohesion can focus on the provision of social insurance (e.g. for health care) and social assistance (e.g. means-tested cash or in-kind transfers) programmes and perhaps an effort to reduce inter-household and interregional inequalities<sup>24</sup>.

23 Dayton-Johnson (2003); see also Dayton-Johnson (2001), Osberg (2003).

24 By social assistance programmes, we mean policies to redistribute permanent income among individuals; social insurance programmes are forms of co-insurance, or risk sharing, among individuals, in which people subject to positive income shocks pay taxes and those hit by negative shocks receive benefits. This useful schema is based on the model of Osberg and Cyrus (2001, 60-61).



However it is defined, social cohesion is an objective that, like labour-market equilibrium, has nothing to do *per se* with immigration. Nevertheless, many of the concerns that people in OECD countries harbour regarding immigration have to do with social cohesion. People worry that integrating newcomers into the networks of trust and fellow-feeling will be costly. In the policy domain, people worry that increased immigrant inflows will raise the cost of social insurance and social assistance policies. This concern does not arise only where immigrants have lower employment rates: low-skilled migrants work in sectors such as construction, heavy industry and agriculture, often without the necessary training, where the risk of injuries is greater than average. Reported accidents vary from one industry to another, but in general occupational accident rates among migrant workers in Europe are approximately twice those of native workers<sup>25</sup>.

Consider two scenarios, one optimistic, the other pessimistic. In the first, immigrants enter the country and readily find employment; their net contribution to publicly provided goods and services – what we are calling social cohesion policies – becomes positive quite quickly. Indeed, in Southern European countries, Ireland and the United Kingdom, open labour markets and mainly economic immigration are reflected in negative employment gaps (i.e. nationals have lower employment rates than third-country nationals): Greece, –8.9 percentage points; Spain, –8.2 percentage points; Portugal, –5.2 percentage points, and Ireland, –1.4 percentage points<sup>26</sup>.

In the pessimistic scenario, immigrants are characterised by low levels of employment, low wages or both, which raises their consumption of public goods and services and makes them a burden on public finance rather than contributors. In countries like those mentioned above (e.g. Greece, Ireland, Italy, Portugal, Spain and the United Kingdom), immigrants are net contributors to the treasury. Where immigrants face difficulties in access to work, inappropriate access to schooling and training, and

25 Spencer and Cooper (2006). In France, over 30 per cent of industrial accidents resulting in permanent disabilities involve non-French workers. Similar findings are reported from Belgium and Switzerland.

26 Münz *et al.* (2006b). The employment gaps are mirrored in low unemployment gaps as well (that is, the difference between immigrant and native unemployment rates). For some countries, immigrant unemployment rates were barely above the rate for native workers: –2.4 percentage points in Spain, –2.5 percentage points in Ireland and –4.9 percentage points in Portugal and the United Kingdom. In Greece, the unemployment rate of third-country nationals was actually two percentage points *lower* than that of the nationals.

discrimination (e.g. Belgium, Denmark, France, Netherlands and Sweden), they are more dependent on welfare payments than natives<sup>27</sup>.

Indeed, “integration” is the appropriate policy domain for discussion of social cohesion and immigrants. This is an enormous subject, which, in the European context, has been exhaustively reviewed and analysed by Spencer and Cooper (2006). These authors distinguish between the economic and social dimensions of integration<sup>28</sup>. While these dimensions are interrelated, the first is achieved largely in the domain of the labour market. Policies for the social integration of immigrants relate to education, housing and neighbourhoods, health, and citizenship measures. A recent report (OECD, 2006a) highlights the importance of integration among the policy objectives related to immigration.

In this section, we do not attempt to review this vast policy experience. Instead, given our emphasis on the interaction of policy instruments, we point out that immigration almost certainly raises the cost of providing a given level of social cohesion, via the policies mentioned above. (This is not the same thing as saying that immigration reduces social cohesion.) This is an important policy trade-off, in terms of the framework introduced in Table 1.

There is a corresponding complementarity between social integration objectives and the labour market objectives discussed above. European studies suggest that migrants’ position in the labour market dominates other dimensions of integration and has a greater impact than any policy intervention (Spencer and Cooper, 2006). Thus, a migration policy focused on economic integration can reduce the cost of social integration, even as social integration measures increase the effectiveness of labour market integration. In particular, there is a reciprocal link between low labour market status and relatively poor school performance. In the Netherlands, for example, researchers argue that there is a strong correlation between immigrants’ low employment rates and lower educational attainment (only about 30 per cent of migrants have higher secondary or tertiary education, versus

27 Germany belongs in the latter group for slightly special reasons: the large-scale admission of ethnic Germans and their dependent family members characterised by high unemployment and high take-up rates of state pensions.

28 See also de Palo *et al.* (2006).

more than 60 per cent of Dutch natives) (Spencer and Cooper, 2006). Education policies can therefore improve labour market performance of immigrants and natives alike.

There is another, conceptually more difficult, potential trade-off between the objectives of social cohesion and development co-operation. In the EU, it is explicitly stated that there can be no successful immigration without full integration. Conversely, the literature on social integration of migrants points out that host populations in the OECD countries often see migrants' links to their countries of origin as a threat, and that this contributes directly to negative public attitudes about migrants generally (Spencer and Cooper, 2006). In the United States and the so-called "settlement countries" (Australia, Canada, New Zealand), there is an emphasis on permanent settlement rather than temporary movements. In both cases, the goal is to make immigrants full members of the host country's society. This is based on laudable principles grounded in recognition of fundamental human rights and is certainly not objectionable as such. However, the development benefits of immigration are to a large extent tied to the migrant's continued links with his or her home society. These are the links that encourage migrants to transfer money back home, to circulate back and forth, transferring capital, skills and knowledge, to entertain the possibility of a definitive return. A not very strict reading of the EU integration principle, or of the settlement countries' permanent-migrant logic, is that such links to the old country must be definitively cut.

Arguably, it is not impossible to be meaningfully engaged with both one's host society and one's home society. But this will require a rethinking of OECD countries' social integration goals if migration policy is to be seen as a tool for development outcomes.

## **5. The role of diasporas and migrants' networks**

### **5.1 The argument so far: what are the trade-offs?**

What are the genuine trade-offs that pose difficult problems for migration policy making? To summarise rather crudely, there are four:

(1) **Developing countries have much to gain from emigration of low-skilled workers, but this could further jeopardise the already tenuous economic security of low-skilled workers in OECD countries.** The benefits to developing countries of low-skilled emigration are not terribly controversial, whereas controversy abounds concerning the benefits to OECD countries. While the impact of immigration on employment and wages in OECD countries is small and difficult to detect, it is often negative. Even if the aggregate effect is indistinguishable from zero, certain classes of workers may bear the costs in a disproportionate way, and these are likely to be workers ill-prepared to do so: the low-skilled, younger workers, other immigrants. Policies may be able to lessen the negative impacts, but it is hard to envision how larger flows of low-skilled immigrants will *improve* the security of low-skilled workers, which should be a fundamental policy objective of all countries.

(2) **High-skilled workers are genuinely beneficial to developing and OECD countries; the brain drain can cause real pain.** As with trade-off (1), there are tantalising possibilities that movement of skilled workers can create benefits for their home countries, but the costs of such movement, at least in the short to medium term, are substantial. The alacrity with which OECD countries pursue these workers bears testimony to their value in their destination countries.

(3) **Integration is costly.** Using immigration to balance labour supply and labour demand raises the costs of social cohesion through policies of social assistance and social insurance.

(4) **“Full integration” or “permanent settlement” must be reconciled with “transnationality”.** (The idea of “transnationality” is discussed in the next section.) The notion that migrants can be vectors of development, channelling resources and skills from their host countries to their home countries, conflicts with public attitudes in OECD countries regarding the assimilation of migrants in their new homes. How can migrants remain productively engaged in both countries without alienating their neighbours in their new home, or indeed their compatriots in their old homes?

Our review suggests some policies that can be used to lessen the incidence of these trade-offs, but there are nevertheless difficult choices to be made. (This paper will not seek to quantify the trade-offs. Although this would be of primary importance for policy

making, the complexity of the trade-offs as well as data limitations would render this work very challenging and beyond the scope of the paper.) The remainder of this paper is devoted to considering an additional policy lever that might be marshalled to this end: the mobilisation and encouragement of diasporas.

We begin with some general information on what is known about migrants' networks and diasporas and about their contribution to development. We then address how they reduce the tension inherent in the trade-offs listed above, and how they might be encouraged to contribute more in this respect.

## 5.2 What can diaspora networks offer?<sup>29</sup>

By “diaspora networks”, we refer to a range of social networks ranging from formally constituted groups (such as “home-town associations”) to amorphous networks of co-ethnics in OECD countries. Such groups are made up of migrants, regardless of whether the latter have retained their original citizenship or adopted the citizenship of their new country, and they can include second, third and subsequent generations as well<sup>30</sup>. A critical feature of the kind of networks we have in mind is that they are meaningfully represented among migrant communities in OECD countries but also meaningfully engaged in some way in their countries of origin. This link to the home country may be unorganised and sporadic (e.g. communication or travel); it may be commercial (trade and investment links running in either or both directions); or it may be formally organised to foster development (as in the case of many home-town networks). This aspect of networks is referred to by sociologists as “transnationality” (de Haas, 2006; Rindoks *et al.*, 2006). In this vein, Sandu (2005) claims that “one fifth of Romanian villages could be classified as transnational”, as a result of high rates of emigration and especially circular migration. (It is debatable whether such “transnational Romanians” truly differ in some meaningful sociological sense from persons with a dual nationality that is not recognised by both states concerned; nevertheless, the term is a useful shorthand for the phenomenon of having one's feet in two different countries, and is used here in that sense.)

<sup>29</sup> The remainder of this section draws heavily upon Rindoks *et al.* (2006).

<sup>30</sup> This broad definition of “diasporas” is also that used by the European Commission in recent policy statements on immigration (European Commission, 2005).

Among the recommendations of the Global Commission on International Migration (GCIM) is that “diasporas should be encouraged to promote development by saving and investing in their countries of origin and participating in transnational knowledge networks”<sup>31</sup>.

In general, the contribution that diaspora networks can offer to the policy trade-offs identified in the previous section have to do with information advantages and with social mechanisms at their disposal. The first information advantage has to do with the flow of information among various parties. Network members know about business opportunities in their host countries that might interest counterparts in their home countries, and vice versa. Rindoks *et al.* (2006) provide two prosaic examples about Koreans in the United States: first, Korean migrants apparently informed wig manufacturers in their home country about new trends so that the Korean wigs could be adapted to changing styles; later, Korean Americans helped to open markets in the United States for Korean automobile, electronics and other industries.

Diaspora networks know things about host-country labour market conditions or ways of accessing social services that can help newcomers to the network (that is, newly arrived migrants). Borodak’s (2005) study of Moldovan migration finds that about 60 per cent of migrants claim to have had a job lined up before they migrated, precisely as a result of existing networks. These information flows are not limited to transmitting labour-market information. In the area of public health, researchers in the United Kingdom show that immigrants have low take-up rates of preventive measures such as screening and immunisation, and that uncertain immigration status is among the reasons migrants do not seek access to primary health care. Immigrants’ command of English is often insufficient to navigate among service providers, and the foreign-language competency of medical workers is too weak to meet them halfway. For their part, medical practitioners are equally unclear as to who is entitled to which service, while those outside metropolitan areas may lack the cultural competency to provide appropriate care (Spencer and Cooper, 2006). Could intermediaries in diaspora networks better disseminate information between service providers and immigrants with genuine service needs?

31 GCIM point 10; cited in de Haas (2006).

The second sense in which diaspora networks provide an informational value has to do with the way in which economists use the term. That is, networks have asymmetric informational advantage over other actors. Network members know more about their members than outsiders, and this information would be genuinely valuable in a credit or insurance market. Thus, diaspora networks can judge who among them is in need of material assistance, though their members may not have easy access to formal insurance contracts (or publicly provided social assistance). Similarly, networks can assess whether a given immigrant is a good credit risk, though he or she may have no collateral of any value to a formal bank in the host economy. Indeed, a frequently cited benefit of ethnic (social) networks is the access to financial capital they provide. Rotating credit associations, for example, often perceived as divided along ethnic or national lines, allow members access to capital for businesses through informal channels; members pool their funds so that each can raise money for small business operations (Rindoks *et al.*, 2006).

A third asset of diaspora networks, related to asymmetric information, is that they have access to means of contract enforcement that are presumably unavailable to those outside the network. These may range from social norms of co-operative behaviour within the network (network members feel shame if they breach a contract with another network member, but not if the contract is with an outsider) to social sanctions, i.e. costly actions taken by network members to punish rule-breakers in their midst (the most draconian of which is expulsion).

These characteristics of diaspora networks allow them, in principle, to provide services to their members that other members of society access directly from the public sector (e.g. information about the health-care system) or from markets (e.g. a business loan). It should be noted, however, that the networks' initiatives, based on mutual confidence relations between associations and public authorities, are privately driven and that public policies may help to encourage them but may have only limited success in mobilising them. The promise of diasporas as a policy lever is that they can bridge gaps not filled by the public sector or markets; it remains an open question whether a more efficient solution would be to address the market failures directly.

The role of diaspora networks may not be as productive or as positive as it appears at first blush. Rindoks *et al.* (2006), in their exhaustive review of the literature on migrants' networks, suggest that the observed behaviour attributed to networks

– loans, information sharing, investment, cross-border trading, etc. – might often be more accurately ascribed to family contacts. They cite research on ethnic business networks showing that much of the putatively network-based financing available to ethnic entrepreneurs is in fact intra-family lending; moreover, family-based businesses of this type are at a competitive disadvantage when family objectives compete with profit maximisation or other economic motives. Spencer and Cooper (2006) point out that although such organisations can effectively build social cohesion among migrants, there are risks that they can also create barriers to broader participation, “filtering them out of mainstream politics into marginal spheres of political activity”. Indeed, this concern mirrors the distinction made between “bridging social capital” (institutions that create links between communities) and “bonding social capital” (institutions that affirm fellow-feeling within communities). Some migrants’ associations may be far more effective at providing the latter than the former. Additionally, the very fact that many migrant communities are marginalised reduces their capacity to be effective political or social intermediaries (Rindoks *et al.*, 2006).

Research on migrants’ associations and other groups in the diaspora has not generally addressed the attributes we have identified here, namely, information sharing, asymmetric information and contract enforcement. Instead, it tends to highlight two other roles of such groups that make them valuable and important to their constituent members: affirmation of identity and a proxy for formal mechanisms of political participation (Spencer and Cooper, 2006).

Perhaps the most striking example of encouragement of networks is the attempts by OECD country governments and international organisations to use them to facilitate the return of migrants. In general, these initiatives have been marginally related to development goals. The Migration for Development in Africa (MIDA) initiative, managed by the International Organization for Migration (IOM) at the behest of the African Union, attempted to inject a greater quotient of development concerns into this kind of repatriation programme; other so-called “assisted voluntary return” (AVR) programmes have been undertaken. The EU and other actors hope that diaspora networks can help with the reintegration of returning migrants in such schemes (de Haas, 2006).

In general, voluntary return programmes have been disappointing in terms of the number of migrants induced to go home. Many shortcomings of these experiments have



been elucidated by various evaluations. Perhaps the most fundamental is that a migrant's decision to return is a private one and that there is no readily available policy tool to make up a migrant's mind – nor should there be. A more realistic perspective is that some migrants' choices might be constrained by counterproductive policies: given a broader menu of options, some apparently permanent migrants might choose to return home. Policy making could then focus on broadening choices and removing institutional obstacles.

In any case, the hope that better use of diaspora networks will reduce the cost or raise the efficiency of reintegration efforts is speculative. Dahou and Foucher (2004) detail how the public image of the return migrant in Senegal has been transformed from one of scorn to one of celebration. Transnational diaspora networks will thus have better luck reintegrating migrants in the current Senegalese context than was the case in decades past. In many countries, however, it is likely that return migrants may be viewed askance by society; equally important, migrant networks are also likely to be viewed this way in such societies.

De Haas (2006) and other authors promote the idea that, instead of encouraging voluntary return, diaspora networks could be encouraged to foster a kind of “virtual return”. Initiatives of this kind could focus on repatriation of skills and resources, but not necessarily of the migrants themselves. Such repatriation of resources could be powerfully catalysed by remittances. Concrete examples include “home-town associations” formed by Latin Americans, and Mexicans especially, in the United States; among their activities (in addition to affirmation of identity and other roles valuable to migrants), they pool remittances for social investments in their home towns. Moreover, these initiatives can be leveraged by public policy. Iskander (2005) details the case of the *Tres por uno* (Three for one) programme in Zacatecas state, Mexico, in which the state government matches each peso remitted with three of its own, provided they are channelled into productive social investments like schools and infrastructure. She also outlines a similar programme in Guanajuato state that has not been as successful and deduces important lessons for policy makers from the comparison. (In the latter case, migrants were constrained to invest in isolated regions and even the added incentives were probably not sufficient to make these investments viable.) Daoud (2004) describes the evolution of the French-based non-governmental organisation Migrations et Développement, which has similarly pooled remittances for social

investments (rural electrification, hydraulic works, road construction, clinics) in the Moroccan province of Taroudant.

In addition to endorsing the idea of government matching funds, as in the Zacatecas example, the European Investment Bank (EIB) recommends that banking systems offer banking services specifically targeted at migrants – including mortgage products, remittance-tailored bank accounts, and investments funds – in order to channel remittances into productive investments (de Haas, 2006).

For the high-skilled, several proposals have been floated as ways to repatriate skills. For example, the African Human Resources Programme (AHRP), touted by the GCIM, would create a database of Africans teaching in universities and high schools in Europe, the United States, Canada and elsewhere, to be placed at the disposal of African states and other stakeholders active in education and teaching in Africa (de Haas, 2006). Given the success of university programmes that bring together internationally acclaimed faculty for short but intensive teaching semesters in far-flung locations, the AHRP and ideas like it could be productive.

Skilled and wealthy expatriates will return in large numbers, if at all, only when the institutional environment in their home countries improves. (Indeed, under such circumstances one would not be surprised if third-country nationals immigrate to those home countries to take advantage of opportunities; one would expect the expatriates to return first, however.) That is, if the objective is to induce definitive return migration, there is no substitute for development and transformation of poorer countries. This discussion suggests, however, that definitive return is not necessarily the only objective that might be pursued.

### ***5.3 Diaspora networks can mitigate migration-policy trade-offs***

Let us return to the three principal painful trade-offs facing the migration policy maker, enumerated at the beginning of this section. Recall that we have identified three key characteristics of diaspora networks: they can be information intermediaries; they have access to “inside information” about their members; and they have recourse to contract enforcement mechanisms not available to outsiders.

How can diaspora networks lessen the constraints imposed by these trade-offs?

