

CDP Background Paper No. 11(E)
ST/ESA/2011/CDP/11(E)

December 2011

International Migration and Development: A review in light of the crisis

José Antonio Alonso

Abstract

Increasing international migratory flows in the last four decades is one of the most visible manifestations of the globalization process. In spite of its potential positive effect on global efficiency and well-being, little progress has been made in designing and promoting a normative and institutional framework to allow a better global governance of international migration. The current crisis has added new concerns in relation to migrant situation particularly in the countries more affected by the recession. It is likely that migratory pressures continue beyond the crisis, as international asymmetries that promote international migration have not been overcome.

JEL classification: F22, F24, J61, J83, K31, O15

Keywords: international migration, labour markets, mobility of labour, development, migrants' remittances, human capital, brain drain, immigration policy.

José Antonio Alonso is Director of the Complutense Institute for International Studies and Professor of Applied Economics at the Universidad Complutense of Madrid. He is a member of the Committee for Development Policy at the United Nations Economic and Social Council, and his main research areas focus on growth and the external sector, trade specialization development policies and international aid. He is the editor of *Principios: Estudios de Economía Política*. His most recent books are *Acción Colectiva y Desarrollo: El Papel de las Instituciones*, coauthored with Carlos Garcimartín, and *Corrupción, Cohesión Social y Desarrollo*, coedited with Carlos Mulas-Granados. Comments may be addressed to the author by e-mail: j.alonso@ccee.ucm.es

Contents

1.	Introduction	1
2.	International empirical evidence	3
	2.1. Size of migration	3
	2.2. Differential traits.....	6
3.	Factors driving migration	10
	3.1. Introduction.....	10
	3.2. Income differential	11
	3.3. A wider view	12
	3.4. Other social factors	17
	3.5. Empirical evidence	20
4.	Effects of migration	21
	4.1. Aggregated effects.....	21
	4.2. Remittances.....	25
	4.3. Emigration of qualified labour and loss of human capital	32
5.	Migratory policies	39
	5.1. National policies	39
	5.2. International framework.....	41
6.	The effects of the crisis: A note	44
	6.1. The effects of the crisis.....	44
	6.2. The effects on migration.....	46
	6.3. Political responses.....	49
7.	Final considerations	50
	Bibliography	54
	Annex: Models for determining migratory flows	60

CDP Background Papers are preliminary documents circulated in a limited number of copies and posted on the DPAD website at http://www.un.org/en/development/desa/policy/cdp/cdp_bg_papers.shtml to stimulate discussion and critical comment on the broad range of economic, social and environmental issues associated with the issues dealt with by the Committee for Development Policy. The views and opinions expressed herein are those of the author and do not necessarily reflect those of the United Nations Secretariat. The designations and terminology employed may not conform to United Nations practice and do not imply the expression of any opinion whatsoever on the part of the Organization.

United Nations
Development Policy and Analysis Division
Department of Economic and Social Affairs
2 United Nations Plaza, Room DC2-2020
New York, New York 10017, USA
Tel.: +1 212 963 5497
Fax: +1 212 963 1061
email: dpad@un.org
http://www.un.org/en/development/desa/policy/cdp/cdp_bg_papers.shtml

International migration and development: A review in light of the crisis

José Antonio Alonso

1. Introduction

One of the most conspicuous signs of the process of globalisation is the increase in migratory flows among countries, regions and continents. In an increasingly integrated world, people—although with significant restrictions—move across national borders, seeking opportunities on foreign soils that are denied them in their own countries. According to the United Nations, there were about 214 million international migrants in 2010. In relative terms, this corresponds to over 3 per cent of the world population. The percentage does not seem exceptionally high, especially when compared to the proportion of other cross-border transactions, such as trade and investment. However, the social and political relevance of migration goes beyond numbers: migration involves people, not just production factors but the plans, dreams, frustrations, hopes, and interests of human beings. Migrants are active forces driving new realities and corresponding social responses both at home and in host countries.

In fact, migration has become a major force shaping international reality. Migration is a powerful force of social change and cultural interaction in implicated countries. It provides migrants themselves with significant opportunities to progress. It is also a factor that has diverse developmental effects on both the home and host countries. The international community has recognised these facts in its deliberations on migration and has accepted the need to establish a more coherent political response to the phenomenon. The *Global Commission on International Migration*,¹ the *UN High Level Dialogue on International Migration and Development*² and the *Global Forum on Migration and Development*.³ are cases in point. Alongside these global initiatives, there are regional initiatives such as the Alto Diálogo Iberoamericano sobre Migraciones, la Conferencia Regional sobre Migración (the Puebla Process), the Migration Dialogue for West Africa, the Migration Dialogue for Southern Africa, the Ministerial Consultation on Overseas Employment and Contractual Labour for Countries of Origin and Destination in Asia (the Colombo Process), or the Bali Process on People Smuggling, Trafficking in Persons and Related Transnational Crime (the Bali Process), among others.

International organisations have also tackled the question of international migration and sought to define their positions on it. In this regard, the United Nations Department of Economic and Social Affairs (UN/DESA) focused the second part of its *2004 World Economic and Social Survey* to study migration (*International Migration*); the World Bank devoted its *2006 Global Economic Prospects* to analysis of the economic consequences of migration (*Economic Implications of Remittances and Migration*); the International Labour Organization (ILO) issued a report on the effect of migration on labour markets (*International Labour Migration and Development: The ILO Perspective*); and the United Nations Development Programme

1 <http://www.gcim.org/en/>.

2 <http://www.un.org/esa/population/migration/hld/index.html>.

3 <http://gfmd-fmmd.org/>.

(UNDP) devoted its 2009 *Human Development Report* to this crucial subject (*Overcoming Barriers: Human Mobility and Development*). Additionally, the International Migration Organization (IMO) is issuing increasingly comprehensive annual reports on international migrations and their impacts (the latest, released in 2010, entitled *The Future of Migration: Building Capacities for Change*)⁴.

Among the bilateral donors, the United Kingdom and the Netherlands stand out for the policy positions they have adopted on development aid, aiming to improve the impact of migration on development.⁵ In the same way, the European Commission dedicated several documents to defining its position on this subject, one of the most revealing of which was the Council Communication of November 2006 (*The Global Approach to Migration One Year On: Towards a Comprehensive European Migration Policy*).⁶

Despite all these initiatives, migration remains subject to restrictive legislative frameworks, which have been reinforced due to the current economic crisis. This restrictive tone contrasts with the increasing liberalisation of other economic flows. Private capital has become more mobile and moves across national borders (Caselli and Feyrer, 2007; Giannone and Lenza, 2009). Barriers to trade have been reduced, although obstacles remain (Bergin and Glock, 2007), and the degree of internationalisation of certain services has grown. Nevertheless, labour mobility between countries remains constrained by severely restrictive rules and policies. This contrast illustrates the unbalanced nature of the globalisation process currently under way.

The restrictive tone with which immigration is regulated is contrary to the need for migrant labour in developed countries, given the countries' stagnant demographics and ageing populations. Some developed countries need immigrants to support growth as well as to sustain public social security schemes. However, the gap between the needs of foreign labour and the norms regulating that demand has led to large numbers of immigrants living irregularly in their host countries. This has costs not only for the immigrants themselves, but also for the functioning of the society in which they live. Undocumented immigrants are denied the protection of the law and are thus prone to abuse, extortion, exploitation and violence. In irregular migrant environments mafias, police corruption and crime flourish and immigrants are among the victims.

The recent economic crisis has exacerbated the vulnerable situation of immigrants. The effect has been multiple. Firstly, in some OECD countries, the crisis has often implied a higher level of unemployment among immigrants than among natives, not only due to the precariousness of migrant work, but also because jobs held by immigrants were concentrated in construction and other services which were more severely hit by the crisis than other sectors. Secondly, due to the nature and duration of their contracts, immigrants tend to have a lower level of social protection when they become unemployed. Thirdly, strains on labour conditions in host countries have slowed migratory flows and have led many governments to announce significant reductions in their authorised immigration quotas: as a consequence, it is likely that undocumented migration will increase. Fourthly, the crisis has also affected remittances, which declined in real terms in 2009, although forecasts point to a rapid recovery of flows in the years to come. Lastly, and most importantly, the crisis has led to hostility against migration in certain social and political groups in host countries- migrants are seen as rivals to natives in the search for jobs, or as an additional burden to public services. That

4 The range of international institutions that have studied international migration is obviously wider, including several regional institutions (such as, for example, the Economic Commission for Latin American Countries (ECLAC), with its 2006 study, *International Migration, Human Rights and Development*) or others with mandates on specific kind of migrations (such as, for example, UNHCR in relation to refugees).

5 In the United Kingdom, for instance, the DFID produced the 2007 policy paper *Moving out of Poverty*, and in the Netherlands the MFA produced the 2008 document *International Migration and Development*.

6 http://ec.europa.eu/development/icenter/repository/comm_pc.

perception has been translated not only into a more restrictive tone in migration policy, but also into greater discrimination and xenophobic attitudes, even in countries with consolidated democracies.

The above notwithstanding, it is worth reiterating that migration, when suitably regulated, can potentially improve the efficiency and well-being of the overall international economic system, as both theoretical and empirical studies have confirmed. History shows, moreover, that migration can, in certain circumstances, be an important force in correcting international inequalities, actually reducing international salary differences between host and home countries (O'Rourke and Williamson, 1999; Hatton and Williamson, 2005). Aside from this global effect, migration is also an effective, although notably selective, means of increasing the possibilities of individuals to better themselves; improving individual income, health, education and living conditions. It is, therefore, an important development factor, especially if we consider that people (not only countries) matter (Clemens, 2010). If people could choose their places of residence with fewer restrictions, human freedom would be strengthened (Nussbaum, 2000).

Of course, migration can entail costs, both for the countries of origin (breaking of family structures, destruction of emotional ties, loss of dynamic sectors of the population, waste of social capital, etc.), as well as for the recipient countries (funding of policies for social integration of migrants, the effects deriving from greater ethnic and cultural heterogeneity, etc). Furthermore, in certain conditions, when emigration becomes a wide-spread and intensive phenomenon, it can feed a vicious circle which promotes a regressive dynamic of depopulation and the abandonment of productive activities in migrants' communities of origin. In these cases, young people plan their future in relation to the opportunities of migration, rather than seeking work and professional promotion in their own communities. All these costs need to be considered and, to the extent possible, minimised, through adequate policies both in countries of origin and in host countries.

In the following sections, the present study will analyse current migratory flows by taking into account their effects on development. The next section reviews trends in international migrations, while the third section discusses factors driving migration and reviews the theory of migration. Section 4 examines the effects of migration, focusing chiefly on its impact on the development of both home and host countries. This examination is followed by analysis on regulatory responses to the phenomenon in section 5. Section 6 analyses the impact of the current economic crisis on the flow and nature of international migration, and section 7 concludes.

2. International empirical evidence

2.1. *Size of migration*

This section begins by highlighting the limited reliability of data on the number of current migrants in the world. The fact that there is no single concept of what should be understood as a migrant,⁷ the irregular conditions in which many migrants live, and the shortcomings of the demographic statistics from some low-income countries all contribute to the problems with the quality of this information. Nevertheless, in the last few years the availability of such data has improved. Firstly, the United Nations has made an effort to present a relatively homogeneous statistic on the total number of the world's emigrants with data series spanning over the last five decades. Secondly, for some years bilateral flows of emigrants have been compiled, based on

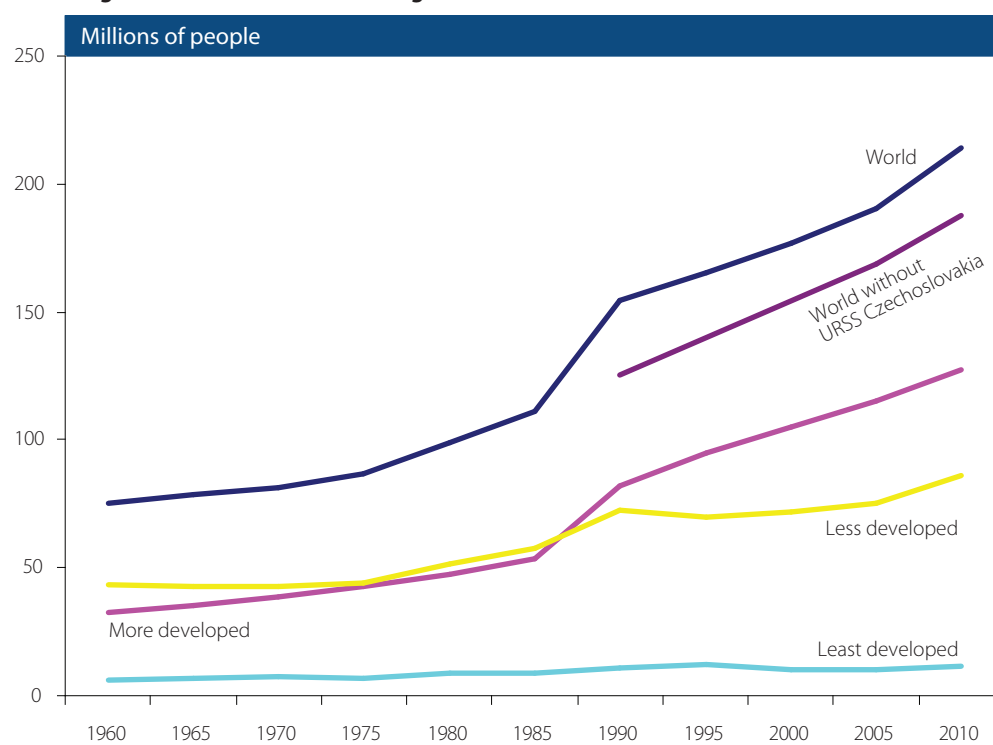
7 The two dominant concepts discussed are, firstly, that which defines a migrant as anyone born in a country different from that in which he or she lives, and secondly that which reserves the term for those of a different nationality from the country in which they live. In the second definition, the process of acquired citizenship leads to a difference in the migrant population.

harmonised data from national sources, mainly drawn from Population Censuses carried out in 2000 (Parson et al., 2007). Finally, Docquier and Marfouk (2004, 2006) have put together exacting data on education levels of migratory flows to OECD countries, allowing more rigorous studies.⁸

The United Nations' data over the last five decades shows that the trend in international migration has been upward in keeping with the process of globalisation. For these purposes, a migrant is considered anyone who was born in a country different from the one in which he or she currently lives. This upward trend shows a (somewhat artificial) jump around the 1980s, as a result of the sudden migrant status acquired by former USSR citizens as a consequence of living in regions different from their birthplaces (later converted into independent countries).⁹ Apart from that phenomenon, even excluding the USSR and Czechoslovakia, the upward tendency has been maintained, with a slight acceleration in the last three five-year periods (figure 1).

As a consequence of this upward trend, in 2010 there were about 214 million migrants in the world, about 3.1 per cent of the world's population. This figure is most likely an underestimate of the true magnitude of the phenomenon because undocumented immigrants are not adequately included in the data. Tentative estimates put the ratio of undocumented migrants in a wide range of between 5 and 30 per cent of registered migration, depending on national cases.¹⁰ In any case, if the total rate of migrants is compared to the relative share of trade and capital movements as a proportion of economic activity there is no doubt that, apart from its social significance, the phenomenon of emigration is relatively small in size.

Figure 1: Evolution of total emigrants



Source: United Nations (UN/DESA), International Migrant Stock. The 2008 Revision (<http://esa.un.org/migration>).

- 8** In any case, still there are problems in identifying the exact number of migrants, so the official register is not always able to estimate the number of irregular migrants.
- 9** A similar, though smaller, phenomenon was produced as a result of the breakups of Czechoslovakia and the former Yugoslavia.
- 10** Even in the United States, it is estimated that the official calculation fails to account for at least 1 to 1.5 million people.

In dynamic terms, in the 30 years between 1980 and 2010, the total number of migrants increased by an average annual rate of 2.6 per cent. In terms of the location of emigrants, from the mid-1980s, a noticeable change is that high-income countries have become the major destination of immigration. While the growth rate of migrants in high-income countries is 3.3 per cent for the period, low-income countries reached a rate of 1.7 per cent. By 2010, 60 per cent of migrants lived in a high-income country (table 1).

According to these data, the most developed regions of the world (Europe and North America) have the highest number of migrants. Asia comes next, with a relatively similar percentage. These figures are, however, highly dependent on the demographic size of the respective regions. This is why it is useful to look at the relative size of immigrant communities to their host populations (table 2). From this point of view, North America and Oceania, the two most recently populated regions, are those with the highest coefficients (14 per cent and 16 per cent respectively). Next is Europe, a region where migrants make up 9 per cent of the residential population. In the other regions, the immigrant population is less than 2 per cent. This evidence confirms the greater relative importance of the migrant population in more developed countries (10 per cent of the population) than in less developed countries (1 per cent).

Table 1: Total numbers of migrants

Millions of people											
	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
By region											
Africa	9.1	9.4	9.9	11.0	14.0	14.4	16.3	17.9	6.5	17.0	19.2
Asia	28.5	28.2	27.8	28.0	32.1	37.2	49.9	47.2	50.3	53.3	61.3
Europe	14.2	16.6	18.8	20.1	21.9	23.4	49.3	55.2	58.2	64.1	69.8
Latin America	6.0	5.8	5.6	5.7	6.0	6.2	6.9	6.0	6.3	6.6	7.5
North America	12.5	12.7	12.9	15.3	18.1	22.1	27.6	33.5	40.3	44.5	50.0
Oceania	2.1	2.5	3.0	3.3	3.7	4.2	4.7	5.0	5.0	5.0	6.0
World	75.4	78.4	81.3	86.7	99.2	111.0	154.9	165.0	176.7	190.6	213.9
By developmental level											
More developed	32.3	35.4	38.3	42.4	47.4	53.6	82.3	94.9	105.0	115.4	127.7
Less developed	43.1	43.0	42.9	44.3	51.8	57.3	72.5	70.1	71.7	75.2	86.2
Least developed	6.4	6.9	7.2	6.8	9.1	9.1	10.9	12.2	10.2	10.4	11.5

Source: United Nations (UN/DESA), International Migrant Stock. The 2008 Revision (<http://esa.un.org/migration>).

Table 2: Regional distribution of emigrants

As a percentage of the local population											
	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
By region											
Africa	3.2	3.0	2.7	2.7	2.9	2.6	2.6	2.5	2.0	1.9	1.9
Asia	1.7	1.5	1.3	1.2	1.3	1.3	1.6	1.4	1.4	1.4	1.5
Europe	3.4	3.8	4.1	4.3	4.5	4.8	6.9	7.6	8.0	8.8	9.5
Latin America	2.8	2.3	2.0	1.8	1.7	1.6	1.6	1.3	1.2	1.2	1.3
North America	6.1	5.8	5.6	6.3	7.1	6.2	9.7	11.2	12.8	13.5	14.2
Oceania	13.4	14.3	15.4	15.8	16.4	17.0	17.8	17.5	16.3	15.2	16.8
World	2.5	2.4	2.2	2.1	2.2	2.3	2.9	2.9	2.9	3.0	3.1
By developmental level											
More developed	3.4	3.5	3.6	3.9	4.2	4.6	7.2	8.1	8.8	9.5	10.3
Less developed	2.1	1.8	1.6	1.5	1.6	1.6	1.8	1.6	1.5	1.4	1.5
Least developed	2.6	2.5	2.3	1.9	2.3	2.0	2.1	2.0	1.5	1.4	1.3

Source: United Nations (UN/DESA), International Migrant Stock. The 2008 Revision (<http://esa.un.org/migration>).

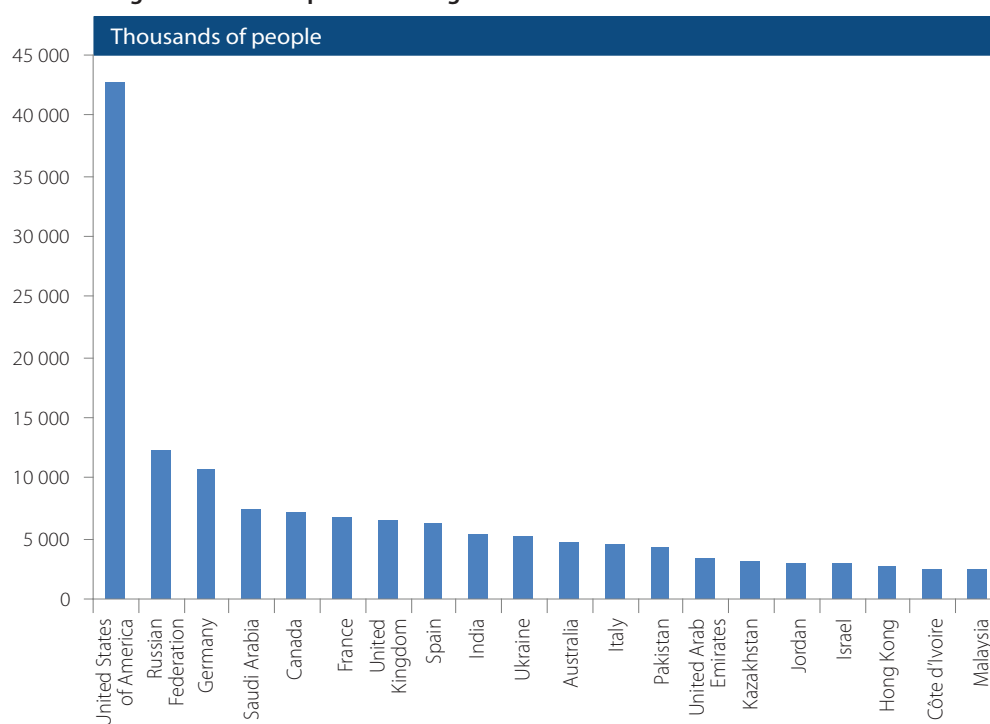
The above data could suggest that problems related to receiving international immigrants almost exclusively belong to developed countries. However, the phenomenon is more complex than that image suggests, as becomes clear when the countries with the largest amount of immigrants are identified (figure 2). Some developed countries stand out here, such as the United States, Germany, Canada, France and the United Kingdom—countries that have traditionally received migrants. Spain is in eighth place, having progressed in the last few years. Nevertheless, developing countries like India, Pakistan and the Ivory Coast also occupy leading positions. That suggests that the distinction between host, destination and transit countries in terms of emigration is increasingly blurred. A good number of countries, particularly Mexico and India, fall into all three categories.

Figure 3 also shows that the migratory phenomenon is global in nature. According to the *Migration Development Research Centre*, in 2000, 79.7 per cent of migratory flows came from developing countries; 45.3 per cent went to developing countries and the remaining 34.4 per cent was bound for developed countries. In turn, 16 per cent of the total emigration from developed countries went to other developed countries, while 4.2 per cent went to developing countries. It is clear that migrant flows are not characterized by only one-way traffic.

2.2. Differential traits

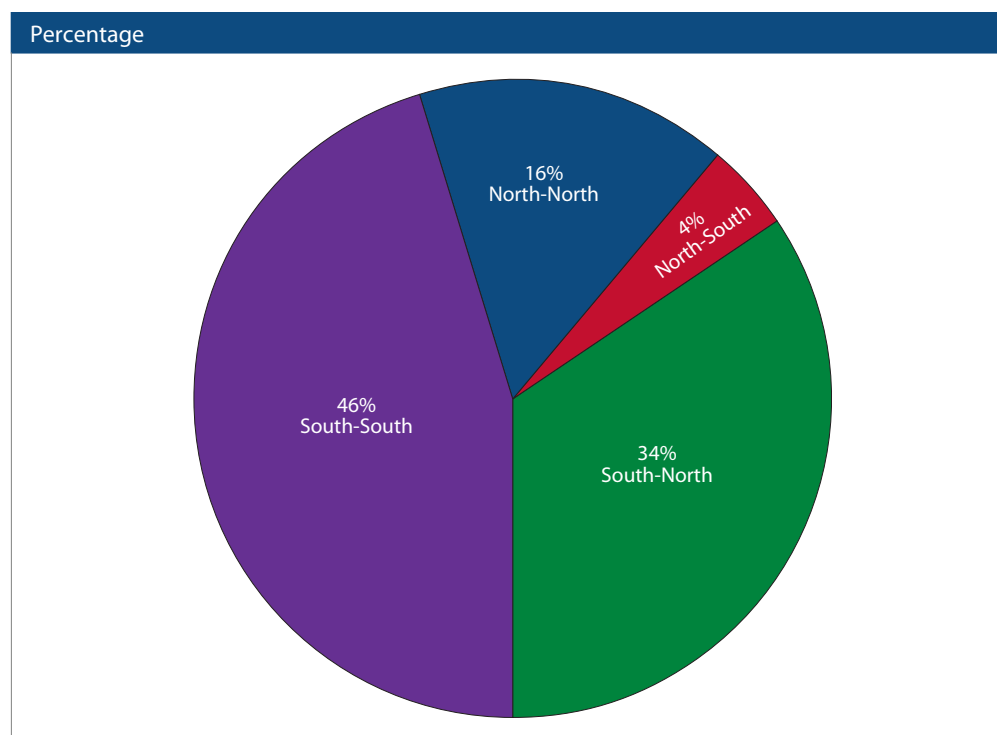
The phenomenon of massive migration is not new in history. Similar international population movements took place in previous eras, across countries and continents. In particular, historians have documented large-scale migratory movements between 1840 and the start of the First World War. They estimate that almost 50 million Europeans moved during that period either to America, crossing the Atlantic, or to Australia and New Zealand. During the same period, 50 million Asians left China and India to seek their fortunes on the southern coasts of Asia, Africa and Latin America. This was the *first era of mass migration*, as Hatton and Williamson (1998) have termed it.

Figure 2: Main recipients of emigration



Source: United Nations (UN/DESA), International Migrant Stock. The 2008 Revision (<http://esa.un.org/migration>)

Figure 3: Flows of origin and destination in 2000



Source: Based on data from Development Research Centre on Migration, Globalisation and Poverty and Parsons et al. (2007), "Quantifying International Migration: a Database of International Migrant Stock", in C. Ozden and M. Schiff (Eds), *International Migration: Economic Development and Policy*, World Bank, Palgrave Macmillan.

