

---

**Trends in International Migration Flows and  
Stocks, 1975-2005**

B. Lindsay Lowell

---

58

Unclassified

DELSA/ELSA/WD/SEM(2007)13



Organisation de Coopération et de Développement Economiques  
Organisation for Economic Co-operation and Development

27-Sep-2007

English - Or. English

DIRECTORATE FOR EMPLOYMENT, LABOUR AND SOCIAL AFFAIRS  
EMPLOYMENT, LABOUR AND SOCIAL AFFAIRS COMMITTEE

DELSA/ELSA/WD/SEM(2007)13  
Unclassified

OECD SOCIAL, EMPLOYMENT AND MIGRATION WORKING PAPERS No 58

TRENDS IN INTERNATIONAL MIGRATION FLOWS AND STOCKS, 1975-2005

B. Lindsay Lowell

*JEL Classification F22, J11, J61, N3, O15*

JT03232801

Document complet disponible sur OLIS dans son format d'origine  
Complete document available on OLIS in its original format

English - Or. English

**DIRECTORATE FOR EMPLOYMENT, LABOUR AND SOCIAL AFFAIRS**

<http://www.oecd.org/els>

**OECD SOCIAL, EMPLOYMENT AND MIGRATION  
WORKING PAPERS**

<http://www.oecd.org/els/workingpapers>

This series is designed to make available to a wider readership selected labour market, social policy and migration studies prepared for use within the OECD. Authorship is usually collective, but principal writers are named. The papers are generally available only in their original language – English or French – with a summary in the other.

Comment on the series is welcome, and should be sent to the Directorate for Employment, Labour and Social Affairs, 2, rue André-Pascal, 75775 PARIS CEDEX 16, France.

The opinions expressed and arguments employed here are the responsibility of the author(s) and do not necessarily reflect those of the OECD

**Applications for permission to reproduce or translate  
all or part of this material should be made to:**

**Head of Publications Service  
OECD  
2, rue André-Pascal  
75775 Paris, CEDEX 16  
France**

**Copyright OECD 2007**

## **ACKNOWLEDGEMENTS**

This paper has been prepared by B. Lindsay Lowell (Director of Policy Studies, Institute for the Study of International Migration, Georgetown University), consultant to the OECD. It was discussed at the OECD Working Party on Migration on 13-14 June 2007. The author would like to acknowledge helpful comments on a previous draft from Georges Lemaître and John Martin. The views expressed are his own and cannot be held to represent those of the OECD or its member governments.

## **SUMMARY**

This paper discusses broad trends in the rates and levels of international migration over the past three decades, the places that migrants leave from and the destinations they choose; and some of the demographic and policy implications of these trends. It raises some features of international mobility trends over the past three decades that are, superficially, somewhat contradictory: stable rates of emigration but growing numbers of emigrants; and an apparent dynamism in the flow but a stable concentration of migrants going to more developed nations. On the one hand, these facts can be somewhat simply resolved by reference to the demographic divide between the less and more developed world. On the other hand, these facts hold implications for the past and future impacts of admission policies on international mobility.

## RÉSUMÉ

Ce document examine l'évolution générale des taux et des niveaux de migrations internationales au cours des trois dernières décennies, les points de départ des migrants et les destinations qu'ils choisissent, ainsi que quelques conséquences de cette évolution sur le plan de la démographie et des politiques. Il met en évidence certains aspects des tendances en matière de mobilité internationale observées ces trente dernières années qui, à première vue, paraissent assez contradictoires : stabilité des taux d'émigration mais augmentation du nombre d'émigrants, dynamisme apparent des flux mais stabilité de la concentration des migrants partant pour les pays avancés. D'un côté, on peut résoudre assez aisément cette énigme en rappelant la fracture démographique qui sépare les pays avancés du reste du monde mais, d'un autre côté, cette réalité a des implications s'agissant de l'impact passé et à venir des politiques d'admission sur la mobilité internationale.

## TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	3
SUMMARY .....	4
RÉSUMÉ .....	5
Introduction.....	7
1. Inflows: growth and re-direction of immigrant stock .....	7
2. Outflows: stability in emigration and the brain drain.....	10
3. International mobility: policies, economics and demographics .....	17
APPENDIX.....	23

## TRENDS IN INTERNATIONAL MIGRATION FLOWS AND STOCKS, 1975-2005

### Introduction

1. International mobility has significant impacts on the lives of millions of migrants, but also on the fortunes of the billions of persons they leave behind and the millions of persons where they make their new homes. It is little wonder that increasing attention is paid by policymakers to the trends and patterns of international migration. This paper discusses broad trends in the rates and levels of international migration over the past three decades, the places that migrants leave from and the destinations they choose; and some of the demographic and policy implications of these trends.

2. Many of the basic presumptions about trends are mostly, but not completely correct. First, international migration has been increasing since the 1980s; however, it has not been rising rapidly in a continuous fashion. Rather, the worldwide rate of migration slowed somewhat over the final decade of the last century. Secondly, globalization has led to significant increases in the mobility of goods and services, but one cannot assert that immigration has failed to “free up” to the same degree. In fact, if one plots the growth of immigration against other facets of globalization it is clearly a key component of the globalization process.<sup>1</sup> International mobility has expanded significantly, if its magnitude and relative importance is gauged on the basis of its inflow to more developed nations. Thirdly, while it is true that the major regional flows of international migrants are divided roughly in thirds – north to north, south to north, and south to south – the story remains primarily one of movement from poorer to richer economies; or from less to more developed nations.

3. This paper has three sections. The opening discussion focuses on the volume of the international stock of immigrants, its growth over the past three decades, and its regional distribution. Immigrants’ relative share of the host population is plotted over time in the least, less, and more developed nations of the world. This is primarily a discussion of the distribution and rate of inflows of where migrants tend to reside. The next section switches over to a discussion of trends and patterns in emigration. Estimates of the rate of emigration over time are presented, as well as changes in the volume of migration. These data distinguish between less-skilled and skilled migrants and the discussion retains an interest in the pattern of movement between less and more developed nations. The final section briefly discusses the role of policy, economics, and demographics on the pattern of flows and speculates a little about future patterns.