**1) Diaspora networks can increase the contribution of low-skilled mobility to labour market efficiency.** The question is whether diaspora networks can somehow maximise the benefits of low-skilled migration for labour market efficiency. Certainly their information-intermediary role is at work, in that they communicate labour market information to would-be migrants about the most remunerative job opportunities.

**(2) Diaspora networks can reduce the costs of the brain drain to developing countries.** If diaspora networks can be encouraged to facilitate “virtual return”, they can reduce the cost to sending countries of the loss of skilled workers. Circular migration regimes that facilitate temporary movement of such workers, including the acquisition of new skills and practices, will complement the activities of networks. The promise of networks is that they will allow people in sending and receiving countries to participate in transnational networks, rather than having to make a dichotomous choice between one locale or the other. Proposals to pool remittances for investment in educational and community development are a concrete example. Proposals to marshal intellectual resources of the high-skilled remain slightly more ephemeral, but should be encouraged.

**(3) Diaspora networks reduce the costs of social integration.** If migrants’ associations are active in labour market integration (trade-off number 1 above), they are also serving the role of social integration, given that the research resoundingly shows that economic integration is the most powerful driver of social integration. Moreover, migrants’ organisations can intermediate between migrants in need and the public sector to ensure more effective take-up of existing integration programmes. Such organisations can similarly be canvassed regarding their views about how these programmes can be redesigned to serve the objective of integration more effectively. It is also possible that these organisations can be effective substitutes for publicly provided services. Informally, they engage in many such activities in any case, but a formal alliance with public authorities might enhance their ability to provide social insurance and social assistance to migrants at a lower cost than provision by the public authorities alone. (This assertion should be interpreted cautiously. Migrant networks may reduce the cost of a newcomer’s adjustment but nevertheless *raise* the cost of his or her integration into the fuller society; the migrant might regard the network as a superior substitute to integration into national life, resisting efforts at integration.)

(4) **Diaspora networks engender a valuable culture of double nationality.** This remains a conundrum. The very effectiveness of diaspora networks derives from having a foot in both countries, and efforts to integrate migrants ask them to put both feet in their new country. At the same time, public misgivings about immigrants are amplified by the sense that migrants have dual loyalties. It may be that the resolution to this dilemma is an intertemporal one: over time, some individual migrants will ultimately shift their allegiance to one or the other country, even as migrant organisations continue to be a bridge between them. Some organisations, too, may shift over time from being concerned with the problems of newcomers to being concerned with the problems of new citizens. Nevertheless, in many cases a genuine tension will remain. To encourage diaspora networks, a shift in public attitudes will have to occur.

Juxtaposing the problems besetting coherent migration policy and the promise of diaspora networks gives us reason to be guardedly optimistic about this novel policy instrument. Some cautionary notes are necessary. First, as Rindoks *et al.* (2006) point out, OECD country governments can explicitly deal only with formally constituted organisations, but many of the claimed benefits of migrant networks lie in the interstices of informal relationships and social capital. More generally, the putatively beneficial effects of diaspora activities arise from social practices first, and public policies second, if at all.

Second, OECD country governments are not the only public actors that must play a role. There must be meaningful co-operation between OECD country governments and the governments of migrants' home countries. A MIDA pilot project in Italy foundered owing to the lack of commitment of the Ethiopian and Ghanaian governments (de Haas, 2006). Databases on migrant diasporas will be useful largely to the extent that sending country governments make use of them. Some countries of origin have established ministries of migrant affairs, a clear signal of political will; others have shown less alacrity in integrating migration into national development plans.

## 6. Conclusion

This review of the terrain suggests that expert opinion and policy debate on the link between migration and development have moved through two stages; we advocate a third.

The first might be called the “conventional wisdom”. According to this view, some types of migrants are needed in OECD countries for demographic or skill-specific reasons, but domestic migration policies need to focus their efforts on protecting low-skilled workers from competition with immigrants. If labour could be recruited on a “guest worker” basis, so much the better, but if migrants were to settle more permanently, significant resources should be marshalled to ensure their social integration into the host societies. This “conventional wisdom” view pays no attention to the impact on migrants’ home countries.

A more recent shift in thinking might be called “challenging conventional wisdom”, which commentators always enjoy doing. This view starts with a recognition of the massive development potential of international migration: the most recent example is Pritchett’s (2006) claim that \$150 billion in benefits to developing countries could be obtained annually from labour migration equal to a mere 3 per cent increase in the OECD labour force. The proponents of this view emphasise the existence of win-win scenarios, in which shortages of low-skilled workers in OECD countries and surpluses in developing countries could give way to greater labour market efficiency in the OECD and new resources for development in the developing world.

We urge a new, slightly more guarded, view. Our thinking is inspired by the logic of **policy coherence**; namely, that policy instruments in one domain have an impact on outcomes of other policy domains, and this means there are difficult trade-offs. On the basis of a wealth of new critical evaluation of several research literatures in several languages carried out as part of the OECD Development Centre’s Gaining from Migration project, and drawing upon country case studies included in our work, we elucidate some of these trade-offs. We suggest that for migration policy makers in the OECD, there are win-win scenarios to be sure, but there remain four difficult trade-offs. First, developing countries gain from low-skilled emigration, but low-skilled workers in OECD countries remain vulnerable, even if the observed effects on their wages or employment are not as catastrophically negative as the conventional wisdom might have feared. Second, brain drain of skilled workers from developing countries, despite the potential contributions they could make to their home countries, imposes real pain on these countries even as it reduces skill shortages in OECD countries. Third, integration is costly, and increased immigration raises these costs even as it delivers other benefits. Fourth, the ideal of full integration or permanent settlement conflicts with the emerging transnationalism of migrants and their communities.

We also urge a fresh look at the potential to **encourage diaspora networks** as a new policy instrument, arguing that diasporas could in principle lessen the severity of the first three of the hard trade-offs we identify. Nevertheless, for diaspora networks to be effective intermediaries between migrants' home and host countries, we need to change our attitudes towards full integration and entertain the idea of transnational migrant communities. That is, the encouragement of diaspora networks exacerbates the fourth of the trade-offs we identify.

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# Comment

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by

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Dayton-Johnson and Xenogiani's paper is impressive in its ambition and scope. It draws on and summarises a number of research works produced under the OECD Development Centre's "Gaining from Migration" project. It is easy and interesting to read, and contains many interesting arguments. It is difficult to disagree with its conclusions and recommendations. In this commentary, I will simply highlight the points that seem to call for further discussion or be worth further study.

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The paper's most original feature, as well as its limitation, is that instead of studying the impact of migration for host or source countries in a specific, well-defined subject area, the authors place the issue of North-South migration in the framework of a trade-off between several potentially conflicting objectives of Northern countries. This approach naturally leads them to the subject of "policy coherence", to which the OECD Development Centre has also devoted several studies. Before addressing a few questions that are more matters of detail or side issues, this commentary will highlight three criticisms of such an approach: the first relates to the choice of objectives, the second to the mechanisms and identification of the trade-offs considered, and the third to policy coherence.

## Objectives

The authors consider three objectives of rich countries: balancing supply and demand on domestic labour markets, social cohesion and reduction of world poverty. This choice is largely *ad hoc*: these objectives make intuitive sense, certainly, but the decision to consider them instead of other objectives, or to consider only these three, is simply arbitrary. Other objectives could be taken into consideration: balancing social accounts (e.g. migrants' contribution to the funding of pensions), public health (the problem of pandemics), national security – a goal that leads the United States, for example, to engage in the “transformational diplomacy” so dear to Condoleezza Rice, based on the notion that the nature of political regimes counts for more than the distribution of power. We should also mention the importance of political manoeuvring by governments trying to stay in power. How else can we interpret – apart from the shocking aspect of the measure – President Bush's authorisation of the construction of a wall between the United States and Mexico? This is an extreme measure that does not really stem from a trade-off among interacting objectives, but rather from objectives other than the three considered by the authors.

## Mechanisms and trade-offs

One of the problems with the authors' approach is that they are obliged, owing to the scope of the issues addressed, to simplify the causal relationships involved in the effects of migration. In so doing, they lose some of the analytical subtlety needed in addressing this complex subject and cannot use economic research that documents this complexity. This limitation of their paper may be illustrated with two examples:

The authors mention some aspects of the debate over the impact on source countries of flows of skilled migrants (i.e. brain drain issues), but they regard this impact as primarily negative. The trouble is that this is still an open question, as shown by Frédéric Docquier's paper in this volume. In particular, it is essential that skilled human capital formation in poor countries not be treated as exogenous. The possibility of migrating increases the return to education and to skills acquisition. Thus, analysis of the brain drain must take into account the endogenous development of such skills, which can be encouraged by the prospect of emigration. The net gain or loss is uncertain, and this uncertainty can be dispelled only by careful empirical research, although

Docquier's work tends to confirm that the brain drain has a high net cost for some poor countries, notably in sub-Saharan Africa.

The effect of migrants' remittances, which the authors discuss only briefly, is considered to be largely positive for source countries. This also makes intuitive sense, but here again, the subject needs to be approached at a finer level of detail: migrants' remittances are also associated with "Dutch disease" and similar problems; they may fuel speculation in land and real property (examples of this have been observed in Senegal – for example in Dakar – and in Nepal), or may cause an increase in inequality. Moreover, a recent World Bank study by Pablo Fajnzylber and Humberto Lopez, *Close to Home: The Development Impact of Remittances in Latin America*, shows that there may be a tendency to overestimate the impact of migrants' remittances. In fact, this impact depends, like that of development aid, on the quality of local policies.

The trade-offs considered are more presented as given than documented, and they are not quantified, which makes it difficult to undertake any comparisons and, precisely, to take decisions on these trade-offs. One of the difficulties facing the authors is the poor quality of the data available. What, for example, should a policy maker do when migration results in lower wages for part of a country's population but benefits other groups? In addition, the trade-offs studied by the authors relate to effects that, once again, are intuitively sound but are essentially short-term effects. What contribution does migration make to the medium- and long-term demographic balance and to the long-term growth potential of the economy? Is not strong population growth, due in part to migration, one of the reasons for the growth potential of the United States, which, though dropping at the moment, is still envied by European countries? Can an ageing Europe afford to consider this subject only in the short term?

In sum, one might respond to the approach used by Dayton-Johnson and Xenogiani by saying that they should first give more thought to the objectives a country sets, justifying their choices more systematically, and only afterwards study the impact of migration on these objectives. On this second point, however, we are just beginning to understand a few of the effects of migration, owing to the body of theoretical and empirical work that is gradually accumulating. And if we do not understand these effects, it is clearly difficult to link them to national objectives. Moreover, little is known about the impact of the policy instruments available for influencing migratory flows.

## Policy coherence

At the risk of disturbing the reigning consensus, it may be useful to reconsider the issue of policy coherence in the light of these uncertainties. When we do not really know which objectives to pursue and what priority to assign them, when we have not mastered the policy instruments needed to achieve them and when little is known even about the impacts of such policies, “coherence” may be a worthy but mistaken idea. Incoherence, in contrast, helps us to understand the causal mechanisms involved and informs policy choices by revealing the contradictions between policy objectives. It admittedly does so in a chaotic and unspecific way, but this is part of a necessary learning process on changes in collective preferences concerning objectives that have become potentially contradictory with the advance of globalisation: these questions can really be decided only through competition between special-interest agendas. In fact, we all want greater coherence, but coherence geared towards our own lists of priority objectives! Which do we prefer: incoherence, or coherence in support of a different ranking of priorities?

The authors rightly call for policy coherence with regard to the objectives pursued, but it may be too early for real coherence on the issue of migrations and development. We do not know enough to reach firm conclusions on economic policy recommendations concerning migratory flows and development policies. What is most urgently needed is the process of humanistic and social learning about the movement of individuals, a process that extends far beyond the merely economic dimension or knowledge-building on a still recent phenomenon that has not been sufficiently documented and quantified. In this context, the quality of political leadership is wholly decisive, since there is as yet no “good practice” to guide policy. The time-frame of decision making, however, is not the same as that of scientific or empirical knowledge creation, which poses a challenge to the scientific community, and particularly economists: how can they provide effective support to decision making? In the conference that gave rise to this volume, certain comments from the floor suggested that we should show more modesty, but also that we should broaden our approaches to encompass history, demography and the social sciences. In addition, it is very clear, as in the case of trade, that the relevance of economic analyses to the public policy debate will depend on economists’ ability to focus more on issues of income distribution and inequality, whereas their inherent bias leads them primarily to study efficiency issues.



## Additional remarks

The authors round out their paper with a very useful and interesting section on the role of diasporas, which opens up a broader set of issues and is somewhat unrelated to the rest of the paper. This section contains many interesting points. However – and this is merely a detail – the notion mentioned therein that diaspora networks reduce the cost of migrants' social integration does not seem convincing. These networks do reduce the cost of migration for immigrants by offering a structure to receive them in the host country, but they can in fact make social integration more difficult because ultimately they make it less necessary.

Several of the points made would be worth analysing in greater depth. For example, the notion that return migration benefits the host country does not take into account the fact that migrants who are likely to return to their home countries also have less incentive to become integrated, in terms of both language and culture.

What might constitute an incentive to return is another interesting question. It might be useful here to cite Dani Rodrik, who has asked similar questions, suggesting that a potentially Pareto-efficient solution would be to introduce a system of temporary employment contracts in host countries that provide for various penalties for the migrant or the employer to ensure repatriation of the migrant after a given number of years. We might also mention the work of Bhagwati, who recommends that migrants be taxed (*Financial Times*, 6 October 2005), which could lead to encouragement of the movement of skilled workers in order to reduce poverty in the source country! In recommending that migrants be taxed in the source country, Bhagwati seems indeed to ground his argument on the idea of national consciousness and an insistence on horizontal equity.

This issue leads us to the distinction – not made in Dayton-Johnson and Xenogiani's paper – between individual utility (welfare) and the "development" of a country. In fact, one may ask on what basis and from the standpoint of which groups the impact of migration should be judged, particularly as regards source countries. In many of the latter, solidarity is not really organised on a national scale, but rather on the scale of the family or village. As a result, the notion of an impact on home countries is not fully relevant politically. If development is approached in the manner of Amartya Sen, as the individual's ability to realise his/her capacity, it may be argued that it is important for individuals to have the right to migrate.

## Concluding remarks

This context raises the question of the role to be played by official development assistance (ODA), which is addressed by Dayton-Johnson and Xenogiani. ODA has a role to play in the search for “win-win” solutions, particularly as regards aid for the improvement of health and education systems. At the same time, one must not take too mechanistic and causal a view that connects aid directly to management of migration. In the long term, development can only reduce the incentive to migrate from South to North, but the short-term effects will necessarily be unclear. Human capital formation makes individuals in poor countries more employable in the rich countries and can increase their incentives to migrate, at least initially. The issue thus seems to me more one of finding the right mix of migration policies, social policies in rich countries and aid policies to manage this phenomenon in a way that creates a “win-win” solution, without which tension and conflict will arise. As for the rest, and in the short term, ODA clearly has an important support role to play concerning the free flow of migrants’ remittances and how well they are used. The AFD is deeply involved in such co-development programmes. But this is only one aspect of the question.

Lastly, in addition to further theoretical and empirical research on migration, it is necessary right here and now to apprehend migration in its global dimension, as a new, and probably dangerous, stage in the globalisation process (see Docquier, in this volume), and a stage that we must learn to manage collectively. Jagdish Bhagwati, once again, raised this problem early on by calling for the establishment of a world migration organisation that would set up an international institutional architecture. It seems important not to succumb to the temptation of bilateralism, which is even more dangerous where human beings are concerned than for goods and services, and to avoid competitive behaviour between potential host countries. Migration is thus truly a matter for joint international action and for governance of globalisation. It will also be important to combine such actions with the establishment of safety nets, which are needed in our countries to facilitate acceptance of globalisation. It is to be hoped that our discussions will help to increase awareness of this, and Dayton-Johnson and Xenogiani’s paper makes an excellent contribution to the identification and analysis of the relevant issues.

by

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Dayton-Johnson and Xenogiani's presentation rightly emphasises the informational advantages of migrants. It mentions the informal mechanisms that generate trust and thus allow secure transactions between individuals, and highlights the importance of bonds of loyalty.

Migrants can, within the limits clearly indicated by Dayton-Johnson and Xenogiani, exploit these advantages to conduct trade between their host and home countries, to participate in the financial relations between the two, to serve as a bridge between new migrants and the home-country population in terms of integration, and to engage – individually or collectively – in development activities in their home regions.

I would like to comment on five issues.

## **1. The link between migration and development**

On this issue, there is often confusion between public policy and social practice. The role of migrants in the development of their home countries is primarily a matter of social practice, or rather the scattered sum of longstanding social practices, encompassing a wide range of possible actions. The Lebanese diaspora, for example,

has been helping to finance public facilities in rural Lebanese villages since the Ottoman occupation.

This diverse range of social practices may be approached through the various types of financial transfers used: *i)* remittances by individuals to family members remaining in the home country, in which traditional forms of solidarity are projected across national borders to countries where institutional solidarity mechanisms are weak or non-existent; *ii)* remittances by individuals for individual investments (in property, trade and, more rarely, manufacturing enterprises or services other than trade); and, *iii)* collective remittances for community projects in the migrants' region of origin, in which construction of infrastructure can be extended into economically productive projects.

These practices have variable and ramified effects on the situation of the home country: *i)* for family remittances: consumption, insurance (by smoothing out the effects of economic and natural risk), education, health, but also the possibility of creating disincentives to work hard; *ii)* for individual investment projects: the effects are positive but small (on the one hand, the proportion of entrepreneurs in migrant populations is not significantly higher than in host-country populations; on the other, these investment possibilities are heavily dependent on factors determining the trust needed to start up a business in institutional environments that offer little support to private initiative); and, *iii)* collective actions undertaken by associations of migrants that invest in development projects in their home countries are in most cases highly effective, because they are based on participatory processes driven by the migrants and villagers themselves. These actions aim to make such regions of emigration more attractive for the natives, and most especially for the young. Although such actions are undertaken only in specific types of regions (generally rural areas where the state is conspicuous by its absence, where there is a strong culture of community solidarity, etc.), such regions are – by their very nature – areas of high emigration.

In addition to these direct effects, there are indirect effects: in the words of a Western Union advertisement, "you're not just sending money!" When families travel to their home countries on holiday, a transfer of cultural and social behaviour occurs: attitudes towards health and education, particularly education for girls (in the home country, children are not automatically sent to school), towards fertility (reduction of the birth rate in areas of emigration), towards the local authorities (in terms of rights), etc.

All of these initiatives are private in nature. Public policy cannot generate such actions *ex nihilo*, but it can encourage existing practices of this type on the basis of trust between government and migrants' associations, through measures such as facilitation of remittances, the creation of financial tools conducive to economic initiative (which requires sound banking intermediation) and financial support to collective projects within the framework of official development assistance.