Note: North includes the United States, Canada, EU-15+EFTA, Australia, New Zealand, Japan and high-income countries of Middle East; and South Latin America, Eastern Europe and Central Asia, the Middle East and North of Africa, East Asia and Pacific, Southern Asia and Sub-Saharan Africa.

The intensity of migration in that period was even higher than levels registered today. Taking the United States for comparative purposes, between the end of the 19th century and the start of the 20th, new arrivals to the country for each decade amounted to about 10 per cent of the resident population-today that rate is around 3 per cent. In fact, between 1880 and 1920, an average of 6 million immigrants arrived in the United States per decade, a figure that has only been exceeded during the last three decades. The liberal tone of immigration policies in receiving countries, coupled with a desire to stimulate the population of certain regions, facilitated the migration process, while in source countries emigration was driven by food crises and the degradation of traditional rural structures. All this took place in the context of a notable lessening of transportation costs due to the increasing use of steam engines on ships and the expansion of railways.

The flow of transatlantic migration fuelled the growth of host countries by providing them with necessary human resources, while it also accelerated the transformation of Europe's agrarian structures and relieved pressure on its labour markets. Some segments of these migration flows filled jobs in manufacturing and temperate agriculture in countries of limited demographic density (such as the United States, Canada, Argentina, and Brazil). The production of these countries competed with European production and with countries with relative high level of development. As a result, migration reduced international inequalities in wages-historians estimate that the transatlantic migration accounted for just over 60 per cent of the process of convergence in real wages between Europe and the United States (Lindert and Williamson, 2001; O'Rourke and Williamson, 1999). However, this was not the case for a large part of Asian migration, which was driven to fill jobs in agriculture and services in tropical countries such as those in the Caribbean. In this case, production largely competed with that of other low-income countries in Asia and Africa, which had high labour intensity and low standards of living, therefore fuelling inequalities between recipient countries and the rest of the world (Lewis, 1969 and 1983). So, the effect of migration on international inequality depended, in great part, of the conditions of the host country's productive specialization in international markets.

Although the countries of origin and destination have changed, every fact available seems to point out that we are currently in a *second era of mass migration*. This is suggested by the intensification of migratory pressures. It is no coincidence that both periods appear to be characterised by an increase in international openness and integration; the root of what we call globalisation. The phenomenon is, therefore, not new and humanity experienced similar processes in previous eras. However, when compared with other historic episodes, the present migratory flows have four distinctive traits worth highlighting:

- Firstly, the *factors encouraging emigration*.

In the past, the fundamental factor that stimulated transatlantic migration was not so much the average income differential between countries but rather the opportunities for social and economic betterment that the new world offered. In 1850, the per capita income of the United States was only 33 per cent higher than in Italy, and Argentina's in 1870 only 9 per cent higher than Spain's. Migration took place between countries with relatively similar developmental levels and came about because it allowed poor Europeans to move from hierarchical, highly unequal societies to countries with much greater social mobility. Inequality within countries was a more significant factor than international inequality.

Today, however, the per-capita income differential between countries is a much more important factor in explaining migration. The United States' per capita income is quadruple Mexico's, Spain's is five times that of Ecuador, France's six times that of Morocco, and the United Kingdom's is 10 times that of Pakistan. Migration now means movement to a country whose average level of life is much higher. Therefore, international inequality is a much more important factor fuelling migration in this era.

- Secondly, the *feminisation* of emigration.

At the end of the 19th century, migratory flows were primarily composed of men (between 2/3 and 3/4). The presence of women, especially in the form of independent migration (as opposed to being part of the family nucleus) was a relatively minor phenomenon. At the moment, however, women make up half the total amount of emigrants; in some cases as a consequence of family-reunion policies, but also as a result of total independent migratory strategies (figure 4). Even so, the rate of women in migratory flows varies considerably depending on the destination region. The proportion of women is highest in emigration to Europe, and lowest in emigration to Asia. Although some of the factors that influence the presence of women in different migratory flows are known, a full explanation of the observed differences is far from established.

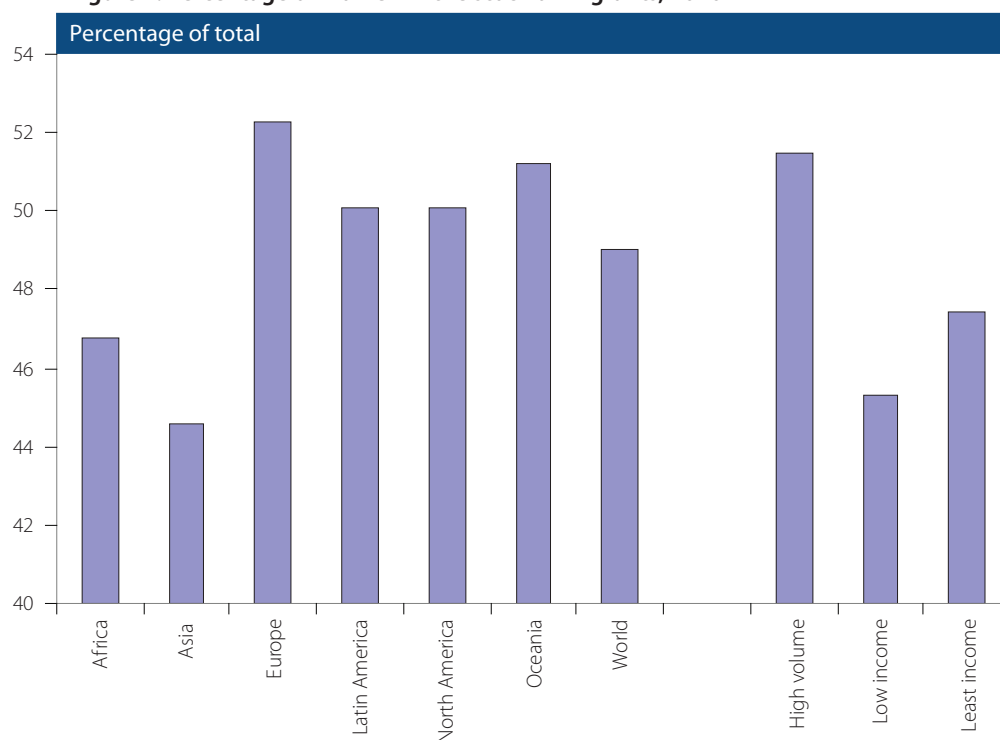
Although the higher share of women in total migrants could be the result of advances in women's empowerment, it is worthwhile pointing out that in many cases female migration seems to be associated with activities related to traditional domestic tasks in the destination country (domestic service, child care, care of the elderly)—a reality that reinforces traditional gender roles, although on a transnational scale. In fact, in some cases female migration has allowed a fresh division of domestic tasks in host countries, allowing women in host societies greater independence. In other words, gender inequality in host societies has been corrected at the expense of gender inequalities internationally. The increase in elderly populations in developed countries is also contributing to the feminisation of migrant flows, as new jobs for female migrants are created in relation to the "economy of family care". This labour specialization has costs for the migrant woman in terms of salary, personal promotion and employment security. In any case, a fuller and more independent incorporation of women into migratory flows should be seen positively, to the extent that it contributes to reduce gender inequalities in countries of origin.

- Thirdly, *the presence of undocumented migrants*.

In the previous era of mass migration in the second half of the 19th century, the phenomenon of undocumented migration did not exist: after a medical examination and registration, migrants acquired the status of residents of the host country. However, since the start of the 1920s, when U.S. legislation became more restrictive on immigration, a large number of migrants have lived outside the law in their host country. The best estimates suggest that close to 30 per cent of total emigrants are living informally in the United States (Passel and Cohn, 2008); while in the European Union that share ranges between 5 per cent and 15 per cent, depending on the country (Vogel and Kovacheva, 2009). The presence of undocumented immigrants is the result of an imbalance between the restrictive regulatory framework and the strength of migratory pressure, sometimes fuelled by the labour needs of recipient countries.

The contrast between migratory demand and regulatory response means that for a large number of people migration takes place without legal protection. Emigrants in this situation are stripped of rights and made vulnerable to abuses, both during transit and following settlement in their destination country. Undocumented migration has also contributed to the abuse of emigrants by mafias and criminal networks. The most extreme example of this abuse is human trafficking, in which displacement may be associated with sexual exploitation, organised crime, violent abuse, and clear economic exploitation. Despite the seriousness of this phenomenon, its full dimension is not known. A recent report by the U.S. Department of State¹¹ estimates that 12.3 million people were affected by such crime, meaning that 1.8 of every 1000 of the global population suffered this type of abuse.

Figure 4: Percentage of women in the stock of migrants, 2010



Source: United Nations (UN/DESA), International Migrant Stock. The 2008 Revision (<http://esa.un.org/migration>)

11 US Department of State: *Trafficking in Persons Report 2010*, <http://state.gov/g/tip/rls/tiprpt/2010/>.

- Finally, a source of *transnational social capital*.

Advances in communications technology have meant that contact between communities of origin and those in destination countries occurs almost on a daily basis with lower costs, creating a range of transactions and communications. Remittances are just one part of those transactions; other flows related to communications, tourism, transport and trade in nostalgic products have likewise been developed. There is an entire network of communications, initiatives and undertakings linked to relationships between communities of origin and the diasporas in destination countries. Feelings of national identity are strengthened in the diasporas, creating positive phenomena of solidarity and mutual support (social remittances, for example), as well as negative expressions of crime (such as gangs and “maras”).

3. Factors driving migration

3.1. Introduction

Almost four centuries ago, Marc Lescarbot (1907-14, I, 295) wrote: “Three things drive men to seek lands far away and to abandon their homes. The first, the desire to find something better. The second, when a province is full to bursting of people (...). The third, divisions, disputes and quarrels”. More recently, the Global Commission on International Migration (2005) reached a similar conclusion, referring to three ‘Ds’ driving emigration: development, demographics and democracy.¹² *Relative privation* generates a lack of development; pressure on resources and employment is caused by *excessive population growth*; and exclusion, persecution and violence, is caused by *a lack of democratic rights*. These have been the most important factors for migration in history.

Of course, times have changed since Lescarbot wrote his *History of the New France*, but the problems he highlighted remain today. It is true that during the last few decades democracy has spread across the globe and there is a more generalised, shared recognition of human rights. The data show that elections to choose a government are held in about 140 of the 192 countries that make up the United Nations. However, the United Nations recognises that in 100 of those countries, there are important restrictions on civil and political liberties; in 70, levels of corruption are demonstrably high; and in about 30 there are active armed conflicts. As a result, more than 14 million people are refugees today; and an untold quantity of people have emigrated from their countries to flee violence—not just political, but also religious and gender violence.

Progress has doubtless been made in democratic terms, but the differences that exist between countries in their levels of development and respective demographic dynamics have taken on huge proportions in the current era. In particular, the gap between the richest region on the planet and the poorest was less than 3 to 1 at the beginning of the 18th century when Lescarbot wrote his book, but today that ratio is 19 to 1 (the richest region has 19 times the per capita income of the poorest). These differences are multiplied if we look at countries rather than regional averages: the per capita income of the United States is about 267 times that of Zimbabwe, both expressed in PPP; the per capita income of Norway is 184 times that of the Liberia; and that of the Netherlands is 140 times that of the Democratic Republic of the Congo, with both expressed as purchasing power parity (PPP).

Differences in terms of demographics have also increased significantly. For instance, the population growth rate of sub-Saharan Africa is five times that of the EU (2.7 per cent compared with 0.5 per cent). With an ageing population, developed countries face the problem of providing sufficient human resources

¹² See Global Commission on International Migration (2005): *Migration in an interconnected world: New directions for action*, en www.gcim.org.

in order to fuel economic growth and extend the sustainability of their respective welfare states. In the case of developing countries, the problem is how to educate their populations and integrate a large number of young workers into the labour market. The lack of balance between these demographic dynamics is another powerful factor behind international migration.

In this context we should not be surprised when people try to overcome international inequalities through personal initiatives: emigrating from places with few opportunities to destinations offering more. *If a society does not change, we change the society: individual exit* emerges as an alternative when there is no confidence in the *collective voice* as a means of social progress. Emigration therefore becomes a response to striking economic and social differences in an increasingly integrated and unequal world.

That said, for people to decide to migrate, it is not enough that inequalities exist. It is necessary that the emigrant have scenarios of both departure and reception in the new country in his mind, as well as a vision of what opportunities might be in his future. People do not desire that which they do not know about, nor do they demand things clearly beyond reach. Reductions in the cost of transport, development of new communication technologies have contributed to greater integration of the international community. Geographic barriers are pushed, distances are broken down, and alternative ways of life are shared and presented as desirable.

Globalisation and international inequality are revealed, therefore, as the two underlying vectors feeding migration. It can be understood that the greater the international inequality (the greater the gradient of income and living standards between countries) and the lower the costs associated with displacement (the lower the obstacles to mobility), the greater the expected volume of emigration will be. This argument explains the increase in migratory pressure in an era of accentuated and imbalanced globalisation. In this context, the question is not why migratory flows are so intense but, given the huge inequalities that exist, why there is so little migration.

To sum up, we live in a world of growing migratory pressures. This burden is neither entirely new nor likely to be episodic, beyond the effect of stemming flows caused by the crisis. During other historical periods, humanity underwent waves of migration that were similar, or even more intense, than what we are experiencing now. The wave we are experiencing now is bound to remain with us, at least for some time, as an important feature of international relations. Since the phenomenon is not new, we need to draw on important lessons from the past. As this wave of emigration is not temporary, we need to tackle the phenomenon intelligently and without alarmism. In this way, it is necessary to start to analyse the causes driving emigration, which is what this section seeks to do.

3.2. *Income differential*

The causes of migration are as numerous and diverse as the kinds of migration that exist. Temporary migration as a one-off saving/investment strategy is not the same as the definitive move of a migrant to a new country of residence; migration undertaken by an individual is not the same as migration by an entire family nucleus; the characteristics of migration driven by migrant's economic poverty are not the same as those of a migration promoted by people's desire to improve their professional qualification or their studies; and finally, emigration aimed at obtaining a more secure and profitable job is not the same as emigration fuelled by the desire to flee violence, persecution and discrimination. The means of emigration are as diverse as the reasons behind each case. Despite that, when economic reasons are referred to for emigration—thereby excluding political, religious and cultural reasons—the migration is thought to be conditioned by two opposing factors: the opportunity for economic progress that change implies, and the cost and risk associated with the move.

Economic theory at its simplest has tended to identify the cause of international migration with differences in labour rewards between countries. In a framework of general equilibrium, migration operates like a system of interconnected vessels, which allow balancing of the difference in wages between countries with dissimilar productive factor endowments. It is to be expected, therefore, that in search of greater income, the world's population moves from economies with (cheap) abundant manpower in relative terms to places where manpower is in relative short supply (higher-income countries). This theory seems confirmed by the fact that almost 80 per cent of the migrant population of a developing country chooses a more developed country as destination (UNDP, 2009).

Differences in living standards among countries are substantial enough to justify this movement. Clemens Montenegro and Pritchett (2008) aim to estimate the benefits to citizens from developing countries who settle in the United States. They compare data for 1.5 million workers in 42 developing countries with that of people from the same developing countries who work in the United States, correcting the selection bias associated with the comparison. They find that an average male worker from a developing country, aged 35, with 9-12 years of education can earn an additional income of 10,000-15,000 dollars a year in the United States. In other words, the average wage doubles or triples, depending on the case—a powerful factor driving emigration.

According to the analysis, emigrants from the least developed countries are those which most benefit from migration. The UNDP (2009) states that this type of migrant can see his or her income multiplied 15 times (15,000 dollars a year), while rates of registration in education double (from 47 per cent to 95 per cent) and infant mortality is reduced 16 times (from 112 to 7 per thousand live births). For the migrant, the emigration decision is therefore one with enormous potential for progress.

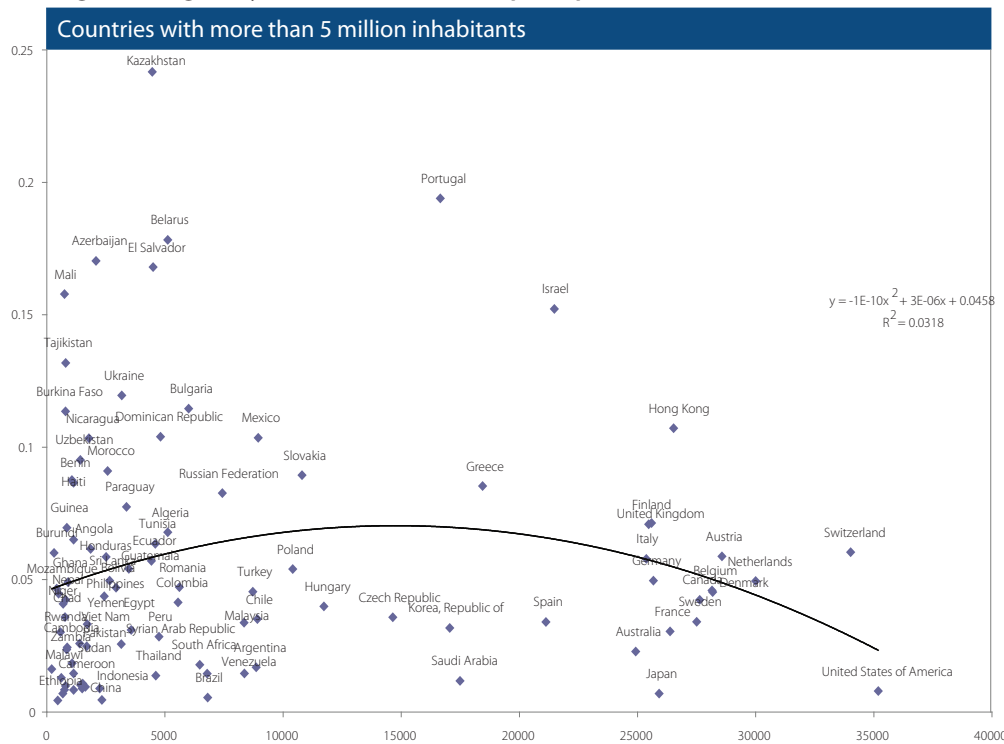
Despite the persuasiveness of the above theory, it comes up against one problem: the cartography of cross-border migratory movements does not respond precisely to the gradient of labour rewards. Migration does not necessarily originate from the poorest countries (where wages are lowest), nor are the principal destinations for migratory flows always the richest countries (those with the highest wages). The mere difference in wages or in developmental levels between countries does not seem an exhaustive explanation for migratory flows. If it were, why then would Ecuadorean migrants choose Spain as a destination, when they could go, for example, to the Netherlands, whose per capita GDP is 34 per cent higher than Spain's? And why do Ecuadoreans emigrate massively to Spain but not Haitians, whose per capita GDP is almost one-seventh of Ecuador's?

In fact, if the rate of migration (taken from Parson et al. 2007) is plotted against countries' GDP per capita (measured in PPP), no significant linear relationship is found between the two variables. Instead, an inverted U-shape curve can be drawn, showing that migration is at its most intense from middle-income countries (figure 5). Nevertheless, even this relationship is subject to nuances, since the size of a country also influences the rate of migration (there being a bias in favour of the smaller countries) as well as the size of the diasporas which, as we shall see later, reduces the costs of migration.

3.3. *A wider view*

If we want to deepen our explanation, we should begin by underlining—as Todaro (1969) and Harris and Todaro (1970) did—that the important factor is not so much the dissimilarity of labour rewards at a particular moment, but rather the differential in *expected income during the life cycle*. In other words, when

Figure 5: Migratory rate in relation to GDP per capita (PPP), 2000



Source: Based on data from Development Research Centre on Migration, Globalisation and Poverty and Parsons et al. (2007), "Quantifying International Migration: a Database of International Migrant Stock", in C. Ozden and M. Schiff (Eds), *International Migration: Economic Development and Policy*, World Bank, Palgrave Macmillan.

the migrant decides to change countries, he or she is not just taking into account the difference between wages in the countries of origin and destination at a given moment, but also considering the possibilities for progress that one or another country might offer over his or her life cycle (or the overall period of emigration). In determining the difference in progress and salaries, other factors are also taken into account, such as the probability of access to a stable job in one country or another, the possibilities for social and professional promotion that each market offers, and the different level of risk associated with future income flows over the migrant's life cycle in each country.

This approach allows us to integrate the *comparative demographic dynamic* into the explanation of the migratory phenomenon. The value of expected incomes in the country of origin will be notably reduced with very expansive demographic dynamics, since an excess of working-age population will put downward pressure on salaries as well as the probability of employment. On the other hand, a stagnant and ageing population in host countries increases the demand for immigrants to occupy jobs at moments of economic expansion, as well as to fund welfare systems, given the growing burden of this passive sector of the indigent population.

Recently, the United Nations dealt with this issue in its report UN (2000) *Replacement Migration: Is it a Solution to Declining and Ageing Populations?* According to demographic forecasts by the Population Division of UN/DESA, the world population is expected to grow by 2.5 billion people by 2050 (from 6.7 to 9.2 billion). That growth will be concentrated in developing countries (growing from 5.4 to 7.9 billion), with the developed world remaining relatively stable at 1.2 billion people. The growth will be accompanied by a sharp ageing of the world population: the percentage of the population aged over 60 will double and the percentage of those younger than 15 will slightly decline (table 3).

Table 3: Distribution by age

Percentage	Percentage in 2005				Percentage in 2050			
	0-14	15-59	+60	+80	0-14	15-59	+60	+80
World	28.3	61.4	10.3	1.3	19.8	58.3	21.8	4.4
More developed	17.0	62.9	20.1	3.7	15.2	52.2	32.6	9.4
Less developed	30.9	61.0	8.1	0.8	20.6	59.3	20.1	3.6
Least developed	41.5	53.4	5.1	0.4	28.2	61.5	10.3	1.1
Other less developed	29.1	62.3	8.6	0.9	18.4	58.7	22.9	4.3
Africa	41.4	53.4	5.2	0.4	28.0	61.7	10.4	1.1
Asia	28.0	62.7	9.2	1.0	18.0	58.3	23.7	4.5
Europe	15.9	63.5	20.6	3.5	14.6	50.9	34.5	9.6
Latin America and the Caribbean	29.8	61.2	9.0	1.2	18.0	57.8	24.3	5.2
Northern America	20.5	62.7	16.7	1.5	17.1	55.6	27.3	7.8
Oceania	24.9	61.0	14.1	2.6	18.4	56.9	24.8	6.8

Source: "World Population Prospects: The 2006 Revision. Population Ageing".

This process of ageing will be most striking in developed countries. By 2050, almost a third of the population in developed countries will be 60 or older, while the population younger than 15 will scarcely reach 15 per cent of the total (table 3). Those proportions are more balanced in developing countries, with both ends of the age spectrum weighted at 20 per cent. There are, however, some variations among regions in the developing world. In the major part of Latin America and Asia in which the ageing of the population has already notably started, about 24 per cent of population will be 60 or older by 2050 while those under 15 years old will make up 18 per cent. In many African countries, with the ageing process behind that of other regions, persons 60 and over will make up just 10 per cent of the population, while those younger than 15 will account for 28 per cent.

This age distribution has repercussions for the *potential support ratio* (PSR),¹³ which is expected to fall in developed countries as a result of the ageing demographic. This ratio conditions not only the results of the productive effort, since the working-age population has to sustain the dependent population; it also conditions the possibilities of sustaining welfare policies based on distribution between active and non active people. For example, the potential support ratio in Europe is about 4.5, but it is expected to fall to about 2 in 2050. This means every two members of the active population will have to support one retired person. It is clear that, the greater the dependency on each working member, the lower the level of per capita income generated from the same productive effort. Avoiding such a decline could be one of the motivations for encouraging immigration in developed countries in the future.

The demographic data from the United Nations are rather similar to those related to the economically active population (EAP) that the ILO is projecting for the next few years.¹⁴ Accordingly, the world's EAP will rise from 3 billion in 2008 to little over 3.5 billion in 2020. Due to the stagnation of the EAP in developed countries, all EAP growth is forecast to be in developing countries (by 446 million of people). Again, if developed countries want to increase their economically active population, they will have to do it through international migration.

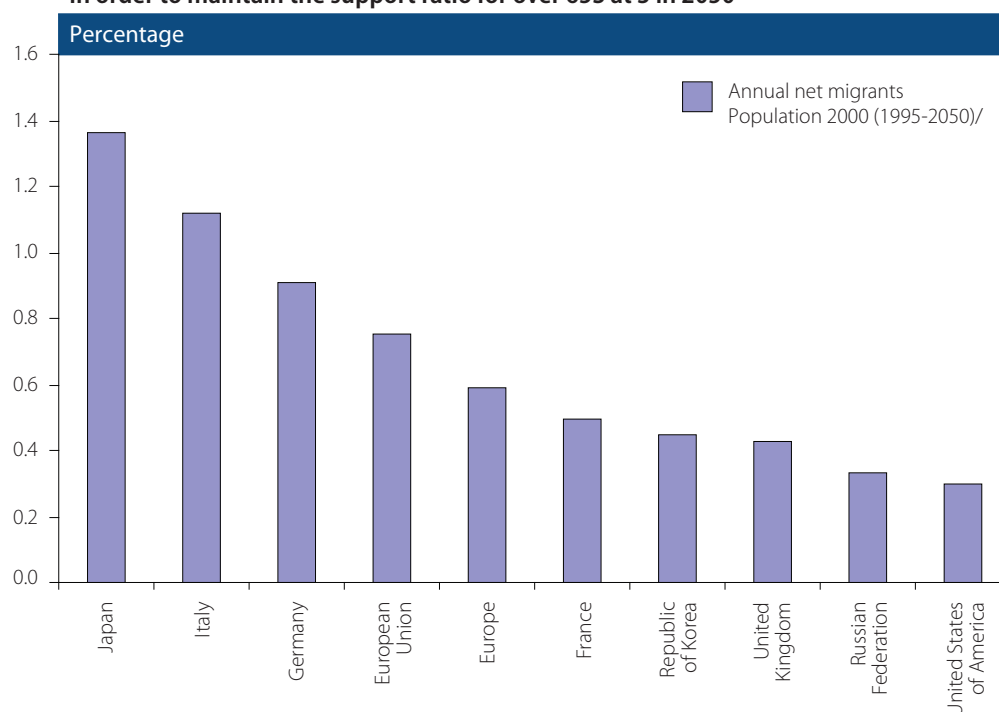
¹³ Measured as the quotient between the population of 15 to 64 to the number of people over 65 (children younger than 15 are in this case not considered as passive people).