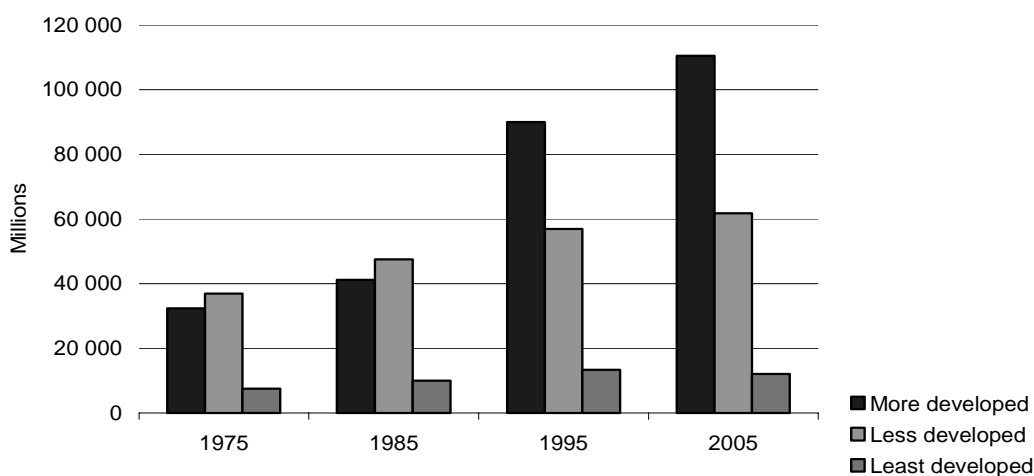
### 1. Inflows: growth and re-direction of immigrant stock

4. The United Nations estimates that the number of international migrants, or persons living outside their country of birth, has reached about 190 million.<sup>2</sup> This is a small number compared with the 6.7 billion inhabitants of planet earth, but it is often not a trivial number compared with either the populations of the migrant source or receiving nation. International migrants tend to reside in the more developed nations. The more developed nations (including the former USSR) have had a growing share of all international migrants: about 42% in 1975 and growing to 60% in 2005. The less developed and the least developed nations have had, correspondingly, a slightly declining percentage of migrants over this three-decade span: 34% resided in less developed nations and 7% in the least developed nations in 2005.



5. As can be seen in Figure 1, the greatest growth in the international stock of migrants occurred not in the past decade, but rather between 1985 and 1995. The global migrant stock grew 62% in that ten-year span and it more than doubled within the more developed nations. Although growth slowed, the immigrant stock in the developed nations still increased by 23% after 1995. Outside of the more developed nations, the rate of immigration actually decreased decade to decade from 1975 to 2005. The percentage growth of immigrants in less developed nations decreased from 29% in 1975 and 1985, to 9% between 1995 and 2005. In the least developed nations, there was a 33% increase in each decade from 1975 to 1995, but the immigrant stock decreased (-9.2%) in the decade after 1995.

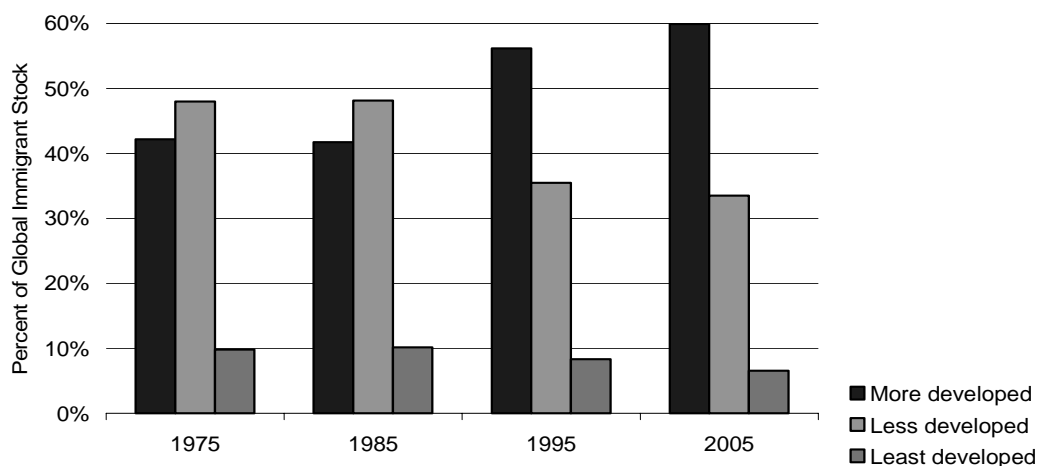
Figure 1. Number of Immigrant Stock by Place of Residence and Level of Development



Source: United Nations (2006).

6. These patterns of growth are reflected in shifts in where the greatest proportion of the world's immigrant population resides, e.g. a shift toward the more developed nations. Figure 2 shows that in 1975, just under half of the world's international stock resided in the less developed nations, while 42% were found in the more developed nations. The faster growth of the immigrant population in the more developed world, over the past three decades, has shifted the bulk of the immigrant stock. Today, 60% of the world's immigrant population resides in the more developed nations compared with only 33% in the less developed nations. The remaining 7% are in the least developed nations. Clearly, the more developed world became a more attractive destination for immigrants over the latter part of the last century.