In France, support provided to FORIM (the Forum des organisations de solidarité internationale issues des migrations), an association of diaspora organisations working for the development of their home countries, is helping to build this relationship of trust.

The shift in vocabulary from "mobilising" diasporas to "encouraging" diasporas is a positive development reflected in Dayton-Johnson and Xenogiani's paper.

## **2. Coherence between migration policy (management of migratory flows) and policy supporting diasporas' efforts to foster the development of home countries**

Experiments in giving migrants an incentive to return home, based on the creation of an economic activity in the country of origin, have shown their limitations throughout Europe.

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For a legal migrant, the decision to return home is a personal decision that is taken according to the migrant's view of his/her future life and that cannot be brought about by any incentive mechanism. At best, those who have already decided to return may take advantage of an existing mechanism to realise their own plans.

Host countries' support for diasporas working to foster development in their home countries must necessarily be based on relations of trust between the diasporas and public institutions. Any attempt to instrumentalise diasporas with a view to encouraging return policies would merely cost these organisations their legitimacy in the eyes of migrants, and thus render such policies less effective.

### 3. The effects of remittances on the home-country economy

Remittances have clear, measurable effects at the macroeconomic level: they are more stable than aid and FDI flows; they reduce balance-of-payments deficits; they affect exchange rates (which tend to appreciate if the amounts remitted are large relative to the size of the economy), and so forth.

However, other effects of remittances – their impact on growth, inequality and poverty reduction – are hardly perceptible at the national level. One reason for this is that migration generally concerns sub-regions within home countries (what the European Investment Bank's study on remittances calls "corridors"), and that country-level analyses are thus too general to capture phenomena specific to these sub-national areas.

In terms of coherence between development policy and migration policy, a guiding principle of official development assistance could be better targeting of countries and, most important, of emigration regions within these countries.

Within these sub-regions, remittances may raise the level of human capital (education, health), but they may also, above a certain threshold of purchasing power transferred to the home country, constitute a disincentive for productive work. For example, some rural Egyptian villages subsist entirely on the remittances sent by migrants in the Gulf countries.

Moreover, the effects of remittances depend on the motivations of remitters, which in turn are dependent on many different factors: intra-family flows, for example, depend on cultural factors that differ sharply from one group to another (solidarity, gifts, family obligations), on migrants' age and level of qualification, on whether their families have joined them in the host country, and on how long ago they migrated (degree of integration in the host country).

These motivations also vary over time according to the course taken by individual migrants' lives: while recent migrants send substantial remittances, their contribution declines when their families join them and they seek to become integrated, and then rises again when they begin to consider retirement. The second and third generations have a tendency to forget their parents' countries initially and to "return to their roots" later in

life, undertaking individual investment projects or, more often, collective projects that are concerned more with the country of origin as a whole than with their parents' village.

All of these intermingled factors make it difficult to observe general trends that could be captured by country studies based on econometric analysis of national data at a given time T. A number of monographs focusing on the local level show clearly the diversity of the possible impacts, positive and negative, of remittances on development and poverty reduction, but aggregating these effects at national level does not lead to valid conclusions.

By analogy with the flower *Saxifraga umbrosa*, commonly known in French as “painter’s despair” because it consists of a multitude of tiny white flowers, one might say that migration is the “econometrist’s despair”. The econometric approach must be supplemented by those of other social sciences (demographers, geographers, sociologists, anthropologists, etc.).

The general conclusions presented by Dayton-Johnson and Xenogiani should thus be taken with a grain of salt, particularly as regards the effects of remittances on poverty reduction. However, the paper does return to the question of targeting, in particular via the sector-specific effects of skilled migration on the health and education sectors of some home countries. In these countries, this dimension could lead to the targeting of development policies on these sectors, with the aim of stabilising the health and education workforce at local level.

#### **4. Conflicting objectives of development policy and migration policy**

It is well known that restrictions on temporary migration to Northern countries often lead migrants to stay in the host country once they have crossed the border to the North. Yet temporary migration could potentially be conducive to actions in favour of the development of migrants' home regions, and an increase in such migration would thus be positive for development. In terms of control of migratory flows, however, it is very difficult to distinguish between genuinely temporary migration and entry for purposes of permanent settlement.

## 5. International migration as mobility of human capital, an uncontrolled aspect of globalisation

Despite the general tightening of restrictions on access to the developed countries, the decrease in travel and communication costs works in favour of mobility and migration.

Many migrant families have an experience of transnationality that is not limited to two countries: for example, family members may have emigrated to Italy, Canada and the Netherlands and all get together for holidays in an isolated Moroccan village in the Atlas mountains.

Globalisation also fosters trade networks – which may be either formal or informal, large-scale or limited to what fits in a suitcase – that pass through complex channels between home countries, the former USSR, Asia, the Middle East and Europe. Such networks create a population of mobile individuals who live in a transnational space in which they accumulate knowledge of trade on a global scale.

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# Migration and Remittances: The Impact on Countries of Origin

by  
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## 1. Introduction

International labour mobility can be a powerful source of growth and convergence at the international level. O'Rourke *et al.* (1994) show that international migration played a key role in fostering income convergence among countries during the 19th century. Given the sizeable productivity differences among countries, the welfare gains arising from international migration are likely to be large. Hamilton and Whalley (1984) estimate the gains in world output arising from free labour mobility to be at least 20 per cent and perhaps as high as 40 per cent of world GDP<sup>1</sup>.

Most of the benefits from international migration, however, accrue to the migrants themselves. The impact on either the source or the receiving country remains controversial. Moreover, most of the recent literature has focused on the – supposedly negative – impact of *immigration*, and thus shows a distinct bias towards the receiving countries' point of view.

Admittedly, market imperfections can limit the benefits of labour mobility. International migration can lead to the depopulation of entire regions, with an obvious

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<sup>1</sup> Hamilton and Whalley (1984) seek to control for many of the factors, such as technological or price level differentials, that may account for international wage differences.

welfare loss for the immobile factors. Equally important, labour outflows could well deprive the sending regions of their most skilled and dynamic workers. This “brain drain” effect is viewed with great concern in source countries, even more so now that receiving regions appear to be dedicated to promoting skilled immigration. The negative impact of emigration can however be offset by flows of remittances, return migration and favourable educational incentives. The ultimate impact is thus an empirical matter.

This paper takes a close look at the impact of international migration on source countries. We first assess the welfare impact of migration and show how remittances play a crucial role in this respect. We also examine the link between remittances and the skill composition of emigration. Finally, we assess the contribution of remittances to growth.

Our main results can be summarised as follows. First, migration is typically associated with a welfare loss in sending countries, unless remittances are sufficiently high. Second, remittances are a declining function of the proportion of skilled workers in the migrant labour force, suggesting that the eventual negative impact from the brain drain is not necessarily offset by a larger flow of remittances. Third, we find considerable evidence that remittances contribute positively to growth. Overall, sending countries are unlikely to benefit from the policy shift in receiving countries in favour of high-skill migrants.

## **2. Migration: some basic facts**

According to United Nations data, the stock of international migrants increased by almost 14 per cent between 1990 and 2000, from 154 million to 175 million. Over the same period, however, the world population increased by more than 15 per cent. Hence, while migration has been rising in absolute terms, there is no indication that it has increased as a share of world population. Focusing on developing countries, the (unweighted) net migration rate stayed basically unchanged at 0.9 per cent. Only for low middle-income countries did the net migration rate show a clear rise from 1.37 per cent in 1990 to 1.54 per cent in 2000 (Table 1). For low-income countries, the net migration rate actually declined, from 0.66 per cent to 0.38 per cent.

Table 1.  
**Net emigration rates from developing countries** (unweighted averages)

	1990	2000
Low-income countries	0.66	0.38
Low middle-income countries	1.37	1.54
High middle-income countries	0.60	0.63

*Source:* World Development Indicators.

Docquier and Marfouk (2004) come to very similar conclusions. They find that total out-migration rates have changed very little for most African countries but have increased substantially for Latin American countries. They also confirm that migration rates reach a peak for low middle-income countries.

At first blush, the modest rise in migration is at odds with the widespread notion that immigration has substantially increased in the industrial countries. Indeed, OECD data show that the foreign-born population has been rising as a share of the host-country population in most industrialised countries (Table 2). In 2000, foreign-born individuals accounted for 9.9 per cent of the US population, as against 7.9 per cent in 1990. The share of foreigners rose also in Austria (from 5.9 per cent to 9.1 per cent), in Germany (from 8.4 per cent to 8.9 per cent), in Italy (from 1.4 per cent to 2.1 per cent) and in the United Kingdom (from 3.2 per cent to 3.8 per cent). This trend is by no means generalised, however: in the Netherlands and Belgium, the share of foreign-born individuals actually fell. Nonetheless, it remains true that the stock of foreign-born individuals shows a (limited) rise in most, albeit not all, OECD destination countries.

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How then do we reconcile the growing weight of the foreign-born population in the OECD with the fact that the worldwide migration rate has been basically unchanged? The answer is quite simple: these apparently conflicting trends reflect the fact that population growth has been substantially slower in host countries than in the rest of the world. As a result, the flow of migrants towards receiving countries has accounted for a constant share of the developing world population but a growing share of the industrial countries' population.

By and large, therefore, migration is still the grand absentee of globalisation. The contrast with the rising trend for commodity trade and international capital flows is

Table 2.  
Foreign-born population in selected OECD countries (% of total population)

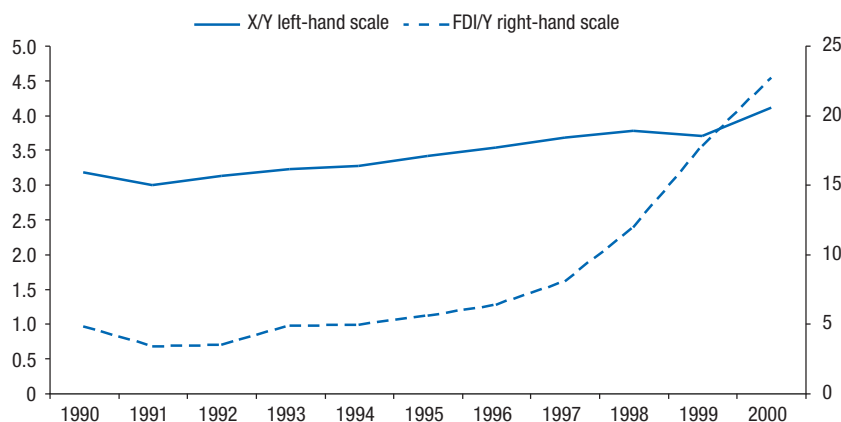
	Early 1990s	Late 1990s
Austria	5.9	9.1
Belgium	9.1	8.7
Netherlands	4.6	4.2
Germany	8.4	8.9
Italy	1.4	2.1
United Kingdom	3.2	3.8
United States	7.9	9.9
Canada	16.1	17.4
Japan	0.9	1.2

Source: OECD (2000).

striking. Between 1990 and 2000, world real GDP increased at an average annual rate of 3.7 per cent. During the same period, real exports increased at an average rate of 6.6 per cent and real foreign direct investment (FDI) flows by 17.7 per cent. As a result, the share of both exports and FDI in world GDP increased substantially (Figure 1).

The marginal role of international migration in the present wave of globalisation seems quite puzzling when we recall that income differentials have if anything widened compared to the 1960s or to the late 19th century (Pritchett, 1996). We need not look

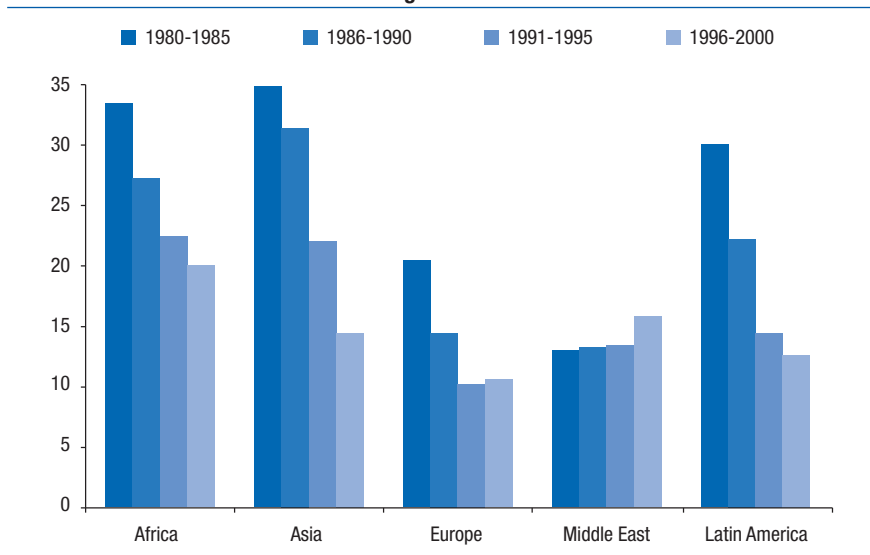
Figure 1.  
World trade and FDI (% of world levels)



very far, however, to find the answer to this puzzle. While the economic incentives in favour of international migration have grown larger, policy has become increasingly restrictive. International migration was largely free during the late 19th century and even encouraged in the 1960s, whereas the policy imperative today seems to be to restrict immigration, with the notable exception of skilled migration. Since 1974, most industrial countries have tried to limit new immigration and, at the same time, to favour the return of previous immigrants. While many of these policies have been only partly successful, they have succeeded in slowing the flow of immigrants. More recently, in response to the growing shortage of skilled workers, most receiving countries have tried to shift the focus of their immigration policy, with the view to favouring the recruitment of highly skilled workers. This new twist in the policy stance towards immigration has become a source of considerable concern in traditional sending countries, which are afraid that they will lose their most skilled and entrepreneurial workers. Clearly, migration policies largely account for the relatively marginal role of international population and labour flows in the present globalisation episode.

In sharp contrast, a more liberal policy stance has been instrumental in opening up the world economy to trade and FDI. In Figure 2, we see that over the last 20 years

Figure 2.  
Average tariff rates



tariff barriers have declined quite significantly in most developing regions, from 33 per cent to 20 per cent in Africa, from 35 per cent to 15 per cent in Asia and from 30 per cent to 13 per cent in Latin America. Developing Europe, a relative latecomer to the globalisation process, also managed to halve its average tariff rate from 20 per cent to 10 per cent. The notable exception to this fairly general trend is the Middle East, where tariff barriers increased from 13 per cent in the early 1980s to 16 per cent in the late 1990s. Non-tariff barriers have also declined for most developing countries (Kee *et al.*, 2004).

Where barriers to FDI are concerned, the general picture of a more liberal regime still holds. Although restrictive measures are more difficult to quantify in this area, UNCTAD has maintained a headcount of FDI measures and classifies them according to whether they represent a move towards a more or less liberal regime. The trend is definitely towards a more open policy regime, with liberalising measures outnumbering restrictive ones by a factor of ten.

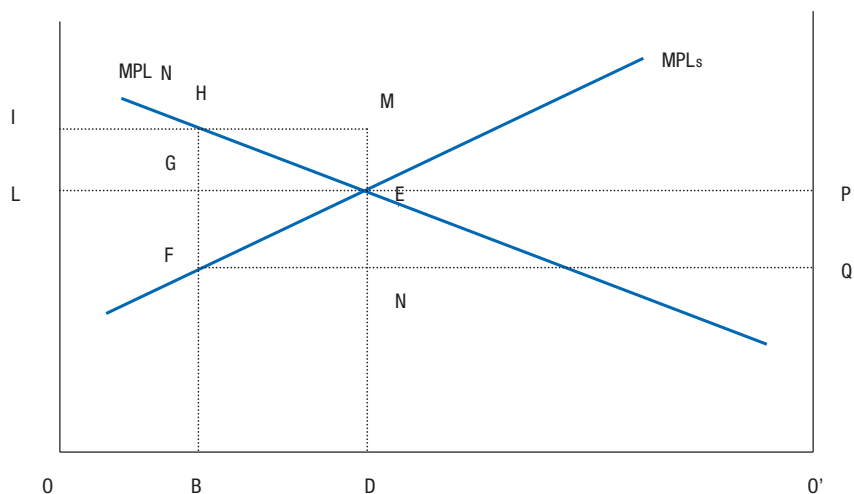
### 3. The impact of emigration on the source country<sup>2</sup>

Migration is typically seen as a strong engine of growth and convergence. Restrictions on migration are deemed to hamper the income convergence process between rich and poor countries. Historians (O'Rourke *et al.*, 1994) have often pointed out that intercontinental migration was the most powerful force working towards convergence across the Atlantic.

The argument is easily expressed in a simple diagram of a two-country economy (Figure 3). Employment in the South ( $L_S$ ) is measured from right to left, employment in the North ( $L_N$ ) from left to right. The two schedules  $MPL_S$  and  $MPL_N$  measure the marginal productivity of labour in the South and in the North respectively, both as a declining function of their employment levels. Suppose that the initial equilibrium is at B, with OB workers in the North sector and O'B workers in the South. The equilibrium is inefficient. Given that the marginal productivity of labour is lower in the South, world output can be increased by letting labour migrate towards the North. At point C, world output has increased by the area EHF.

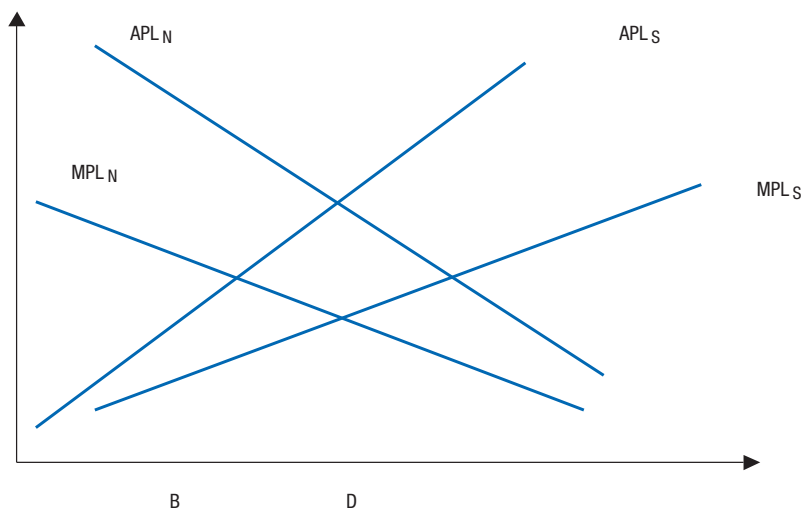
<sup>2</sup> This section draws on Faini (2002).

Figure 3.  
The welfare impact of international migration



Migration will also lead to rapid convergence in income between the North and the South. Let  $APL_S$  and  $APL_N$  measure the *average* product of labour in the two regions respectively (Figure 4). With a constant ratio of the labour force to population, the

Figure 4.  
Migration and income convergence



average product of labour will also measure average income, namely per capita GDP. Clearly, at the initial equilibrium B, per capita income is higher in the North than in the South. After migration has taken place and wages have been equalised, income differences will have vanished.