¹⁴ See <http://laborsta.ilo.org/STP/>.

These demographic forecasts are translated by the UN (2000) in terms of migratory necessities required to replenish the working age population. In one scenario,¹⁵ for example, the EU’s net immigration would need to be almost 2.8 million people per year (0.75 per cent of the 2000 population) during the period 1995-2050 to maintain the PSR at 3 in 2050.(figure 6). The total amount of immigrants needed for 1995-2050 across the whole of Europe would be 235 million people-four times the increase in immigration experienced in the last 50 years. In other regions, such as North America, the replacement needs are smaller (44 million people), but that still amounts to an increase of 17 per cent compared with the flows received over the last five decades.¹⁶ To sum up, the *differential in the patterns of demographic growth*, when not compensated for by differences in the rate of job creation, constitutes a relevant factor in explaining migratory flows.

One additional factor in migration is the accumulation of *assets*—to be displaced to the destination market—that can back a potential migrant’s decision to emigrate. Migration involves an investment in resources, so it is not surprising that certain assets are required to undertake it. One relevant asset in this respect is of course money amassed by the migrant, that is, personal savings (or those of the family) that allow the migrant to pay for travel and other expenses associated with settlement in the destination country. This is why—as we shall see later—extreme poverty acts as a restrictive element on emigration-the poorest do not emigrate because of a lack of necessary resources. This leads to the conclusion that globalisation has created an additional factor in social segregation by discriminating against those who lack sufficient means even for migration (Bauman, 2003).¹⁷

Figure 6: Net annual needs for migrants per inhabitant in the period 1995-2050 in order to maintain the support ratio for over 65S at 3 in 2050



Source: United Nations (2000), *Replacement Migration: Is it a Solution to Declining and Ageing Population?*, United Nations Publications No. E.01.XIII.19.

15 The UN (2000) suggests six scenarios, some of which are unrealistically extreme. Among those proposed, the most plausible is the one outlined here (being the fifth scenario).
 16 As is obvious, the assumptions on which these estimates are based could be altered in accordance with productive specialization and the nature of the technological development of those countries with greater ageing populations.
 17 This is in keeping with the definition by Nussbaum (2000) that mobility is one of the basic fundamental capacities of human beings.

Apart from money, another important asset is the *accumulated human capital* of the migrant: his or her skills, competencies and knowledge. In the highly competitive OECD markets, where primary and secondary education is virtually universal, the level of education of the migrant is an asset relevant to employment opportunities, and influences the decision to emigrate (Adams, 2003). The asset of education becomes even more valuable in the case of migration to countries with selective migratory policies such as Canada or Australia. On the other hand, education seems less relevant in the case of irregular migration, or migration specialising in rural labour (Mora and Taylor, 2006).

In general, a migrant's training can actuate the migratory decision as it facilitates access and insertion into the labour market of the destination country. The more difficult the access to a labour market, the greater the educational assets a migrant should possess in order to ensure success. For example, in case of migration to the U.S., the level of education of migrants from Asia or Africa is higher than those from Mexico. The cost of not finding a job in the host country for a Mexican migrant may be seen as lower than for African and Asian migrants, who require a higher level of human capital to reduce their risk of failure. In general, migrants tend to have a higher level of education than the average person in their country of origin. For example, 35 per cent of economically active migrants heading to OECD countries have tertiary education, a rate almost six times the average population in their countries of origin (Docquier and Marfouk, 2006).

In some cases and professions this effect is so pronounced that—as we shall see further on—it drains the pool of professionals with higher education in the country of origin, leading to what has been dubbed *brain drain*. Frequently, however, the economy receiving the emigrants is incapable of making full use of the education of the migrant population, and immigrants end up in less-skilled jobs, causing the phenomenon called *brain waste*.

One of the components of human capital that can be evaluated by the destination market is the *mastery the emigrant has of the language and customs* of the host country. Mastery of the language and local culture allows the migrant, in theory, to integrate in the labour market and the social environment more quickly, and with lower costs (Alonso and Gutiérrez, 2010). This asset is especially valued in jobs involving a high level of communication, such as those related to customer service or personal care. This factor explains why migrants from English-speaking countries are over-represented in the United Kingdom and the United States, while French-speaking emigrants are over-represented in France and Belgium, and Latin Americans in Spain. The cultural community is also a factor that can reduce a migrant's integration costs in the host country. This explains why six out of ten migrants head for countries with a similar religion to their own, and four of ten go to a country with the same language (UNDP, 2009).

The comparative degree of certainty about the future flow of income in the markets of origin and destination also influences the decision to migrate. The more unstable the market of origin and the more stable the likelihood of progress in the destination market, the greater the migratory pressure. The stability of the destination market influences the confidence with which the future is viewed, in terms of an intertemporal choice (through the discount factor of expected income). Migration tends to take place in highly unstable environments with episodes of prolonged stagnation or recurrent crises in the markets of origin; and it is stimulated by the sequence of continued progress in the destination markets. This explains the effect that the current crisis is having on reducing the attraction of some developed countries as destinations for migration.

Lastly, another factor that limits migration is the *cost of transport and access to the destination markets*. Here we need to consider not just the economic cost of transportation and settling in the host country, but

also the risks and difficulties associated with the transit. This is why the bulk of international migrations take place within regions: almost 60 per cent of emigration happens between countries belonging to the same region (Parsons et al., 2007). In accordance, migratory pressures are increased when proximity reduces access costs while, at the same time, the contrast between levels of living is made more evident. This is the case with the geographical borders between the developed and developing world, where the gradients of income and well-being that co-exist internationally are most visible and immediate. This is evident, for example, in the 3,600-kilometres border between the United States and Mexico, and in the sea that separates North Africa (Tunisia, Libya or Morocco) from Southern Europe (Italy or Spain); also between Albania or Macedonia and Greece or Italy, or between Indonesia and Malaysia. In all these cases, the relationship between the per capita incomes of the contiguous countries is higher than 1 to 3 (Milanovic, 2011).

3.4. *Other social factors*

So far, the factors we have considered in explaining emigration have been those that most directly affect the differential of future income in the markets of destination and origin. However, other factors, more social in nature, also influence the decision to emigrate. Here we will focus our attention on nine of them.

Firstly, as Stark and Levhari (1982) and Katz and Stark (1984) suggest, beyond being a route to improved income, migration can also be considered a *risk-avoidance strategy* by families in highly vulnerable environments. Something presented as a personal venture can in fact be a calculated strategy for reducing levels of family risk through diversification of the income sources of the domestic unit. To the extent that a low co-variance exists between the evolution of income in the markets of origin and destination, the migration of a family member can prove an apt strategy to reduce the levels of risk and vulnerability of the family nucleus. An important conclusion that can be drawn from this is that the factors determining the migration of certain family members can also explain why, sometimes, the rest of the family decides not to migrate.

Looking at the *family and community as a reference unit* to analyse emigration seems to be an acceptably demonstrated assessment (Massey, 1987, Barham and Boucher, 1998). The presence and purpose of remittances, the intensity of communication between the emigrant and his or her family, the sharing of family obligations such as caring for children and the home by family members who remain behind, and the effort the emigrant devotes to the processes of reuniting the family are all factors which confirm a family commitment on which the decision to emigrate is largely based. Emigration redefines family relations, causing new morphologies in the family nucleus as a result of the ties maintained despite a geographical separation (creating so-called *transnational families*¹⁸). Taking this approach, as Stark and Bloom (1985) do, migration theory is widened beyond the consideration of migration as a purely individual decision (where individuals make the most of themselves) and is instead seen as a cooperative choice (optimisation of the whole family). The theory moves to consider migration as a “calculated strategy” rather than as a mere “act of desperation or limitless optimism”.

Secondly, emigration involves costs associated with transport and settling in the destination country. These costs can be notably reduced by the presence of *family networks, ethnic or linguistic ties* between the communities of origin and those of the destination of the emigrant (Massey, Goldring and Durand, 1994; Borjas, 1992, 1994 and 1995).

¹⁸ The “chain of affection” that emigration produces is ironic, since it often results in a migrant looking after children in the host country to make a living, leaving her own children to be looked after in the country of origin by a family member (Hoshchild, 2001).

This element has been justly highlighted by studies on emigration that draw two interesting considerations. The first has to do with the influence that the linguistic and cultural proximity between countries of origin and destination has on emigration, an aspect highlighted by Borjas (1999); the second refers to the effect that the social networks of the diasporas have on reducing the costs and risks of emigration (Massey et al., 1987). Both factors contribute a *partially accumulative nature* to the phenomenon: as the diasporas increase, further emigration from a similar origin is facilitated. Common ties and networks of trust constitute an external force that reduces the emigrant's cost and risk levels when settling in the host country (Bartel, 1989, and Jaeger, 2000).

A consideration of this aspect reveals the contradictory relationship of migration to the social capital of the countries of origin and destination. Migration involves, firstly, the loss of social capital in the country of origin, as a result of the break in common ties-it causes a sort of *social capital drain*. Migration also involves a similar process in the host country, since it brings with it heterogeneous elements (different values, customs, languages and cultures) that may weaken existing relationships of trust in the destination country, feeding xenophobic tendencies. Part of the lost social capital is re-established in the more limited sphere of the immigrant community in the diasporas, which acts as a factor of security for the integration of new arrivals (Schiff, 1998).

Thirdly, one variable whose effects on emigration are disputed is the level of inequality present in the emigrant's original society. For some authors, such as Stark (1984) and Stark and Yizhaki (1988), there is a direct relationship between inequality and migratory pressure: the higher the level of inequality (the greater the *relative shortage*, in Stark's terms), the greater the migratory intensity for a given level of poverty. For other authors, however, such as Clark et al. (2002), inequality approximates the differential in the rewards of diverse levels of qualification; the greater the inequality in home countries, the lower the stimulus to emigrate to populations with better levels of training. The first of these relationships was noted for the case of Mexico by Stark and Taylor (1986), while the second relationship seems to fit the results of Clark et al. (2002) who studied emigration from various regions to the United States.

In pure terms, the two interpretations are not as contradictory as they might seem, if we consider the additional effect of social mobility. If there is sufficient social mobility, inequality would not lead to a decision to emigrate, since social improvement could be obtained in one's own country of origin. In this case, the interpretation suggested by Clark et al. (2002) would be feasible. However, when mobility does not exist (in other words, when inequality is engrained and chronic), emigration constitutes one of the few means through which the less fortunate can improve their social status (and that of their family)-this is the interpretation offered by Stark and Yizhaki (1988).

From a dynamic point of view, one can perceive the complexity of the relationships between the evolution of inequality and migratory pressure. Everything seems to indicate that the relationship is not monotonic. When the country of origin has a very unequal income distribution, an increase in inequality will lead to a fall in the rate of emigration, perhaps because increases in extreme poverty lead to more people lacking the resources to migrate. On the other hand, when the country of origin has a relatively fair income distribution, an increase in inequality will increase the rate of emigration, perhaps because the number of people who are frustrated with their expectations for progress is increased. The migration rate seems therefore to describe an inverted U curve: the rate grows and then falls as levels of inequality fall. However, more investigation is needed to confirm this relationship.

Fourthly, a neater relationship exists between *emigration and poverty*. As is recognized, migration is not highest in either the poorest countries or the poorest sectors of society (Hatton and Williamson, 2003). This is largely because the migratory decision itself involves an economic cost that cannot always be met by the poorest sectors. Migration entails a minimum amount of capital to cover the costs of the journey, payment to intermediaries for entering the destination country (fixers, those who help irregular immigrants across the border, etc.) and money for survival until the migrant finds work. In many cases, the capital involved is beyond the savings potential of the would-be migrants, who must borrow money either from the formal financial sector or, more frequently, from the informal sector (usurers) or the intermediaries. Among poor people, having a migratory experience seems to be dependent on the accumulation of assets by the emigrant's family in preparation for the costs of migration. This also suggests the advantage enjoyed by those sectors of society living above the poverty line. To sum up, migration requires that an emigrant have a certain prior economic capacity, thus many poor people are excluded from migrating (Barham and Boucher, 1998; Taylor, 1986 and 1987; López and Schiff, 1998).

That said, we observe the fifth factor to take into consideration—if the potential migrant can access a prior accumulation of capital (his own savings, or a loan), the question becomes: why does he not invest that capital in his place of origin, in order to avoid emigration? One response has to do with the existence of significant *imperfections in the capital markets*, making them rationed markets that are difficult to access for people without patrimonial assets that can be given as a guarantee (Stark and Chau, 1998). As mentioned before, emigration can be considered an investment strategy: an aim of the migratory experience is to obtain the resources needed for the emigrant and her family to establish the foundations for a more secure and comfortable life. If capital markets operated with perfect information, the corresponding institutions (of credit and insurance) would be capable of identifying successful investment projects, providing the savings and necessary assurance, thereby avoiding the migratory strategy. In this sense, the absence of those conditions is what stimulates alternative savings strategies such as emigration.

Sixthly, beyond the singular elements that influence migratory decision, there are global contextual factors that also fuel migration. Three are especially remarkable. Firstly, the worldwide spread of market relationships, fuelled by economic growth in developed countries and by the ubiquitous presence of multinational companies, works to change socioeconomic and cultural conditions on the periphery. These relationships create ideological and material ties that promote migration of workers from developing countries toward the centre of the world system (an aspect pointed out by neo-Marxist theories, such as Wallerstein, 1974; or from a different approach by Sassen, 1988). Secondly, the labour market segmentation in developed countries promotes the consideration of some jobs as socially undesirable by native workers (the so-called three Ds: dirty, dangerous and degrading); such jobs are set aside for immigrant workers (Piore, 1979). And, thirdly, structural imbalances in developing countries also fuel migration, as a consequence of the widespread expectations for consumption and ways of life inappropriate to the resources and possibilities present in most developing countries (Portes and Walton, 1981).

The seventh factor is that the ageing process and the dissolution of the nuclear family model of developed countries have generated an increased demand for migrant workers to carry out domestic tasks or to care for children, sick persons, or the elderly. These kinds of tasks have created an important market in developed countries, promoting jobs especially for migrant women. So a “chain of affection” is generated internationally, with the consequence that the migrant offers her host family affection that she cannot offer her own family, as they are left behind in the home country (Hoshschild, 2001). This factor is expected to grow in importance in the future.

An eighth factor, also forecast to gain importance in future migration trends, is the effect promoted by climate change and other environmental damages. We do not know enough about the effects of such factors on international migration. Probably a significant part of the migration triggered by environmental causes will occur within a given national territory, but we can not dismiss international migration as a consequence of the severe deterioration of fragile ecological environments with abundant populations.

One final reflection is concerned with the relationship between migration and development. According to the heuristics suggested by Hirschman (1977), migration constitutes an expression of *an individual exit*, once loyalty to local institutions has been lost and there is a lack of faith around the possibilities of the expression of a *collective voice* to change the society. In keeping with this explanation, it is not surprising that migratory pressures increase when situations such as the breakdown of government, institutional fragility, social fragmentation, or a collective lack of confidence occur. In these cases, emigration becomes *an escape valve* for social crises and a *silent condemnation* of the failure of collective response in the countries of origin (Ellerman, 2003; Li and McHale, 2009).

This same approach may lead to a notably unsettling conclusion: in certain conditions, migration can annul the possibilities for transformative options in a country of origin, which become unfeasible due to the bleeding of resources that migration entails. In the terms used by Rosenstein-Rodan (1943), migration could make it impossible for a country to obtain a *high level* equilibrium, condemning that country to remain at a *low level* equilibrium (remaining at the level of an underdeveloped country). Suppose, for example, that there are complementarities between, for example, unskilled workers, human capital and physical capital, that are necessary to take into account to reach a high level equilibrium. Unskilled workers are faced with two options: (i) to remain in the country, trusting that the rest of the elements of the strategy will be available and, as a result, the dynamic (or high level) equilibrium will be reachable, to the benefit of all; or, alternatively, (ii) they can try to improve their personal state through emigration. The greater the lack of trust in the possibilities of quality collective action in the country of origin, the more attractive the individual option of emigration will become. The problem is that the more individuals emigrate, the lower the chances of success for a cooperative strategy designed to achieve a high level of equilibrium. In turn, the reduction in expectations for collective success encourages new individuals to opt for emigration, generating a process that feeds on itself, condemning the economy in question to remain underdeveloped.

3.5. Empirical evidence

Testing all the theories mentioned in the previous sections is necessarily difficult. However, in the last few years, advances have been made in micro- and macro-economic perspectives. Firstly, an effort has been made to link the decision to migrate to the incentives associated with mobility, as well as to the specific characteristics of the person or family involved. The aim in the microeconomic approach is to definitively reconstitute the decision-making process of the emigrant (or her family), taking into account the factors that influence the decision. Studies along these lines include those by Perloff et al. (1998), Taylor (1987, 1992), Stark and Taylor (1989, 1991), Lucas and Stark (1985), Bardham and Boucher (1998) and Mora and Taylor (2006). In general, these studies confirm the selective character of migration. Factors such as the accumulated wealth of the family, the age and educational level of the people, and the existence of social support networks are significant variables in the migratory decision.

Macroeconomic investigations have, in general, tended to be inspired by the proposals of Sjaastad (1962) or Borjas (1994, 1999). In the first case, emigration is conceived as an investment process in which

it is necessary to consider both the benefits and the costs associated with transit and settlement in the host country. Borjas (1994, 1999), on the other hand, sees emigration as a result of the forces of attraction and repulsion (*pull and push*) that operate in the markets of origin and destination (Alonso et al., 2004). In this way, he defines three equations of behaviour: one referred to the wage and job conditions in the host country; the other related to these conditions in the country of origin; and a third equation to consider the cost factors associated with a change of country. The reduced functional form of these three equations is not very far from that offered by Sjaastad (1962).

With a greater or lesser degree of sophistication, the empirical studies have taken this framework of analysis as their starting point. Hatton and Williamson (1998) examine whether the migratory rate in the United States is positively related to the differential of the average wage (adjusted in terms of purchasing power parity) between the origin and destination countries, with the weight of the cohorts of the young population in the source country and the total number of immigrants in the destination country. Alongside these factors, Faini and Venturini (1994) add the negative effect that the level of poverty has on the possibility of emigration, by studying emigration from Southern Europe.

Using a relatively similar structure as a starting point, several authors have tried to build a more complete model to determine migratory flows. In some cases they have tried to explain the international emigration to a particular country: Clark et al. (2002), for instance, study emigration to the United States; Karemera et al. (2000), emigration to the United States and Canada; Hatton (2005), emigration to the United Kingdom; and Márquez et al. (2004), Moreno and López-Casnovas (2006), Cebrián (2009) and Alonso (2010), studying the case of migration to Spain. Other authors, meanwhile, prefer to study bilateral emigration involving a larger or smaller group of countries: Mayda (2007), for example, studies 14 OECD countries; Pedersen et al. (2008), relationship to 27 countries; or Berthelémy et al. (2009), the emigration to developed countries.

The analytical methods employed in these studies range from cross-country analysis (Clark et al., 2002, Hatton, 2004, and Alonso, 2010, for example), to a kind of gravitational models (Berthelémy et al., 2009, and Karemera et al., 2000), to panels of dynamic data with Generalized Method of Moments (GMM) and Generalized Estimating Equations (GEE) procedures (Pedersen et al., 2008). The periods analysed do not completely coincide, although most of them relate to the accelerated period of emigration in the 1990s.

A good example of these types of results is that of Clark et al. (2002) which considers the widest range of factors in the explanation of migratory flows. The results of that model are in the Annex, applied to the United States, while a similar approach is applied to emigration to Spain (Alonso, 2010).

4. Effects of migration

4.1. *Aggregated effects*

It is not unusual to find bodies of opinion that staunchly defend the advantages of free trade and free capital movement while, at the same time, call for severe restrictions on migratory flows. Nevertheless, as stated earlier, the theoretical frameworks in which the effects of one or another type of flow is analysed are, essentially, the same. In a world of perfect competition, the mobility of both goods and services as well as other factors such as capital and labour lead to greater total efficiency. In the case of migration, free migration allows people to move from where they are least rewarded (because they are less productive) to areas where they

earn more (and are more productive). As a result, this is not a zero-sum game. The international system as a whole undergoes an increase in its total level of efficiency and material well-being. Obviously, not all sectors of society benefit from the change, but the overall result is undeniable.

It is interesting to ask how large the benefits would be in terms of efficiency gains in the hypothetical case of greater freedom of movement of people. Hamilton and Whalley (1984) undertook that task by building a model of general equilibrium and supposing full labour mobility. The authors were aware of the simplification of the assumptions taken as a starting point, but they were aiming to estimate the potential benefits of free migration. The results were striking: after considering various scenarios, they evaluated the benefits as being in a range between 4.7 and 16 billion dollars, at a time (1977) when the world's overall GDP was estimated at 7.82 billion dollars. In other words, the gain from allowing the free movement of people was between 60 per cent and 204 per cent of the world's GDP.

More recently, Moses and Letnes (2002) repeated the exercise of Hamilton and Whalley, trying to correct some of its shortcomings and extending the estimate to 1998. In particular, Moses and Letnes had access to better data and updated the adjustments to the economically active population, and to the comparative productivity of the labour factor. Given the sensitivity of the results to the elasticity of the substitution of factors, the estimates were carried out with various parameters, assuming the most conservative conditions for the environment. As a result of those changes, the benefits of liberalisation were found to be more limited than those obtained by Hamilton and Whalley, but they nevertheless remain notable: accepting an elasticity of substitution of 1, the gains would be 7.19 billion dollars in 1977, a magnitude only slightly lower than the total GDP for that year; while gains would reach 34 billion dollars in 1998, or 96 per cent of the GDP. The application of the adjustments of labour efficiency between migrants and natives would considerably reduce the estimates, but even in the most restrictive case, with the supposed elasticity of substitution, the benefits would be equivalent to 9.4 per cent of the 1977 GDP and 12.6 per cent of the 1998 GDP.

Even though this is an intellectual exercise, the estimates confirm the potential efficiency gains that could result from less restrictive migration policies. It is also important to note that even a small correction to the wage differential can bring about part of the benefits; in other words, the first phases towards complete liberalisation—a powerful argument in favour of more flexible positions in the field of regulation of the movement of people—could realized such benefits.

More recently, the World Bank (2006) carried out a similar exercise but with a different focus. Instead of considering full freedom of movement of people, it started from a more realistic assumption: accepting an annual growth rate of 3 per cent of the working population in developed countries between 2001 and 2025, and allowing labour needs to be covered, as required, by immigration.¹⁹ That would involve an increase in the immigrant population by about 14 million people in the 24 year period

Table 4: Efficiency gains from removing restrictions on emigration

Percentage of world GDP					
	<i>Elasticities of substitution</i>				
	<i>1.5</i>	<i>1.25</i>	<i>1</i>	<i>0.75</i>	<i>0.5</i>
Without adjustment					
1977	109.5	102.7	92.7	76.4	47.6
1998	118.1	109.4	96.5	75.6	43.6
With adjustments (1)					
1977	28.2	26.4	23.8	20.2	14.8
1998	36.0	33.3	29.7	24.4	17.3
With adjustments (2)					
1977	11.6	10.6	9.4	7.9	5.9
1998	15.5	14.2	12.6	10.7	8.3

Source: Own elaboration from Moses, J.W. and B. Letnes (2002): "The economic cost to international labour restrictions", *WIDER Conference*, September. Adjustments 1 and 2 referred to the correction of the differentials of salaries in function of the productivity differentials between regions.

¹⁹ The demographic forecasts for developed countries predict scant growth in the working population of those countries.

(increasing from 27.8 to 42 million), assuming an annual accumulated rate of increase in the total number of new immigrants of 1.7 per cent, which is slightly under that of the last three decades. In terms of the starting point, this implies an increase in the total amount of immigrants by almost 50 per cent in the final year of the period, although the rate of variation depends on the demographic characteristics of each country.²⁰

If we take as a baseline the assumption that the proportion of immigrants that there was in 2001 is maintained, the net gains to welfare from the expansion scenario suggested above would be close to 674 million dollars, or 1.19 per cent of world GDP. If this is adjusted in function of the different costs of living from country to country (translated into Purchasing Power Parity), the benefits would be somewhat reduced but would still amount to 0.63 per cent of world GDP. The distribution of these benefits would be favourable to developing countries (including to the people who emigrate) since these populations would experience an increase in income of about 1.8 per cent, while developed countries would obtain an increase of 0.4 per cent.

The World Bank's estimation makes an additional interesting contribution as it divides the impact of migration between private and public consumption, on one hand, and between different sectors of society on the other. Although the largest benefits are obtained by the people who migrate, the families that remain behind also benefit from the process. The sector of society that is most clearly affected negatively is that of migrants who are already settled, as they represent the main substitution factor for the new immigration.