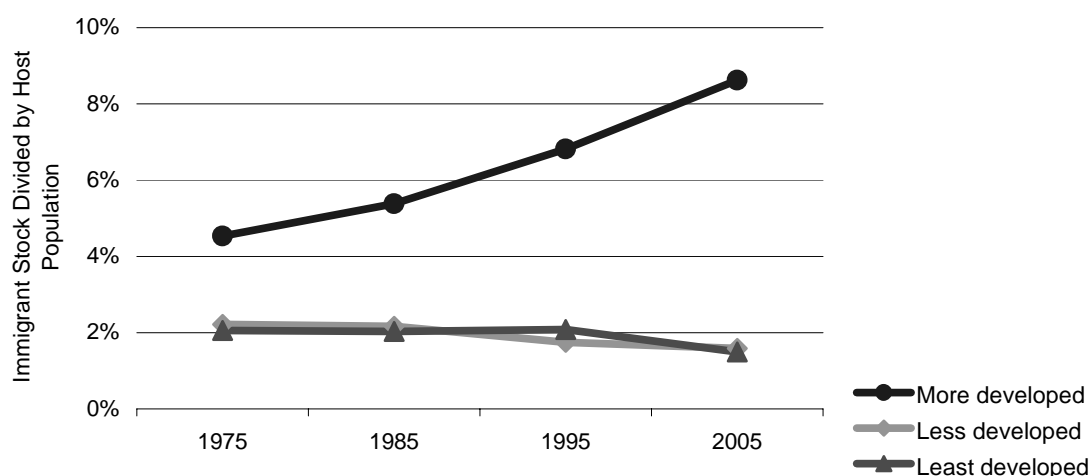
Figure 2. **Percentage of Immigrant Stock by Place of Residence and Level of Development**



Source: United Nations (2006).

7. These stylized facts are relatively well known, but it bears repeating that the growth in the number of international migrants, choosing more developed destinations, has led to substantially increasing *rates* of inflows or immigration. Figure 3 shows the international migrant stock as a percentage of the host nations' populations by level of development. Since 1975, immigrants' share of the host nations' populations in the more developed world nearly doubled from about 5 to 9% by 2005. Simultaneously, immigrants' share of the host nations' populations in both the less and least developed world have declined by almost one third from about 2.2 to 1.5%. These trends are consistent with the slowing and even the decline of the immigrant stock in selected nations and even entire regions such as Africa.

Figure 3. **Immigrants Share of Host Population by Level of Development**



Source: United Nations (2006).

8. Table 1 gives a more detailed look at the immigrant population in major regions of the world, as well as its decade-to-decade changes. First, note that 59% of the international stock resides in Europe and North America. Another 26% of the international migrant stock resides in Asian nations, leaving just 15% of the balance in the other major regions. So these patterns roughly line up with the figures shown above on the distribution of the immigrant stock by level of development.

	Europe	Northern America	Latin America and the Caribbean	Asia	Oceania	Africa	Total
Immigrant Population ('000s)							
2005	63 997	44 461	5 825	48 355	4 815	16 922	184 375
1995	55 183	33 525	5 388	43 320	4 878	17 864	160 158
1985	18 365	22 118	5 740	34 051	4 045	14 390	98 709
1975	16 474	15 267	5 381	25 419	3 270	10 990	76 801
Percentage Change from Prior Decade							
1995 to 2005	16.0	32.6	8.1	11.6	-1.3	-5.3	15.1
1985 to 1995	200.5	51.6	-6.1	27.2	20.6	24.1	62.3
1975 to 1985	11.5	44.9	6.7	34.0	23.7	30.9	28.5

*Source:* United Nations Population Division 2007 (author's tabulations of online database).

9. The greatest growth in the stock of international migrants has occurred in Europe and, once again, that spurt occurred from 1985 to 1995. Otherwise, it is interesting to note that the most consistent growth over time is the number of migrants in North America, while decade to decade growth declined over time in all other regions. Between 1985 and 1995, the percentage of the world's immigrants residing in Asia declined from 35 to 27, while the percentage in Europe increased from 19 to 35%. There has been little change in the distribution of the international migrant population since then. This reinforces the observation of mobility toward the developed world with a slowing of growth in mobility elsewhere, with some exception for mobility in Asia.

## 2. Outflows: stability in emigration and the brain drain

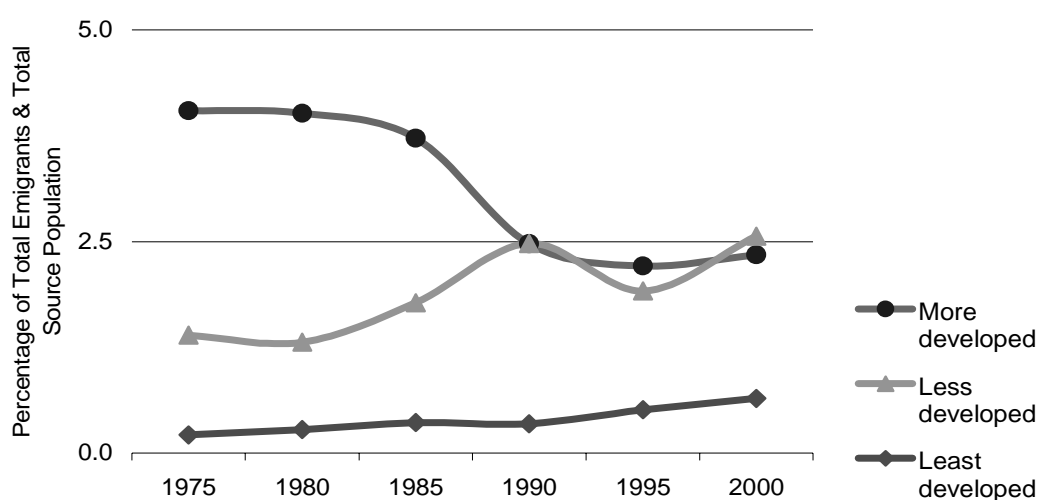
10. Of course, immigrant stock in the receiving nations is built up through emigration from the source nations. One measurement of the emigration rate is captured by dividing the stock of emigrants abroad by the total number of individuals born in a given country. This is a measure of the percentage of all emigrants living abroad or the cumulative emigration rate.<sup>3</sup> Recently constructed data sets disaggregate the emigrant population by its level of education and permit us to see how international mobility differs according to whether or not migrants have completed tertiary (college) education. Typically, these data are only for adults, individuals aged 25 and over, in order to measure only persons who have completed their pursuit of education (versus say children still in school).