The world as a whole will then be better off with free migration. Not only will income converge relatively faster, but the large wedge between wages in the North and in the South indicates that welfare gains are likely to be significant, even after adjusting for the different quality of the labour force in the two regions.

Migration will not necessarily benefit those left behind in the source country, however. From Figure 3, it can be easily seen that the gains in labour income (area NEPQ) are more than offset by the losses in income from capital (area FEPQ). The net loss is equal to FEN<sup>3</sup>. Migrants, however, are better off, and, quite crucially, their gains (FGEN) more than offset the losses of those left behind. Migrants could therefore fully compensate the losers and still be better off. Moreover, while compensating income transfers are typically seen in the welfare literature as a merely theoretical possibility, in the case of migration such transfers do occur, in the form of remittances. The net effect on the welfare of those left behind is ultimately an empirical matter and will depend on the amount of remittances. In a one-good two-factor economy, the rough and ready formula for computing the aggregate welfare impact of migration (Borjas, 1995) is:

$$\Delta Q/Q = -(\alpha_L m^2 \varepsilon)/2 + R$$

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where  $m$  is the emigration rate,  $\alpha_L$  the income share of labour,  $\varepsilon$  the elasticity of wages with respect to labour and  $R$  the GDP share of remittances, with the welfare change ( $\Delta Q$ ) being measured as a ratio of initial GDP. Suppose now that  $\alpha_L = 0.7$ , that  $\varepsilon = 1$ <sup>4</sup> and that 10 per cent of the home-country population lives abroad ( $m = 0.10$ ). The

3 At first blush, these findings are puzzling. We have just seen that migration will bring a fall in per capita income in the receiving country and a rise in the origin country. How then could the welfare impacts run the opposite way? These apparently conflicting results can be easily reconciled when we consider that migrants are assumed to carry little or no capital. They are therefore relatively poorer. Accordingly, average income falls in the host country and rises in the home country. Nonetheless, natives in the former country are better off, while those left behind in the latter are worse off.

4 With a constant elasticity of substitution (CES) production function,  $\varepsilon = (1 - \alpha_L)/\sigma$ , where  $\sigma$  is the elasticity of substitution. Then  $\varepsilon = 1$  is consistent with  $\alpha_L = 0.7$  and  $\sigma = 0.3$ .



first term of the equation, which measures the welfare loss from emigration in the absence of remittances, would then be equal to less than 0.4 per cent of annual GDP, a relatively small effect, most likely to be offset by reasonable values of  $R^5$ .

These calculations assume labour to be homogeneous. Two caveats are in order here. First, migrant workers may be less than perfect substitutes for native workers. With imperfect substitutability, a large inflow of foreign workers will depress the wage of existing migrants relatively more, with a negative impact on their earnings in the host country and on their capacity to remit. Both migrants and those left behind would therefore be worse off compared to the case of perfect substitutability. These effects can be substantial, as shown in World Bank (2006), where estimated remittances would fall from \$129 billion under perfect substitutability to \$88 billion under imperfect substitutability.

Second, and this is the concern most often voiced in the literature, migration may deprive sending countries of their most talented, skilled and entrepreneurial workers. Here again, the basic diagram is much too simple in that it disregards differences in skill levels and assumes only one type of labour. Note, however, that if workers, whatever their skills, are paid according to their marginal productivity, then the welfare losses from emigration are fully captured by the basic diagram. While we need some form of externality for this "brain drain" effect to be qualitatively different from those described in the basic diagram, such externalities are not too hard to identify. First, skilled workers may generate strong positive externalities in production (Barro and Sala-i-Martin, 1995; Lucas, 1990). Second, while the costs of education are borne by the home country, its benefits are lost to the country if the worker emigrates. Remittances, if sufficiently large, may once again offset these effects. We turn to the analysis of the brain drain in the next section.

5 In Faini (2002), I simply assume that  $R$  is a function of the migration rate, i.e.  $R = \beta m$ , disregarding the fact that the link between migration and remittances is likely to depend also on the skill composition of migration, migrants' links to their home country, the wage differentials between the host and source countries, and other complicating factors. Based on a simple cross-country regression, I take  $\beta$  to be equal to 0.3. While this estimate is purely indicative, it suggests that if  $m$  is not too large, i.e. is less than  $\beta/\varepsilon_{\alpha_L} \cong 0.43$ , the welfare impact of additional out-migration is positive.

#### 4. Is the brain drain a blessing in disguise?

The early development literature typically concluded that the brain drain was detrimental to sending countries. Even when skilled workers were unemployed at home, their social marginal productivity was not necessarily nil, as they could have moved to the countryside instead of migrating abroad. There are a number of reasons, however, to suspect that the brain drain is not an unmitigated curse. First, a non-zero probability for educated individuals to move abroad should raise the returns to education and ultimately may even lead to an increase in the numbers of educated workers who stay at home (Bhagwati and Hamada, 1974; Bhagwati, 1976; Stark *et al.*, 1997, 1998). Second, skilled migrants will typically earn more and may therefore remit more (World Bank, 2006), relieving the foreign exchange constraint at home and ultimately fostering growth. Third, migrants may return home after having acquired valuable skills abroad. Fourth, migrants, particularly skilled ones, may establish trade and investment links with their home countries, enhancing the attractiveness of these countries as destinations for FDI. Some of these arguments have been critically reviewed in Faini (2005b). An exhaustive and illuminating analysis of the brain drain is presented by Docquier (2006, in this volume). In what follows, these issues will only be touched on briefly.

##### *a) Does skilled migration boost the incentive to invest in education?*

The argument is straightforward and was immediately recognised by the early development literature (Bhagwati and Hamada, 1974; Bhagwati, 1976). It was then fully developed by Mountford (1997) and Stark *et al.* (1997, 1998), and tested empirically by Beine *et al.* (2001, 2003).

Suppose that the South is endowed with an inferior technology. Under plausible assumptions, the returns to education are lower in the South. If, however, some educated individuals are allowed to migrate to the North, the expected return to education – the weighted average of the skill wage in the North and in the South, with weights equal respectively to the probability of migrating abroad and of staying home – will increase, thereby boosting the incentive to acquire education in the South. The key assumption is that only educated individuals hold a non-zero probability of migrating. Otherwise, the incentive effect may run the opposite way. Suppose, for instance, that

the wage differential between the North and the South is larger for unskilled than for skilled workers. In that case, the ability to migrate would raise the relative unskilled wage and depress the incentive to invest in education. In addition, most of these models disregard the possibility of strategic complementarities among skills (Kremer, 1993). Under such circumstances, the expectation that a sizeable share of skilled individuals will migrate may discourage others – particularly those for whom migration costs are relatively large – from investing in education.

Existing evidence on the educational impact of the brain drain does not resolve the theoretical ambiguities (for an apt summary, see Docquier, 2006, in this volume). Beine *et al.* (2003) found a positive impact of migration prospects on human capital formation, as measured by the change in the proportion of persons with tertiary skills among natives in the sending countries. If investment in education is measured by educational enrolments, however, there is little or no evidence that the brain drain is associated with higher investment in education (Faini, 2005a). Beine *et al.* (2006) rely on the more comprehensive data set of Docquier and Marfouk (2004) and also conclude that measurement issues matter in determining whether migration prospects have a positive or negative impact on educational investment.

*b) Do migrants help to boost trade and investment relationships with their home countries?*

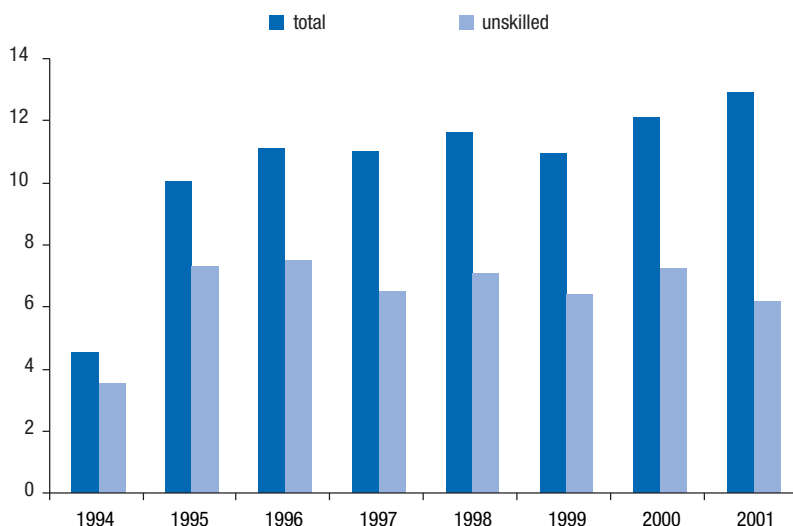
There are many reasons why migrants may have a positive impact on trade and investment links with their home countries. First, migrants may possess an informational advantage as to the investment opportunities at home. Even if they do not return, they would then promote both trade and investment between the home and host countries. Second, the presence of migrants in the host country may help overcome the informational disadvantage – and the prejudices – of natives with respect to the migrant's home country. Not only will migrants spread information about trade and opportunities in their home country, but their presence, their dedication to work and their skills will indicate to natives that the sending country is a profitable place to invest. In both cases, skilled migrants are more likely to generate these kinds of “diaspora externalities”. Indeed, Docquier and Lodigiani (2006) show that business networks are mainly driven by skilled migration.

On a more cautionary note, one could stress that FDI is typically attracted by a large pool of skills in the investment-receiving country (Barba Navaretti and Venables, 2005). Moreover, both secondary and tertiary school enrolment are positively correlated with the presence of foreign firms (Faini, 2005a). Multiple equilibria may then arise. In particular, in a low-equilibrium trap, the inadequate skill endowment in the home country will discourage foreign firms from investing there, while the lack of foreign capital will depress the demand for skills. The brain drain, if it does not turn into a brain gain, may well exacerbate such a situation and even precipitate the economy towards the low-level equilibrium. Thus, it is not sufficient to ask whether the skilled diaspora is associated with a larger flow of FDI towards the migrants' home country; one must also control for the direct effect of the brain drain on the supply of skills at home.

### *c) Return migration*

Migrants may return home bringing many valuable skills they have acquired abroad. Dustmann (1996) cast some doubts, however, on the ability of (Turkish) migrants to use such knowledge productively. More generally, Borjas and Bratsberg (1996) show that, under fairly general conditions, return migration will tend to amplify the initial selection bias. Hence, if migrants were initially relatively skilled, then the least skilled will be more likely to return to their home country. Intuitively, if the initial selection bias is positive, with the more skilled also more prone to migrate, then the least skilled will be the marginal migrants and will thus be more likely to reconsider their initial decision. Solimano (2002) reports that, at least in science and engineering, a large fraction of PhD graduates from developing countries tend to remain in the United States after graduating. National Science Foundation data show that, four years after graduation, 88 per cent and 79 per cent respectively of China's and India's science and engineering graduates are still working in the United States. More comprehensive evidence comes from Massey and Lindstrom (1994) for Mexican migrants, Reagan and Olsen (2000) for the United States, Bauer and Gang (1998) for Egypt, and Steiner and Velling (1994) for Germany. Rodriguez and Horton (1994) show that, in the case of the Philippines, returnees are somewhat less educated than those still abroad. Borjas (1989) shows that the least successful foreign scientists are more likely to return home from the United States. Finally, Faini (2006) finds that, for Europe as a whole, low-skilled individuals are less likely to be reunited with their spouses (Figure 5) and that educated migrants are less likely to return home. This finding is consistent with the notion that skilled migrants tend to stay

Figure 5.  
**Family reunification in Europe** (percentage of households where spouses are reunited)



longer in the host country and are more willing, and more able, to reunite with their close family members. This result has a number of implications for the pattern of remittances as well, as seen in the next section.

*d) Do skilled migrants remit more?*

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A further line of argument emphasises the role of remittances. According to the World Bank (2003), “the negative effects of brain drain are offset to some extent by inward remittances from migration workers”. There is indeed some (limited) evidence that remittances tend to increase with the level of skills (Johnson and Whitelaw, 1974; Rempel and Lobfell, 1978). Presumably, skilled migrants earn relatively more and therefore are, *ceteris paribus*, likely to remit more. However, this strand of the literature leaves many issues unresolved. First, the evidence does not all point in the same direction. Rodriguez and Horton (1994), for instance, show that, in the case of the Philippines, the educational level of migrants has no impact on the amount of remittances. Second, skilled workers may come from more educated and wealthy families, and may thus have less incentive to remit. Finally, they may spend a longer

period of time abroad<sup>6</sup>, either because they are more willing to reunite with their families in the host country or because they face lesser constraints in doing so. A typical finding in the literature is that the flow of remittances tends to decline with the length of migrants' stay (Lucas and Stark, 1985).

Thus, even a positive impact of education on remittances cannot be taken as evidence that the brain drain is associated with a larger flow of remittances. The direct effect of skills may indeed be positive, but the overall effect, after controlling for skilled migrants' propensity to stay longer abroad, may well be negative.

Faini (2006) develops a simple model in which migrants choose both the level of remittances and the degree of family reunification. Their key assumption is that a migrant's utility is a positive function of his/her own consumption, the level of remittances and the number of reunited close family members. Family members in turn are divided into two groups, depending on their "closeness" to the migrant. Typically, migrants will remit relatively more to their close family members and will place a higher value on being reunited with them. Consider now the impact of a shift in the composition of migration towards higher-skilled and higher-wage migrants. In this set-up, the increase in wages will have two conflicting effects on remittances to the home country: *i*) a wage effect, where higher earnings are associated with larger remittances to those left behind; and, *ii*) a reunification effect, where higher earnings will allow the migrant to afford the cost of reuniting with close family members, which has a negative impact on the flow of remittances.

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The ultimate effect on remittances of a shift towards skilled migration is therefore an empirical matter. The results of Faini (2006) suggest that, by and large, more skilled migration is associated with a smaller flow of remittances. Simulation results, based on the econometric findings, are presented in Table 3. The impact on remittances of a shift towards skilled migrants is always negative. Just as crucially, it turns to be quite large for a number of countries, such as Jamaica (−4.8 per cent), El Salvador (−3.2), Lesotho (−2.9) and Morocco (−1.5). The impact is particularly strong for the Caribbean and Central American countries, but quite significant also for countries in other regions. On average,

<sup>6</sup> More direct evidence on the positive relationship between education and duration of residence comes from Reagan and Olsen (2000) for the United States. Similarly, the intended duration of residence is found to rise with education in Germany (Steiner and Velling, 1994). Knerr (1994) finds that in the case of Pakistan skilled migrants tend to stay longer abroad than unskilled workers.

a rise of 10 per cent in the share of skilled migrants is associated with a 1 per cent decline in the GDP share of remittances.

Table 3.

### The impact of a 10 per cent increase in skilled migration on the GDP share of remittances

Caribbean		Sub-Saharan Africa	
Antigua	-1.38	Cote d'Ivoire	-0.26
Barbados	-0.89	Guinea Bissau	-0.14
Dominica	-1.45	Lesotho	-2.86
Grenada	-1.41	Mali	-0.47
Jamaica	-4.77	Mauritania	-0.04
		Mozambique	-0.17
South America		Nigeria	-0.65
		Sudan	-0.63
Colombia	-0.36	Swaziland	-1.02
Ecuador	-1.67	Tanzania	-0.03
Paraguay	-0.59	Uganda	-0.61
Peru	-0.29		
Venezuela	-0.06	Asia	
		Bangladesh	-0.55
Central America		Malaysia	-0.11
		Mongolia	-0.24
Belize	-0.86	Nepal	-0.23
El Salvador	-3.18	Philippines	-1.00
Guatemala	-0.73		
Honduras	-1.49	Western Asia	
Mexico	-0.62		
North Africa		Georgia	-0.96
		Turkey	-0.53
Egypt	-0.72	Ukraine	-0.03
Morocco	-1.53		
Tunisia	-0.92		

Source: Faini (2006).

## 5. Remittances and the macroeconomy

We saw in the preceding section that remittances are a key factor in determining the sign of the welfare impact of migration for the source country. We also saw that the impact of the brain drain on remittances is generally negative. This section takes a closer

look at remittances, documenting their size, analysing their determinants and investigating their growth impact.

*a) The growing size of remittances*

The flow of remittances is growing fast and playing an increasingly large role in the world of development finance. According to the World Bank (2006), total remittances increased from \$58 billion in 1995 to \$160 billion in 2004. They have surpassed private debt and equity flows combined as well as official development assistance flows (Table 4), and now rank second only to FDI.

Table 4.  
**Remittances and other flows to developing countries (\$ billion)**

	1995	2004
Workers' remittances	58	160
Foreign direct investment	107	166
Private debt and portfolio equity	170	136
Official development assistance	59	79

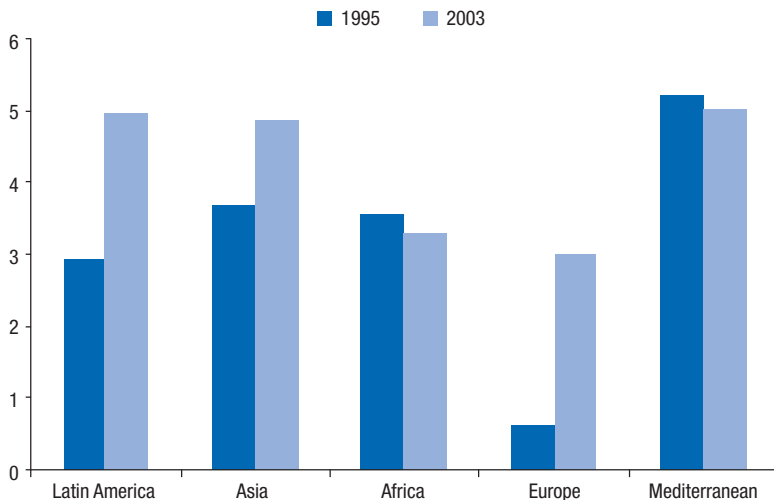
*Source:* World Bank, 2006.

The growth in remittances is due to a number of factors. First, as noted earlier, the rise in the stock of migrants in most receiving countries has been associated with an increase in remittances. Second, the fall in transaction costs may have been instrumental in shifting a substantial share of previously informal flows towards more formal, and more easily detectable, channels. Third, the heightened attention of governments in recipient countries has led to strengthened monitoring and data collection capabilities. It is not clear whether this trend will continue. Improved data collection and the shift towards more formal channels bring by definition an increase in recorded remittances, but not necessarily in actual remittances. Restrictive migration policies in the main receiving countries are likely to cap the rise in the stock of migrants, with a negative impact on the future growth of remittances. Moreover, the increasing preference of immigration policies for the admission of high-skill workers may be associated with a fall in remittances, as discussed in the previous section. In contrast, the shift towards temporary migration schemes, for both skilled and unskilled individuals, should lead to a rise in the flow of remittances.