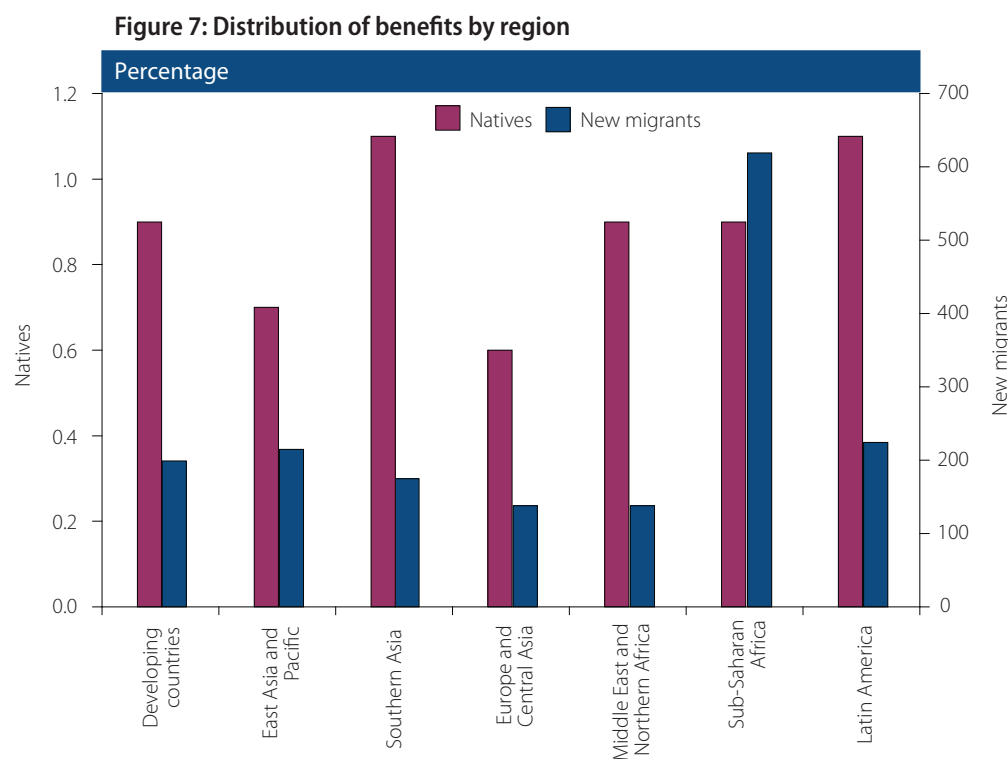
The regional distribution of these gains is highly sensitive to differences in starting salaries. In particular, Southern Asian and Latin American natives obtain a greater relative benefit as a result of the migratory phenomenon; for new communities of emigrants, the greatest benefits are concentrated in Sub-Saharan Africa, which is the region with the lowest salaries (figure 7).

Table 5: Change in real income due to the migratory process

	<i>Real income</i>			<i>Real income adjusted for cost of living</i>		
	<i>Private</i>	<i>Public</i>	<i>Total</i>	<i>Private</i>	<i>Public</i>	<i>Total</i>
Billion dollars						
Natives in developed countries	0.44	-0.01	0.36	0.44	-0.01	0.36
Former migrants in developed countries	-9.41	-0.02	-6.02	-9.41	-0.02	-6.02
Natives in developing countries	0.94	0.44	0.86	0.94	0.44	0.86
New immigrants	584	607	589	198	203	199
World total	1.20	1.15	1.19	0.67	0.45	0.63
Percentage change						
Natives in developed countries	0.44	-0.01	0.36	0.44	-0.01	0.36
Former migrants in developed countries	-9.41	-0.02	-6.02	-9.41	-0.02	-6.02
Natives in developing countries	0.94	0.44	0.86	0.94	0.44	0.86
New immigrants	584	607	589	198	203	199
World total	1.20	1.15	1.19	0.67	0.45	0.63

Source: World Bank (2006): *Global Economic Prospects: Economic Implications of Remittances and Migration*, Washington, D.C., The World Bank.

20 The simplified assumptions on which this estimate is based include the following: (i) the proportion of the population that is qualified or unqualified is maintained in developed countries (both grow by 3 per cent); (ii) the regional origin of the migrants remains constant; (iii) it is understood that migrant workers will bring their families to the new country in accordance with the ratio of dependence of their own country of origin; (iv) remittances are considered to remain constant as a proportion of the migrant's income.



Source: World Bank (2006): *Global Economic Prospects: Economic Implications of Remittances and Migration*, Washington, D.C., The World Bank.

The World Bank's estimates double the benefit calculated a few years earlier by Walmsley and Winters (2003), who took very similar assumptions, supposing more flexible regulation of temporary migration in order to allow the labour force of developed countries to grow by about 3 per cent. Their lowest estimate (around \$150 billion) responds to a more restrictive assumption in the salary differential between the immigrant population and the native population in the host country. Nevertheless, the World Bank (2006) results are very close to those of Walmsley et al. (2005).

Lastly and more recently, van der Mensbrugge and Roland-Host (2009) applied the Linkage model to estimate the impact of migration, using a framework of computable general equilibrium models (CGE), thereby updating the work carried out by the World Bank (2006). In particular, they corrected the growth rates of developed countries (downwards) and developing countries (upwards) and used new PPP estimates. With these assumptions, the authors considered the flows of migrants as exogenous and defined various scenarios in function of the growth in the workforce in the destination countries. If 5 per cent growth in the workforce is assumed, an increase in the world's aggregate product is expected to be around \$964 billion (\$571 billion in PPP) by 2025 (in relation to the base line), or roughly equivalent to 0.9 per cent of world GDP. Again, the new migrants capture the bulk of that benefit, and previous emigrants are negatively affected, although to a lesser extent. The direction of the estimates would not change much if the growth rate of the labour population in the destination country were 3 per cent or 8 per cent, leading to net benefits to the world GDP of \$604 billion and \$1,462 billion, respectively, in relation to the base line.

The fact that migration has a positive effect on the international system in terms of aggregate efficiency does not mean that everyone affected ends up winning. As we have seen, the current immigrant and native workers substituted by new immigrants may be negatively affected by an intensification in migratory flows. This argument is occasionally used to justify a restrictive migration policy, highlighting the way in which the entry of new immigrants could depress salaries in the recipient country. Empirical studies confirm

this effect, but find the salary decline to be small. For example, Borjas (2003) finds that immigration to the United States between 1980 and 2000 caused a cumulative deterioration in average U.S. salaries by 3.2 per cent (in other words, an annual reduction of barely 0.15 per cent). An even lower rate is estimated by Ottaviano and Peri (2008), who put the accumulated effect of immigration between 1990 and 2006 at 0.4 per cent (in other words, a 0.025 per cent fall in the average rate).

At least three additional factors should be taken into account to further evaluate the effect: (i) the inverse effect—a rise in salaries—that is taking place in countries from which migrants originate, as Mishra (2007) demonstrates in the case of Mexico; (ii) the reduction in the cost of certain goods and services caused by the arrival of migrants, increasing the purchasing power of salaries in the recipient country; and (iii) the fact that the contraction effect on salaries only occurs in the short term—in the long term, the net effect is positive (Ottaviano and Peri, 2008). The cost of migration to the citizens of recipient countries does not, therefore, seem a weighty argument in support of restrictive migratory policies, especially when judged in the light of the criteria of equality.

To sum up, estimates confirm the potential efficiency gains of a less restrictive policy on migration. These benefits, even in their most modest versions, are comparable (or superior) to those that would result from the trade liberalisation promoted by the Doha Round and, moreover, afford a more equal distribution of those benefits among countries. In fact, the World Bank (2006) itself decided to update the benefits that would derive from the global reform of trade (as envisaged in Doha) for the same year as the estimate of the migratory model. The results are clear: \$155 billion of gains in the case of the trade reform, compared with \$175 in the case of migration. This confirms the development potential of international migration.

4.2. *Remittances*

Remittances that migrants send home are another important issue when examining the effects on development of migratory processes. There are two aspects that need to be considered here: the size of the remittances, and their effects.

a) *Size*

Although it has become considerably easier in recent years, it is still difficult to adequately assess the size of remittances. Accounting registration criteria are inadequate, and the levels of hidden remittances complicate the task tremendously. With regard to registration, the definition of an immigrant used by National Accounts is far from clear. In fact, in the balance-of-payment accounts there are three related items: workers remittances, compensation of employees, and migrant transfers. Defining these components while avoiding overlaps, and identifying the source of each, is complicated.

Added to the difficulties of registration, there are problems stemming from the fact that many of the transfer channels are less than transparent, causing obvious complications for the statistics. Often migrants' savings are sent in the form of non-financial assets (consumer or household goods, for example), or transfers are made via informal routes (trips by acquaintances or family members) that are impossible to control. Thus only a fraction of the savings sent home by migrants is captured in statistical data, appearing in the balance of payments. Conservative estimates put unrecorded remittances at a third or more the size of registered remittances²¹, but the recent study by the World Bank (2006) increased that ratio to as high as 50 per cent.

21 Puri and Ritzema (1999) carry out an estimate of unregistered remittances in eleven countries. The margins they obtain are very wide, ranging from 8 per cent to 85 per cent of documented remittances. The average is 36 per cent of registered remittances according to the sample studied.

In accordance with the best estimates—those provided by the World Bank—migrant remittances reached a little over \$443 billion in 2008—the year with highest amount of remittances—\$325 billion of which went to developing countries and the remaining \$118 billion to developed countries (table 6). The total remittances doubled the total of ODA (\$122 billion in that year).

Table 6: Evolution of remittances, 1990-2009

Millions of dollars												
	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Developing countries	31	56	81	95	111	137	159	192	226	278	325	307
Regions												
Latin American	5.7	13.3	20.1	24.4	28.1	36.7	43.3	49.8	58.8	63.0	64.4	56.5
Southern Asia	5.6	10	17.2	19.2	24.1	30.3	28.6	33.9	42.5	54.0	71.6	75.0
Eastern Asia	3.1	8.9	15.8	20.9	27.0	32.2	40.0	50.3	57.4	71.0	85.5	85.8
Northern Africa and the Middle East	11.4	13.3	13.0	15.3	15.9	20.4	23.2	25.0	26.4	32.1	36.0	33.4
Central Europe and Central Asia	3.2	6.4	10.3	10.3	10.7	11.6	15.9	23.2	28.4	39.3	45.8	35.4
Sub-Saharan Africa	1.9	3.2	4.6	4.6	5.0	5.9	8.0	9.4	12.6	18.6	21.6	20.7
Income levels												
Low income	1.4	2.2	4.1	4.5	6.0	6.9	8.1	10.0	12.9	16.6	22.0	22.7
Lower-middle income	18.4	31.2	48.8	57.6	68.7	82.9	93.5	114.2	135.8	174.8	211.0	206.3
Upper-middle income	10.9	21.8	28.3	32.7	36.1	47.4	57.6	67.4	77.5	86.8	91.9	77.9
High income	37.5	46.0	50.2	54.6	58.2	66.8	77.7	82.7	91.2	106.3	118.5	109.5
World	68.6	101.6	131.5	149.5	169.2	204.2	236.9	274.5	317.6	384.5	443.5	416.5

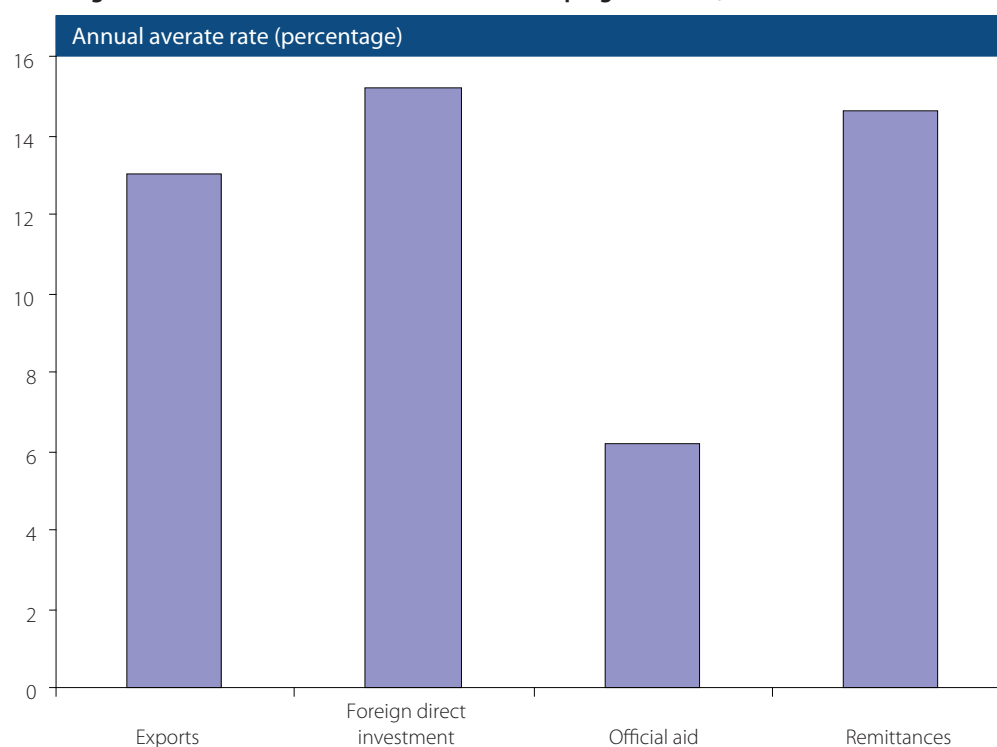
Source: World Bank: World Development Indicators (<http://data.worldbank.org>).

Viewed in perspective, the rapid growth of remittances in the last few years is surprising. In particular, officially registered remittances destined for developing countries climbed from barely \$31 billion in 1990 to \$325 billion in 2008. This increase became particularly notable in the past three five-year periods, where official remittances grew at an average 5-year accumulative rate of 13 per cent. Caution is required when interpreting these numbers due to the existence of remittances not captured by official statistics, however the figures reveal a significant growth of remittances that has acquired increasing relevance in the international system. In fact, during the period of 1995-2008, only foreign direct investment grew faster. The average rate of growth of remittances in that period doubles the rate of international aid and is higher than the rate of exports (figure 8).

The trend of remittances shows two traits which are relevant in development terms. The first is related to the regional distribution of remittance flows, which reflects, with slight nuance, the distribution of emigrant sources. It is not surprising that those with larger population and significant rates of migration, such as the Asian regions, account for almost 44 per cent of the remittances sent to developing countries (Southern Asia 18 per cent and Eastern Asia 22 per cent). Latin America follows with 21 per cent, North Africa and the Middle East with 12 per cent, and Eastern Europe with 18 per cent. Sub-Saharan Africa is last, with 7 per cent. By country, the main recipients of remittances coincide with the middle-income countries, the main source of emigration flows: India, China, Mexico, the Philippines and Morocco, among the developing countries.

The distribution of remittances in accordance with countries' income levels is interesting for another reason: the poorest countries do not receive the bulk of the money. More than half of remittances flows to

Figure 8: Evolution of financial flows to developing countries, 1995-2008



Source: World Bank: World Development Indicators (<http://data.worldbank.org>).

developing countries (65 per cent) go to lower-middle income countries, 28 per cent go to upper-middle income countries, and 6 per cent go to the poorest countries. However, as in the case of regional distribution, this result is highly dependent on the burden of the population (and the migration potential) of the various aggregates. It is important, therefore, to relate these resources to the country's other relative dimensions (table 7).

The ratio of remittances to the GDP of the poorest countries is almost double that of middle-income countries. In fact, the ratio of remittances to GDP decreases as income level goes up: 4.63 per cent in the case of low-income countries and barely 1.18 per cent for upper-middle-income countries. This profile explains the redistributive effect of the remittances in the international scope. Another way of expressing the same problem is to compare remittances with other relevant macroeconomic variables (table 7). The ratio of remittances to foreign direct investment, gross capital formation, imports, or private consumption are higher

Table 7: Relative importance of remittances

	Percentage of GDP			Remittances as a percentage of				
	Remittances	Foreign investment	Official aid	Foreign investment	Official aid	Imports	Gross capital formation	Private consume
Average 2005-2008								
Low income countries	4.63	2.22	9.10	208.5	50.4	12.6	20.3	5.9
Middle income countries	1.86	2.20	0.42	84.8	436.5	6.2	6.3	3.5
Lower-middle income	2.51	2.50	0.70	100.3	356.8	7.5	6.9	5.2
Upper-middle income	1.18	1.91	0.14	62.2	819.3	4.4	5.1	2.0
High income countries	0.25	-0.89	-	-0.27	-	0.8	1.1	0.4

Source: World Bank: World Development Indicators (<http://data.worldbank.org>).

in the low-income countries than in the other groups (middle- and high-income countries). This confirms the key role that remittance plays as part of international financing in the poorest countries.

The second relevant characteristic of remittances is their acceptable stability over time. For example, considering the evolution of the variables since 1990, the variation coefficient for remittances (0.23) is a little higher than that for international aid (0.09), but it is notably lower than flows of direct investment (0.46) or other private flows (0.43). The greater stability of remittances makes them a more predictable source of financing than other private sources. Furthermore, remittances often demonstrate an anti-cyclical nature, with family aid increasing during periods of greater difficulty in the country of origin, a fact verified by Kapur and McHale (2005) through a panel of data on 14 countries. Other case studies also confirm this: the case of the Philippines after the financial crisis of 1997 (Yang, 2005) or of Jamaica following its natural disaster (Clarke and Wallsten, 2004).

To sum up, in relation to other private financing sources, remittances are more stable and more equitable in their distribution. Additionally, in terms of official financing—foreign aid and other official sources—remittances are not only larger, but also more dynamic in nature.

b) Effects

The effects of remittances on recipient societies are multiple, and not all of them produce the same result, which explains why empirical exercises present contradictory results. While some researchers argue that remittances allow families to improve their economic security and increase their ability to invest, others believe that remittances encourage conspicuous consumption and “rentier” behaviour by recipients. Although this controversy is far from resolved, the following section will try to shed some light on the available empirical evidence.

From a *macroeconomic perspective*, remittances provide developing countries with a means of relaxing external constraints on their growth, helping them finance imports and preserve the balance of payments. Remittances also complement diminished domestic savings, contributing to an increase in the investment effort. Additionally, in some countries such as Brazil, El Salvador and Mexico, remittances are used as a guarantee in their access to international private capital. (Ketkar and Ratha, 2001).

Of course, a large volume of remittances to a given country can have perverse macroeconomic effects. There are two factors most frequently cited. The first has to do with the appreciation of the real exchange rate and the subsequent loss of competitiveness for the concerned economy, through so-called “Dutch disease”. The reality is that this effect only seems plausible in those economies (generally small in size) that are highly dependent on remittances. In addition, the steady, gradual growth of remittances means that any perverse effect is less pronounced than that of other international resources displaying significant instability. In fact, Rajan and Subramanian (2005) do not find symptoms of loss of competitiveness associated with remittances. Despite this finding, however, the possibility that the Dutch disease could emerge in countries that are highly dependent on remittances (such as Haiti, Jordan, Jamaica, Cape Verde and El Salvador) should not be ruled out.

The second factor that is often cited is the temporary nature of remittances. Remittance flows are expected to fall as emigrants extend their time abroad because ties to families left behind in the countries of origin become weakened over extended periods of time. This effect can be reinforced by immigrants starting new families in their host countries, or by family members from the country of origin being brought to the host countries to join relatives, leading to a fall in remittances. However, this behaviour is far from certain.

Indeed, what has been noted is the robustness of remittances, although their size and their evolution depends on the type of emigration in each case (temporal or permanent, skilled or unskilled).

Translating these arguments into empirical terms leads to results that do not always match up. Adelman and Taylor (1990), for example, identify a multiplier effect of the remittances on the Mexican economy between \$2.69 and \$3.17 per dollar received (considering urban or rural environments, respectively)²². A similar effect was obtained by Desai, Kapur and McHale (2001) in a study on India, identifying a multiplier effect of remittances of between \$1.5 and \$2 per dollar received. Mishra (2005), meanwhile, finds that a 1 per cent increase in the remittances to 13 Caribbean countries increases private investment by 0.6 per cent (in addition to the increase in consumption), causing a positive effect on GDP.

In contrast, other studies take a less optimistic view of the effect of remittances. Among these studies, one by the IMF (2005) stands out, observing a rather wide sample of countries over a long period (101 developing countries, between 1970 and 2003). The study does not identify robust effects of remittances on the growth of GDP per capita, expenditure on education, or growth in investment in the reception country.

From a *microeconomic perspective*, remittances, unlike international aid, directly link the supplier of resources to the receiver, without intermediation from development agencies or the attendant problems of bureaucracy and the principal/agent relationship. Remittances produce a positive impact in various ways, but mainly through the effect of asset accumulation in a family (Stark and Lucas, 1988), and relaxation of its financial constraints (Faini, 2002). On the negative side, however, remittances are considered to be predominantly used for purposes other than investment, feeding consumption (even “conspicuous consumption”), discouraging labour and saving efforts by recipient families and generating a “rentier-state” culture (Chami et al. (2005) and Görlich et al. (2007)).

Surveys of migrant families seem to confirm these negative impacts. One survey conducted by BID (FOMIN, 2004) on Latin American countries found the proportion of remittances dedicated to consumer spending reached 61 per cent in Ecuador, 77 per cent in Central America, and 78 per cent in Mexico. Compared with the share spent on basic consumption, spending on non-essential consumption was between 3 per cent and 17 per cent; spending on education, between 2 per cent and 7 per cent; the share dedicated to savings, between 6 per cent and 8 per cent; finally, productive investments attracted the smallest share, between 1 per cent and 8 per cent. These margins show, in any case, the variability of behaviour, which seems dependent on the characteristics of the emigration, the circumstances of the family, and the economic conditions. Nevertheless, the overall picture confirms the dominant tendency towards consumption of the remittances received.

This somewhat negative image does not appear to be confirmed in the statistical and econometric studies, however. Studies such as those on Egypt, Pakistan and Guatemala (carried out by Adams, 1998, 2005a and b), on Mexico (Taylor et al., 2005), or on the Philippines (Yang and Martínez, 2006) all point out that remittances reduce poverty, especially non-permanent poverty, and increase family investment. Part of the discrepancy between the statistical analyses and survey results could be due to the fact that the surveys try to capture the direct use of the remittances, while the statistical analyses examine the effect (whether total or marginal) that remittances have on the make-up of the total family budget. Given the fungibility of the resources received and the endogenous nature of migration, the marginal effect of remittances on family budget is the most relevant factor.

²² In urban environments, consumption includes a larger component of imported goods compared to rural environments.

Taking these factors into account requires consideration of the effect remittances have in relation to a relatively demanding, counter-factual scenario in which neither emigration nor remittances would have taken place and the emigrants therefore would have continued to contribute to the family income in their home countries. This approach could be implemented through two methods, either through a cross-country analysis, which isolates the effect of each variable, or through a specific country study based on family budgets. The possibility of making generalisations is greater in the first approach, although the counter-factual tends to suppose the absence of remittances without considering alternative income from the potential migrant (which tends to overvalue their effect). In the case of country-specific studies, this problem can be resolved more effectually, at the expense of the capacity for generalisation and as long as the bias stemming from the selective character of migration is corrected.

The work of the World Bank (2006) is expressive of the first approach, in which a cross-country focus is used to analyse the impact of a cease in remittances on poverty. The results crucially depend on the size of the remittances in question, the extent of the poverty, and potential changes in the inequality levels of the country. When it is assumed that inequality levels remain constant, simulations of the effect of removing remittances show an increase in poverty of between 1.2 per cent and 20.3 per cent, depending on the volume of the remittances at present and the initial level of poverty. In average terms, the effect is an increase in poverty by 5 per cent in those countries with low remittances, and reaches 12 per cent when remittances are high in volume. Additionally, the impact is greater (about 70 per cent higher) if the country starts off with a higher level of poverty. The model has some weaknesses, however, since it does not take into consideration, for example, the potential income-loss associated with emigration, or the endogeneity of poverty and emigration. In any case, the results match those of the IMF (2005) in its wide sample of 101 countries.

Among country-specific studies, worth highlighting is a study on Guatemala by Adams (2006). Here the selection bias of migrant families is corrected through a Heckman-type procedure. His conclusions suggest: (i) receiving remittances has a positive effect, not by inhibiting the existence of poverty so much as limiting its depth and severity; (ii) migrant families spend less at the margin on consumption (including conspicuous consumption), compared to families without migrants living outside the home country; and (iii) families who receive remittances use those resources for investment, particularly in relation to education. The first of these conclusions was also drawn by Yang and Martínez (2006) and Yang (2008) when they studied data on the Philippines. They solved the problems of the endogeneity of the natural experiment of the effect on remittances from changes to the exchange rates suffered by Asian economies in the crisis at the end of the 1990s. In a study on Indonesia, based on a large survey of family budgets, Adams and Cuecuecha (2010) not only confirmed the positive effect of remittances on poverty, but also found a larger impact: when compared to the counter-factual scenario of not receiving remittances, the poverty level fell by 26.7 per cent.

The positive effect of remittances on amounts spent on education by a given family was also confirmed in studies by Acosta (2006) on El Salvador, Mansurini (2007) Pakistan, and López-Córdoba (2005) and Hanson and Woodruff (2003) on Mexico, the last of which takes into consideration the educational level of the parents. Adams and Cuecuecha (2010) could not confirm the positive impact in their study on Indonesia but they identified the boost to consumption expenditures that remittances generate. They explain these results by indicating the higher levels of poverty among those Indonesian families that receive remittances and showing the tendency of the families to prioritise the consumption of basic products over investment goods, including education.

Some country studies allow more generalisations to be drawn, including those by Adams and Page (2005) and by Acosta et al. (2007). The former, using data from family budgets in 71 developing economies,

confirms that an increase of 10 per cent in remittances leads to a reduction of 3.5 per cent, on average, in the poverty rate in those countries. The latter examines eleven Latin American countries and applies the same methodology of Adams and Page. Their results suggest that remittances have an effect on reducing levels of poverty (an increase of 1 per cent in remittances as a proportion of GDP reduces poverty by 0.4 per cent). The study also finds that remittances have a positive effect on education levels and health indicators. However, the impact is weak and subject to notable heterogeneity among countries, possibly related to both the starting income level of the recipients²³ and the effect that maintaining the migrants at home has on the family income (the counter-factual hypothesis). In any case, the aggregate impact of remittances is positive for both the families and the recipient countries.

Less clear, however, is the effect of remittances on income inequality in the recipient country. Some studies suggest that remittances have a levelling effect: Adelman and Taylor, 1990, for instance, looking at Mexico, or De and Ratha, 2005, studying Sri Lanka. Other studies, however, suggest that pre-existing levels of inequality are either sustained or increased: Adams (1998 and 2005), who studies the cases of Pakistan and Ghana, respectively, observes that per capita remittances grow with family income levels, thereby reinforcing existing levels of inequality. This result is in line with the fact that extreme poverty is a factor restricting emigration. Nevertheless, the relationship between migrations, remittances, and inequality can vary over time. As the network of migrants is consolidated abroad, access costs to migrate are reduced for a new migrant (Stark, Taylor and Yitzhaki, 1986). This means that as time goes by, migration becomes possible for lower income groups, suggesting remittances have a higher redistributive impact.