11. One data set has collected data for emigrants from 233 nations into just six nations – the United States, Canada, Australia, the United Kingdom, Germany, and France – but mobility to these destinations represents the vast majority of international movers and the data are the only long-term trend data available. Based upon a detailed analysis, Defoort concludes two things.<sup>4</sup> First, the rate of emigration of tertiary-educated adults is two to three times greater than that of the total international flow. Secondly, the

rate of emigration exhibits some fluctuation from 1975 until the 1990s, but then shows little increase during the closing decades of the last century.

12. Figure 4 shows that the emigration rate of *all* adult migrants from the more developed nations declined substantially, particularly after 1985, but just as the rate of emigration from less developed nations began to increase. This pattern is consistent with the aforementioned spurt in the international migrant stock from 1985 to 1995; and suggests that much of that spurt was due to growth in migration from the less to the more developed nations. Today, the total rates of emigration from both the more and less developed nations are similar, while rates from the least developed nations are very low. Otherwise, these figures show that the total emigration rates have increased only slightly during the 1990s.

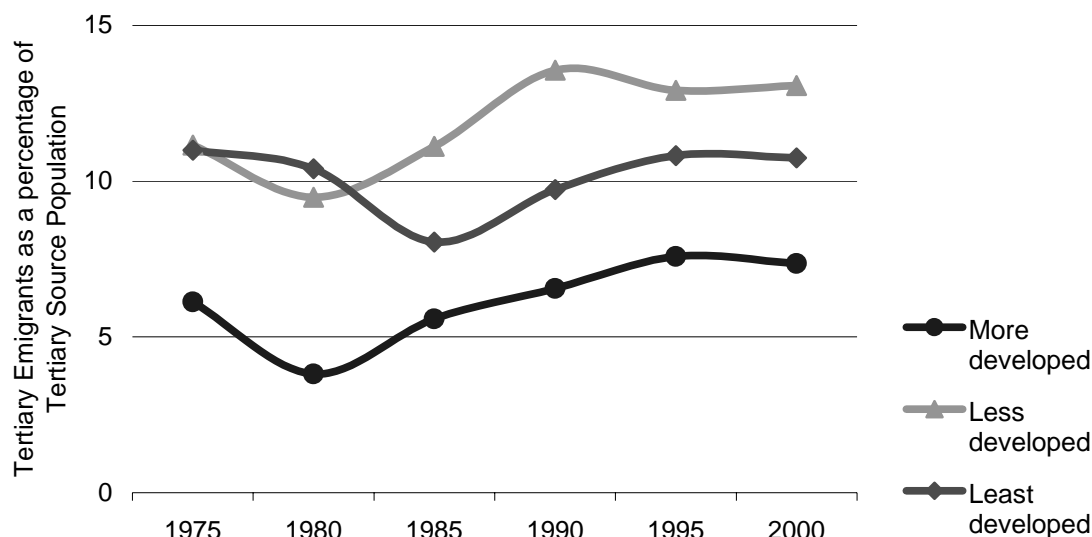
Figure 4. Total Emigration Rate  
Percent of All Source Nation Adults



Source: Defoort 2006; note median of national percentages.

13. Changing focus to the highly educated, Figure 5 shows the emigration rates for just those adults with a completed tertiary education. The tertiary emigration rates are much higher than the overall or total rate of emigration. Here we can see that emigration rates in 1975 were relatively high and actually declined through 1985 before starting a longer-term trend upward. However, the rates of emigration of tertiary-educated migrants appear to have stabilized from 1995 to 2005. Tertiary emigration (the so-called “brain drain”) has gained importance because the rates of tertiary emigration increased during the 1980s; and because rates of tertiary emigration are several times larger than the rate of emigration for less well educated migrants.

Figure 5. Tertiary Educated Emigration Rate  
Percent of All Source Nation Adults

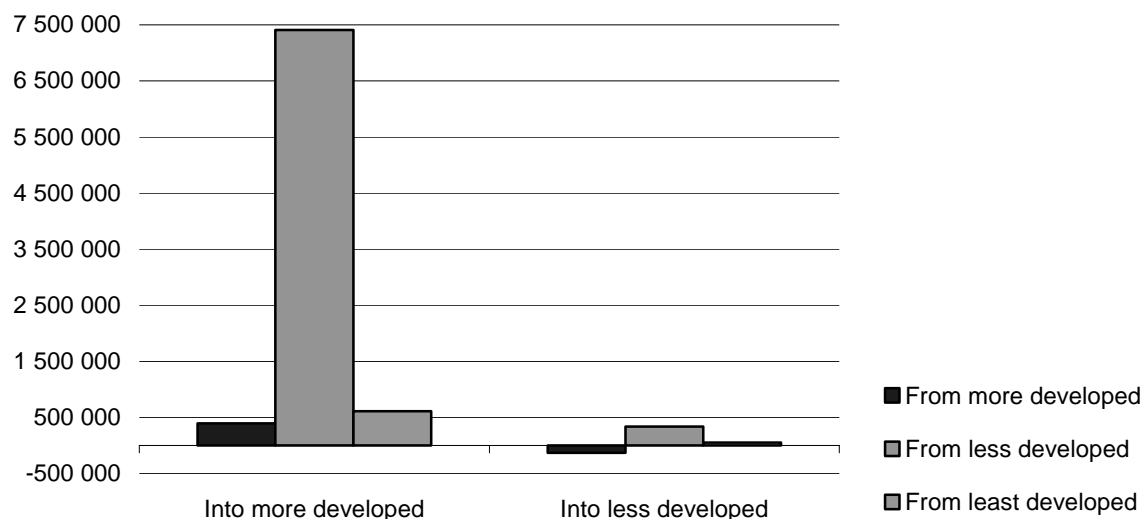


Note: Statistics shown are medians of national percentages.  
Source: Defoort 2006.