At any rate, most regions have benefited from the surge in remittances, even when measured as a share of the recipient's GDP (Figure 6). The rise in the GDP share of remittances was particularly marked for Latin America and, as reflecting the growing integration of the region into the world economy, for developing Europe. However, both Africa and countries on the Southern shore of the Mediterranean witnessed a reduction in the weight of remittances, a trend that is not altogether surprising when we recall that for both regions emigration rates appear to have declined between 1990 and 2000 (Docquier and Marfouk, 2004).

Figure 6.  
**The growing role of remittances** (percentage of GDP)



#### *b) The determinants of remittances*

The determinants of remittances have been thoroughly investigated in the literature. First and foremost, remittances will depend on the stock of migrants abroad. Controlling for other factors, we would expect to find that the elasticity of remittances with respect to the migrant stock is close to one. Other factors are likely to be at work, however. In what follows, we develop a simple framework to describe the migrant's choice to remit.

We assume that migrants are altruistic and, accordingly, that their utility function can be represented as:

$$U = U(C_M, C_F) \quad (1)$$

where  $C_M$  and  $C_F$  are respectively consumption levels by the migrant and by those left behind (other family members). There are two budget constraints, one for the migrant:

$$C_M = Y_M - R_M \quad (2)$$

where  $Y_M$  and  $R_M$  denote respectively the migrant's earnings and the amount remitted, and one for those left behind:

$$C_F = Y_F + R_F \quad (3)$$

where  $Y_F$  and  $R_F$  denote respectively the income of the migrant's family members and the amount of remittances received. For the time being, we assume that  $R_F = R_M$ , i.e. that the amounts remitted and received are equal.

Substituting the two budget constraints (equations 2 and 3) into the objective function and maximising with respect to  $R$  yields the first-order condition:

$$U_M(C_M, C_F) = U_F(C_M, C_F) \quad (4)$$

where  $U_i$  denotes the marginal utility with respect to  $C_i$  ( $i=M, F$ ). At an optimum, therefore, the marginal utility of  $C_M$  and  $C_F$  must be equal. We can use this (admittedly stylised) framework to assess the impact of a change in  $Y_F$  on remittances. Assuming that remittances stay constant initially, a decline in  $Y_F$  would be associated with a fall in  $C_F$  and hence with an increase in the marginal utility of the family's consumption ( $U_F$ ). To restore the equilibrium, remittances would then have to rise. In other words, if migrants are altruistic they will respond to a fall in home income by increasing remittances. Indeed, there is considerable evidence that remittances behave in a countercyclical way and, *ceteris paribus*, are larger for poor recipient countries. Conversely, an increase in the host-country wage should be associated with higher

migrants' earnings ( $Y_M$ ) and, *ceteris paribus*, a higher flow of remittances.

This simple framework can be extended in a number of ways. First, migrants need not be altruistic. In the exchange-related model (Lucas and Stark, 1985), remittances are part of a contractual arrangement between the family and the migrant, where the migrant's motives may stem from the aspiration to inherit or the need to ensure that his/her assets at home are properly taken care of. Whereas in the altruistic model a decline in recipients' income should be associated with a larger flow of remittances, this is no longer the case in the exchange-related model, where a fall in the income potential of those left behind should either depress remittances (e.g. because of lower potential inheritance) or have no effects at all.

The second extension concerns the impact of migrants' income. An increase in  $Y_M$  should be associated with a larger flow of remittances. However, higher earnings in the host country may allow migrants to reunite with their closest family members, to whom they tended to remit more. The aggregate amount of remittances may then fall, if, as noted earlier, the traditional wage effect is more than offset by the reunification effect (Faini, 2006). At any rate, the skill composition of migrants is likely to be a significant determinant of the level of remittances.

Finally, one should allow for relative price effects. The literature on remittances has typically focused on the role of the nominal exchange rate. In the portfolio approach, for instance, migrants decide how large a share of their wealth should be invested in home-country assets. Misalignment in the exchange rate, together with the expectation of a nominal exchange rate correction, may induce migrants to change their portfolio allocation, and, accordingly, their remittance behaviour. A different and perhaps more relevant channel, at least in the long run, relates to real exchange rate effects. Let us relax the assumption that  $R_F = R_M$  and assume instead that:

$$R_M = \lambda R_F \quad (5)$$

where  $\lambda$  is the real exchange rate, i.e. the relative price of the domestic good. What equation 5 shows is that the amount remitted may differ from the amount received because of real exchange rate fluctuations. Let now consider the impact of a real appreciation, i.e. of a rise in  $\lambda$ . There will be two main effects. First, for a given level of

remittances ( $R_M$ ), the increase in  $\lambda$  will lead to a drop in  $R_F$  and in  $C_F$ . In other words, provided that remittances are positive in the initial equilibrium, the real exchange rate appreciation will have a negative income effect. The level of  $R_F$  will unambiguously decline. Second, there will be a substitution effect to the extent that home-country goods are now more expensive. If remittances are expressed in terms of the home-country good, the income and substitution effects will work in the same direction and cause both  $C_F$  and  $R_F$  to fall. Matters are slightly more complicated when remittances are expressed in terms of the foreign good ( $R_M$ ). The substitution effect should cause the migrant's own consumption ( $C_M$ ) to rise and remittances to fall. If the income effect predominates, however,  $C_M$  will fall and  $R_M$  will increase. The policy implications of this set of findings are considerable. A real depreciation should unambiguously boost remittances when the latter are expressed in terms of the home-country good but may be of little help in relaxing the foreign exchange constraint if income effects predominate.

*c) Do remittances affect competitiveness?*

The international financial institutions have been extremely cautious in assessing the macroeconomic and growth impacts of remittances. According to the World Bank (2006), "the evidence on the effect of remittances on long-term growth is inconclusive". Similarly, an IMF study found no significant link between remittances and per capita growth. These findings may also be attributed to a number of confounding factors, namely that remittances may behave counter-cyclically with respect to growth (IMF, 2005) or that they may force an appreciation of the real exchange rate, with a negative impact on real growth (Rajan and Subramanian, 2005a, 2005b).

In what follows, we look at the inter-relationships between the real exchange rate and remittances. We first consider the impact of remittances on the real exchange rate with a view to assessing whether a "Dutch disease" effect is at work<sup>7</sup>. As in the classic Corden-Neary framework, remittances can be seen as having two distinct effects on the real exchange rate. First, almost by definition, there will be a resource movement effect. The migration of labour, antecedent to the flow of remittances, will shift the production possibility frontier inwards. Whether this shift will be associated with real appreciation, i.e. a higher relative price of non-traded goods, will depend on the relative

<sup>7</sup> A Dutch disease syndrome occurs when the real exchange rate appreciates in the wake of, for example, an oil discovery or a surge in capital inflows.

labour intensity of the two sectors. Second, the expenditure effects of remittances should unambiguously lead to real exchange rate appreciation. The latter effect can be mitigated in the case of remittances, given that their benefits are typically more dispersed than aid flows or the impact of an oil price shock and less concentrated in the hands of the public sector, whose demand is typically biased towards non-traded goods. Overall, the net impact of the resource movement and expenditure effects will not necessarily cause the real exchange rate to appreciate.

Empirical analysis is called for to resolve this ambiguity. We estimate a very simple model where, in the first equation, the log of the real exchange rate ( $\lambda$ ) is assumed to be a function of the terms of trade (TOT), the GDP share of remittances and the GDP share of foreign aid:

$$\log(\lambda) = \alpha_0 + \alpha_1 \log(\text{TOT}) + \alpha_2 (\text{REM}/Y) + \alpha_3 (\text{AID}/Y) + \varepsilon \quad (6)$$

As noted earlier, however, remittances themselves are likely to depend on the real exchange rate. In a more complete specification, therefore, we need also to allow for the possibility that remittances are endogenously determined. We assume that remittances are a function of the stock of migrants abroad (MIGR), income per capita in the source country ( $Y_{pc}$ ) and, possibly, the real exchange rate itself<sup>8</sup>:

$$\log(\text{REM}/P) = \beta_0 + \beta_1 \log(\text{MIGR}) + \beta_2 \log(Y_{pc}) + \beta_3 \log(\lambda) + \eta \quad (7)$$

where remittances are measured in current US dollars and P is the GDP deflator for the United States. Following our previous discussion, we expect remittances to fall on account of the substitution effect, but to rise if the income effect predominates. We rely on a panel of 38 countries in 1990 and 2000. Our (unbalanced) panel is limited by the availability of reliable migration data and consists of 65 observations. All our results therefore must be treated with the utmost caution. We allow for fixed country and time effects. We first report the two-stage least squares results of estimating equation 6 for the real exchange rate (Table 5). We find that an improvement in the terms of trade is associated with a statistically significant increase in the real exchange rate, i.e. a real appreciation. The main finding, however, is that neither aid nor remittances seem to affect

8 Given the short time dimension of our panel (two years), we rely on time effects to control for the income level in the receiving country.

the real exchange rate. Although these results must be treated with caution, they do not suggest that the real exchange rate is much influenced by remittances. Such a finding is consistent with the conclusion of Rajan and Subramanian (2005a, 2005b), who could not identify a significant impact of remittances on the real exchange rate.

If we now turn to the remittance equation (Table 6), we see that both the stock of

Table 5.  
Econometric determinants of the real exchange rate

Dependent variable: log (real exchange rate)

log (terms of trade)	0.86 (2.10)
AID/Y	-0.03 (0.75)
REM/Y	-0.02 (0.73)
R <sup>2</sup>	0.35
Time effects	Yes
Country effects	Yes

**Note:** t-statistics in parentheses.

migrants and income per capita in the source country play a statistically significant role in influencing migration. We have tested and easily imposed the restriction that the coefficient associated with the stock of migrants is equal to one. The real exchange rate has a positive coefficient but is not statistically different from zero. Hence, the income

Table 6.  
Econometric determinants of real remittances

Dependent variable: log (real remittances)

log (stock of migrants)	1* —
log Y <sub>pc</sub>	-1.83 (1.74)
log λ	4.2 (1.36)
R <sup>2</sup>	0.87
Time effects	Yes
Country effects	Yes

**Note:** \*: constrained coefficient; Y<sub>pc</sub>: income per capita in the remittance receiving country; λ: real exchange rate.

effect seems to predominate, but not strongly enough to make the net effect statistically significant.

Overall, the real exchange rate is unlikely to be a key channel through which remittances would affect growth in the recipient economy. At the same time, however, we find some (very weak) evidence that real appreciation may boost remittances in terms of both the home-country and foreign goods.

*d) Remittances and growth: some new results*

The literature is not unanimous on the relationship between remittances and growth. The “new” migration literature (Lucas and Stark, 1985; Stark and Lucas, 1988) focuses on the role of remittances and migration as a way to overcome imperfections in the capital and insurance markets. Suppose for instance that, because of credit rationing, a household is unable to finance an investment project with a positive present discounted value. By allowing some of its members to migrate, the household will be able to rely on a steady flow of remittances and thus to finance the project. Similarly, if insurance markets do not work properly, a household may have to give up on a high-risk, high-return project because of the substantial increase in the risk exposure that this project would entail. The household may, however, have some of its members migrate to destinations where wages are weakly correlated with those at home. The consequent decline in the level of risk exposure may allow the household to undertake the risky investment project. On both counts, therefore, migration and remittances should be associated with better allocation of capital and, presumably, with faster growth. In this view, remittances will be relatively more productive in a distorted economic environment.

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Remittances may also be used for “unproductive” purposes. This is a recurring argument in the more traditional literature (Lipton, 1980), where it is emphasised that remittances are too often used for conspicuous consumption. Even so, the welfare effect of remittances may still be positive. Perhaps more crucially, this argument has found only limited support in the more careful microeconomic studies (Adams, 1991, 1998). More recently, Chami *et al.* (2003) cast the traditional argument in a more refined version. In their model, an increase in remittances will reduce recipients’ work effort and lead to lower output. As neither the migrant nor the firm can observe the recipient’s work effort, a moral hazard problem arises. This finding runs counter to that of the “new”

migration literature. A further implication is that the negative impact of remittances on work incentives, and ultimately on growth, may be strengthened by widespread domestic distortions.

Hence, both the sign of the growth impact of remittances and the interaction of this impact with the domestic policy environment remain controversial. According to the new migration literature, remittances should boost growth and the effect should be stronger if the domestic environment is highly distorted. The incentive view is that remittances depress growth, particularly in a distorted policy environment. Only empirical analysis can resolve these issues.

In what follows we estimate a simple growth equation, as in Chami *et al.* (2003), but with a key difference: investment is not included in the list of regressors. Including investment is bound to generate a downward bias in estimating the effect of remittances. As we have seen, the positive impact of remittances on growth works mainly through investment. Taking investment as given will therefore omit one of the main channels through which remittances can affect growth. In our base specification, we regress per capita growth on secondary school enrolment (used as a measure of human capital), the number of telephone lines per 1,000 inhabitants (as an indicator of physical capital) and the International Country Risk Guide index (as an indicator of institutional quality). Our data set covers 64 countries. Average annual per capita growth is measured from 1980 to 2004.

Estimates of the base specification are reported in column 1 of Table 7. All coefficients carry the expected sign. The negative coefficient of initial per capita GDP highlights the existence of convergence, with poorer countries, *ceteris paribus*, growing at a relatively faster rate. Institutional quality, human capital endowment and the stock of infrastructure are all positively associated with per capita growth, although the coefficient of the last variable is not significantly different from zero. In column 2 we introduce (average) remittances as a further regressor. Its coefficient is positive and statistically different from zero, while the size and significance of all the other coefficients are virtually unchanged. Introducing the average value of remittances among the regressors raises obvious endogeneity problems. The sign of the bias may go either way, however. On the one hand, positive shocks to growth should lead to a fall in the value of remittances, inducing a downward bias in the coefficient. On the other, remittances will typically benefit



poor countries, which are likely to grow faster. In column 3, we rely on a simple instrumental variable procedure, using distances from the main destination countries as instruments. The significance of the coefficients falls, but their size remains basically unchanged. Finally, in column 4, we control also for aid receipts as a percentage of GDP. To minimise endogeneity problems, we take the initial value for both remittances and aid. The key finding is that remittances have a positive impact on growth whereas aid is negatively associated with growth.

As a further check on the robustness of our results, we rely, following Easterly

Table 7.  
**The determinants of per capita growth** (cross-country regressions)

Dependent variable: per capita income growth

$\log Y_{pc}$	-0.01 (2.3)	-0.01 (2.47)	-0.01 (2.23)	-0.02 (4.16)
Secondary school	0.001 (2.36)	0.001 (2.54)	0.001 (1.56)	0.001 (3.11)
Phone lines	0.006 (1.34)	0.008 (1.55)	0.0001 (1.40)	0.0001 (2.55)
Institutional quality	0.002 (1.64)	0.002 (1.50)	0.002 (1.16)	0.005 (3.27)
Remittances/GDP	--	0.0004 (2.81)	0.0009 (1.1)	0.0004 (2.07)
Aid/GDP	--	--	--	-0.0009 (1.81)
R <sup>2</sup>	0.24	0.31	0.12	0.50

(2001), on decadal growth rates. Our (unbalanced) panel consists of 136 observations for 89 countries. Throughout, we use a generalised least squares (GLS) random effect procedure. For our panel data set, we prefer to rely on the black-market premium, or alternatively the inflation rate, as (time-varying) indicators of the policy stance. The results are presented in Table 8. The main findings can be summarised as follows. First, policy matters. The black-market premium is a highly significant determinant of growth. Second, the traditional determinants of growth, i.e. human and physical capital, are only weakly related to per capita income growth. Third, remittances have a significant impact on growth. Our estimates suggest that a 1 per cent increase in the GDP share of remittances (a fairly large change) should boost growth by 0.08 per cent. Hence, in the light of our previous results on the link between the brain drain and remittances,

we conclude that a 10 per cent increase in the share of skilled migrants would depress growth by 0.08 per cent, a non-negligible effect.

In column 2, we assess whether the growth impact of remittances is itself a function of policy. In a weak policy environment, the incentive to use remittance income for investment purposes will be relatively weak. Alternatively, remittances may be more effective when capital and insurance markets are distorted. This is more likely to happen in the case of widespread financial repression, as manifest in a large black-market premium or in high inflation. To test these competing hypotheses, we interact the GDP share of remittances with the black-market premium (column 2). We find that the interaction term is different from zero at standard significance levels and carries a negative coefficient. Hence, the positive impact of remittances on growth is much diluted when the policy environment is unsound. Moreover, when this term is included, the level of remittances is still statistically different from zero.

In column 3 we repeat the same exercise, replacing the black-market premium with inflation. The findings and main conclusions are basically unchanged. Finally, in column 4,

Table 8.  
The determinants of per capita growth (panel regressions)

Dependent variable: per capita income growth

log $Y_{pc}$	-0.02 (6.9)	-0.02 (6.41)	-0.001 (0.58)	-0.001 (1.54)
Secondary school	-0.001 (0.34)	-0.004 (0.32)	-0.006 (0.99)	0.001 (1.34)
Phone lines	0.0001 (1.28)	0.0001 (1.37)	0.0001 (1.05)	0.00003 (0.12)
Black-market premium	-0.0002 (6.66)	-0.0005 (1.33)	—	—
Remittances/GDP	0.028 (6.25)	0.029 (6.46)	0.028 (8.7)	0.53 (2.07)
Inflation	—	—	—	-0.00005 (2.80)
BMP*Remittances	—	-0.0001 (2.27)	—	
Inflation*Remittances	—	—	-0.00001 (12.9)	-0.0001 (1.09)
R <sup>2</sup>	0.08	0.08	0.07	—

we try to tackle the endogeneity problem and rely on an instrumental variable procedure, with institutional quality and distance from migrants' destination countries serving as instruments for inflation and remittances. While the interaction term is no longer significant, both remittances and inflation are still significant determinants of growth, with respectively a positive and a negative coefficient.

By and large, these results are consistent with the findings of both the new and the traditional migration literature. On the one hand, remittances appear to play a substantial role in fostering growth, most likely because they relax financial constraints and allow potential investment projects to be undertaken. On the other, as argued by the more traditional literature, remittances may be used less productively, particularly if unsustainable macroeconomic policies breed uncertainty and financial repression.

## 6. Conclusions

If confirmed by future research, some of the results of this paper have striking implications. Sending countries lose from migration on three grounds. First, there is the standard welfare loss, as described in Figure 3. Second, there is no evidence whatsoever that the negative externality of the brain drain may be offset by either stronger incentives to invest in education or larger remittances, as the propensity to remit is lower for more educated migrants. Third, a fall in remittances may be associated with slower growth, further compounding the plight of origin countries.

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These effects could be mitigated by the beneficial impact of return migration, the incentive effects of skilled migration on human capital investment, and the creation of business networks abroad, with a positive impact on trade and FDI flows. As we have seen, however, there are good reasons to question the sign and the significance of these channels: return migrants are negatively selected; educational enrolments seem to be only weakly affected by skilled migration; and the brain drain may discourage FDI by increasing the scarcity of skilled workers.