Another benefit attributed to remittances is the effect they have on stabilising the purchasing power of families and on providing a certain degree of insurance against adversity. Remittances help families overcome adverse shocks, contributing to a smoothing out of their expenses over time and thereby reducing their levels of vulnerability. This effect is analysed by Lucas and Stark (1985) in relation to internal migration in Botswana, and by Yang and Choi (2007) in the case of the Philippines.

Aside from these economic aspects, there is another that should be highlighted: the returns from emigration received by the society of origin are not limited to remittances in the form of monetary resources. Migration creates an international social network that promotes new activities and business which attend to the demand of migrant communities for transport services, tourism packages, trade in nostalgic products, transfer of money to families, and telecommunication services (“the five Ts”, Orozco 2004). In some cases, home-town associations located in the recipient country are able to send “collective remittances” that finance investment in social projects and public infrastructures in their home communities.

At the same time, new cultural and political relationships are forged between communities in the diasporas and communities in countries of origin, creating a kind of transnational social capital. In some circumstances, the communities of migrants in the diasporas became important political actors in their home countries, giving support to certain political projects (such as assisting the political autonomy of an ethnic minority). Finally, migrants are also carriers of new values, customs, attitudes and social relations, which they transfer to their communities of origin through their ongoing communications, frequent visits, and possible return. These benefits could be termed *intangible remittances*, affecting values, social visions, behavioural changes, etc. It is most probable that not all these changes are useful to the development needs of

²³ Differences in this aspect are very notable among countries. For example, in the case of Mexico almost 60 per cent of emigrants come from the lowest income category, while in Peru almost 40 per cent come from the highest income category.

the countries of origin, but some probably are, thus adding another positive factor to emigration. One good example is the entrepreneurial capacity studied by Massey and Parrado (1998) in the case of Mexico.

4.3. *Emigration of qualified labour and loss of human capital*

Alongside its economic benefits, emigration can also have costs for the country of origin, largely associated with the selective nature of migration. The assumption of homogeneity of the labour force on which the neoclassical explanation of emigration is based is not borne out by the reality of the phenomenon. There is a clear self-selection process in the decision to emigrate, revealing that emigrants have some traits that clearly distinguish them from their populations of origin. Compared to their average countryman, emigrants are relatively young, with greater capacity for initiative and self-confidence than most, and they are more likely to take risks. Through emigration, therefore, the original society loses highly valuable groups of its population.

Aside from these psycho-social factors, there is another trait that is extraordinarily important from a social and economic point of view: that is, contrary to what is sometimes believed, the level of training of emigrants often tends to be above the average in the country of origin. In other words, through emigration, the country loses a significant part of its limited human capital, which then feeds labour markets in destination countries. This process, when referring to groups of highly qualified workers and acquiring certain intensity, is called “brain drain”²⁴, a phenomenon that should be considered in terms of its size as well as effect.

a) *Size of the phenomenon*

As in other fields, it is difficult to estimate the true size of the phenomenon. Neither the countries of origin nor the recipient countries adequately register the educational levels of emigrants. The United States might be the country with the best statistics on the subject. Using the U.S. Census of 1990, Carrington and Detragiache (1998 and 1999) carried out an estimation of the educational levels of immigrants. Their results showed that the average educational level of the emigrant population in the United States was significantly high: more than half of migrants, with the exception of those from Central America and Mexico, had tertiary education. Given the lack of availability of comparative data (to those of the U.S.), Carrington and Detragiache (1998, 1999) assumed for all other OECD countries the educational level of the migrants was the same as that registered for migrants in the U.S. and coming from the same countries (which overvalues educational levels). In any case, the general panorama drawn from this information was of an immigrant population with a manifestly higher education level than their populations of origin.

Later, Adams (2003) carried out a rigorous estimation of the educational levels of the emigrant population from a sample of the main 24 countries that send migrants to the United States in large volume, aiming to obtain better data with a more selective approach.²⁵ Adams (2003) used the U.S. Population Census for 2000, focusing his attention on the population aged over 25 who had been born abroad, with the aim of obtaining the educational level of immigrants. His results confirm the estimates obtained by Carrington and Detragiache (1998): 67 per cent of emigrants to the United States had a secondary or higher level of education; and, if Mexico (which contributes almost half the number of registered immigrants) is excluded from the

²⁴ A “brain drain” tends to be acknowledged when emigration affects more than 10 per cent of the population with tertiary studies in the affected country.

²⁵ All countries with remittances of more than 500 million dollars in 2000 were chosen. The selected countries were: Albania, Armenia, Bangladesh, Brazil, P.R. China, Colombia, Croatia, Dominican R., Guatemala, Egypt, El Salvador, India, Indonesia, Jamaica, Mexico, Morocco, Nigeria, Pakistan, Peru, the Philippines, Sri Lanka, Sudan, Tunisia and Turkey.

sample, the share of emigrants with secondary or higher level of education reaches 83 per cent. In any case, the educational levels of the emigrants would vary notably depending on the countries of origin considered: the share of emigrants with tertiary education would vary from 14 per cent in the case of Mexico to almost 80 per cent in the case of India. In order to estimate the level of “brain drain”, we need to discern the share of emigrants with tertiary education as a proportion of the population in the country of origin with similar education. In the sample selected by Adams (2003) the highest rates were those of El Salvador, Guatemala, the Dominican Republic and Mexico, where the share of the emigrant population with tertiary education was at least 10 per cent greater than the population with similar education in the country of origin.

In the case of the other OECD countries, Adams (2003) obtains the data from a source, *Trends in International Migration: Annual Report*, 2001, which does not have as complete information as the Census. Adams (2003) makes the same assumption as Carrington and Detragiache (1998, 1999) by accepting that the distribution of educational levels among emigrants in the OECD is similar to those migrating to the United States. Aside from those limitations, the proportion of emigrants with secondary or tertiary levels reaches 88 per cent of total registered immigrants. The highest proportions of tertiary education were found in immigration from India, Egypt, Indonesia, the Philippines and Sri Lanka.

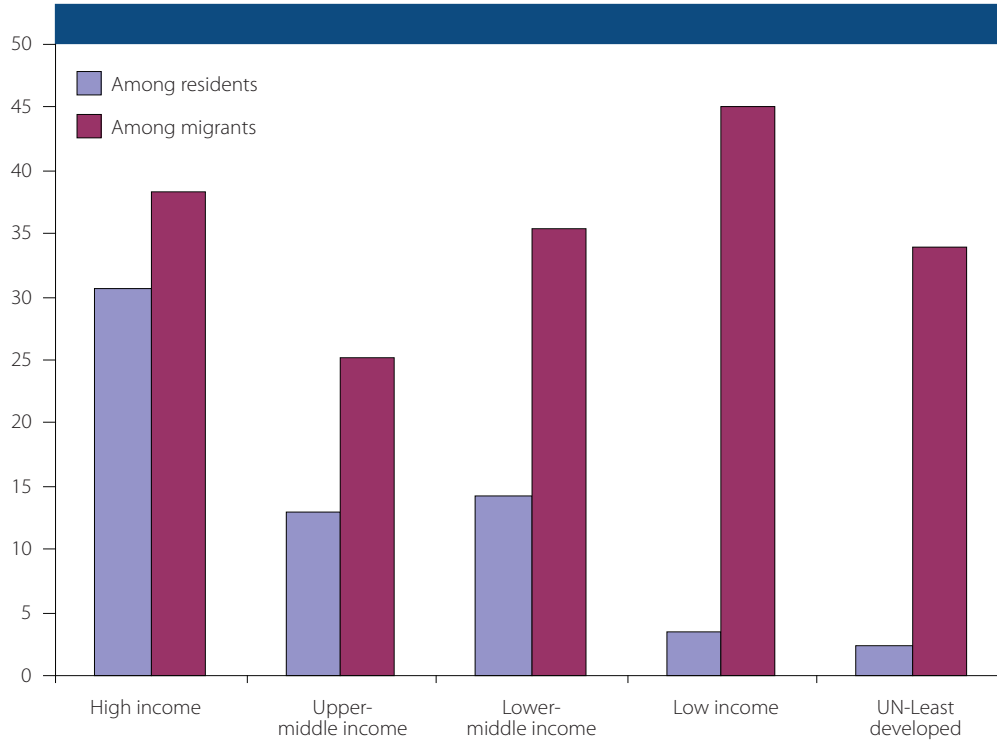
Recent work by Docquier and Marfouk (2004, 2006) presents a new, much fuller and more reliable estimation which, besides correcting previous figures, allows us to examine the evolution of rates of loss of qualified populations to emigration with data from 1990 and 2000. In their study, qualified immigration is considered to be persons 25 years and older with tertiary education who are living in an OECD country and were born in a different country from where they are currently residing. The data is therefore limited to emigration to OECD countries, where the bulk of qualified immigration is concentrated, with 192 independent territories and 39 dependant territories as sending countries. Their source, however, does not contain information on educational levels of irregular immigration and is incapable of distinguishing between those immigrants who arrived with registered educational levels and those who acquired such levels in the destination country.

The data from the more complete database produces unequivocal results: in 2000, 34.6 per cent of immigrants working in the OECD countries received tertiary or higher education, as compared with 11.3 per cent in the entire labour population worldwide. The immigrant population is also confirmed as having a higher education level than the average in their countries of origin. This phenomenon appears to be increasing over time, since in 1990 the ratio of qualified workers was 29.8 per cent of the total number of immigrants—almost 5 percentage points less than in 2000.

The difference between the percentage of qualified workers in the emigrant population and those in the country of origin tends to be smaller in high-income countries (figure 9). In high-income countries, the qualified population amounts to 30 per cent among residents in the country of origin and 38 per cent among emigrants from those countries; these shares are 3.5 per cent and 45.1 per cent, respectively, in the case of low-income countries. In other words, the poorer the country, the greater the differential between the qualification levels of immigrants and their home populations.

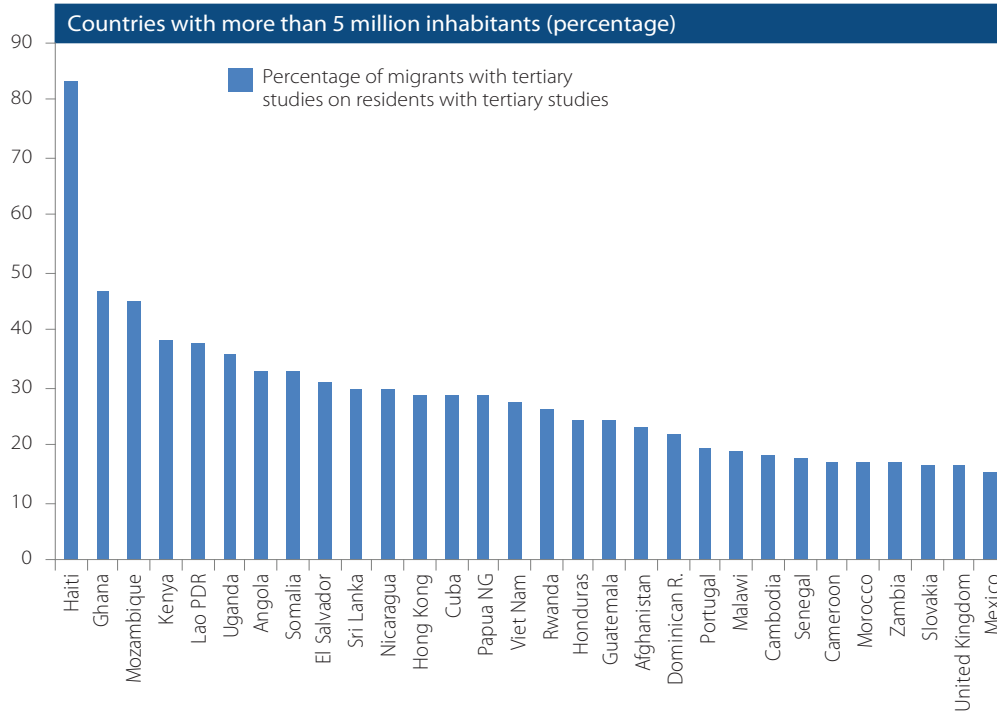
If the loss of human capital is measured through the proportion of migrants with tertiary education to the population with that same level of education in the sending country, the highest rates are found in small countries near the United States, such as Guyana, Jamaica, Haiti, Grenada, St. Vincent and the Grenadines. However, some countries further from the U.S., such as Cape Verde, Gambia, the Seychelles, Mauritius or Sierra Leone have equally high rates—all above 50 per cent. In order to avoid the effect of

Figure 9: Percentage of population with tertiary studies, 2000



Source: Docquier, F. and A. Marfouk (2006): "International Migration by Education Attainment, 1990-2000", in Ozden, C. and M Schiff (eds), *International Migration, Remittances and the Brain Drain*, Washington, D.C., The World Bank and Palgrave Macmillan.

Figure 10: The weight of migrants with tertiary education in relation to the residential population with that level of qualifications



Source: Docquier, F. and A. Marfouk (2006): "International Migration by Education Attainment, 1990-2000", in Ozden, C. and M Schiff (eds), *International Migration, Remittances and the Brain Drain*, Washington, D.C., The World Bank and Palgrave Macmillan.

size, it is worthwhile to exclude small countries (those with less than 5 million residents). When the smaller countries are excluded, Haiti, Ghana, Mozambique, Kenya, Laos, Uganda and Angola have the highest rates. Some Central American countries, such as El Salvador and Nicaragua, also show high rates (figure 10).

Two interesting conclusions can be drawn. Firstly, although it is not generalised, the problem of the loss of qualified workers—more than 10 per cent of the population with higher education—affects a significant number of countries, some of them notably poor. Secondly, even in cases where the threshold for the flow to be considered “brain drain” is not reached, migration does cause a significant loss of trained human resources. This is clear in terms of the educational composition of the migrant population—with educational levels above the average—as well as in the rate of migration in terms of the population with tertiary studies.

The tendency for migrants to be increasingly well-qualified seems to be influenced by various factors (Kapur and McHale, 2005). Firstly, the bias towards greater use of advanced technology doubtlessly plays a role. The ability to adopt new technological capacities affects not only the international competitiveness of an economy, but also its long-term growth possibilities. This source of economic growth increases demand for specialised labour with highly technical knowledge. Countries attempt to meet that demand by attracting trained human resources not only from their domestic markets, but also from international markets.

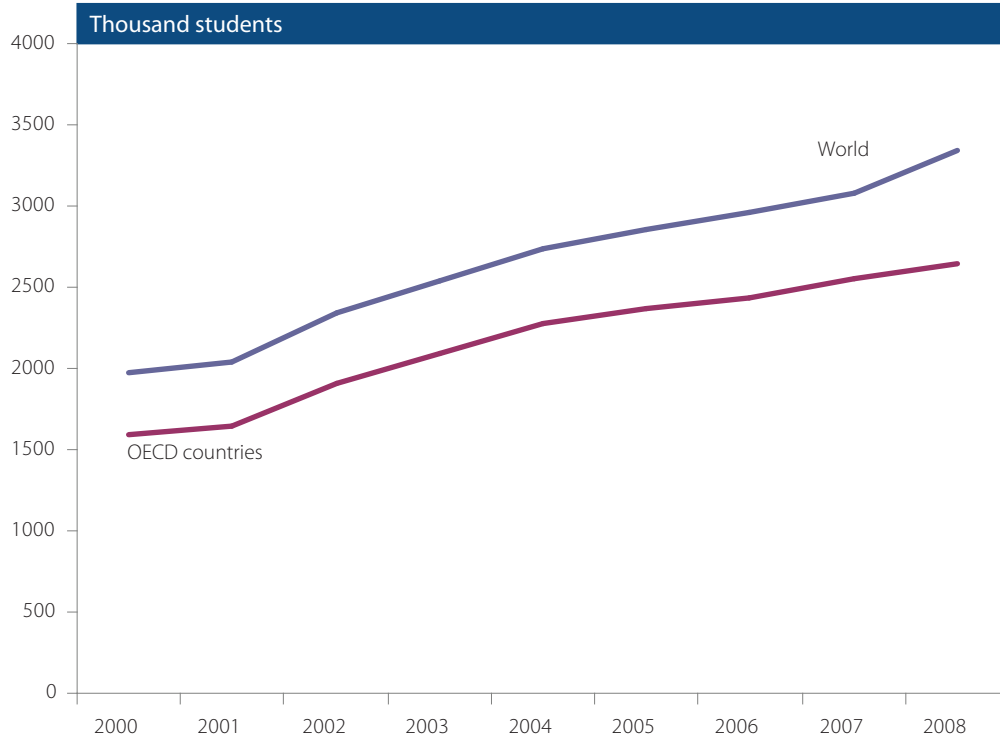
Aware of this need, some countries have implemented active policies to attract specialised labour abroad, reinforcing the phenomenon analysed here. Countries such as Canada, Australia and New Zealand, for example, have tried to incorporate admission criteria related to the educational level and specialisation of the applicant, while in other cases, such as in Germany and France, policies have been drawn up to attract specialised labour in specific sectors such as telecommunications and health. In some cases, such policies affect permanent migration while in others it refers to temporary-admission formulae (such as Germany’s “green card” and the H-1B of the United States). Regardless of its characteristics, this type of policy is a second factor feeding the trend of attracting qualified resources linked to the migratory phenomenon.

A third factor that is influential in this process is the growing internationalisation of higher education. Prestigious universities in the developed world offer training programmes open to students from the developing world. In fact, in the past decade the number of foreign students in universities in the OECD countries has increased (figure 11), and 88 per cent of these students end up staying in the host country to develop a significant part of his professional career. The United States has the largest number of foreign students, followed by the United Kingdom, Germany and France (figure 12). A recent study reveals that approximately 68 per cent of foreign doctoral students in the United States stay in the country after completion of their studies; that percentage ranges between 45 per cent and 73 per cent among the OECD countries in the case of science and engineering doctoral students (Kapur and McHale, 2005).

b) Effects of the loss of human capital

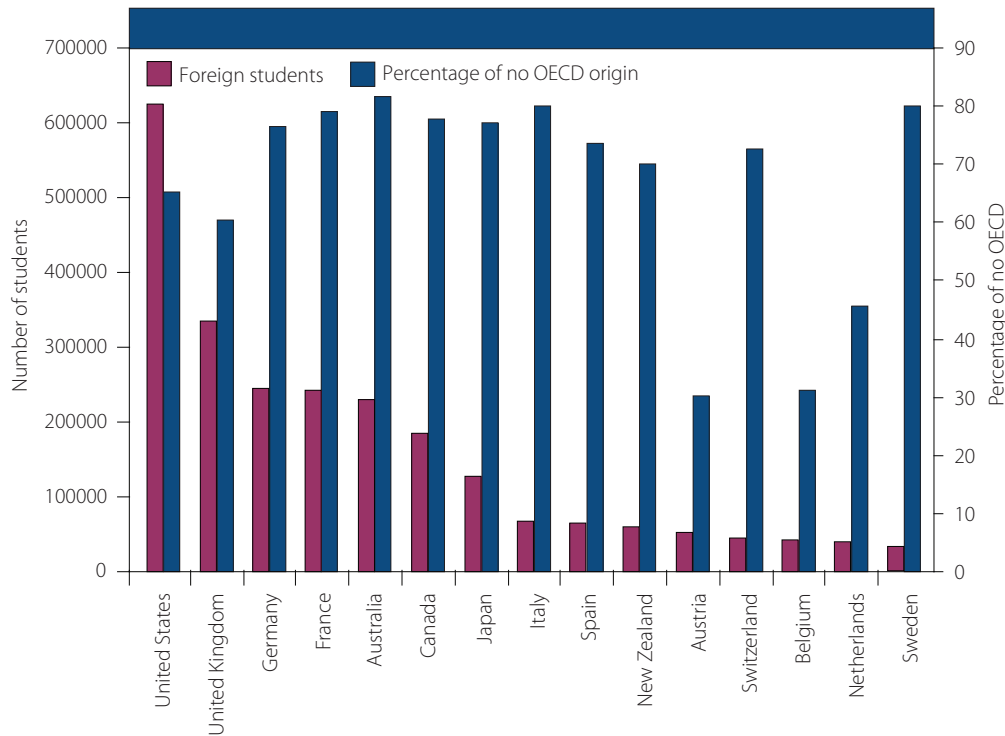
Traditionally, human capital loss was considered a cost to the development possibilities of the country of origin. It was supposed that through migration the country of origin lost a significant part of its limited supply of human capital, which could negatively affect its future growth prospects. The higher the externalities attributed to that human capital, the greater this effect would be (Grubel and Scott, 1966, and Bhagwati and Hamada, 1974). Those who support the theory of endogenous growth, highlighting the crucial role of human capital in economic dynamics, have reinforced this verdict (Haque and Kim, 1995, and Wong and Yip, 1999).

Figure 11: Foreign students in national universities (thousand students)



Source: OECD (2011): *Education at a Glance, 2010*, Paris.

Figure 12: Main recipient countries of foreign students in national universities



Source: OECD (2011): *Education at a Glance, 2010*, Paris.

Given the fact that many educational processes are carried out with public budgets, emigration of trained people presents an additional problem related to the contradiction that may exist between the private interests of emigrants and the social interests of the country from which they come. With regard to private interests, emigration is an opportunity to improve an individual CV, to find opportunities for professional progress, and to improve salary. In terms of the social interest of the country of origin, emigration amounts to a partial loss of public investment in education, limiting the returns from the collective investment. Definitively, through this route, the paradox of “the poor subsidising the rich” can arise (Kapur and McHale, 2005).

This is the conflict that fed the debate at the end of the 1960s between Johnson (1968) and Patinkin (1968)—a debate between the so-called “liberal cosmopolitan” position, which defended a world order that allowed any individual to freely put her choices into action (Johnson, 1968), and the position then dubbed “nationalistic”, associated with defending a certain social return from investments made in education (Patinkin, 1968). It is that same contradiction that Bhagwati (Bhagwati and Dellalgar, 1973, or Bhagwati, 2003) cites to justify the imposition of a tax on the educated labour that emigrates from a country, in order to partially compensate the social effort invested in their training.

In contrast to this perspective are those who find positive aspects of the emigration of trained resources. The fundamental argument here is that, if returns from the educational effort are higher abroad than in the country of origin, the possibility of emigration will increase the return on investment in human capital and will lead to more people making an effort to become educated. This, then, is a “brain-drain-induced-brain-gain”. Stark et al. (1997, 1998), Vidal (1998) and Mountford (1997) are among the authors that initially developed this vision, and such approaches led to what one of their most prominent advocates termed “the new economics of the brain drain” (Stark, 2005). In addition to the reason argued above, other potentially positive contributions are offered from the emigration of qualified persons: (i) the asset that experience and qualification gained through emigration can represent to the country of origin, as long as the emigrant returns (Stark et al., 1997; Domingues Dos Santos and Postel-Vinay, 2003); (ii) the possibility of creating networks for international business (Mesnard and Ravallion, 2001); and (iii) the higher level of remittances from this type of emigration (Cinar and Docquier, 2004). Some of these arguments are questioned by Schiff (2006). Good surveys of this field of theory can be found in Commander et al. (2004), Docquier and Rapoport (2004) and Clemens (2009).

Despite the importance of the question, much of the “brain-drain/brain-gain” debate has focused on the theoretical field, with limited empirical information. Only recently could advances be made in empirical studies, from information provided by Carrington and Detragiache (1998, 1999), Adams (2003), Docquier and Marfouk (2004, 2005) and Dumont and Lemaitre (2005).

The effort to clarify the debate and provide empirical proofs took place through two main channels. A first group of researchers tried to analyse the relationship between qualified emigration and the accumulation of human capital in the country of origin. Their results, in general, tend to confirm the association between this type of emigration and the shortcomings of professional personnel in the affected countries (Chen and Boufford, 2005; Docquier and Marfouk, 2006). As is obvious, the statistical association does not imply causality.

A second group of researchers, on the other hand, tried to analyse the causal effect of qualified migration. Their results are far from conclusive. Firstly they are inconclusive because the analysis needs to estimate a counter-factual scenario in which human capital remains in the country. As a consequence, the results

vary according to the study considered. Some studies argue the benefits of qualified emigration and support the notion of brain gain (such as Easterly and Nyarko, 2010, or Manning, 2007), but others are more sceptical about the supposed benefits and condition them on factors of context and emigration thresholds (Beine et al. 2008; Schiff, 2006; and McKenzie and Rapoport, 2006). On the whole, it seems that the effects of the loss of qualified personnel are highly subject to the externalities attributed to the human capital, the rate of emigration considered, and the sensitivity of educational decisions to opportunities abroad.

Although it is difficult to draw definitive conclusions from this literature, the studies might support a position somewhere between the two extremes, suggesting that: (i) probably the optimum does not coincide with a probability of professionals emigrating equal to zero; but (ii) an excessive drain of human capital could make the costs of the process unambiguous for sending countries. A simple modelling of the phenomenon confirms this hypothesis, suggesting an inverted U relationship between the probability of skilled emigration and the expected value of the income derived from that migration for sending countries (Kapur and McHale, 2005).