14. A comprehensive database compiled by the OECD using international definitions provides the possibility of capturing outflows of working adults who are immigrants in the year 2000, by level of education.<sup>5</sup> However, this database does not allow one to measure change. For this, another database, compiled by Docquier and Marfouk along similar lines, but incorporating data for 1990 as well, can be used.<sup>6</sup> The data include 93% of the OECD stock of international migrants for 190 countries in 2000 and 170 countries in 1990 by level of education. These data can reveal many things, but I focus here on the net change in the number of working adults by level of education, tracking their movement *from* a nation in one of the three-levels of development *into* either a more or less developed nation. The data cannot track migrants into least development nations, but then we have already seen that only about 7% of the global stock of migrants resides in less developed nations.

15. Figure 6 shows that the greatest growth in the mobility of migrants with less-than-a-tertiary education was from the less developed to more developed nations. There was a net increase of just less than 7.5 million non-tertiary-educated migrants *from* less developed and *into* more developed nations during the 1990s (an increase of 64%). There was no growth of mobility from the more developed to less developed nations. At the same time, there was almost no increase in inflows of migrants into less developed nations from any other nations.

Figure 6. **Net Increase in the Number of Less-than-Tertiary Educated Adult Migrants, 1990 to 2000**

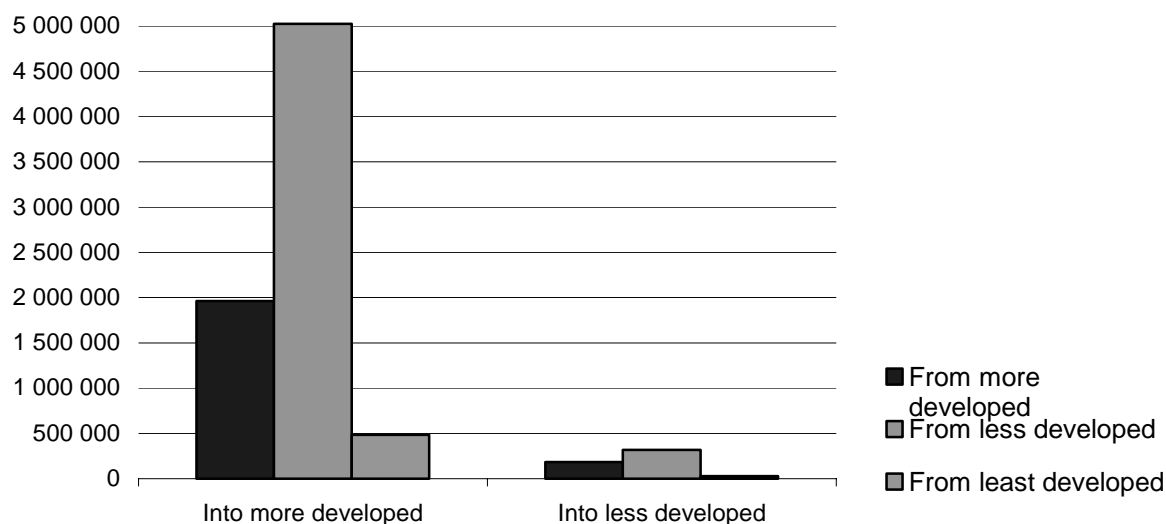


Note: Net increase refers to inflow minus outflow.

Source: Docquier and Marfouk, 2006

16. Figure 7 focuses on the mobility of tertiary-educated adult workers. Net growth occurred within the more developed nations but especially from less developed nations. There was a net increase of nearly two million tertiary-educated adults who moved from a more developed nation to another more developed nation between 1990 and 2000 (an increase of 40%). At the same time, there was an increase of five million tertiary-educated adults who moved from a less developed nation to a more developed nation (an increase of 94%). The net increase in the number of tertiary-educated migrants from the least developed nations to the more developed was small, just under 500 000, but that represented very significant growth in relative terms (an increase of 129%). Likewise, net numerical increases into the less developed nations were small, albeit the percentage growth was strong from all origins.

Figure 7. Net Increase in the Number of Tertiary Educated Adult Migrants, 1990 to 2000



Note: Net increase refers to inflow minus outflow.

Source: Docquier and Marfouk, 2006

17. One of the central migration stories of the 1990s has been the substantial increase in the number of skilled migrants, even though the rate of tertiary out-migration did not increase notably. Tertiary-educated migrants were 30% of all adult emigrants as of 1990 and by 2000 they made up 35% of the worldwide stock. And the numerical increases of the tertiary emigrant stock were greatest *from* regions of the developing world such as Latin America and the Caribbean (97%), Asia (84%), Oceania, (69%), and Africa (113%).

18. Tables 2 and 3 present a more detailed look at the flows of migrants from one region to another in 1990 and 2000. Once again, the story over the past decade is one of relative stability in patterns, although there is some difference between the origin and destinations of adult migrants with less-than-tertiary education and those who complete tertiary education. Table 2 shows the patterns of origin/destination mobility for adult migrants with less-than-tertiary education. Over the decade the most notable shifts were the increase in the European-to-European movement, an increase of Asian movement to North America and, interestingly, an increase in movement from North America to Latin America. Nevertheless, nearly 90% of international migrants with less-than-tertiary education are found in either Europe or North America.