The policy message is not straightforward. From the standpoint of sending countries, a first-best strategy would be for destination countries to relax the constraints on unskilled immigration. As shown by Walmsey and Winters (2003), even a modest

relaxation of such constraints would bring significant welfare gains. It is quite unlikely, however, that the main receiving countries will step back from their current policy stance of discouraging unskilled migration and favouring the entry of skilled workers. Temporary schemes, where both skilled and unskilled workers are admitted for a relatively short period, might work better. They would allow a sustained and steady flow of remittances; they could be targeted to the labour-market needs of receiving countries; migrant workers would return home after having acquired valuable skills and could be instrumental in promoting new trade and investment links. The trouble is that such schemes have not always worked very effectively in the past. Firms have been reluctant to release their freshly trained workforce, and migrants have been wary about returning home unless they are guaranteed a positive probability of returning to the destination country. Addressing such issues is key to the success of new programmes.

What can and should be done is to favour the flow of remittances. Reducing the costs of formal channels would raise the amount of remittances and would encourage a shift away from informal channels. There is no need to set up specific incentive schemes for remittances. Such schemes are costly and can easily create undesirable arbitrage opportunities. Our results show that the best way to attract remittances is a sound policy stance that protects property rights and maintains a stable macroeconomic environment.

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by  
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For many years, and until a fairly recent period, the attention of economists was exclusively focused on whether trade and migration were complements or substitutes. Today, however, there is an abundant literature on the links between migration and development, and particularly between migration of skilled workers and development. This relatively recent interest on the part of the academic community is welcome in a context characterised by a steady increase in the number of migrants and in remittances to their home countries, and by rapid growth in the proportion of skilled workers among migrants.

Riccardo Faini's paper is intended as both a contribution to and a review of this literature. The author begins with a reminder that despite a strong rise in the number of international migrants, there has been no particularly marked massification or diversification of international migratory flows, particularly from the South. From 1990 to 2000, the expatriation rate from Southern countries remained perfectly stable. The proportion of immigrants in the resident populations of Northern countries increased, but this was due to the population growth differential between North and South. Migration is thus the "grand absentee" of globalisation.

In the rest of his paper, Faini demonstrates how ambivalent the links between migration and development are, in both theoretical and empirical terms. Using a very

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\* The author thanks Jacky Amprou, Lisa Chauvet and Anne-Sophie Robilliard for their careful reading of this commentary.

simple analytical framework, he shows first that emigration of part of the labour force causes a loss of well-being for the remaining residents, but that remittances from emigrants may more than offset this loss. The net impact of migration on the well-being of those who stay behind is thus unclear. This ambiguity increases when we abandon the assumption of homogeneous labour and consider instead migration of skilled workers. Whereas brain drain has long been viewed as entailing costs for home countries (although these costs have never been quantified), the author points out that the recent literature has identified four channels through which emigration of skilled workers could ultimately prove beneficial for sending countries. The first such channel relates to the possibility that migration of elites provides an *ex ante* incentive for more workers to acquire training, thus leading to a brain gain in the home country; the second, to the considerable remittances that skilled workers would be apt to send to promote the development of their countries of origin; the last two, to the potential role of skilled migrants or diasporas in promoting trade and international capital flows and in the dissemination of knowledge when they return to the home country.

As the existing theoretical models very often yield different predictions, the question of the links between migration and development becomes an empirical one. A review of recent applied work, however, reveals contradictory results that do nothing to dispel the theoretical ambiguities. Concerning specifically the links between migration of elites and development, no clear, definite answer emerges as to whether those who stay are losers or winners. On the basis of the results of two econometric exercises, however, Faini seems to lean towards the former proposition. He finds that remittances have a positive impact on the growth of sending countries and that skilled migrants tend to remit less, relatively speaking, than unskilled migrants. He therefore concludes that any change in the composition of migratory flows in favour of skilled workers could be harmful for the sending country, owing to the decline in remittances that would ensue.

Three main lessons can be drawn from this article in particular and more generally from the literature on links between migration and development.

### ***The need for accurate, harmonised data***

Much remains to be done to dispel the uncertainty concerning the impact of migration and remittances on home countries. There are not enough empirical studies,

and those we do have yield results that are too contradictory for any clear policy recommendations to be drawn from them. In particular, there is currently no evidence that the brain drain always becomes a brain gain for home countries in the end. The principal problem in conducting empirical analyses of the links between migration, remittances and development at the macroeconomic level is the unavailability of relevant, harmonised and accurate data. As a result, most of the results of such analyses (including those obtained by Faini) are marred by bias: selection bias resulting from failure to include many developing countries (notably African countries) in the samples of countries studied; bias arising from measurement errors in the explanatory variables used in the regressions (migrants' remittances in particular); and bias due to the high degree of heterogeneity across countries, on which little information is available.

This literature thus points first and foremost to the need for regular collection of harmonised, reliable data on the size and composition of flows and stocks of migrants, on whether migration is temporary or permanent, on the intensity of return flows, on migrants' remittances, etc. In this respect, the recent initiatives of the World Bank and the OECD to compile statistics on migrants by educational level from census data are to be welcomed. Where remittances are concerned, several recent surveys of migrants or their families have yielded positive results, suggesting that estimates of the amounts involved can be appreciably improved.

### ***The need to consider the heterogeneity of sending countries***

Although caution is needed, it would be too easy (and highly frustrating) to conclude merely that we know nothing as yet about the links between migration and development. If the existing studies do not point to any clear conclusion, it is because the potential effects of migration and remittances on development are contradictory. Another reason, however, is undoubtedly that, since these studies are often based on cross-country analyses, they mask important effects that are specific to each country. It seems in particular, as noted in the work of Docquier and his various co-authors<sup>1</sup>, that some countries benefit from migration of their elites while others are harmed by such migration. The winners include India, China and the newly industrialised economies of South-East Asia, which either managed to develop their own scientific and technical systems

<sup>1</sup> See in particular Beine, Docquier and Rapoport (2001, 2003).

despite strong emigration of their elites or experienced a reversal of their migratory flows (Gaillard and Gaillard, 2002). In the latter case, the growth process in the sending country is the motivation for, not the result of, the return of migrants, although returns may have contributed to growth by fostering information exchange and technology transfer. The losers, which include many countries of sub-Saharan Africa, are far from meeting the conditions required for the emergence of a gain from the emigration of skilled workers and the beginning of return migratory flows. This heterogeneity across countries could also explain the extreme diversity of the results obtained by studies of the contribution that remittances make to growth in migrants' countries of origin. In this respect, there is nothing to contradict the idea that this contribution depends on countries' initial income levels.

### ***Consistent empirical results that are too often neglected: the insurance role of migrants***

Although Faini's paper does not mention this (admittedly, it makes no claim to be exhaustive), there is a consensus in the literature concerning migrants' function as insurance for those who stay behind, a role that at the macroeconomic level is reflected by the fact that flows of remittances are sometimes counter-cyclical (Chami *et al.*, 2005). Many microeconomic studies of developing countries have shown that the amount of remittances depends on the shocks sustained by families that stay behind<sup>2</sup>. This unanimity is worth emphasising because, as mentioned above, empirical consistency of this kind is rare in the literature on the effects of migration and, more importantly, because it sheds light on three aspects that receiving countries would like to be able to influence: the motivations that lead individuals to migrate, the reasons for migrants' reluctance to return home and the fact that remittances have little productive impact.

By serving as insurance for their families, migrants make up for the lack or inadequacy of local insurance systems in areas where incomes are highly variable, where diseases are more common and more severe than elsewhere, where political, economic

<sup>2</sup> See in particular, for Africa, Lucas and Stark (1985) on Botswana; Hoddinott (1992, 1994) on Kenya; Schrieder and Knerr (2000) on Cameroon; Gubert (2002) and Azam and Gubert (2005) on Mali; for Asia, Yang and Choi (2006) on the Philippines; Miller and Paulson (2000) on Thailand; and for Latin America and the Caribbean, Amuedo-Dorantes and Pozo (2006) on Mexico; Clarke and Wallsten (2003) on Jamaica; and Halliday (2005) on El Salvador.

and/or social instability is greater, etc. They also allow families to engage in activities that entail more risk but are potentially more profitable. In so doing, they play a non-negligible role in poverty reduction. In this perspective, remittances are not just another source of capital. The share of remittances “allocated” to insuring the family unquestionably varies from one country to another, but there are several reasons to think that it is generally high, particularly since the insurance provided sometimes gives rise to moral hazard. *A contrario*, the share of remittances allocated to investment is very likely to be low, especially because the business environment in sending countries or regions offers little incentive. Therefore, as long as migrants have a fundamental duty to insure their families, any measure aimed at steering remittances towards productive investment or to encourage migrants to return to their home countries can only have mixed results.

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by  
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Riccardo Faini's contribution reviews the recent literature focusing on the impact of international migration on countries of origin. His argument may be summed up in three main points:

- Contemporary migratory flows are marked by restrictive and selective policies on the part of the main host countries; these policies confine international population movements to the sidelines of the globalisation process.
- Under these circumstances, the welfare gains associated with international migration are obtained to the detriment of the home country, since the loss of human capital is offset neither by a positive effect on educational investment in the home country, nor by remittances, the amount of which apparently tends to decrease as migrants' level of qualification increases. The indirect effects on flows of foreign direct investment (FDI) and trade are estimated to be insufficient to compensate for the initial losses.
- Remittances, it is argued, have a positive impact on growth that works mainly through investment, but here again, the effect is too small to offset the negative effect of selective migration.

The author concludes that, from the standpoint of home countries, only greater openness to unskilled migration on the part of host countries would be likely to leverage development and produce a net welfare gain. Considering host countries' reluctance to take such measures, the best – or only – possible option would be programmes of temporary migration for purposes of employment, on condition that the pitfalls encountered in past experiences with such programmes are avoided.

We will consider some of the above points, followed by a more detailed discussion of certain specific policy options.

To begin with, the observation that international migration has been excluded from the globalisation process, though fully justified in comparison with other components of globalisation, needs to be qualified:

- The diversity of situations: the unweighted averages of net migration rates presented by Faini mask the differences between the situations of certain large sending countries that are well integrated into global flows and have relatively low emigration rates, such as China, India and Russia, and those of smaller countries, particularly in Africa and the Caribbean, whose emigration rates are considerably higher but which are less well integrated into the world economy.
- The size of migratory flows: from 1990 to 2000, the number of migrants residing in OECD countries rose by more than 17 million (according to current figures, permanent immigration is appreciably higher today, amounting to some 3 million entries annually). This figure is approximately equivalent to that given by Walmsley and Winters (2003), who find that a 3 per cent increase in the labour force of OECD countries, or approximately 16 million additional workers, would generate an overall welfare gain equivalent to \$156 billion (0.6 per cent of world GDP). Has such a gain been observed over the period considered (1990-2000), and to what extent have developing countries benefited? To answer these questions, a much more precise evaluation would probably be needed.

On the second point – the effect of the brain drain – Faini's results, which tend to cast doubt on the positive effect of the brain drain, are convincing on the whole. As for the link between emigration and education, Dumont and Lemaître (2006), using the OECD database on the number of migrants by country of birth and educational level,



show that there is a significant, robust negative correlation between the skilled emigration rate and the rate of enrolment in tertiary education. Other things being equal, the lack of economic opportunity in the home country seems to explain both under-investment in human capital and the brain drain.

The arguments concerning remittances by skilled workers seem less clear. The fact that remittances per person are negatively correlated with the percentage of skilled emigrants is not enough to demonstrate that remittances would fall if migration policies were to become more selective with respect to skills, at least in the short and medium terms. Yet this argument serves as the basis for the author's assertion that remittances have no compensating effect. More in-depth studies, by country and duration of residence, would probably be needed to corroborate the author's reasoning in this regard.

Although I do not wish to challenge the basic soundness of Faini's observations, it must be recognised that they offer not only a rather negative picture of migration in the form it takes today, but also rather gloomy prospects for the future. This assessment differs from that presented by Schiff (2006, in this volume).

In any event, it seems necessary to try to introduce some shades of colour into this black-and-white picture. A few concrete proposals could ensure more equitable sharing of the benefits of migration among all those involved: home countries, host countries and, most important, migrants themselves and their families. There have in fact been a great many experiments in the OECD countries and elsewhere, both successes and failures, from which we can draw lessons to guide policy.

The following remarks draw extensively on research conducted with the ILO and the main conclusions of an OECD seminar held in Marrakech in 2005 with support from the AFD and the Banque Centrale Populaire du Maroc.

## **Mobilising all available human resources**

If indeed it is to be feared that the international mobility of skilled workers will have negative effects, it should be emphasised from the outset that only multi-

dimensional approaches that help to reduce both push and pull factors simultaneously could bring a more equitable division of the benefits from international mobility. A few simple principles could guide policy regarding both skilled and less skilled workers:

### ***1. Efficiency: facilitating international mobility of high-skilled workers***

It seems essential that such workers have the possibility of obtaining residence permits allowing them to travel back and forth, and more generally to be both “here and there”. The issue of double nationality also needs to be mentioned in this context.

From the standpoint of home countries, it is important to identify and eliminate barriers to the return of migrants, particularly administrative barriers, and to recognise and value experience acquired abroad. China’s experience is rather instructive in this regard.

### ***2. Equity: sharing the costs more fairly***

There are many possible ways of improving cost sharing without additional public financing. When the social return to education is close to the private return, for example, it can be worthwhile to develop private training institutions dedicated largely to those who wish to emigrate and to facilitate access to credit in order to finance such training. Two cases in point are those of nurses trained in the Philippines and of Indian IT specialists.

Public and private employers could also contribute more directly to the cost of training migrants recruited abroad, for example by supporting training in the home country or by setting up twinning schemes. There are and have been many noteworthy initiatives of this type, notably in the health sector. They could probably bear fruit on a larger scale.

Lastly, facilitating the international mobility of foreign students is another promising option in which the host country, and possibly the migrant, bears part of the cost of education. In this case, those who decide to settle in the host country are better prepared for long-term integration into the labour market and

society as a whole, whereas those who return will increase the stock of human resources in the home country.

### ***3. Sustainability: better human resource management***

In the long run, regardless of which control mechanisms are employed, the benefits of international migration of skilled workers will not be evenly balanced unless home and host countries manage their human resources more efficiently.

In this regard, it is the responsibility of host countries to implement credible programmes to develop and employ human resources. In many countries, job opportunities for skilled workers are too limited, which in itself constitutes a reason for emigration.

The development of discipline-specific centres of excellence at regional level could also have a considerable impact on retaining talent in source regions. Chinese Taipei's experience in this regard is highly interesting.

Where the host country is concerned, it must be borne in mind that international recruitment of workers should not be regarded as a long-term solution to labour scarcity or to recruitment difficulties. Moreover, host countries could help source countries simply by providing more transparent, up-to-date information on migratory flows by source country over time.

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### ***4. Ethics: promotion of ethical practices in international recruitment***

A promising initiative of the United Kingdom, and more recently the Commonwealth, concerns the adoption of a code of international recruitment stipulating that recruitment campaigns for public health services may not be conducted in developing countries suffering from a shortage of health-care workers.

Despite the questions that arise concerning the enforcement and scope of such a code, it provides an incentive for debate in host countries on the brain drain and related issues, and for the introduction of an ethical dimension in the recruitment practices of both private and public employers. Europe could take the lead in such an endeavour.

## Remittances: the lifeblood of the development process?

The fact that remittances have in recent years exceeded the flows of official development assistance provided by the OECD countries has become a recurring theme in the literature. It has led some observers to think that remittances could play a greater role in stimulating productive investment in home countries and thereby foster economic and social development.

Although this argument has an attractive side, it often leads to a dead end. Remittances are *private* transfers, and the savings from which they are drawn belong to migrants and their families. To be sure, governments can offer incentives in order to increase the volume of remittances and to influence their allocation in home countries, but it should be emphasised that attempts to do so which have not recognised the primacy of individual *choice* have failed repeatedly. Some examples of good practice do exist, however, based on relations of trust and on the networks forged both abroad and in migrants' home countries.

There is no substitute for sound macroeconomic policy, good governance, a reliable banking system, respect for property rights and a strategy aimed at fostering trade and attracting FDI. The state, supported by the international community, has a crucial role to play in establishing these basic principles of economic development. Migrants are not responsible for development, and remittances are not substitutes for aid or FDI flows.

Lastly, the artificial distinction between “productive” and “unproductive” uses of remittances needs to be reconsidered. Remittances are used not only to reduce the poverty of households and meet basic needs, but also to increase investment in health and education, for example through increased investment in human capital in home countries. Initiatives at sub-national level, such as the *Tres por uno* (Three for one) programme in Mexico and encouraging examples at the local and regional levels in Morocco, Mali and Senegal, could provide inspiration for other countries, which could adapt them to their own contexts.

## Conclusion

Although international migration certainly has a role to place in the development process, under no circumstances can it be a sufficient or even a fundamental condition for development. Rather, migration is simply an additional asset that governments may be able to use to advantage. From this point of view, policies aimed at achieving greater coherence between migration and development can make a crucial difference.

That said, can and should international migration be used, like development aid, as an instrument for income redistribution at the global level? What impact would such a policy have if it were applied to the detriment of migrants' rights, particularly the right to settle and become integrated in the host country? This is the question raised by Faini's conclusion – a complex question, but one that is now unavoidable.

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# Cross Perspectives

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by  
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## **Migration and Development: Mutual Benefits?**

This conference has placed the emphasis on highly academic approaches. Although this is probably necessary in order to step back and gain some perspective on news items of strong current interest in the field of migration, we must be careful not to step back so far that we can no longer see anything or that we neglect the reality of what is at stake in both migration and development.

What is happening today is the desperate flight of thousands of wretched people, who leave their countries at the risk of dying in the sole hope of reaching El Dorado – a glimmer of hope for a better life, sometimes at the price of death. It must be recognised that this is due to the failure of the economic and social development “strategies” of a great many countries.

What is happening is the considerable growth of migration to the OECD countries over the last 20 years, despite what has been asserted in some of the papers presented today. During the 1990s, for example, nearly 20 million migrants settled in the OECD countries. In 2005 alone, some 3 million immigrants holding long-term entry permits entered the OECD countries, and 1.5 million more entered with temporary permits (granted, these figures include movement between OECD countries and do not count any illegal migrants).

In addition, the geographical scope of migration has grown considerably over the last 15 years – to Eastern Europe, to the east of Eastern Europe and, more recently, to Latin America, as shown by large migratory flows from that region towards the OECD countries, particularly Spain, although the United States remains the “traditional” destination for many Latin American migrants. This trend is not necessarily related to economic globalisation. There are also growing flows of migrants from Asia, even though China and India have not yet played the “migration card”.