In any case, the studies referred to are based on significant, simplistic assumptions. Eliminating these assumptions leads to some interesting nuances on how to evaluate the phenomenon. Five are highlighted here:

- Firstly, the possibility of emigration affects not only the generation of human capital, but also the type of human capital promoted, because far from being homogeneous, human capital is a highly specific asset with a very low degree of substitution between different varieties—the loss of human resources in one sector (health professionals, for example) cannot be compensated for by the availability of resources in another (engineers, for instance). The stimulant effect of the emigration of professionals on training affects various elements of human capital differently, with the greatest benefit to those with skills that can be employed internationally. This explains why skills such as those related to telecommunications and digital technology, which are relevant across borders, are affected by this phenomenon, while skills of a more idiosyncratic nature, such as the knowledge of national laws, are not.
- Secondly, the loss of specialised resources through emigration increases the bargaining capacity—and therefore the salaries—of the specialists that stay in their home country. To the extent that those sectors are among the highest paid, the process will increase inequality in the country of origin. That same social inequality is sometimes justified as a response to contain the outflow of specialists. That is the case, for example, in Brazil, whose low loss of human capital is sometimes related to the income concentration in its high-specialisation sectors.
- Thirdly, professional sectors of society provide a significant base of taxes in any economy. Thus if a country is shedding qualified professionals, it will also be notably reducing its taxation base. For instance, in a study on India, Desai, Kapur and McHale (2003) estimate the fiscal loss from the emigration of qualified human resources at between 0.24 per cent and 0.58 per cent of the country's GDP. This loss must be added to the loss of public investment already spent on training those people.
- Fourthly, there are certain characteristics of human capital that make it particularly important to any economy. Most importantly, human capital carries knowledge that can be passed on to the whole economic system. Human capital is also presented in some businesses as complementary to other productive factors (such as physical capital). Finally, in order to promote human capital it is necessary to keep a critical mass of migrants in the host countries to fully benefit from their presence as a group; if the group is too small, their impacts on the host country economy will

not be significant. All these characteristics—externality, complementarity and indivisibility—mean that the loss of human capital can have a greater effect than the mere value of the private income associated with the return of that factor on the market.

- Lastly, human capital constitutes a basic factor in building institutions within a society (Kapur and McHale, 2005; Alonso and Garcemartín, 2008). Although not much is known about the dynamic of creation and change in institutions, everything suggests that the process is highly intensive in human capital. From this perspective, a great loss of qualified human capital could also have implications for the evolution and quality of the institutional framework available in the country in question. Since institutions constitute a relevant factor in explaining development, the loss of human capital could therefore affect the development possibilities.

Doubtlessly, none of the reasons above would support a policy against international mobility of qualified workers, but they are sufficient to justify countries (both sending and net recipient countries) to try to limit the most negative effects associated with the human capital loss from the of emigration of professional workers. Policies that restrict cross-border flows of professional workers could include: (i) limiting developed countries' creation of aggressive selective migratory policies designed to attract qualified personnel; (ii) greater attention to the labour conditions of qualified workers in their countries of origin; and (iii) policy to stimulate the return of professionals. In any case, this is a difficult objective for any developing country to achieve.

5. Migratory policies

5.1. *National policies*

There is a clear contradiction between the needs of developed countries to have migrant workers to support growth and the restrictive approaches to regulate migratory flows. The result of this contradiction is the creation of a large population—the dimension varies depending on the case—of undocumented migrants living outside the law in host countries. Moderate estimates suggest the share of illegal immigration could be 25 per cent greater than the total number of registered migrants. This scenario creates uncertainty for migrants, who often fall victim to abuse or exploitation. It also contributes to fragmentation of the labour market, worsens both the regulatory environment and social harmony, and generates unfair competition between employers in the host countries.

The problems associated with the presence of undocumented migration go beyond the present generations of migrants and affect their descendants as well. This second generation suffers the segmented social assimilation that derives from the irregular situation of their parents. Their downward assimilation frequently produces low educative performance, school drop-out, adolescent pregnancy and involvement in gangs and illegal activities (Portes, 2008). These problems end up reinforcing social and racial stereotypes associated with migrants and further reinforce the difficulties of the social integration of migrants in host countries.

Additionally, the fact that significant migration operates in a context outside the law makes for an appealing situation for mafias and other illegal groups to take advantage of the vulnerability and uncertainty that many migrants face. Such abuses are especially serious around the routes of entry to destination countries, including transit countries and border crossings. Violence is more frequent against women, who frequently suffer exploitation and sexual abuse. The most extreme of such abuses are related to human trafficking.

As a consequence of these manifestations of delinquency, recipient countries end up viewing migration as a security problem, focusing policies on the tightening of borders and persecution of undocumented

migrants. Terrorist threats have amplified this tendency, making migration policy more repressive in tone. These kinds of measures can foster abuses by police and security forces, not only in recipient countries but also in transit countries. However, experience shows that this repressive approach, taken without complementary measures, has had only limited success. The migratory cycle begins not when a foreigner tries to cross a border, but when a person decides to look abroad in search of her prosperity. Therefore, only through the involvement of source, transit and recipient countries can the fair and effective regulation of the migratory process be designed.

Beyond border controls, if recipient countries are to avoid irregular migration, their governments should estimate labour needs in a more realistic way and create routes of legal access to those jobs deemed necessary. If the labour needs are based on medium- and long-term demand, conditions should be set for migrants to settle legally in the destination countries. The conditions should allow the migrants to be granted residency and, where appropriate, nationality in the host country—in reasonable time-frames and with reasonable criteria, thus guaranteeing rewards and social rights in conditions similar to those enjoyed by national workers. To achieve this, it is necessary to adjust estimates of annual permits, allowing visas to be granted in a simple and transparent way. It is also important for governments to flexibly regulate migrant mobility once emigrants are in the host country, so they can extend their visas without excessive costs. If labour conditions so allow, and migrants can then change jobs and employers without restriction once a determined period has expired. Furthermore, it would seem just from the human rights point of view to establish limits to tethering, which ties the foreign worker to a sponsoring employer, thus facilitating abuses by the unscrupulous.

Sometimes the demands of the labour market lead to temporary jobs or seasonal jobs (in tourism or agriculture, for example), so it is important for governments to develop adequate regulatory frameworks to make the most of seasonal or cyclical migration. In these cases, permits are associated with a defined task or time period, although they should allow for the possibility of multiple and renewed permits over successive seasons. The State, in any case, should guarantee that the conditions of the work, residence, and health and security of migrant workers is up to the standard of native workers. For this kind of programme to work properly, it is best for the authorities in the countries of origin, as well as unions from both countries, to be involved—not just the employers. In fact, the sharing of responsibilities and obligations by source countries (such as pre-movement screening and selection, facilitation of return, and commitments to combating irregular migration) should be a key element of these programmes. The General Agreement on Trade in Services (GATS), through its Mode 4, could have offered a multilateral frame to develop this kind of agreement. Unfortunately, few commitments have been made on Mode 4 in the Doha Round, moving countries to turn their attention toward bilateral and regional agreements.

The form in which recipient countries have implemented these policy recommendations is highly variable. In 2007, the British Council and the Migration Policy Group undertook the task of developing an index of immigrant integration (the MIPEX) in which they evaluated the quality of the migration policies of recipient countries. They considered seven key dimensions in migratory policy:²⁶ (i) labour mobility; (ii) the possibilities and costs of bringing other members of the family to the host country; (iii) education; (iv) the conditions required for long-term residency; (v) regulation encouraging the political participation of migrants; (vi) access to nationality; and (vii) policies to fight discrimination. A wide range of experts took part in constructing the index, which used data from 31 countries (in its third edition). It is worth mentioning that the index did not look at regulation on temporary or cyclical migration.

²⁶ Initially, the index had only six components: afterwards, education was added.

That limitation aside, the results confirm the differences that exist in the current regulatory frameworks in recipient countries: the range of the overall qualification goes from 83 points for Sweden to 31 in Latvia, with the potential range being 0 (for the worst case) to 100 (for the best case) (table 8). The most notable differences were found in the extent of political participation and in eligibility of migrants to acquire host countries nationality, the areas where approaches by different countries most diverged. Overall, the countries with the most favourable overall policies for integration of migrants were the Nordic countries and the southern European countries.

5.2. *International framework*

Although there has been improvement in national migration policies, we must recognise that national solutions alone are insufficient—the global phenomenon requires a global approach. As argued in the previous

Table 8: Assessment of national migratory policies (MIPEX) 2010

<i>Countries</i>	<i>Labour market mobility</i>	<i>Family reunion</i>	<i>Education</i>	<i>Political participation</i>	<i>Long-term residency</i>	<i>Access to nationality</i>	<i>Anti-discrimination</i>	<i>Total</i>
Austria	56	41	44	33	58	22	40	42
Belgium	53	68	66	59	79	69	79	67
Bulgaria	40	51	15	17	57	24	80	41
Canada	81	89	71	38	63	74	89	72
Cyprus	21	39	33	25	37	32	59	35
Czech R.	55	66	44	13	65	33	44	46
Denmark	73	37	51	62	66	33	47	53
Estonia	65	65	50	28	67	16	32	46
Finland	71	70	63	87	58	57	78	69
France	49	52	29	44	46	59	77	51
Germany	77	60	43	64	24	59	48	57
Greece	50	49	42	40	56	57	50	49
Hungary	41	61	12	33	60	31	75	45
Ireland	39	34	25	79	43	58	63	49
Italy	69	74	41	50	66	63	62	60
Latvia	36	46	17	18	59	15	25	31
Lituania	46	59	17	25	57	20	55	40
Luxemburg	48	67	52	78	56	66	48	59
Malte	43	48	16	25	64	26	36	37
Netherland	85	58	51	79	68	66	68	68
Norway	73	68	63	94	61	41	59	66
Poland	48	67	29	13	65	35	36	42
Portugal	94	91	63	70	78	82	84	79
Romaria	68	65	20	8	54	29	73	45
Slovakia	21	53	24	21	50	27	59	36
Slovenia	44	75	24	28	69	33	66	48
Spain	84	85	48	56	78	39	49	63
Sweden	100	84	77	75	78	79	88	83
Swizerland	53	40	45	59	41	36	31	43
United Kingdom	55	54	58	53	31	59	86	63
United States	68	67	55	45	50	61	89	62

Source: Migration Policy Group and British Council (<http://www.mipex.eu>).

pages, there are reasons to believe that emigration involves a notable potential for progress for emigrants themselves as well as both the sending and recipient countries. Migration involves not only benefits, but also costs and risks, which should be understood, with steps taken to avoid them. This could justify the need for the international community to establish an agreed regulation of migratory flows. The reality, however, as UNDP (2009) pointed out, is that migration falls into an area not covered by any formal international regime. There exists neither a globally agreed regulatory framework nor a specialised multilateral institution. Only in the case of forced migration is it possible to recognise an international regime—a widely supported normative framework to regulate the phenomenon (Convention Relating to the Status of Refugees, 1951) and a specialized organization to manage it (UNHCR). Such is not the case for the labour migration we are considering here.

Internationally, there is only one agreement aimed at regulating the rights of economic migrants and their families, but its degree of support is very limited. This is the Convention on the Rights of Migratory Workers and their Families (1990) (CMW), signed by only 41 countries. Other international agreements and treaties, often related indirectly to migration, attract greater support. The above-mentioned Convention Relating to the Status of Refugees (1951) has wide support: affecting the rights of a specific type of migrant, it has been signed by 144 countries. The six fundamental treaties on Human Rights,²⁷ which contain clauses against discrimination, have been signed by 131 countries; and the Protocol on the Trafficking of People (2000) has been signed by 129 countries.

Furthermore, unlike other international issues, migration lacks a coherent institutional framework at the global level. There are a large number of international organisations that have mandates over issues related to migration, but none in a specialised and comprehensive way (these include, among others, the United Nations Population Fund, UNFPA; the United Nations Department of Economic and Social Affairs, UN/DESA; the International Labour Organization, ILO; the World Trade Organization, WTO; and the International Organization for Migration, IOM). The IOM has recently increased its membership and has expanded its initial mandate beyond the repatriation of refugees, but it is outside the UN system and lacks regulatory power, and its activity is mainly limited to service provision by member states on a project basis.

There is not a unanimous opinion on the need to create a supranational institution with enforceable power to manage global migration (Bhagwati, 2003, and Hatton, 2007, as opposite opinions). The main barriers to agreement are related to: (i) the limited interest that destination states have in joining an international regime to facilitate migration; (ii) the limited room for reciprocal benefits among (sending and host) countries; and (iii) the lack of leadership from major migration-destination states. There is a wider agreement on the opportunities for more active international cooperation based on networks (like the numerous regional consultative processes), dialogues (such as the Global Forum on Migration and Development), and certain institutions (such as the IOM) (Betts, 2011; Ghosh, 2007; Trachtman, 2009; or Kolowski, 2009). Nevertheless, it would be necessary to integrate these efforts into a more global and coherent framework. The Global Migration Group tries to partially fulfil this aim through coordination among different UN agencies.

The reasons why a global regulatory framework on migration has not attracted greater support may have to do with perceptions about the disparity of interests between net exporters of emigrants and net

²⁷ This is the International Convention on economic, social and cultural rights (1966), on civil and political rights (1966), on the elimination of all forms of racial discrimination (1966), on the elimination of all forms of discrimination against women (1979), for the prevention of torture and other cruel, inhuman or degrading treatment and penalties (1984), and on the rights of infancy (1989).

importers. The view is that mutual interests are limited and, as a result, this policy should be preserved as the exclusive responsibility of the States. Political and social sensitivity surrounding migration also contribute to the reasons governments try to maintain control over this field of international affairs.

However, this perception that the space for mutual benefit is limited is partially biased, for at least two reasons. The first is that many countries are now sending and receiving migrants at the same time and this characteristic is set to increase in the future, as international interdependence increases. For this reason, setting up international rules and rights could benefit not only the foreign population entering a country, but also the nationals who leave their native countries. Second, in order to build an adequate and efficient migratory policy, the participation of the migrants' countries of origin is essential. An efficient migratory policy should address international movements of people well before a person tries to cross a border because migration is planned much earlier, very far from the recipient country. This means both sending and receiving countries need to be involved in solutions tackling the migratory phenomenon.

The failure to face up to this task will result in ineffectiveness of migration policy and mistakenly place its focus on restricting migratory flows and identifying "illegals". Such ineffective policy will allow the entire process of migration—departure from the home country, transit to another country and arrival in the host country—to occur in non-transparent environments without legal protection. This approach leads to repressive answers, with consequent costs to community harmony and risks to expose migrants to abuse and criminal networks.

In fact, there is a shared opinion that potential global gains produced by international migration can be both increased and better distributed if states can share among themselves a more coherent, liberal set of rules at the global level. The key to achieving this purpose is to find incentives that attract both home and host countries to take part in cooperative action. But it is difficult to find sufficient mutual rewards in the field of migration alone. It may, therefore, be necessary to make changes in other areas of international relations in order to create mutually beneficial development opportunities in trade, technology and finance. International migration is a consequence of the asymmetries that exist in the international system. It is impossible to reduce migration pressures if these asymmetries are not corrected through fairer distribution of development opportunities. Without question, the dilemma faced by developed countries is whether to "export opportunities for development" or to end up importing the consequences of their lack. That is an argument for the need to improve levels of coherence in policies for development.

To sum up, it is difficult to make progress towards adequately managing migratory flows without the participation of all those countries and regions from which the migrant populations predominantly originate and settle in. This fact has driven the increase in a number of regional and bilateral agreements on migration—a useful route in the face of the difficulties that frustrate the striking of more far-reaching international deals.

In any case, regardless of the disposition of governments toward signing international treaties on this matter, what is clear is that the starting point should be based on a double principle: (i) firstly, the recognition that it is up to the individual States to define the ways of accessing residence, employment, and nationality in the case of anyone coming from another country; but also (ii) acknowledgement that those same States have an obligation to protect the basic human rights of people within their territory, whatever their administrative status.

Moreover, in the case of an emigrant who legally lives in a host country, as UNDP (2009) reiterates, the host government should be obliged to guarantee, as a minimum, the following rights: (i) equal pay for similar jobs, respectable labour conditions and social and health protection; (ii) collective organisation and negotiation; (iii) not being subject to arbitrary detention or deportation without judicial process; (iv) not suffering cruel, inhuman or degrading treatment; v) the possibility of free return to the country of origin. All these rights should be guaranteed along with those associated with personal freedom and security.

It was on these principles that the ILO tried to define a Multilateral Framework on Labour Migration in 2005, spelling out some recommendations to governments on migration policy.²⁸ These recommendations were aimed at compensating for the low level of support for the Convention of the Rights of Migrant Workers and their Families. However, international comparative analysis reveals that governments are very resistant to the application of international standards and are anxious to preserve national control.

An important aspect in migratory regulation is the question of how migrants can keep the social benefits they have obtained from work in countries outside their home countries. With increasingly more intense labour mobility across countries, it is necessary to review the territorial principle that currently defines the right to social benefits. Otherwise, if a person has worked in several countries, but in a shorter period than the minimum duration required in each given country to claim, say, pension benefits, he will be not entitled to receive the old-age pension. A good way to solve this kind of problem was offered by the *Convenio Multilateral Iberoamericano de Seguridad Social*²⁹ which defines insurance coverage for migrant workers, and for their families in the case of permanent disability, old age, labour accident, or professional disease, based on total period worked in different countries. The international agreement assures equal treatment to any worker, whatever his nationality; the preservation of rights obtained in each country; and the consideration of the total time worked in proportion to the time spent in each job. This is a new legal initiative, recently put into practice (1 May 2011), forging an interesting method of cooperation in defending the social rights of migrants among countries (such as Latin American and Spain and Portugal) with different models of social security.

Defending migrant rights is not, however, solely a task for States-labour unions and NGOs should be involved as well. Sometimes these organisations can be more effective than public authorities in identifying and denouncing abuses. It is equally important for migrants to organise themselves and to channel their complaints institutionally. This is why it is important that governments: (i) implement easy and efficient routes for migrants to present complaints if they are subjected to abuses; and (ii) create ways for immigrant communities to take part in defining migratory policy.

6. The effects of the crisis: A note

6.1. *The effects of the crisis*

The crisis that began in 2007 is severely affecting the evolution of the international economy. Although the origins of the instability have been traced to the turmoil of the U.S. financial markets, the contagion to the rest of the world was instantly realised. The rapid reaction of authorities on both sides of the Atlantic avoided the collapse of the international financial system, but it could not avoid the sinking of the world economy into a serious, synchronised recession with severe effects on overall growth and well-being of people. The

²⁸ ILO (2005): *ILO Multilateral Framework on Labour Migration. Non-binding principles and guidelines for a right-based approach to labour migration*, Geneva.

²⁹ This agreement was subscribed to by Argentina, Bolivia, Chile, El Salvador, Spain, Paraguay, Portugal, Venezuela and Uruguay.

destruction of wealth, the fall in production, the rise in unemployment and the increase in debt levels are hitting both advanced economies—where the crisis originated—and, in an uneven way, some emerging and other developing countries.

To tackle the first stages of the crisis, governments used truly exceptional measures, first to sustain the financial system and then to stimulate demand in order to avoid recession, finally rebalancing their budgets to avoid a sovereign debt crisis. The individual responses of nations were complemented by the use of a more visible international coordination. The framework chosen to facilitate that task was the G-20, which has since become the preferred institution for economic governance of the international system, albeit with some reservations. The succession of Summits held during the last three years (Washington, D.C., London, Pittsburgh, Toronto and Seoul) reveals the uneven progress of the reform initiatives. In fact, there seems to have been a dilution of the summit progress as time passed—in terms of the degree of consensus shared among participants attended the summit meetings as well as the significance of the agreements reached.

Aside from its origins, one consequence of the crisis has been its severe impact on growth and employment, especially in developed countries. Although the forecasts have changed over time, the latest ones drawn up by the IMF (table 9) can serve as a guide for judgement. Overall, it would be fair to say that, so far, developed countries have been much worse affected by the crisis than emerging economies and developing countries. That verdict is confirmed by the location of the epicentre of the crisis in the Western financial system (including Japan) and the way it became a transatlantic phenomenon through the underlying property bubble. Of the developed countries, it is the euro zone that seems to have suffered most severely from the crisis, and it is the euro zone that is facing the most pessimistic forecasts (with minimal growth to GDP in 2010 and 2011). The levels of debt reached by some countries on the periphery of Europe, and the severity of the corrections imposed by the discipline of the Monetary Union, justify those projections.

Among the developing countries, those in Asia are the least affected, whichever sub-region is considered. Nor has Africa suffered a high impact from the crisis because of the sustained demand in raw materials from the Asian economies, among other reasons. The effect of the crisis on Latin America has been relatively small and has basically been felt through the contraction of trade, remittances and private investment. With the exception of Mexico, the data points to a steep fall in national products in the first half of 2009 and a rapid subsequent recovery which led to positive and high rates of growth in 2010. Among the emerging and developing economies, the regions most affected by the crisis are those in Western Europe and the CIS (including Russia). These are the economies that suffered a contraction in 2009 with falls of 3.6 per cent and 6.5 per cent, respectively, and experienced a slower recovery in 2010.

From the point of view considered here, and given the limited growth expectations for the next few years, it is interesting to underline the rise in unemployment in the OECD countries, the main recipients of migration. Between 2007 and 2009, all countries with the exception of Poland, Israel and Germany experienced a rise in the rate of unemployment. In some cases—Spain, the United States, Estonia, Ireland and Iceland—the rate doubled in less than two years, and in seven of the OECD countries, the unemployment rate reached double digits (figure 13).

The difficulties in labour markets have doubtlessly affected the migrants in those countries, as they generally suffer higher unemployment rates than the national average. The data for 2010 confirms this: in the OECD, the average unemployment rate among immigrants was 50 per cent higher than the unemployment rate of natives (figure 14). This figure was the case for men in 18 of the 21 countries where data exists

Table 9: World economy outlook

Rates of growth (percentage)					
	2008	2009	2010	2011 ^a	2012 ^a
World GDP	2.8	-0.6	5.0	4.4	4.5
<i>Advanced economies</i>	0.2	-3.4	3.0	2.5	2.5
United States	0.0	-2.6	2.8	3.0	2.7
Euro zone	0.5	-4.1	1.8	1.5	1.7
Germany	1.0	-4.7	3.6	2.2	2.0
France	0.1	-2.5	1.6	1.6	1.8
Italy	-1.3	-5.0	1.0	1.0	1.3
Spain	0.9	-3.7	-0.2	0.6	1.5
Japan	-1.2	-6.3	4.3	1.6	1.8
United Kingdom	-0.1	-4.9	1.7	2.0	2.3
Canada	0.5	-2.5	2.9	2.3	2.7
Other advanced countries	1.7	-1.2	5.6	3.8	3.7
Recently industrialized Asian economies	1.8	-0.9	8.2	4.7	4.3
Emerging markets and developing countries	6.0	2.5	7.1	6.5	6.5
Sub-Saharan Africa	5.5	2.8	5.0	5.5	5.8
Latin America	4.3	-1.8	5.9	4.3	4.1
Brazil	5.1	-0.2	7.5	4.5	4.1
Mexico	1.5	-6.1	5.2	4.2	4.8
CIS	5.3	-6.5	4.2	4.7	4.6
Russia	5.2	-7.9	3.7	4.5	4.4
Developing economies in Asia	7.7	7.0	9.3	8.4	8.0
China	9.6	9.2	10.3	9.6	9.5
India	6.4	5.7	9.7	8.4	8.0
ASEAN-5	6.4	1.7	6.7	5.5	5.7
Central and Eastern Europe	3.0	-3.6	4.2	3.6	3.2
Middle East and Northern Africa	5.0	1.8	3.9	4.6	4.7

Source: FMI Overview of World Economic Outlook (January 2011).

a Projections.

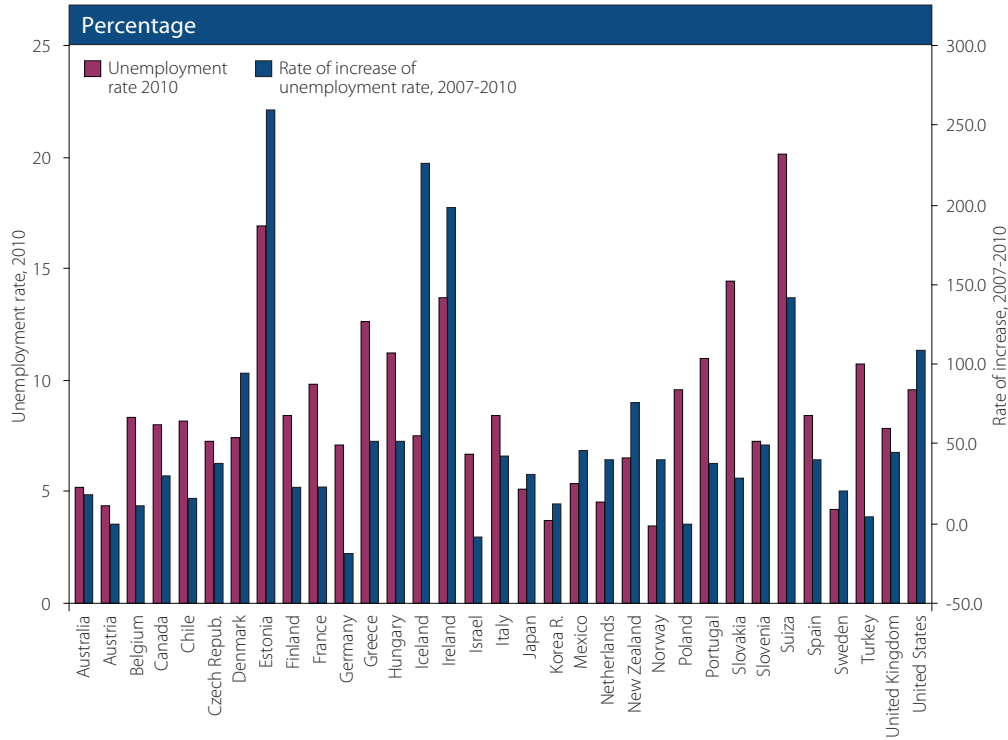
(the United States, Greece and Hungary being the exceptions); and for women in 19 of the 21 countries (with the exception of the United States and Hungary).

The crisis has affected the unemployment rates of migrants in OECD countries, but the extent of the effect is based on the circumstances of each economy. The impact has been greater in those economies where growth was driven disproportionately by a small number of sectors—such as the construction sector—which contains a high proportion of the migrant population. Spain is an example: although the unemployment rate rose among both natives and migrants, the unemployment rate among immigrants was almost 70 per cent higher (figure 15). This result, however, cannot be generalized. In countries such as the United Kingdom, a certain recovery in migrant employment can be seen after the fall in 2009.