**Table 2. Regional Distribution of All Adult Migrants with Less-than-Tertiary Education  
by Source and Receiving Region**

Source Area	Receiving Area						Table Total	Number of Residents
	Europe	Northern America	Latin America and the Caribbean	Asia	Oceania			
	2000							
Total	46.5	43.0	0.7	3.4	6.4	100	36878 487	
Europe	64.5	21.1	0.4	3.9	10.2	100	14408 341	
Northern America	27.7	47.4	17.2	4.8	2.9	100	689 008	
Latin America & Caribbean	9.2	88.7	0.9	1.0	0.3	100	10225 946	
Asia	48.1	38.7	0.1	7.0	6.0	100	8001 457	
Oceania	17.7	16.3	0.1	1.0	64.9	100	444 750	
Africa	89.8	7.9	0.0	0.1	2.2	100	3108 984	
	1990							
Total	48.8	37.9	0.8	4.5	7.9	100	28198 445	
Europe	56.9	27.0	0.4	3.7	12.0	100	14003 383	
Northern America	26.4	55.2	11.3	5.3	1.8	100	827 915	
Latin America & Caribbean	11.6	85.6	1.5	0.9	0.4	100	5122 185	
Asia	49.8	33.6	0.2	11.8	4.6	100	5667 674	
Oceania	18.1	16.1	0.0	1.3	64.5	100	318 488	
Africa	93.1	4.8	0.0	0.1	2.0	100	2258 800	

*Note:* Includes mobility across borders and within region. Data collected for OECD receiving countries.

*Source:* Docquier and Marouk, 2006 (author's tabulations of online database).



**Table 3. Regional Distribution of All Adult Migrants with a Tertiary Education by Source and Receiving Region**

Source Area	Receiving Area						Table Total	Number of Residents
	Europe	Northern America	Latin America and the Caribbean	Asia	Oceania			
2000								
Total	23.6	64.8	0.7	2.4	8.5	100	20082 686	
Europe	36.7	49.9	0.6	1.6	11.3	100	6686 361	
Northern America	24.9	62.1	4.6	2.3	6.1	100	947 801	
Latin America & Caribbean	8.0	88.3	1.3	1.4	1.0	100	3655 136	
Asia	14.5	73.1	0.1	4.2	8.0	100	7041 367	
Oceania	22.4	27.2	0.1	0.7	49.6	100	364 055	
Africa	47.8	44.5	0.1	0.1	7.6	100	1387 966	
1990								
Total	20.3	64.9	1.0	3.2	10.7	100	12086 508	
Europe	27.2	57.2	0.8	0.9	13.9	100	4803 501	
Northern America	19.1	67.2	4.8	2.9	6.0	100	722 634	
Latin America & Caribbean	7.9	87.3	2.2	1.2	1.5	100	1856 287	
Asia	13.5	69.0	0.2	7.7	9.6	100	3836 581	
Oceania	15.3	28.5	0.1	0.8	55.3	100	215 591	
Africa	46.8	43.2	0.1	0.1	9.8	100	651 916	

*Note:* Includes mobility across borders and within region. Data collected for OECD receiving countries.  
*Source:* Docquier and Marouk, 2006 (author's tabulations of online database).

19. Table 3 shows the distribution of tertiary-educated adult migrants moving from one region to another. These figures show notable increases in the concentration of movement of tertiary-educated migrants toward Europe over the decade. The shift was primarily due to an increased movement of highly skilled workers from European origins to European destinations; and away from North America (and Oceania). This runs counter to today's perception that highly skilled Europeans have been moving to North America, although one cannot rule out such a recurrent shift since 2000. It is not clear why Europe became more attractive for these rather traditional sources of highly skilled workers during the decade. Within European mobility may have been increased by a strengthening of the European Union, but the attraction of migrants from North America and other regions suggests a strong economic demand. Concurrently, there was a lesser increase in the mobility of Asian and Latin American migrants to North American destinations. Once again, however, the most salient fact is that the proportion of tertiary-educated migrants

remained heavily concentrated, just less than 90% of the international stock of tertiary-educated migrants is in either Europe or North America.

20. These facts are some of the multiple and seemingly contradictory features of recent international mobility: somewhat stable *rates* of total and tertiary *emigration*, but growing numbers of emigrants, particularly with tertiary education; and growing rates of total *immigration*, particularly in the receiving nations of the more developed world. And despite the perception that there is a lot of dynamism in the distribution of where migrants are headed, this is not borne out by the facts: there is a large and relatively stable concentration of migrants going to more developed nations, particularly in Europe and North America. On the one hand, these facts can be somewhat simply resolved by reference to the demographic divide between the less and more developed world. On the other hand, these facts hold implications for the past and future impacts of admission policies on international mobility.

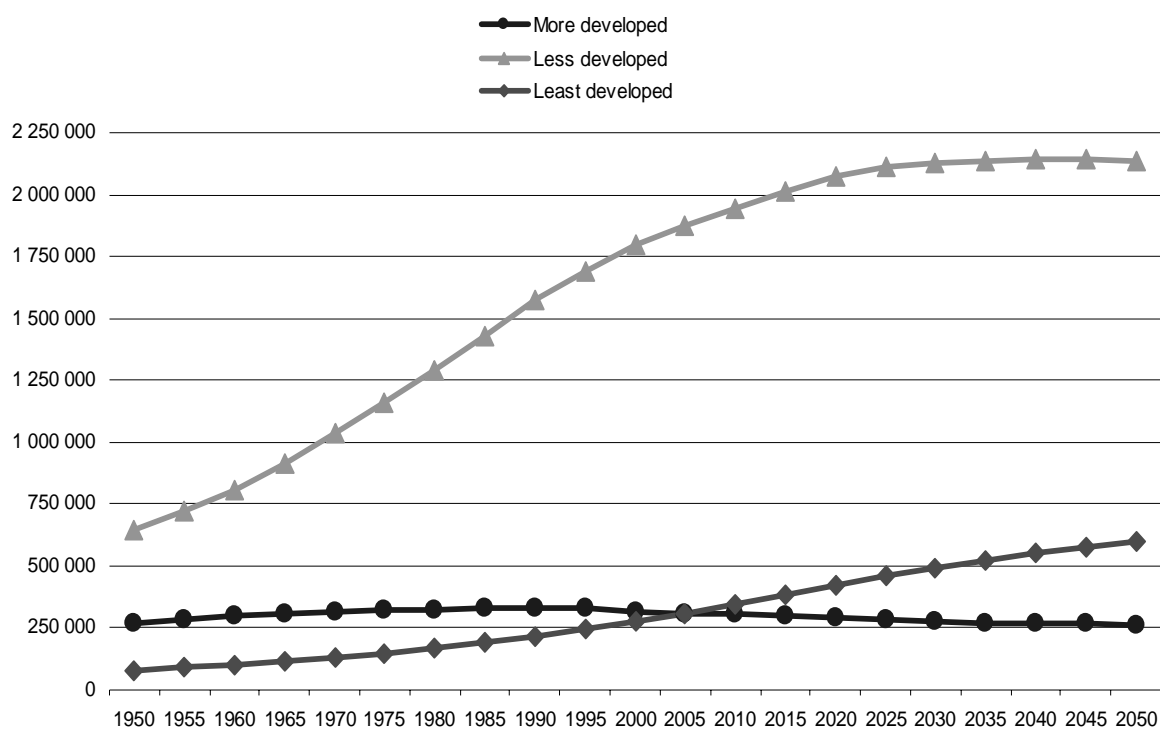
### **3. International mobility: policies, economics and demographics**