What is happening is that a growing number of OECD countries feel threatened by the presence of immigrant communities, and that these communities are finding integration in the host country to be very difficult, while their children do not always manage to enter or stay in the job market. The unemployment rate among immigrants and immigrants’ children is very high in some OECD countries, particularly in Europe.

What is happening is that low-skilled migrants find it harder to become integrated today, despite the persistent need, present and future, for this labour category. Conversely, we are seeing easier international mobility for those possessing intermediate skills and sharp competition among the OECD countries to attract and retain highly skilled workers. Lastly, we must not forget that clandestine migration is still with us, that refugee flows remain at a high level and that revivals of nationalist feeling in some parts of the world, as well as ethnic conflicts and civil war, continue to drive “humanitarian” migration.

Against this background, and putting the spotlight on the links between migration and development, what are the benefits we are speaking of, and with whom are they to be shared?

It is often left unsaid that although immigrants make up only a very small percentage of the population, immigration has frequently been at stake in negotiations that go far beyond migration properly speaking. An example is the relations concerning migration between France and Algeria from the latter’s independence in 1962 until the nationalisation of its oil and gas in 1971: the Algerians obtained a status allowing them to move and settle in France virtually freely, on condition that they found work, in return for a guaranteed supply of oil and gas (“people in the pipeline”). There are also examples of bilateral negotiations concerning the possibility of establishing military bases, or of



obtaining the rights to extract mineral resources or other commodities, in return for liberalisation of migration policy. Russia recently entered into negotiations with the European Union to obtain more liberal terms for the movement of Russian citizens within the EU, in exchange for energy-related agreements. There are also exemptions to legislation restricting the migration of new workers, granted to offset labour shortages in certain sectors of OECD countries' economies.

The benefits in these cases are shared among employers, host countries and source countries, while migrants try to reap as many benefits as they can from these situations.

A hasty list of the benefits must mention that there has been extraordinary progress in the economic and social rights of immigrants in the OECD countries since the mid-1970s, including not only equal treatment of immigrants and nationals as regards labour law and social protection, but also citizenship and more flexible procedures for acquiring the nationality of host countries, the most striking example being Germany's radical revision of its code of nationality in 2000. Here the benefits clearly accrue to migrants. We too often forget to emphasise this, especially since many immigration source countries have little consideration for human rights, even though the authorities of these countries speak of them incessantly in their "official discourse" on emigration.

In both growth periods and economic crises, immigration has brought great flexibility to the labour market, unquestionable complementarity and social advancement for nationals and for certain immigrants who have resided for longer periods in host countries. The benefit in this case accrues more to the economies and residents of host countries.

We could add to this list. In this distribution of the benefits, what remains for the development of source countries? Unquestionably, migrants' remittances and various forms of non-financial transfers. As we have seen, however, these transfers are not the main drivers of development. Some source countries, incidentally, have no qualms about exploiting return migrants; one might even speak of looting of their possessions. Moreover, migrants who wish to invest in these countries face high risks – and in some cases terrible risks, with virtually no hope of success – whereas one might have expected source countries to adopt incentive policies to limit

immigrants' investment risk and to enhance their chances of success. In this context, the benefits for source countries depend mainly on good governance and on administrative and financial systems that are efficient and able to gain the trust of migrants. Moreover, what migrants lack is not so much savings as investment opportunities. Thus, it is necessary to provide abundant information on such opportunities, if any, to all potential investors.

### ***With whom should the benefits be shared?***

Economic development is unsatisfactory in many emigration countries. The international trade negotiations are bogged down, aid is not sufficiently effective, since it is difficult to combat corruption, so the attitude is, "thank heaven for remittances!" That is what we are reading and hearing today. And the more low-skilled migrants there are, the more these remittances will increase. Of course, nobody bothers to ask under what conditions these remittances will be sent or on what scale, and there is little concern over housing for immigrants or any question of the integration of immigrants and their families, the assumption being that they will return home soon. Some observers even propose to encourage temporary migration on a large scale, without bothering to consider the real manpower requirements of host countries, and under-paying both skilled and less skilled migrants. This strategy is wholly in contradiction with those that seek to encourage training and human capital development. There is a genuine risk of "social dumping" and a break with the principle of social cohesion, which has already been weakened in some host countries by globalisation. Moreover, discrimination in the form of under-payment of migrants and granting them less social protection than nationals will reinforce the fear of the public in most OECD countries, which take a dim view of the arrival of migrants who compete with them for jobs and endanger some social entitlements. Worse still, these practices do not take account of the aspirations of migrants, whose principal wish is to reap the maximum benefit from their skills and obtain better standards of living, education and health for their families.

Blind persistence in this strategy, which would drive massive low-skilled migration towards the OECD countries, contains a concealed backlash in terms of social benefits and the blocking of any possibility of improved working conditions and pay in certain sectors, given that in some OECD countries the employment rate of resident immigrants is already rather low. It also encourages illegal immigration, since in any case the

manpower needs of the rich countries will not suffice to absorb the flows arriving on the job markets of many developing countries over the next 30 years. In this respect, I recommend Jacques Ould-Aoudia's book *Croissance et réformes dans les pays arabes méditerranéens*, published by the AFD in 2006, which indicates the right approach to economic development and emphasises the fact that migration will play a minor role in this process. Systematic recourse to immigration by host countries is no solution to their structural labour shortage, and by the same token, sending masses of workers abroad will hardly make it easier for source countries to implement the reforms that are vital to obtaining the economic development needed to reduce the incentive to emigrate under circumstances that are dangerous and hard to control.

Can immigrants be asked to share their earnings in order to promote the development of their countries of origin? Some will reply: "my country is the country that gives me my daily bread". What if we tried, instead of sharing the benefits, to share the responsibilities involved, in terms of both migration and development. It would then be a question of exerting more control over both ends of the migratory chain, trying to develop initiatives at local level while leaving it up to immigrants and to the local population to decide how to use remittances and other forms of investment in economic development. In this respect, it is important to remember the *Tres por Uno* programmes in Mexico, mentioned by Roberto Villareal-Gonda (in this volume), and, in Morocco, the considerable achievements of the NGO Migration et Développement in terms of economic development and infrastructure. The responsibility of source countries is to establish administrative and financial structures capable of attracting foreign investment and, most important, to offer investment opportunities for idle savings. Responsibility must be shared not only concerning management of migratory flows but also concerning management of human resources. Migrants have thoroughly understood this point: they try to sell their labour to the highest bidder, especially those who come from countries where the unequal distribution of wealth leaves no hope for the bulk of the population to participate in national economic development; if they are skilled or highly skilled, it is easily understandable that they should seek to derive the maximum benefit from their human capital "endowment". Consideration can certainly be given, as suggested by Jean-Christophe Dumont (in this volume), to more equitable distribution of the benefits of skilled migration, but from there to preventing or taxing such migration is a step that we must not take. The human capital of migrants, like their financial capital, is their property, to use as they see fit.

Sharing the benefits and responsibilities means getting rid of all the obstacles that hinder development and the old mechanisms that no longer work. Would it not be advisable to give greater weight to the initiatives of young people – whether they are emigrants or not, whether they are members of the diaspora or applicants for return migration – and let them propose new forms of aid for their countries' development. For example, such initiatives could be placed within a regional geopolitical perspective, as enhanced assistance to co-development between migrant-sending countries and migrant-receiving countries. This would place such co-development under the control of migrants and local populations. Regional and federal authorities would then support these initiatives and help to drive sustainable development. It is time to recognise the limits to the role that migration can play in development and to ensure that, although this role is limited, it can nevertheless support a development process based on vital economic and social reforms.

# Cross Perspectives

by  
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## **The “Great Disjunction”, or the Need for Development Economics to Consider Movement**

International migration is a matter of direct concern to economics, and still more to development economics. However, a political science perspective, as long as it takes into account the related contributions of the other social and human sciences – history, demography, anthropology, sociology, geography – can contribute to the debate over migration by reintroducing consideration of actual social practices and the power relationships that they carry<sup>1</sup>.

From this standpoint, the first feature to catch the attention of a political analyst is the disjunction underlying the current period of globalisation, i.e. the “neo-liberal” period, from 1980 to the present. On the one hand, we are seeing growing integration of the international market for capital and, to a lesser extent, for goods – despite the scale of intra-company trade, the existence of multilateral regulation procedures, the recognition of “safeguard” clauses, the invention of various forms of “neo-protectionism” and the reappearance of certain traditional trade barriers. On the other, the international market for labour is becoming increasingly compartmentalised, owing to the adoption of various legislative and regulatory measures and their implementation by bureaucratic, police or even military means.

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<sup>1</sup> These remarks are based on two FASOPO research programmes supported by the Research Department of the Agence Française de Développement: “International migration and the anthropology of travel” (under the direction of F. Adelhah and J.-F. Bayart, with the participation of C. Autant-Dorier, M.L. Berg, A. Battegay, J.-F. Havard, V. Manry, R. Marchal, M. Peraldi, J. Schmitz and S. de Tapia) and “Migration in post-apartheid South Africa: Challenges and questions to policy-makers” (under the direction of A. Wa Kabwe-Segatti, with the participation of S. Ellis, L.B. Landau and D. Vigneswaran).

This contradiction is undermining the regional integration processes that the major industrialised countries have been proposing to their Southern neighbours for the last 20 years. For example, NAFTA and the Euromed Partnership are supposed to promote free trade, but they exclude the movement of labour from this process, thereby condemning their members to building walls – literally – to try to prevent such movement. The Southern countries themselves are adopting immigration policies similar to those of the Northern countries: either they are obliged to fall in line under pressure from their industrialised partners, as is the case for the Maghreb countries, which are subject to a new kind of conditionality imposed by the European Union, namely, that of combating illegal migration; or they reach similar conclusions on their own account to satisfy domestic public opinion, hoping thereby to resolve their unemployment and security problems and pandering to the electorate – or whatever plays the role of an electorate – by putting the emphasis on “indigeneness”, as we have seen in recent years in the case of political regimes as different as those of Oman, Iran, Malaysia, Singapore, Nigeria, Côte d’Ivoire and South Africa.

In purely political terms, the disjunction between a free-market approach to trade and finance, on the one hand, and an interventionist approach to labour with coercive and Malthusian tendencies, is in all probability explosive in the long term. Economic historians have established that a similar situation, during the “first globalisation” period in the late 19th century, led to the Great War and to fascism. Although over the course of history the same causes do not always have the same effects, it is hard to see how what Karl Polanyi called “embargos on immigration” will not engender serious tension between North and South, and within each of the societies making up these illusory groupings. Good governance of migration is already a central issue in some of the most acute political crises today (e.g. in Côte d’Ivoire and the Kivu provinces of the Democratic Republic of Congo), dominates the electoral discourse in the most sober democracies and constitutes a non-negligible diplomatic irritant in the relations between various countries, allies though they may be. An additional cause of friction is that some countries promote emigration as a matter of public policy, in order to reduce unemployment and increase inflows of foreign exchange (e.g. the Philippines), or display an ambiguous – to say the least – attitude towards clandestine migration transiting through their territory (Libya, Tunisia, Algeria, Morocco, Turkey). There is a genuine risk that the present globalisation episode will be stifled, in its turn, by the weight of these contradictions, or that official development assistance (ODA) will gradually be

polluted by “security” considerations concerning “control of migratory flows”. This risk is amplified by the revolution in communications: the dissemination of words and images, if not of information, via satellite television and the Internet has irreversibly decompartmentalised the world and fuelled the social or political anger of frustrated migrants and their families.

The “Great Disjunction” arising from these divergent trends on the international factor markets stems in turn from another disjunction, less spectacular but no less pernicious, between the accepted notions concerning restrictive immigration policies in the industrialised countries and the complexity of the actual social practices at work in the movement of economic agents. Properly speaking, the term “emigration” encompasses an enormous variety of movement or settlement plans, categories of agents, occupational qualifications and time horizons. Moreover, the “transnational” processes of globalisation have given rise to other forms of spatial mobility that have their own motivations and are independent from migratory flows, but which are lumped together with migration in the public policies of the industrialised countries – if not in the text of their legislation, then at least in the way it is implemented. As a result, study abroad, business travel, travel for tourist or religious purposes, artists’ tours, scientific missions, university exchange programmes, the regular to-and-fro movement of “immobile migrants” (in the words of Peraldi, 2006) engaged in the “suitcase trade” – all of these forms of movement face obstacles that are all the more difficult (or expensive) to overcome because they are now engraved in bureaucratic routine. One need only consider the time required to obtain visas, their price and the rigidity of the procedures involved – factors that can deter even travellers who are nationals of the industrialised democracies, and that are starkly inequalitarian for those from the South – to grasp the extent to which the “neo-liberal” globalisation period displays neither the flexibility nor the free movement vaunted by its acolytes.

As a result, laws, regulations and bureaucratic procedures are unsuited to the economic and social practices of today’s world, as are the catch-all notions through which politicians try to conceal their predicament, to delude the public and to put off any realistic action. They call for “zero” immigration, or “chosen” immigration as opposed to immigration that is passively “endured”, or “co-operative” immigration. The choice of words varies, but immigration, despite its obvious heterogeneity, is always considered in the singular, as a static, zero-sum game between “home” countries

and “host” societies, and, paradoxically, without emphasising the very feature that makes it unique: movement.

In other words, the debate is still confined to the – very outdated – national issue of “integration”. The fact that in France such integration is given the label of “republican integration” does not alter the basic problem in the slightest, regardless of how much respect one may feel for the values or principles of a republic. The industrialised countries recognise only grudgingly that their own history is inseparably bound up with migration and that the revival of migration over the last 20 years is an inevitable side effect of the internationalisation and liberalisation of the world economy, and particularly of the expansion of foreign direct investment (FDI). In this respect, the theme of “co-development” is almost grotesque, based as it is on the naïve idea that ODA flows, or development itself, can be substitutes for migratory flows and the economy of movement. In fact, the “development” of a less developed country in all probability boils down to an intensification of the exchanges of people between the LDC and the industrialised countries with which it has ties, in the form of travel for purposes of study, business or services, which are indissociable from FDI, but also, at least initially, in the form of an increased number of would-be emigrants, as soon as workers are better educated, better qualified, better able to get employment abroad and motivated by “modern” or “global” plans for their lives. In the very long run, prosperity would probably reduce the number of candidates for expatriation, but the notion of “co-development” purports to offer a solution to what is regarded as an immediate problem: clandestine immigration, or indeed any immigration at all. Moreover, emigrants’ remittances now make a greater financial contribution than ODA in countries such as Mali, and it will not be easy to make stakeholders in the South forget the old proverb, “A bird in the hand is worth two in the bush”.

Linking the question of ODA to that of immigration – the former being viewed by policy makers as a means of solving the latter – insidiously conveys the capture of the development agenda by the security agenda, a process that we can already see at work in the participation of ministries responsible for immigration in the various bodies devoted to ODA, in certain public statements and in the fact that exchanges of people in the context of development co-operation are routinely subject to extremely restrictive, siege-mentality procedures for issuance of visas. Under the effect of terrorist attacks and “the fight against international terrorism”, globalisation is becoming less neo-liberal



than “national-liberal”, and the ODA themes that have emerged in recent years are gradually being left hanging.

### **The absurdity of public policy on migration**

Having failed to grasp that movement is inherent to migration and to understand the actual social practices involved in such movement, the conventional wisdom obscures the many back-and-forth effects that these practices engender between the “sending” societies and “host” societies. In the well-turned phrase of Fariba Adelhah, speaking of Iran, one can “go without leaving”, but one can also “leave without going”: on the one hand, emigrants retain close ties to their place or country of origin; on the other, those who do not actually leave nevertheless live in the “elsewhere” defined by migratory plans and globalisation. A long list of non-financial transfers leave their mark on migrant-sending societies: “social” transfers through “transvillages” that span the oceans, or through “transnational families”, or through social institutions and movements such as businesses, churches and networks of all kinds. The scale and consequences of such social transfers can be considerable, as is shown by the transfer of the Western European model of marriage, birth control and all, to the Maghreb and its contribution to the spectacular demographic transition in that region of Africa. There are political transfers also, which are not necessarily democratic in spirit: in Ireland, Sri Lanka and Turkey, emigrants and the diaspora have instead been the vehicles for the radicalisation of ethno-nationalistic conflicts, while in Madagascar the massive departure of university graduates in the 1980s left the democratic movement of the following decade in the well-intentioned but inexperienced hands of religious leaders.

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At the same time, the actual social practices of migrants and the absurd conceptions of them held by politicians and public opinion have transformed “host” societies. Outbreaks of xenophobia or outright racism have fuelled populism and changed the terms of the electoral debate, and have ended up by redrawing the boundaries of what are considered to be “legitimate political issues” (Pierre Bourdieu). At the same time, the presence of immigrants has broadened native populations’ cultural frame of reference as regards lifestyle – e.g. food, music, dance, clothing – and artistic creation. A changed urban landscape now includes “assembly points” for migrants, such as Ueno Park in Tokyo, the intersections of Lexington Avenue and

42nd Street and of Times Square and 34th Street in New York, the Belsunce district in Marseilles, the Place du Pont in Lyons, certain streets near the Château-Rouge underground station in Paris, the Yenikapi and Laléli districts in Istanbul, and the Galerie d'Ixelles in Brussels (see e.g. Parrenas, 2001; MacGaffey and Bazenguissa-Ganga, 2000; Stoller, 2002; Autant-Dorier and Battegay, in Adelkhah and Bayart, 2006). Entire sectors of the industrialised economies – restaurants, hotels, agriculture, construction and public works, textiles, health – rely on the labour of immigrants, legal or illegal. Viewed from this standpoint, nothing is more questionable than the notion of clandestine immigration, because such immigration is in plain sight for anyone who wishes to see it, as in the Sentier district of Paris. The territory of countries is being rearranged to include liminal zones where migrants are put on hold, such as, in Spain, the Canary Islands, and, in Italy, the island of Lampedusa and various towns and rural municipalities in Campania.

In the eyes of the human sciences, the presuppositions that underpin public “embargo on immigration” discourse and policies distort the actual social situations that are empirically observable and have been amply analysed in countless publications. The consequences of such distortions are far from negligible, including from the standpoint of ODA issues.

First, migratory practices and wanderings are always treated as suspect or even criminalised. But the classification categories used – “migrants”, “illegal migrants”, “aliens”, travellers automatically suspected of drug trafficking or terrorism – are anything but natural. They are defined politically and bureaucratically, or one might even say through fantasy or routine, in terms of having the “wrong” skin colour or passport. For example, it is laws, orders, circulars and regulations that produce illegal immigrants, by making it *de facto* impossible to obtain legal status, and the fight against illegal immigration has only succeeded in swelling the ranks of illegals by reducing still further their chances of obtaining a residence permit or even a travel pass.

The costs of this vicious circle are high:

- A financial cost: although visa issuance has become a lucrative practice in some consulates and brings in appreciable quasi-tax receipts, many other aspects – more frequent identity checks, increased number of civil servants or auxiliaries assigned to such duties, the time spent by firms, universities and individuals on

increasingly pernicky and grotesque bureaucratic procedures – are expenditures that can hardly be called productive.