6.2. *The effects on migration*

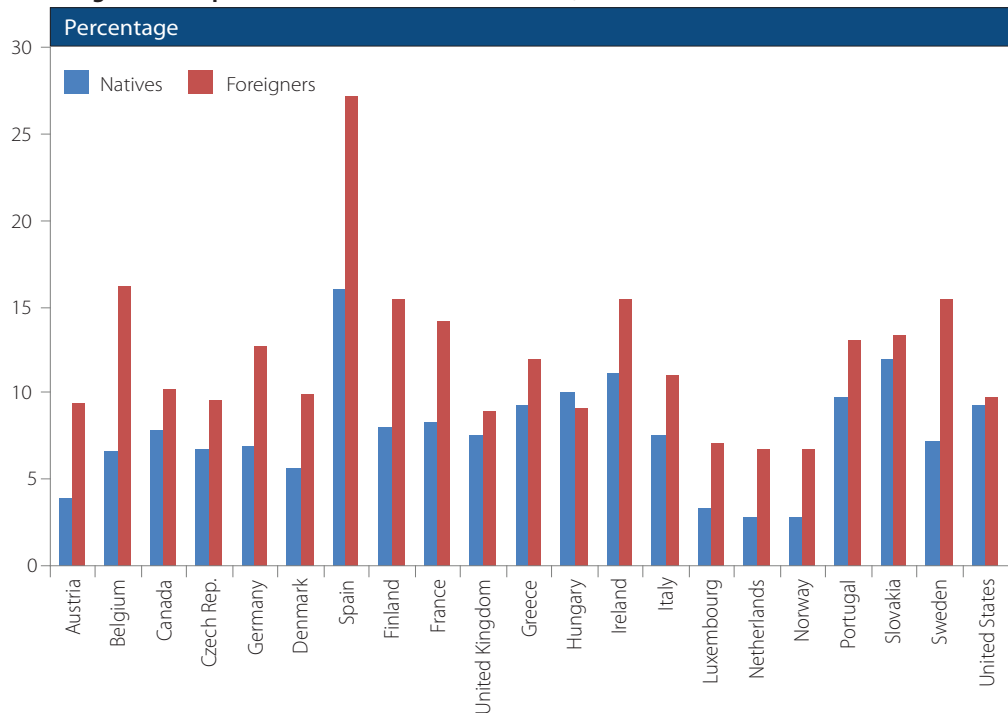
In principle, the recession and the rise in unemployment are expected to affect the net inflow of immigrants into developed countries as well as the remittances that immigrants send to their families. Although these expectations have indeed materialized, the size of the impact seems to be smaller than expected, especially in

Figure 13: Unemployment rate and growth in the rate, 2007-2010



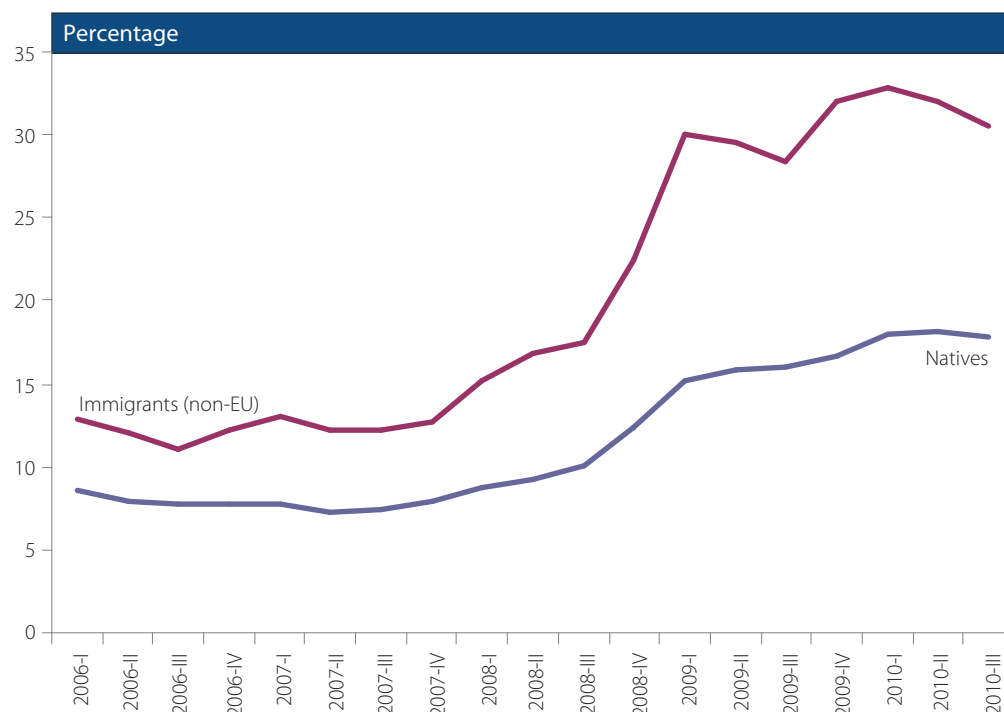
Source: OECD (<http://www.oecd-library.org>).

Figure 14: Relationship between unemployment rates among migrants compared to natives in oecd countries, 2009



Source: OECD (<http://www.oecd-library.org>).

Figure 15: Employment rates among natives and (non-EU) immigrants in Spain



Source: Instituto Nacional de Estadística (<http://www.ine.es>).

the case of remittances, which seem to have held up well in the crisis, recovering rapidly after the contraction of 2009.

In terms of flows of emigrants, the data for the last five years (2005-2010) reveals that the rate of evolution in the total number of migrants worldwide remained stable, but with minor changes. In fact, the programmes put in place by some countries (both net exporters and importers of emigrants) to facilitate the return of migrants have had only limited success so far.³⁰ Among the reasons for the limited effect of those programmes, three stand out: (i) the extraordinary level of inequality between the living conditions between the countries of origin and recipient country; (ii) the temporary protection afforded by public aid to unemployed emigrants in most OECD countries (unemployment benefits, minimum incomes); and (iii) the restrictive access regulations to OECD countries, because migrants in their destination countries may avoid returning to their countries of origin, out of fear of not being able to re-enter the host country afterwards. It is possible, of course, that those countries (such as on the European periphery) are still experiencing effects of the crisis and the impact of the crisis on the labour market prevent emigrants from returning home.

In addition to the effect of those returns, it seems clear that in the next few years, new arrivals to certain developed countries are going to be restricted. Various Governments have announced their decision to significantly cut the numbers of immigrants allowed to enter. It is therefore possible that those countries will see a significant slowdown in the pace of arrivals. Moreover, their economic situation makes them less attractive to the potential emigrant, who must take into consideration the greater difficulties to be faced in finding a job, thereby reducing, at least, the migratory pressure. Spain could, again, serve as an example. The rate of growth in Spain's migrant population in 2009 fell by half compared to the previous year (reaching

³⁰ Examples of this programmes were applied in Japan and Spain, as recipient countries, and Ecuador and Colombia, as sending countries.

7 per cent, compared to 15 per cent in 2008); and, although the statistics have not been released for 2010, the forecasts point to another, still sharper, fall.

At the global level, it is possible that this effect will prove less significant. Firstly, this is because the family reunion policies that operate on the previous migrant stock are less affected by the crisis. Secondly, the crisis may bring new migrant destinations to the fore—destinations associated with emerging markets that have a high growth potential.

In turn, remittances seem to have followed a relatively similar path. In 2009, remittances directed at developing countries fell by 5.5 per cent, ending up at \$307 billion: an appreciable fall, but still well below the declines in direct foreign investment (40 per cent) or private financial flows (80 per cent). Remittances are expected to recover their dynamism in 2010 and to grow by 6 per cent, to 325 billion dollars. The forecasts point to a continuation of an upward trend for the following few years, with growth of 6.3 per cent and 8.1 per cent in 2011 and 2012, respectively (translating to \$346 and \$376 billion, respectively).

Three reasons can be found to explain the ability of remittances to resist the effects of the crisis (Ratha and Mohapatra, 2009): (i) remittances are sent by the entire migrant population accumulated over time, and not just by those who have recently settled in host countries; (ii) not all of the businesses where immigrants were predominantly employed were equally hit by the crisis (for example, employment related to domestic service and personal care are among the most resistant to the effects of the crisis); and (iii) even when migrant returns are limited, those who do return take along their accumulated savings, which are counted as remittances.

In any case, the effect on remittances has not been the same across regions. The two regions most affected by the crisis have been Eastern Europe and Central Asia and Latin America, which suffered falls in remittances in 2009 of 22.7 per cent and 12 per cent, respectively. Declines in the Middle East and Northern and Sub-Saharan Africa were smaller, at 6.3 per cent and 3.7 per cent, respectively. In other regions, although the growth rate fell compared to previous years, the volume of remittances continued to expand. That will be the general pattern for 2010: all regions are expected to see an increase in the remittances they receive. In fact, some of the regions that suffered a greater contraction (Europe and Central Asia, Latin America, and Eastern Asia and the Pacific) are the same regions that will experience some of the highest rates of growth in their remittances in 2011 and 2012 (table 10). Obviously these forecasts are subject, firstly, to the risks that still exist in the economic recovery—especially in the case of the euro zone—and secondly to the effects that international imbalances may have on the currencies in which remittances are paid.

6.3. Political responses

One of the main risks surrounding the crisis is associated with the reawakening of anti-immigration sentiment in very diverse countries, many of which have long traditions of accepting immigrants and consolidated democratic institutions. The subject of migration has become one of the flashpoints in recent election campaigns in many OECD countries. Some are witnessing an increase in the number of political parties that are wary of immigration, and even an increase in xenophobic messages. Additionally, some governments have undertaken actions that are notably aggressive towards migrants, and sometimes at the edge of what is legally acceptable such as new laws approved in the U.S. State of Arizona, or the measures to expel illegal immigrants from the Roma community in France and Italy.

Table 10: Evolution of remittances

Millions of dollars						
	2007	2008	2009	2010 ^a	2011 ^b	2012 ^b
Developing countries	278	325	307	325	346	374
East Asia and Pacific	71	85	86	91	98	106
Europe and Central Asia	39	46	35	37	39	43
Latin America and Caribbean	63	65	57	58	62	69
Middle East and North Africa	32	36	34	35	37	40
South Asia	54	72	75	83	87	92
Sub-Saharan Africa	19	21	21	21	22	24
Low income	17	22	22	24	26	29
Middle income	262	303	285	301	319	345
World	385	443	416	440	464	499

Source: Mohapatra, S. D. Ratha, and A. Silwal (2010). "Outlook for remittance flows: 2011-2012: recovery after crisis, but risks lie ahead", *Migration and Development Brief*, 13, World Bank.

a Estimates.

b Projections.

Aside from these individual actions, the crisis has fed a fear in the minds of national citizens about the competition that immigrants could represent both in the labour market and in terms of access to public services. This fear does not seem to be well-founded, but citizens perceive it as reality, identifying immigration as a potential threat to their living standards. This fear does not always show up in opinion polls, because other threats—like those resulting directly from the economic situation—emerge more strongly in citizens' views. In Eurobarometer data, for instance, in 2005, 14 per cent of those surveyed in the EU found immigration to be the most important problem; in 2010, that had fallen to 9 per cent. In Spain, those figures were 30 per cent and 8 per cent, respectively. In both cases, this drop is due to the mounting concerns associated with the economic situation. Nevertheless, when the survey is specialized in migration, the results reveal a more anti-immigration sentiment. That occurs, for instance, in the survey carried out in Finland in 2007, where the share of citizens who felt that immigration should not be increased rose from 35 per cent in 2004 to 60 per cent three years later. Another recent survey carried out in Germany suggested that a third of the population supported a policy of repatriating immigrants.

The crisis, therefore, represents more of a risk to future migratory flows than a risk to immediate numbers. It seems to have changed the opinions of groups of citizens and the political spectrum in recipient countries towards more restrictive positions on immigration. Some of these positions—and this is worth reiterating—do not coincide with the objective need of those societies in employment terms to stimulate immigration in order to sustain their own welfare systems.

7. Final considerations

A number of general considerations can be put forward, which will serve as a reminder of the main ideas examined in this document. These ten final considerations are expressed briefly here..

1. We are not in a new historical period in terms of international migratory pressures. While the current crisis tends to slow down migration flows, it is reasonable to assume that migratory pressures will continue to be part of the contemporary world. Other contributing factors include: (i) the persistence of notable inequalities in salaries between countries; (ii) the disparity between the demographic dynamic of the

developed world (with stable and increasingly ageing populations) and that of the developing world (which has a more dynamic demographic); and (iii) lifestyles and consumption styles of the developed world are easily and quickly spread to the developing world, making migration an attractive option, along with the fall in the costs of displacement and international transportation. In sum, migration will continue because we live in an increasingly interdependent, but highly unequal, world.

2. International migration may be a powerful factor in the development process for both recipient and destination countries and opens up significant opportunities for the emigrants. In fact, emigrants are the ones who benefit most from the process. When people are able to choose their place of residence with fewer restrictions, their human freedoms are increased and they are allowed access, albeit selectively, to better living conditions. In this sense, emigration is not a zero-sum game; adequately regulated, it can be the source of shared benefits for all those involved. Studies confirm these effects. Of course, emigration can also involve costs, which need to be considered and, to the extent possible, minimized but, on the whole, emigration is an important factor in the development of people and their societies. Governments in countries of origin and recipient countries must, therefore, make the most of the opportunities that emigration offers, aiming at taking full advantage of its positive impacts while attenuating its negative effect. To achieve this objective it is necessary:

- Firstly, that migrants sending countries understand that emigration cannot be conceived as a substitute for a development strategy since only through a solid and solvent development policy can the positive effects of emigration be properly exploited;
- Secondly, that recipient countries of emigrants understand that meeting their labour needs through the use of foreign labour requires offering emigrants the protection of the law and a recognition of workers' social rights, along with their right to work without discrimination.

3. Despite the potential benefits of international migration, the laws governing this process are notably restrictive. There is, therefore, a clear contradiction between the needs of developed countries for migrant workers to support growth and the restrictive rules with which the same countries are creating to regulate immigration. The result of this contradiction is the presence of a large group of undocumented immigrants living outside the law in their destination countries. Thus many people migrate from one country to another without the protection of the law, leaving them vulnerable to abuse and allowing mafias and criminal behaviour to flourish around illegal immigration. In order to avoid this outcome, recipient countries must better balance their need for a migrant population with rules and regulation that allow migrant workers to obtain residence (and citizenship, where appropriate) as well as employment.

4. In relation to migration laws, all countries have the right to define the rules around entry into their territories, access to residency and citizenship, and integration by foreigners into labour markets. However, such regulation should be drawn up bearing in mind:

- Firstly, migratory regulation must be sensitive to the conditions of the poorest peoples and societies while identifying the potential of emigration as a source of progress for those involved.
- Secondly, the nature of the times at present with markets and countries increasingly integrated beyond national borders. It would seem incoherent to seek freedoms governing trade and capital while excluding the movement of people.

If states have the right to regulate conditions of access of non-nationals to their countries, they also have the obligation to protect and respect the basic rights of everyone in their territory, regardless of his or her

administrative status. Migrants constitute a particularly vulnerable sector of society, which obliges states (whether countries of origin, destination or transit) to redouble their efforts in fighting against the abuse and exploitation, xenophobia, exclusion and marginalization of the emigrant, as well as the illegal trafficking of humans.

5. In an increasingly integrated world, national solutions are insufficient. It is difficult to effectively manage migratory flows without a concerted international effort; the participation of sending countries of migrants, recipient countries, and the countries through which emigrants pass en route to their destinations. Policies that address migrants crossing national borders as the major issue tend to treat the migration problem as if it were simply a question of controlling entry flows. On the contrary, the migratory process begins much earlier than border crossing and involves all those factors that drive a person to decide to search for possibilities denied by his home country in distant lands. That is why fair and efficient regulation of the migratory processes can only be tackled with the involvement of countries of origin, destination and transit. Therefore, regulation should support the international instances of dialogue and cooperation currently in effect (such as the Regional Consultative Processes on Migration, or RCPs), backing their secretariats to prepare and monitor their agenda, promoting more active participation by civil society and the private sector, and encouraging, when appropriate, a tighter link with the process of regional integration. The process of negotiation between countries could take place at two levels.

- Firstly, through the setting of minimum rules and standards on which all migratory policies are based. This should involve an analysis of experiences and good practices that can be applied more generally.
- Secondly, through the promotion of agreements on cooperative management between countries, to maximize the developmental impact of migratory flows. This would lead to mutual support on public policies on legal emigration.

6. The key to reaching this level of agreement is to provide the incentives for sending countries of migrants to participate in such a collective action. It might prove to be difficult for such mutual cooperation to be limited to the field of migration. If so, it should expand cooperation to other fields of international relations in order to reasonably manage migration. More effective developmental cooperation needs to be generated through trade, the sharing of technology, the treatment of debt, and international finances. Definitively, the dilemma faced by the northern countries is either to contribute more actively towards “exporting development” to the South, or else to end up “importing” the consequences of the lack of development in the South. These all point to the need to improve the levels of coherence in public policies in relation to the development objectives.

7. The remittances sent by emigrants constitute an important source of financing that may be useful to development processes in countries and communities that migrants come from. However, it is possible to improve the impact of this source of financing through the following measures:

- Reducing the transaction costs of remittance transfers, facilitating access by emigrants to formal financial channels and increasing the competition in those markets.
- Facilitating control over remittances by the people who generate them in order to reduce the agency problems that seem to be associated with them. This requires steps to empower migrants themselves in their relations with financial institutions, both in the countries where they work and in their countries of origin.

- Defining public stimuli to encourage more productive use of remittances for development purposes while respecting the private nature of the funds. This goal could also affect development aid policy through emigrants contributing development aid and technical assistance to their communities of origin.

8. Emigration is highly selective, affecting most intensively the young, the most dynamic, and the best trained members of a population. Emigration incurs costs for developing countries in terms of an investment already made in the training of human capital. This loss may have a negative effect both in terms of the growth potential of the countries of origin and their chances for consolidating goods institutions, since human capital plays a decisive role in both processes. To avoid these negative effects, work needs to be undertaken to:

- Revise the most aggressive policies that selectively aim at attracting qualified human resources from developing countries, especially countries and sectors where an outpouring of people could seriously affect the well being (health, for example) of those populations.
- Review the current internationalization of higher education and the way in which its attraction of students from the developing world frequently feeds the phenomenon of the loss of highly qualified personnel.
- The international community should support efforts by developing countries on training, investigation, and the improvement of the professional environment in order to allow professionals to find an adequate route to progress and personal promotion in their own countries.
- More use should be made of temporary contracts with stimuli for emigrants to return to their countries of origin. Such formulas could turn temporary migration into another stage of professional training from developing countries, without the loss of human capital in their country of origin.
- Finally, consideration must be given to the possibility of paying compensation to countries of origin in cases where developed countries are actively attracting well-qualified professionals away from developing countries.

9. Emigration can culturally enrich a society so long as work is done to achieve mutual adaptation (for the emigrant to fit into the host society, and for the host society to adapt to the new arrivals), as well as to achieve the full social integration of the emigrant. Emigration can contribute towards the creation of a valuable transnational society and towards promoting cooperation between civil societies, above and beyond national borders. This is one of the developmental initiatives that migrant communities have implemented with the involvement of other organizations from civil society. It is invaluable and should be supported by public authorities.

10. The crisis is having multiple effects on international migration. Firstly, it has increased unemployment to above average among immigrants in some OECD countries, not only due to the greater precariousness of immigrant labour ties, but also due to their concentration in certain sectors of business, such as construction or some services, that were hit particularly badly by the crisis. This has not, however, happened in all cases. Secondly, due to the nature and duration of immigrant contracts, migrants tend to have less social protection in the event they lose a job, which means the social costs of the crisis are often higher for them. Thirdly, the effect that the crisis has had on labour conditions in destination countries has slowed migration and led various governments to announce significant cuts in immigration quotas. Fourthly, the crisis has also affected remittances, which fell in volume in 2009; however, the forecasts point to a rapid recovery

in years to come. Lastly, the most worrying effect of the current crisis is that it has generated anti-immigrant sentiment among certain social and political groups in host countries. The immigrant is seen as a rival to residents in the search for work, or as an additional burden to public services. Such perceptions have often been translated into a more restrictive tone in migration rules, and into a greater presence of discrimination and xenophobia, even in consolidated democracies.

Bibliography

- Acosta, P. (2006): "Labor supply, school attendance, and remittances from international migration: The case of El Salvador", *Policy Research Working Paper 3930*, World Bank.
- Acosta, P., P. Fajnzylber, and J. Humberto López (2007): "The impact of remittances on poverty and human capital: Evidence from Latin American household surveys", in Ozden, C. and M. Schiff (2007), *International Migration, Economic Development and Policy*, World Bank and Palgrave Macmillan.
- Adams, R.H. (1993): "The economic and demographic determinants of international migration in rural Egypt", *Journal of Development Studies* 30 (1), 146-67.
- Adams R.H. (1998): "Remittances, investment, and rural asset accumulation in Pakistan", *Economic Development and Cultural Change*, October, 155-173.
- Adams, R.H. (2003): "International migration, remittances and the brain drain: A study of 24 labour-exporting countries", *World Bank Policy Research Working Paper 3069*, June.
- Adams, R.H. (2005a): "Remittances, selection bias and poverty in Guatemala", mimeo, World Bank.
- Adams, R.H. (2005b): "Remittances and poverty in Ghana", mimeo, World Bank
- Adams, R.H (2006): "Remittances, Poverty and Investment in Guatemala", in Ozden, C. and M. Schiff (2006), *International Migration, Remittances and the Brain Drain*, New York, Palgrave Macmillan.
- Adams, R.H. and J. Page (2003): "International migration, remittances and poverty in developing countries", *Policy Research Working Paper 3179*, World Bank.
- Adams, R.H and A. Cuccuecha (2010): "The economic impact of international remittances on poverty and household consumption and investment in Indonesia", *Policy Research Working Paper 5433*, World Bank.
- Alonso, J. A. (ed) (2004): *Emigración, pobreza y desarrollo*, Madrid, Editorial Catarata.
- Alonso, J.A. (2010): "La lengua en la selección de los mercados de destino", in J.A. Alonso and R. Gutiérrez (dirs), *Emigración y lengua. El papel del español en las migraciones internacionales*, Barcelona, Editorial Ariel.
- Alonso, J.A and R. Gutiérrez (dirs) (2010): *Emigración y Lengua. El papel del español en las migraciones internacionales*, Barcelona, Editorial Ariel.
- Anderson, K. and W. Martin (2005), *Agricultural Trade Reform and the Doha Development Agenda*, World Bank, Washington, D.C.
- Barham, B. and S. Boucher (1998): "Migration, Remittances and Inequality: Estimating the Net Effects of Migration on Income Distribution", *Journal of Development Economics*, 55 (2), pp. 307-331.
- Barret, A. and Ph. O'Connell (2001): "Is there a wage premium for returning Irish migrants?", *Economic and Social Review*, 32: 1-21.
- Bauman, Z. (2003): *Comunidad. En busca de seguridad en un mundo hostil*, Editorial Siglo XXI, Madrid.
- Beine, M. F. Docquier, and H. Rapoport (2008): "Brain drain and human capital formation in developing countries: Winners and losers", *Economic Journal*, 118 (528), pp. 631-652.
- Beine, M, F. Docquier and M. Schiff (2008): "Brain drain and its determinants: A major issue for small states", *IZA Discussion Paper 3398*, Institute for Study of Labor.
- Bergin, P. and R. Glick (2007): "Global prices dispersion: Are prices converging or diverging?", *Journal of International Money and Finance* 26 (5), pp. 703-729.
- Berthélemy, J.C., M. Beuran and M. Maurel (2009): "Aid and Migration: Substitutes or complements?", *World Development*, 37 (10), pp. 1589-1599.
- Betts, A. (ed) (2011): *Global Migration Governance*, Oxford, Oxford University Press.