21. Academics have many theories about the causes of migration and many questions about which theory works best.<sup>7</sup> While most policymakers believe that policies help shape the flow of skilled migrants, their precise role, or the role of individual policy elements, has not been systematically studied. Yet, analysts tend to agree that general features of *admission policies* have profound impacts on the skill composition of immigration. The long dominance of family admissions in the United States and Europe, for example, is thought to have reduced the skill levels of immigrants over time. A declining average skill level appears also to have been a key reason that research has found somewhat poor economic assimilation of newcomers in many European countries.<sup>8</sup> This may be one reason for the introduction of policies that tilt toward the admission of workers on the basis of labor market skills in many countries during the 1990s.<sup>9</sup>

22. However, whereas some researchers believe that policies reflect the political economy and play only an indirect role in the level of mobility, they raise some interesting points. They do not necessarily agree on whether policies impose a cost affecting migrants' decisions or are a quantity constraint that conditions the impacts of push/pull factors. But empirical analyses find that policies matter. Analysis of emigration to the United States finds that quota consolidations reduced Asian immigration in the 1970s while the legalization of nearly 3 million workers doubled Latino migration in the 1990s.<sup>10</sup> At the same time, an analysis of emigration to 14 nations found that pull factors are the dominant driver and that push factors play no substantive role. So this analysis based on a large sample of nations suggests that economic pull factors are the driving force of international flows.<sup>11</sup> In fact, an interaction of policy regimes with pull variables suggests that laxer admission policies increase the power of pull factors in the host economy.<sup>12</sup> As long as economic conditions favor migration, then reducing restrictions on immigration, by either lifting caps or easing admission requirements, should increase overall levels of immigration. This is hardly a surprising conclusion but it is at least consistent with recent trends in skilled mobility.

23. Any liberalization of admission policies, given a growing gap in economic opportunities between less and more developed nations, leaves demography as a major driver of the trends in international mobility, not in a Malthusian way, but because demography shapes the potential supply and its relative impact on receiving nations. Consider the role of the relative size of the migrant-prone population in the age groups 0 to 39.<sup>13</sup> Figure 8 shows the UN's past and projected population age 0 to 39 by level of development which fits quite well with the foregoing discussion of trends. Note that this age group in the more developed nations experienced very little growth from 1950 onward until around 2000 when a decline sets in and is projected to continue until mid-century. Simultaneously, the population of the least developed nations grows throughout the period but especially from the 1960s through the 1990s, precisely the period of the introduction of increased numerical admission policies in some of the traditional receiving countries and the evolution of the forces of globalization.

Figure 8. Past and Projected Size of Population Ages 0 to 39



Source: United Nations (2006).

24. Thus, even a fairly stable *rate* of emigration, applied to such a rapidly growing population, would generate a significant growth in the *number* of international migrants. And this is what has occurred because, as we have seen, data on the *rate* of international mobility shows little increase during this period (from 2.5 to 2.9% of the world's population from 1960 to 2000).<sup>14</sup> But the data show significant increases in the *number* of international migrants, particularly those originating in the less developed nations. Conversely, the slowing population growth of the more developed nations, combined with the growing emigration numbers, translates into increasing *percentages of immigrants* (rates of inflow) in the more developed populations.

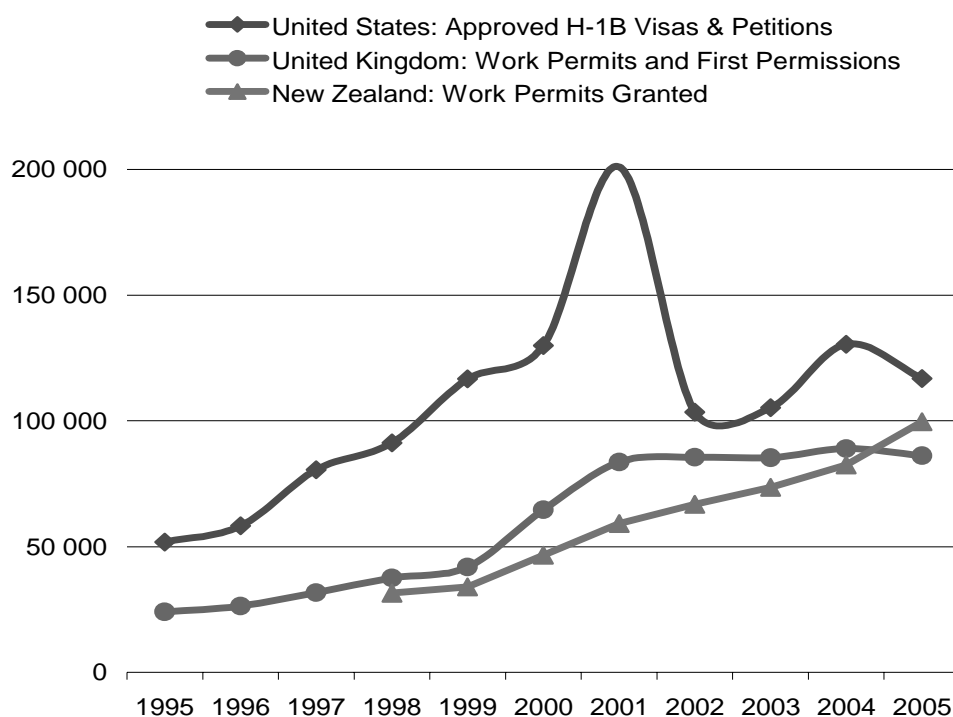
25. And even while the rate of population growth in the developing nations is now projected to slow, the relative size of the populations in those nations will run from five to eight times larger than the diminishing population of the more developed nations. If the distribution of immigrants across regions remains constant – if migrants from the developing world continue to choose to migrate primarily to the more developed nations – then even small increases in the rate of emigration will induce substantial increases in the immigrant stock's percentage of the population in more developed nations (see Appendix Figure 1). However, if migrants change to new destinations primarily in the less developed nations – and even if the rate of emigration were to increase substantially – there would be little if any growth of the immigrant share of the population in the developing world, but substantial ongoing migration to the more developed nations (see Appendix Figure 2).