- An economic cost: Marseilles, for example, has lost its market position to Istanbul, Dubai, Barcelona, Algeciras and Naples.
- A social cost: as the stigma against migrants grows stronger, integrating them in society becomes more difficult, and “governance” of the ghettos into which they are crowded becomes more complex, since the social problem raised by their children is re-encoded as an ethnic or religious problem – though it is not obvious how this helps to resolve it.
- A diplomatic cost: movement of migrants causes disputes between countries in the North and South. Examples of this include the tension between the United States and Mexico, between France and the West African and Maghreb countries, between Malaysia or Singapore and the Philippines or Indonesia.
- A cost that might be called “hegemonic”: the industrialised democracies’ treatment of migrants and travellers detracts from their image, their exemplary status and the legitimacy of their efforts for human rights. It stokes a quiet anger that emerged, for example, in the exaggerated nationalism of the “Young Patriots” opposing the French presence in Côte d’Ivoire. It revives old wounds, as in 2006 when the French notion of “chosen immigration” aroused echoes of the slave trade in some West African countries<sup>2</sup>.
- A philosophical cost: “embargo on immigration” policies result in numerous violations of human rights, *de facto* suspension of *habeas corpus* for non-nationals, high-tech encroachment on public freedoms, the “brutalisation” (George Mosse) of societies, not merely in the liberal democracies but also in some Southern countries that do not shrink from violence, some of which (e.g. Singapore and Malaysia) have introduced corporal punishment against illegal immigrants.
- A cost of incoherence: for 25 years, French taxpayers have been financing two contradictory public policies simultaneously: the policy of containment of immigration and that of support to the French-speaking countries and communities around the world. The pursuit of the former policy constantly hampers that of the latter, owing to the difficulty (and often impossibility) experienced by writers, academics and students from “high-risk” French-speaking

2 *Info-Matin* (Bamako), 2 June 2006.

countries in obtaining visas for entry into France. French taxpayers also financed the structural adjustment policies in sub-Saharan Africa that led, among other things, to liberalisation of agricultural sectors, which in turn intensified migratory flows in West Africa.

In addition, “embargoes on immigration”, like all embargoes, fuel a flourishing political economy of embargo evasion by creating rents for traffickers in labour, by legitimising the ambivalent figure of the smuggler of aliens and by turning such smugglers into necessary middlemen. As one scandal is followed by another, it becomes apparent that the consular services and even the chancelleries of the industrialised countries are themselves no longer proof against the extortion and fraud engendered by restrictive policies concerning residence permits: either a swarm of local middlemen feed on the relations between consulates and users, or consular and diplomatic staff (or border police) give in to the temptation of easy money. Civil society organisations and institutions are gradually being caught up in these practices, at the interface between compassion or solidarity and the lure of gain: government organisations, troupes of performing artists, churches, sects and religious brotherhoods are involved with increasing frequency in producing faked testimonials or conniving to obtain visas that open the way to illegal migration. At a time when officials responsible for ODA are emphasising the urgent need for “transparency” and the fight against corruption, it must be recognised that public policies on international migration are quite literally corrupting and give rise to an underground economy of considerable size.

As a corollary, such restrictive legislation deprives some industrialised societies of the benefits that a more liberal treatment would offer. Many economists regard immigration as one of the factors underlying the sustained growth and capacity for technical and scientific innovation of the United States. Most European countries absurdly deny themselves this resource, even though the example of Spain confirms the contribution of immigration (and regularisation of the situation of illegals) to economic vigour, replenishment of social insurance funds and female participation in the labour market. Moreover, several reports from the Commission have shown that the European Union is structurally dependent on a revival of immigration to ensure the replacement of its population. If these analyses are confirmed, they would suggest that political and legislative acceptance of migration would ultimately help to ease the financial constraints on ODA.

## The social complexity of emigration

In the second place, the way in which *emigration* is represented, creating a sordid image of immigrants and dwelling on “sovereignist” issues, prevents understanding of the fact that, where international migration is concerned, social practices are independent of public policy, regardless of whether such policy is restrictive or positive. Anthropologists and sociologists today lay the emphasis on the intermingling of domestic, regional, continental and intercontinental migratory practices, at the level of “kinship fronts” which often serve as their structural and organising principle. Research conducted in West Africa, Turkey, Iran, Afghanistan and China has provided a great deal of information on this point (see e.g. Schmitz, in Adelkhah and Bayart, 2006). Migration is not merely a binary relationship between “sending” societies and “host” societies, nor is it limited to the geopolitical spaces inherited from the colonial period. It involves many forms of mediation, particularly in urban milieux, that filter, direct and relocate flows of migrants, money and conceptions of migration. Thus, increasing attention is being given to migratory itineraries or channels, rather than to the specific issue of *immigration*.

It has been found, moreover, that migration is a means of self-affirmation and social advancement, instead of merely a means of fleeing poverty or war. Migration allows young people to shape themselves as moral subjects, to attain the dignity of adulthood, if not prominence in society. It indicates, for example, that sub-Saharan Africa is still the “frontier” that the anthropologist Igor Kopytoff evokes in speaking of antiquity: a land of pioneers who invent new forms of economic undertaking and of social solidarity that transcend ethnic, denominational and national divisions, in keeping with the logic of globalisation. Vigorous examples of this are to be found in miners’ camps around deposits of diamonds, gold or precious ores, continental and intercontinental commercial networks based on brotherhood or ethnic ties, and transnational migratory channels. There is thus a moral economy of emigration or travel that Africans describe in terms of “adventure”, in the case of Congolese and Ivorians, or *jihad*, in that of the Senegalese: “What would you have them do? Other than to face the sea for the sake of dignity and not losing face... They went on the *jihad* for better living conditions for themselves and their families”, affirms the chairwoman of the Collectif pour la lutte contre l’émigration clandestine (Senegal), whose son was lost at sea<sup>3</sup>.

<sup>3</sup> *Le Quotidien* (Dakar), 13 October 2006. See also *Walfadjiri* (Dakar), 19 May 2006.

When understood in this way, emigration is also a strategy for gaining access to universality, not only that of the global market, but also that of the global culture or religious faith: the charismatic churches of Christians residing in Amsterdam consider themselves to be universal rather than African, including in their missionary work in the West. Conversely, immigrants are often pushed into communitarianism as a result of the restrictive immigration policies of the industrialised countries. Ultimately, one might say that certain peoples were shaped ethnically or nationally by their role of economic intermediation at the scale of the “world economies” (Fernand Braudel) that existed prior to the contemporary globalisation period, a role that they often continue to play in the current context. Examples include the Kurds, Baluchis, Tuaregs, Dioula, Armenians, Jews, Central Asian nomads and of course the “Indo-Pakistanis” and the Chinese diaspora. In this way, they develop a flexible and non-territorial conception of citizenship. This conception gives less weight to the political issues of being native-born and of national sovereignty, as its political economy is based on pragmatic use of national borders and is plugged directly into the global economy. Yet development economics has little to say about these agents of globalisation: it has remained sedentary in a world in movement.

### **The uniqueness of the suitcase trade**

The fact is, in the third place, that both the conventional wisdom and policy, by treating any form of spatial mobility as true migration (or as a risk of migration), fail to understand the movements of “immobile migrants”, namely suitcase traders. The latter do not plan to emigrate in a lasting sense. Rather, they make their living from movement, and from their return to the epicentre of their wanderings, i.e. their native society. Travel thus becomes a mode of existence, a lifestyle. As such, and in the context of the neo-liberal withdrawal of the state, the suitcase trade amounts to social advancement “at the author’s expense”, although it generally does not enable such traders to accumulate permanent capital early in life. It allows women, particularly divorced, repudiated or widowed women, to become independent or quite simply to survive. In the situation of recurrent social crises obtaining in many African and Middle Eastern societies, it contributes in its own way to poverty reduction, independently of the public ODA policies that are supposed to fight poverty. Moreover, the suitcase trade invalidates the stereotype so easily applied to migration, even seasonal or circular migration, that

it is motivated by the wish to escape from wretchedness. Its practitioners are often members of the middle or lower middle classes, and they trade not in staple commodities but in fashionable consumer items, such as cosmetics, jewellery, clothing, lingerie, auto parts and audio-visual products. In the same way as emigration properly speaking, the suitcase trade can reflect veritable strategies of benefaction adopted by notables to improve the lot of their kin group, village or region of origin. Both underlie contemporary forms of giving from individuals to the community that lie on the interface between the private and public spheres and thus overlap with the concerns of donors, but that are based on the independence of social practices with respect to public policy.

### **The challenges of movement**

In the end, the insights provided by political analysis raise three questions for development economics.

First, do the practices of international migration and the suitcase trade contribute to the emergence of a new form of capitalism – engaged in trade, but perhaps in industrial or even financial activities as well – based on their own social relations of production, their own management methods, their own channels for moving capital and cash? What we know of the workings of *hawala* and *vaqf* in Muslim societies, of Chinese family capitalism and of Senegalese brotherhood trading makes this a legitimate question, though it does not provide a clear answer.

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Second, South-South migration is as crucial to the pattern of contemporary globalisation as South-North migration, or as crucial as were, in a recent imperial past, North-South and East-West migration. The examples of the Indo-Pakistani, Chinese and Syrian-Lebanese diasporas come immediately to mind, but they are far from being the only ones. The South is structured in bipolar fashion between centres of growth and labour-supplying areas or countries. In South Africa, this bipolarity was institutionalised along racial lines, in the system of townships and Bantustans. Usually, however, it involves regional systems of countries. In South-East Asia, the complementarity between, on the one hand, Singapore, Malaysia, Thailand and even, in the long run, Viet Nam, and on the other, Indonesia, the Philippines, Cambodia and Burma (Myanmar) offers an example of this pattern. The same holds for the relations between the Persian

Gulf oil monarchies and their regional or extra-regional environment (Africa, East Asia, CIS). The connection between growth areas and labour-supplying areas is found also at the national level, in terms of rural-to-urban migration, as exemplified by the Industrial Revolution in Europe and, today, the spectacular take-off of China's coastal regions. South-South migration is all the more relevant to development economics because the industrialised countries are trying to "outsource" the implementation of their "embargo on immigration" policies to countries in the South, an example being the concessions that the members of the European Union are trying to obtain from Morocco, Libya, Senegal and Mali, at the risk of transforming these countries into liminal zones and pockets of disinheritance. Thus, an archipelago of buffer states is emerging within the international system, serving as the outlying marches of the industrialised countries: Senegal, the Maghreb countries and the non-EU Balkan countries play this role for Europe, as Mexico does for the United States. Cities where would-be migrants wait are also affirming their regional importance: examples include Istanbul, Tripoli and Tangiers at the gates of Europe; and Altar, in the Mexican state of Sonora, near the United States border. In addition, South-South migration fans the flames of xenophobia and the emphasis on indigenism through which xenophobic feeling is expressed in the political arena, either in the electoral process or in the form of violent, or even militarised, ethnic cleansing strategies. It is imperative for development economics to take on board this new geography of movement and of waiting, as well as the various social forms it takes.

Lastly, one must ask whether it is still possible or acceptable for donors to persist in evading their responsibility for the scale of international migratory flows. Although the bulk of these flows are due to independent social motivations, they are not wholly unrelated to the political situation prevailing in "sending" societies, which contributes, whether we like it or not, to the configuration of ODA. Although it is true that migrants flee their own wretchedness, as has been said *ad nauseam*, is not this wretchedness partly the consequence of the established economic order and of international relations in which the industrialised countries are both the main beneficiaries and the most powerful actors? Is it not also the consequence of conflicts that the "international community" has been unable to quell, when indeed it has not been involved in starting and perpetuating them? To date, the only responses of the industrialised countries have been: containment of emigration, despite the fact that emigration is a strategy for economic and social self-empowerment; gradual abrogation of the right to asylum,



despite the fact that this is an international legal obligation; support for structural adjustment programmes that have devastated public health and education systems; and, more or less shamefaced acceptance of processes restoring authoritarian regimes, despite the fact that these processes lead almost inevitably to political violence and civil war, with their usual quota of refugees and displaced populations. These responses are quite short of the mark, given the formidable danger represented by the Great Disjunction.

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# Cross Perspectives

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by  
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## **Migration, Its Impact on Development and the Impact of Development on Migration**

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Our collective conception of migratory phenomena borders on caricature when it depicts a depopulating Europe surrounded and menaced by a prolific South. It is essential, before engaging in any forward thinking, and still less any policy formulation, to start from the facts established by the social sciences, particularly geography, history, demography and economics.

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Geography is concerned with organised space viewed as a system – a system that is produced by the society which structures this space by inhabiting it, but that also preserves the memory of the historical layers of this society in order to influence its own future.

In this system, population is a rapidly changing variable. Fortunately, demographic change is predictable if we consider the flow of populations through age pyramids over time, and migration is one of the variables that adjusts to the differential evolution of the world's organised spaces. Jean-François Bayart shows us that trying to block these adjustments can lead only to an explosion.

A little historical background is needed as well. Prehistoric anthropology has shown that migration is the oldest of all processes of human settlement. Seaborne migration shaped the Greek world, the Chinese world of South-East Asia, Latin America and others, and of course it produced all of the more recent countries, of which the United States is the most noteworthy example.

The most powerful population movements of the last 50 years have occurred in post-war Europe, the Indian subcontinent after independence and the Chinese world today. Migration within the African continent, a long-standing tradition, is still very large today, considerably more so than migration to Europe.

As a result, one cannot study migratory movements without analysing the structural factors that initiate them, make them grow and bring them to an end.

**The most important fact is, of course, demographic in nature.** The world population doubled:

- in 12 centuries, from antiquity to 1650 (the number of immigrants rising from 250 to 500 million);
- in two centuries, from 1650 to 1850;
- in one century, from 1850 to 1940;
- in 40 years, from 1940 to 1980.

And that is where we stand. Today, global population growth seems to have stopped accelerating.

At the most basic level, the contemporary trend in world demographics is the result of “demographic transition”, a phenomenon common to all humanity, although it has occurred at different periods on each continent, in accordance with the economic development of societies.

Europe was the first – though the timing varied from country to country – to experience a surge of demographic growth due to the fact that mortality fell more than natality in the 18th and 19th centuries, followed by a phase in which population growth gradually slowed, to arrive at the current phase, in which populations have begun to shrink (when migration is excluded).

The main countries that have completed their demographic transition are the European countries, Russia, the United States, Canada, Japan and now China. Asia, Latin America, the south shore of the Mediterranean and the Near East are deeply engaged in the process, but to unequal degrees. Only Africa (except for South Africa and Mauritius) is just beginning its transition – where indeed the process has begun at all.

Apart from mortality factors (mainly nutrition and health), the principal determining factor of the transition is the change in fertility. Basically, fertility is the response of human beings to their perception of their chances of survival and their future. Detailed examination of the world fertility map should be the objective starting point for any geopolitical analysis, especially since actual human geography today does not necessarily correspond to the way it is perceived by European public opinion.

In less than a generation, the North African countries have seen their fertility rates drop sharply, though with appreciable regional differences: in the Mashrek, although the fertility rate has fallen from 7 to 4.5, it remains high, whereas in the Maghreb it has declined to between 2 and 3 and in South Africa to 3.2. Fertility is still dropping in these regions. Sub-Saharan Africa, however, still exhibits a fertility rate of 6, although the decline has begun there as well. These figures are illustrative of the fact that the world's demographic transition is spread out over time: it is complete in half the countries of the world, nearing completion in Latin America, South Asia and the Maghreb, at the halfway point in the Mashrek, and just beginning in sub-Saharan Africa.

The policy implications are of the first importance: the western Mediterranean is converging with Europe and the situation is unclear in the Levant, whereas it is already a certainty that the population of sub-Saharan Africa will double again in the next 30 years. In the Mediterranean, it is a matter of managing economic and social relations with our neighbours: Europe has every interest in promoting the convergence of the two shores of the Mediterranean. However, the question of Africa's stalled development remains wholly unaddressed.

A quick review of the known causes of these trends is in order: it is obvious that they are broadly correlated with economic development, but this does not provide a full explanation, and neither do "official policy" (unless enforced with great severity, as in China) or "religious reasons".

**The second main line of analysis is to study geographical distributions.** We will consider only two examples: fragile areas and employment catchment areas.

In some regions of the world, population replacement is undermined by uncertainty over whether various systems (spatial, economic, political) are capable of sustaining the existing mode of life. Examples include the Sahel, areas torn by armed conflict and areas hit by pandemics. The impact of climate change must be taken into account, for example by analysing water resource maps and topographical maps of low-lying coastal regions.

The map of employment catchments identifies areas in which employment is expanding or shrinking. The issue of the replacement of jobs generated by regional economic systems must be approached from the standpoint of regional rates of endogenous replacement of working populations. For Europe, the most significant fact is that, as from 2015, the working population will cease to be fully replaced.

It must always be borne in mind that, over time, economic, social and spatial fabrics are both built up and destroyed within a given geographical space.

What lesson can we draw from this? That the world is unequal, and that it is changing very rapidly, since these changes are easily visible within one generation.

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This is true to the point that the principal source of inequality between people today is their place of birth, which is the most significant determinant of their life expectancy, incomes, access to education and opportunities in the broadest sense of the term.

Viewed from this standpoint, migration is not illegitimate *per se*. Rather, it should be analysed in terms of the distribution of employment supply and demand, without losing sight of the fact that, over the course of history, labour migration has always become migration for purposes of settlement.

Is this a problem? For sending regions, the question is whether migration ultimately will make them poorer, or even destructure them, or whether, to the contrary, it will ease their burdens.



Receiving regions must consider how well migrants are integrated, what is the social cost of their integration and how long it takes. There are two dangers here: migration that has no connection with employment, which is a real economic and social problem, and rejection of migration, even if it is rational in economic terms.

This raises the problem of borders and the clash of sovereignties. By what geographical space is our thinking defined? What is a border?

What space? When a geographical system is no longer competitive, migration becomes irreversible. Should the system then be abandoned, or should it be developed as part of a broader-based effort of solidarity, through land-use planning, regional policy or “neighbourhood” policy, in order to make it viable for those who stay behind?

What is a border? An imaginary line drawn for political purposes. Borders determine the space within which solidarity is exercised. In the world of modern communications, relationships between contiguous spaces can be determined only by considering the interactions between them, because these spaces constitute a higher-order system known as globalisation. For a geographer, solidarity is not a matter of compassion: it is a matter of fact. And borders are not barriers; they serve not to separate spaces, but to connect them. In a world of communication, we must evolve towards contractual borders.

In conclusion, management of migration offers an opportunity to show our understanding of the world and how to share the benefits of globalisation among different geographical areas. In this respect, it is a policy for development – the development of the entire world, not of developing countries alone. On condition that such development is what we want.



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