- Bhagwati, J. (1991): "Free traders and free immigrationists: strangers or friends?", *Working Paper n° 20*, April, Russell Sage Foundation, New York.
- Bhagwati, J. (2003): "Borders beyond control", *Foreign Affairs*, vol 82, n° 1, pages 98-104.
- Bhagwati, J. and K. Hamada (1974): "The brain drain, international integration of markets for professionals and unemployment: A theoretical analysis", *Journal of Development Economics*, 1 (1), pp: 19-42.
- Bhagwati, J. and W. Dellalgar (1973): "The brain drain and income taxation", *World Development*, 1 (1-2), pp. 94-101.
- Borjas, G. (1992): "Ethnic capital and intergenerational mobility", *Quarterly Journal of Economics*, 107, 123-50.
- Borjas, G. (1994): "The economics of immigration", *Journal of Economic Literature*, 32, December, 1667-717.
- Borjas, G. (1995): "The economic benefits from immigration", *Journal of Economic Perspectives*, n° 9, 3-22.
- Borjas, G. (1995): "Ethnicity, neighbourhoods, and human-capital externalities", *American Economic Review*, vol 85, n° 3, 365-90.
- Borjas, G. (1999): "Economic Research on the Determinants of Immigration: Lessons for the European Union", *World Bank Technical Paper 438*.
- Borjas, G. and B. Bratsberg (1996): "Who leaves? The outmigration of the foreign-born", *Review of Economics and Statistics* 78: 165:76.
- Carrington, W.J. and E. Detragiache (1998): How big is the brain drain?, *IMF Working Paper 98/102*, International Monetary Fund.
- Caselli, F. and J. Feyrer (2007): "The marginal product of capital", *Quarterly Journal of Economics*, 122 (2), pp. 535-568.
- Cebrián, M. (2009): "Los determinantes de los flujos migratorios internacionales", *Principios. Estudios de Economía Política*, 14, pp. 49-70.
- Cami, R., C. Fullenkamp, and S. Jahjah (2005): "Are immigrant remittances flows a source of capital for development?", *IMF Staff Papers* 52 (1): 55-81, International Monetary Fund.
- Cinar, D. and F. Docquier (2004): "Brain drain and remittances: Consequences for the source countries", *Brussels Economic Review* 47 (1), pp. 103-118.
- Clark, X., T.J. Hatton and J.G. Williamson (2002): "Where do US immigrants come from? Policy and sending country fundamentals", *NBER Working Paper 8998*.
- Clemens, M. (2010): "A Labor Mobility Agenda for Development", Center for Global Development, Washington, D.C.
- Clemens, M., C. Montenegro and L. Pritchett (2008): "The Place Premium: Wage differences for identical workers across the US border", *CGD Working Paper 148*, Washington, D.C., Center for Global Development.
- Dessai, M.A., D. Kapur and J. McHale (2001): "The fiscal impact of the brain drain: Indian emigration to the US", *Weekly Political Economy Discussion Paper*, Harvard University.
- Docquier, F. and A. Marfouk (2004): Measuring the international mobility of skilled workers (1990-2000)", *Policy Research Working Paper 3381*, World Bank, Washington, D.C.
- Docquier, F. and A. Marfouk (2006): "International Migration by Education Attainment, 1990-2000", in Ozden, C. and M. Schiff, *International Migration, Remittances and the Brain Drain*, New York, Palgrave Macmillan.
- Docquier, F. and F. Rapoport (2004): "Skilled migration - The perspective of sending countries", *Policy Research Working Paper 3381*, World Bank.
- Domingues Dos Santos, M. and F. Postel-Vinay (2003): "Migration as a source of growth: The perspective of a developing country", *Journal of Population Economics*, 16 (1), pp.161-175.
- Dumont, J.C. and G. Lemaître (2004): "Counting immigrants and expatriates in OECD countries: A new perspective", mimeo, OECD.
- Ellerman, D. (2003): "Policy Research on Migration and Development", *World Bank Policy Research Paper*, 3117, Washington, D.C.
- Faini, R. (2001): *Development, Trade, and Migration*, International Monetary Fund, mimeo.
- Faini, R. and A. Venturini (1994): Migration and growth. The experience of Southern Europe", *CEPR Discussion Papers*, 964.
- Gammeltoft, P. (2002): "Remittances and other financial flows to developing countries", *Working Paper 02/11*, Centre for Development Research, Copenhagen.
- Ghosh, B. (2007): "Managing migration: towards missing regime", in A. Pécoud and P. Guchteneire (eds.), *Migration without borders: Essays on the free movement of people*, United Nations Educational, Scientific and Cultural Organization (UNESCO) and Berghahn, Paris.
- Ginannone, D. and M. Lenza (2009): "The Feldstein-Horioka Fact", *NBER Working Paper 15519*, National Bureau of Economic Research.

- Görlich, D. T., O. Mahmoud and Ch. Trebesch (2007): "Explaining Labour Market Inactivity in Migrant-Sending Families: Housework, Hammock or Higher Education", *Kiel Working Paper* 1391, Kiel Institute for World Economy.
- Grubel, H.B. and A.D. Scott (1966): "The international flow of human capital", *American Economic Review*, 56 (1-2), pp: 268-274 .
- Hamilton, B. and J. Whalley (1984): "Efficiency and distributional implications of global restrictions on labour mobility", *Journal of Development Economics* 14; 61-75.
- Hanson, G.H. and C. Woodruff (2003): "Emigration and educational attainment in Mexico", mimeo, University of California.
- Haque, N.U. and S-J. Kim (1995): "Human capital flight: Impact of migration on income and growth", *IMF Staff Papers* 42 (3), pp. 577-607, IMF.
- Hatton, T. (2005): "Explaining trends in UK immigration", *Journal of Population Economics*, 18, pp. 719-740.
- Hatton, T.J. (2007): "Should we have a WTO for international migration?", *International Migration*, April, pp. 339-383.
- Hatton, T. and J. Williamson (1998): *The Age of Mass Migration: Causes and Economic Impact*, New York, Oxford University Press.
- Hatton, T. and J. Williamson (2003): "What fundamentals drive world migration?", *Discussion Paper* 2003/23, WIDER.
- Hatton, T. and J. Williamson (2005): *Global migration and the World Economy. Two Centuries of Policy and Performance*, MIT Press, Cambridge, Mass.
- Harris, J.R. and M. Todaro (1970): "Migration, employment, and development: A two sector analysis", *American Economic Review*, 60, 126-42.
- Hirschman, A.O. (1977): *Salida, voz y lealtad*, Fondo de Cultura Económica, Mexico.
- Hoschschild, A.R. (2001): "Las cadenas mundiales del afecto y asistencia y la plusvalía emocional", in A. Giddens and W. Hutton (eds), *En el límite. La vida en el capitalismo global*, Madrid, Tusquets Editores.
- IADB-MIF (2004): "Sending money home: Remittance to Latin America and the Caribbean", Washington, D.C.
- IMF (2005): *World Economic Outlook: Globalization and external imbalances*, Washington, D.C.
- Jaeger, D. (2000): "Local labour markets, admission categories, and immigrant location choice", Hunter College, New York.
- Johnson, H. (1968): "An internationalist model", in W. Adams, *The Brain Drain*, Macmillan, New York.
- Kapur, D. and J. McHale (2005): *Give us your best and brightest*, Center for Global Development, Washington, D.C.
- Karemera, D., V.I. Oguledo and B. Davis (2000): "A gravity model analysis of international migration to North America", *Applied Economics*, 32: 1745-55.
- Katz, E. and O. Stark (1984): "Migration and Asymmetric Information: Comment", *American Economic Review*, 74, 533-34.
- Ketkar, S. and D. Ratha (2001): "Development financing during a crisis: Securitization of future receivable", *Policy Research Working Paper* 2582, World Bank, Washington, D.C.
- Kolowski, R. (2009): "Global mobility regimes", paper presented at the Global Mobility Regimes Workshop, 27 April, New York.
- Lewis, W. A. (1969): "Aspects of Tropical Trade", Wicksell Conference, Stockholm, Almqvist and Wicksell
- Lewis, W. A. (1983): *Crecimiento y fluctuaciones, 1870-1913*, Mexico, Fondo de Cultura Económica.
- Li, X. and McHale, J. (2009): "Emigration and Institutions", *Working Paper*, Galway, National University of Ireland.
- Lindert, P.H. and J.G. Williamson (2001) "Does globalization make the world more unequal?", *NBER Working Paper* 8228, National Bureau of Economic Research.
- López-Córdova, E. (2005): "Globalization, Migration and Development: The role of Mexican Migrant Remittances", *Economía*, 6, pp. 217-256.
- López, R. and M. Schiff (1998): "Migration Skill Composition of the Labor Force: The Impact of Trade Liberalization", *Canadian Journal of Economics*, 31 (2), pp. 318-336
- Lucas, R.E.B. and O. Stark (1985): "Motivations to Remit: Evidence from Bostwana", *Journal of Political Economy*, 93 (5), pp. 901-918.
- Maddison, A. (2001): *The World Economy. A millennial perspective*, OECD, Development Centre Studies, Paris.
- McKenzie, D.J. (2006): "Beyond Remittances: The Effects of Migration on Mexican Household", in Ozden, C. and M. Schiff, *International Migration, Remittances and the Brain Drain*, New York, Palgrave Macmillan.
- McKenzie, D.J. and H. Rapoport (2006): "Can Migration Reduce Educational Attainment? Evidence from Mexico", *Policy Research Working Paper* n. 3952, World Bank.
- Massey, D., R. Alarcón, J. Durand and H. González (1987): *Return to Aztlan: The Social Process of International Migration from Western Mexico*, Berkeley, Los Angeles University of California Press.

- Massey, D., L. Goldring and J. Durand ((1994): "Continuities in Transnational Migration: An Analysis of Nineteen Mexican Communities", *American Journal of Sociology* 99 (6), pp. 492-533.
- Massey, D. and E. Parrado (1998): "International migration and business formation in Mexico", *Social Science Quarterly*, 79, pp. 1-20.
- Mayda, A.M. (2007): "International Migration: A panel data analysis", *Discussion Paper* 07, Centre for Research and Analysis of Migration.
- Mesnard, A. and M. Ravallion (2001): "Wealth distribution and self-employment in a developing country", *CEPR Discussion Paper* 3026, Center for Economic Policy Research.
- Meyer, J.B. and M. Brown (1999): "Scientific diasporas: A new approach to the brain drain", *Discussion Paper*, n° 41, Management of Social Transformations, MOST.
- Milanovic, B. (2011): *The Haves and the Have-Nots. A Brief and Idiosyncratic History of Global Inequality*, New York, Basic Books.
- Mishra, P. (2005): "Emigration and brain drain: evidence from the Caribbean", mimeo, IMF.
- Mohapatra, S; D. Ratha, and A. Silwal,(2010): "Outlook for remittances low: 2011-2012: recovery after crisis, but risks lie ahead", *Migration and Development Brief*, 13, World Bank.
- Mora, J. and E. Taylor (2006): "Determinants of Migration, Destination and Sector Choice: Disentangling Individual, Household, and Community Effects", in Ozden, C. and M. Schiff, *International Migration, Remittances and the Brain Drain*, New York, Palgrave Macmillan.
- Moreno, J. (204): "Los determinantes de la inmigración internacional en España: evidencia empírica 1991-1999", *Working Paper* 9, Instituto de Estudios Fiscales.
- Moreno, J. and G. López-Casanova (2006): "Los determinantes de la inmigración internacional en España", *Investigaciones Regionales*, 9, pp. 25- 30.
- Moses, J.W. and B. Lettnes (2002): "The economic cost to international labour restrictions", *WIDER Conference*, September.
- Mountford, A. (1997): "Can brain drain be good for growth in the source economy?", *Journal Development Economics*, 53 (2), pp. 287-303.
- Mundell, R. (1968): *International economics*, Macmillan, New York.
- Munshi, K. (2003): "Networks in the Modern Economy: Mexican Migrants in the US Labor Market", *Quarterly Journal of Economics*, 118, pp. 549-597.
- Murphy, R., A. Shleifer and R. Wishty (1989): "Industrialization and the Big Push", *Journal of Political Economy*, 97, 1003-1026.
- Nussbaum, M. (2000): *Woman and Human Development: The Capabilities Approach*, Cambridge, Cambridge University Press.
- Orozco, M. (2004): "Oportunidades y estrategias para el desarrollo a través de las remesas", in J.A. Alonso (ed), *Emigración, pobreza y desarrollo*, Editorial Catarata, Madrid.
- O'Rourke, K.H. (2001): *Globalization and Inequality: Historical Trends*, Trinity College, Dublin, CEPR and NBER.
- O'Rourke, K.H. and J.G. Williamson (1999): *Globalization and History*, MIT Press Cambridge Mass.
- Ottaviano, G. and G. Peri (2008): "Immigration and national wages: Clarifying the theory and empirics", *Department of Economics Working Paper*, University of California. Ozden, C. and M. Schiff (2006), *International Migration, Remittances and the Brain Drain*, New York, Palgrave Macmillan.
- Ozden, C. and M. Schiff (2007), *International Migration, Economic Development and Policy*, World Bank and Palgrave Macmillan.
- Parsons, C.R., R. Skeldon, T.L. Walmsley and L.A. Winters (2007): "Quantifying International Migration: A Database of Bilateral Migrant Stocks", in Ozden, C. and M. Schiff, *International Migration, Economic Development and Policy*, World Bank and Palgrave Macmillan.
- Passel, J. and D. Cohn (2008): "Trends in unauthorized immigration: Undocumented inflow now trails legal inflow", Washington, D.C., Pew Hispanic Center.
- Patinkin, D. (1968): "A nationalist model", in W. Adams, *The Brain Drain*, Macmillan, New York.
- Pedersen, P.J., M. Pytlikova, and N. Simth (2004): "Selection on networks effects? Migration flows into 27 OECD countries", IZA DP, n° 1104.
- Perloff, J.M., L. Lynch, and S.M. Gabbard (1998): "Migration of seasonal agricultural workers", *American Journal of Agricultural Economics*, 80 (1), pp. 154-164.
- PNUD (2009): *Informe sobre el Desarrollo Humano, 2009. Superando Barreras: Movilidad y Desarrollo Humano*, PNUD, Mundiprensa.

- Portes, A. (2008): "Migration and social change: Some conceptual reflection", *CMD Working Paper 08-04*, The Center for Migration and Development, Princeton University.
- Pritchett, L. (2006): *Let Their People Come. Breaking the Gridlock on Global Labor Mobility*, Washington, D.C., Center for Global Development.
- Puri, S. and T. Ritzema (1999): "Migrant worker remittances, microfinance and the informal economy: prospects and issues", *Working Paper n° 21*, ILO, Geneva.
- Rajan, R. and A. Subramanian (2005): "GAT undermines aid's impact on growth?", *NBER Working Paper 11657*, National Bureau of Economic Research.
- Ratha, D. (2003): "Worker remittances: An important and stable source of external development finance", *Global Development Finance*, 2003: 157:75.
- Ratha, D. and Mohapatra, S. (2009): *Migration and Development, Brief, 9*, World Bank.
- Rosenstein-Rodan, P. (1943): "Problems of Industrialization of Eastern and South-Eastern Europe", *Economic Journal* 53, 202-211.
- Schiff, M. (1998): *Trade, migration and welfare: The impact of social capital*, Development Economics Department, World Bank.
- Schiff, M. (2006): "Brain Gain: Claims about its Size and Impact on Welfare and Growth are Greatly Exaggerated" in Ozden, C. and M. Schiff, *International Migration, Remittances and the Brain Drain*, New York, Palgrave Macmillan.
- Sjaastad, L.A. (1962): "The costs and returns of human migration", *Journal of Political Economy*, 70, 80-93.
- Solimano, A. (2001): *International migration and the global economic Order: An overview*, Macroeconomics and Growth Development Economics Research Group, World Bank.
- Stark, O. (1984): "Rural-urban migration in LDCs: A relative deprivation approach", *Economic Development Change*, 32 (3), pp. 475-86.
- Stark, O. (2003): "Rethinking the brain drain", *World Development*, 32 (1): 15-22.
- Stark, O. (2005): "The new economics of the brain drain", *World Economics*, 6 (2), pp. 137-140.
- Stark, O. and D.E. Bloom (1985): "The new economics of labor migration", *American Economic Review*, 75 (2), pp. 173-178.
- Stark, O. and Chau, N.H. (1998): "Human capital formation, asymmetric information and the dynamic of international migration", *Economic Series* 52, Institute of Advanced Studies.
- Stark, O., C. Helmenstein and A. Prskawetz (1997): "A brain gain with brain drain", *Economic Letters*, 55 (2), pp. 227-234.
- Stark, O., C. Helmenstein and A. Prskawetz (1998): "Human capital depletion, human capital formation, and migration: A blessing of a curse", *Economic Letters* 60 (3), pp. 363-367.
- Stark, O. and D. Levhari (1982): "On migration and risk in LDCs", *Economic Development and Cultural Change*, vol 31, n° 1, 191-96.
- Stark, O. and R. Lucas (1988): "Migration, remittances, and the family", *Economic Development and Cultural Change*, 36: 465-81.
- Stark, O. and J.E. Taylor (1989): "Relative deprivation and international migration", *Demography*, 26, pp. 1-14.
- Stark, O. and J.E. Taylor (1991): "Migration incentives, migration types: the role of relative deprivation", *Economic Journal*, 101 (408), pp. 1163-1178
- Stark, O., J.E. Taylor and S. Yitzhaki (1986): "Remittances and inequality", *Economic Journal*, 96, pp. 722-740.
- Stark, O. and S. Yitzhaki (1988): "Labour migration as a response to relative deprivation", *Journal of Population Economics*, 1, 57-70.
- Stiglitz, J.E. (1974): "Alternative theories of wage determination and unemployment in LDCs: The labour turnover model", *Quarterly Journal of Economics* vol. 88, n° 2, 194-227.
- Taylor, J.E. (1986): "Differential Migration, Networks, Information and Risks", in O. Stark (ed), *Migration Theory, Human Capital and Development*, Greenwich, JAI Press.
- Taylor, J.E. (1987): "Undocumented Mexico-US Migration and the Returns to Households in Rural Mexico", *American Journal of Agricultural Economics*, 69 (3), pp. 626-638.
- Taylor, J.E. (1992): "Earnings and Mobility of Legal and Illegal Immigrant Workers in Agriculture", *American Journal of Agricultural Economics*, 74 (4), pp. 889-896.
- Todaro, M. P. (1969): "A model of labour emigration and urban unemployment in less developed countries", *American Economic Review*, vol 59, n° 1, 138-148.
- Trachtman, J.P. (2009): "The international law of economic migration: Towards the fourth freedom", Institute for Employment Research, Michigan, W.E. Upjohn.

- UN (2000): *Replacement Migration: Is it a Solution to Declining and Ageing?*, United Nations publication, sales No. E.01.XIII.19.
- UNDP (2009): *Overcoming Barriers: Human Mobility and Development, Human Development Report*, New York.
- Van der Mensbrugge, D. and D. Roland-Holst (2009): "Global Economic Prospect for Increasing Developing Country Migration into Developed Countries", *Human Development Research Paper 2009/50*, UNDP.
- Vidal, J.P. (1998): "The effect of emigration on human capital formation", *Journal of Population Economics*, 11 (4), pp. 589-6000.
- Vogel, D. and V. Kovacheva (2009): "Calculation Table 2005: A Dynamic Aggregate Country Estimate of Irregular Foreign Residents in the EU in 2005", at <http://irregular-migration.hwwi.net>.
- Walmsley, T.L. and L.A. Winters (2005): "Relaxing the Restrictions on the Temporary Movements of Natural Persons: A Simulation Analysis", *Journal of Economic Integration* 20 (4), pp. 688-726.
- Williamson, J.H. (1997): "Globalization and inequality: past and present", *World Bank Research Observer* 12: 117:35.
- Williamson, J.G. (2006): *Globalization and the Poor Periphery Before 1950*, Cambridge, MIT Press.
- Woodruff, Ch. and R. Zenteno (2001): "Remittances and microenterprises in Mexico", University of California.
- Wong, K.-Y. and C.K. Yip (1999): "Education, economic growth and brain drain", *Journal of Economic Dynamics and Control*, 23 (5-6), pp. 699-726.
- World Bank (2006): *Global Economic Prospects, 2006: Economic Implications of Remittances and Migration*, Washington, D.C., World Bank.
- Yang, D. (2008): "International Migration, Remittances and Household Investment: Evidence from Philippine Migrants' Exchange Rate Shocks", *Economic Journal*, 118, pp. 591-630.
- Yang, D. and H. Choi (2007): "Are remittances insurance? Evidence from rainfall shocks in the Philippines", *World Bank Economic Review*, 21, pp. 219-248.
- Yang, D. and C. Martínez (2006): "Remittances and poverty in migrants' home areas: Evidences from the Philippines", in C. Ozden and M. Schiff, *International Migration, Remittances and the Brain Drain*, New York, Palgrave Macmillan.

Annex: Models for determining migratory flows

a) *Emigration to the United States*

Annex table 1 shows the results of the estimation of Clark et al. (2002), as used by Hatton and Williamson (2005). The dependent variable is, in this case, the immigration rate to the United States during the period 1971-1998, which is estimated through the weighting of the emigrant population in the United States on the total population of origin. That immigration rate seems negatively related: to the quotient between the GDP per capita of the country of origin and that of the United States (which expresses the distance between the respective levels of development); to the distance to Chicago (which is an approximation of the costs of transportation); to the Mediterranean character of the country (which increases those costs); and to the existing poverty level in the country of origin, measured as a quotient of the Gini index and the square of the per capita income of the country (which acts as a limiting factor to emigration, as Faini and Venturini, 1992, suggest).

Variables that emerge as positively related to the rate of migration are: the educational level of people (approximated through years in the school system, compared to those in the United States); a country's youth demographic (measured by the percentage of the population aged 15 to 29); the level of inequality (approximated through the premium on qualified work); and the size of the diasporas from the country in question that is resident in the United States (which limits the risk and access costs of the emigrant). Both the size of the diasporas and the inequality level present decreasing marginal returns, so that the coefficient of that same variable squared is also significant but appears with a negative sign. Among this collection of variables, a dummy variable is included in relation to whether the country belongs to the English-speaking area, with the aim of capturing the effect that a common language could have on lessening integration costs.

The method followed is a pool of data, estimated through ordinary minimum squares. The number of observations of countries and years considered is 2,268. Some regional and temporary dummies are also included which do not show up here.

Annex table 1: Explanation of the immigration rate to the U.S., 1971-1998

<i>Variable</i>	<i>Coefficient</i>	<i>t-stad</i>	<i>Sense of the variable</i>
Constant	-11.95	35.9	
Ratio, per capita income origin country/U.S.	-1.80	- 9.5	Relation between income levels
Ratio, school years in origin country/U.S.	2.61	12.7	Relation between educational levels
15-29 years in population of origin (percentage)	2.71	2.7	Demographic dynamism of country of origin
Ratio Gini indexes origin/U.S.	4.17	7.1	Premium for labour qualification
Ratio Gini indexes squared	-1.57	6.5	Non-linear effect of the previous variable
Distance from Chicago to origin	-0.18	12.3	Access costs to host country
English-speaking origin	1.11	15.4	Reduction of integration costs
Country without access to sea	-0.31	7	Costs of leaving country of origin
Diaspora of the country in the U.S.	42.91	10.7	Social networks in host country
Diaspora squared	-182.94	6.5	Non-linear effect of the previous variable
Ratio index Gini/GDPpc squared	-0.36	3.9	Level of poverty (threshold effect)
Temporary dummies			
Regional dummies			
R2 Adjusted	0.77		

Source: Hatton, T. and J. Williamson (2005): *Global Migration and the World Economy: Two Centuries of Policy and Performance*, Cambridge MA, MIT Press (p: 239).

The method followed is a pool of data, estimated through ordinary minimum squares. The number of observations of countries and years considered is 2,268. Some regional and temporary dummies are also included which do not show up here.

b) *Emigration to Spain*

Emigration to Spain is a relatively recent phenomenon, which makes it difficult to estimate. Despite these limitations, there have been a group of studies that have tried to identify factors that determine emigration flows to Spain. As internationally, there are also differences in the methods used and the periods that the data refer to. Casado et al. (2005) study emigration in the period 1989-99 and apply a panel model of fixed effects as an analysis procedure; Moreno (2004) studies the period 1991-99, applying both OLS as well as a panel of random effects; Márquez et al. (2004) extend the period to 1993-2002 and use panel data with fixed effects; Moreno and López-Casnovas (2006) look at the period 1994-2004, using generalised minimum squares; and, finally, Cebrián (2009) studies the period 1995-2007, applying panel data both to the general flow of emigrants and to each of the elements by gender.

Following the approach of Clark et al. (2002), the estimate presented here was carried out by Alonso (2010) on immigration during the first decade of the new millennium(?). The migration rate seems to be negatively related to: the degree of proximity of the GDP per capita of the country of origin to that of Spain (*relpib*), which measures the relation between the development level of the country of origin and that of the destination country; the distance from the capital of the country of origin to Madrid (*distesp*), which approximates access costs; and the rate of growth of the GDP of the country of origin (*crecq*), which measures progress in the period previous to the decision to migrate. The level of poverty of the country also appears with a negative sign, as was to be expected, but none of the variables employed to capture this relationship is statistically significant: neither the rate of poverty (*pobreza*) nor the quotient of the Gini index between the GDP per capita squared (*pobreza2*). The total number of the emigrant population from that same country that have previously settled in Spain (*stock*) has a positive impact on the migration rate, confirming the

Annex table 2: Explanation of migration to Spain

Emigrants from developing countries						
	(1)	(2)	(3)	(4)	(5)	(6)
	(t estad.)	(t estad.)	(t estad.)	(t estad.)	(t estad.)	(t estad.)
Relpib: relationship between GDP pc, in PPP, between origin and destination	-3.065 (-1.985)	-5.761 (-3.413)	-6.704 (-3.403)	-6.344 (-3.336)	-4.914 (-2.854)	-4.655 (-2.722)
Stock: emigrant population of the country in 2000	0.056 (4.830)	0.061 (4.723)	0.085 (5.184)	0.235 (4.253)	0.258 (4.551)	0.262 (5.222)
Lesp: Spanish as official language	3.659 (6.417)	3.790 (6.356)	2.710 (4.174)	2.206 (3.454)	2.017 (3.456)	1.856 (3.148)
Distesp: distance between Madrid and the capital of the country of origin	-0.0002 (-3.276)	-0.0002 (-2.577)	-0.0002 (-2.139)	0.0002 (-2.322)	-0.0002 (-2.315)	-0.0001 (-1.867)
Pojo85: percentage of the population of the country under 15 in 1985		-0.091 (-4.070)	-0.103 (-3.867)	-0.098 (-4.148)	-0.073 (-2.814)	-0.056 (-1.860)
Ginior: Gini index of the country of origin			0.059 (2.339)	0.060 (2.527)	0.049 (2.124)	0.041 (1.790)
Stock2: emigrant population of the country, squared				-33.84 (-3.032)	-37.29 (-3.276)	-38.00 (-3.698)
Mar: access to sea					1.430 (3.085)	1.462 (3.200)
Crecq: growth of the GDP of the country of origin during the five years previous to the period						-0.117 (-2.022)
R2 Adjusted	0.481	0.549	0.641	0.701	0.745	0.759
Number of observations	58	58	46	46	46	46

Source: Alonso, 2010 (MCO, with coefficients consistent with heteroscedasticity).

accumulative nature of the phenomenon; however, that effect is submitted to decreasing returns, as revealed by the negative sign associated with that same variable squared (*stock2*). The level of inequality of the country of origin (*ginior*) also has a positive influence, which seems to suggest that inequality encourages populations to seek opportunities outside their countries. And, finally, having Spanish as the official language—the same language as that of the destination country—appears as a notably significant variable in explaining the immigration rate to Spain, as was expected. Variables associated with the level of training of the people do not appear as significant, regardless of whether the rate of literacy or the average years of study of the population is used. Nor does the variable measuring the institutional quality of the country appear as significant, although the sign of the coefficient is the correct one. Despite this, the explanatory capacity of the model is high given that it explains 75% of the variation of the variable.