26. The flow of highly skilled migrants, the tertiary-educated, should likely follow the same profile, although some observers think that trends in highly skilled migration are particularly responsive to the forces of globalization. Despite the fact that it is often opined that past and present levels of immigration are somehow lower than might “naturally” occur without the prevalence of “restrictive” policies – immigration levels do not lag other indicators of global integration. World trade volume increased by a factor of about seven between 1975 and 2005. Over the same period, world immigrant stocks increased by a factor of about two and one-half. A proper comparison, however, would be based on immigrant flows, but an adequate measure of world immigrant flows does not exist. In any event, the mobility of labour, although not as intense as that of goods and services, has also increased significantly and most of this mobility, as we have seen, originated in less developed nations.

27. Whereas globalization may have fostered the movement of highly skilled workers to the more developed nations, and will likely continue to do so for the near future, some observers speculate that this may change in the future. The ICT revolution appears to have been a major driver of highly skilled mobility, an observation reinforced by the timing of increases in highly skilled mobility and the fact that many governments started actively courting foreign ICT workers during the dot.com boom. The ICT revolution has fueled globalization by helping to further flatten the differences between national markets. It also feeds agglomeration economies and helps link global cities where skilled immigrants reside.<sup>15</sup> And the ICT revolution favors highly skilled workers and may continue to do so unless what appears to be the complexity of using today’s ICT technologies changes and becomes accessible to less skilled workers. But so far the ICT revolution has altered the international specialization of production, enhancing demand for skilled workers in the advanced economies. However, many transitional economies have a growing educated class and increased R&D capacity which may alter this scenario. Some observers think the most likely prognosis is for a decreasing north-north migration of highly skilled workers and an increasing south-south migration.<sup>16</sup>

28. Figure 9 demonstrates that there is a relationship between policies and ICT demand in major receiving nations. The United State’s specialty temporary worker (H-1B) program caught a lot of attention during the boom of the new economy’s dot.com bubble of the latter 1990s. At its peak in 2001, the number of new H-1Bs issued hit just over 200 000 with the vast majority in the ICT occupations, only to see the numbers drop in 2002 with the dot.com bust. Subsequently, the US Congress let the cap on the H-1B revert to 65 000, although the number of H-1B petitions easily exceeds that because there is no cap for non-profit employers; and there are 20 000 H-1Bs set aside for foreign graduates of US colleges. Having gotten used to easy access, US employers are clamoring for raising the cap to get more H-1Bs. In the United Kingdom, the Work Permit has also seen substantial growth and many of the workers admitted are in the ICT industry. Those UK numbers also tapered off with the 2001 recession and turned downward slightly last year. Finally, the New Zealand Work Permit numbers, for a small nation, are truly remarkable and demonstrate a steady upward climb, although employers may be turning to a preference for permanent admissions. Indeed, the majority of so-called temporary workers in these nations ultimately transition to permanent status. What these examples show – and similar stories can be told for Canada, Australia, and other nations – is that policies do matter and that significant numbers of temporary and highly skilled workers have been admitted during the ICT phase of globalization. What remains to be seen, is whether or not such programs continue to receive the support of the public and policymakers, and whether or not they continue to make the more developed nations the major magnet for future flows of the educated international migrant.

**Figure 9. Skilled Temporary Workers**



Source: United States Department of Homeland Security, Salt 2006 SOPEMI report.

29. And there is likely to be increasing international competition from the developing nations, particularly for highly skilled workers. In 2005, the United Nations included a question to governments about their current policy perspective on highly skilled workers. Perhaps unsurprisingly, 15 of 46 more developed nations reported that they planned to increase the number of highly skilled workers that they admit.<sup>17</sup> At the same time, 14 of 98 less developed nations reported planning to increase their intake of highly skilled workers which is a smaller percentage of these nations, but equal to the number of more developed nations with the same intention. What this suggests is that, while less developed nations are getting into the game, the major competition for international migrants in the near future will be primarily between more developed nations in Europe and North America.

## NOTES

- 
- <sup>1</sup> Ocampo, José Antonio, 2006. Affairs, "International Migration and Development," Presentation to the United Nation's International Symposium on International Migration and Development, Turin, June (<http://www.un.org/esa/population/migration/turin/index.html>).
- <sup>2</sup> Figures in this section are based on the author's tabulations of United Nations data; see World Population Policies 2005, Population Division (<http://www.un.org/esa/population/unpop.htm>).
- <sup>3</sup>  $CE_j = E_j / (E_j + P_j)$ , where the cumulative emigration rate includes in the denominator both the emigrant population for a given nation ( $E_j$ ) and the source-country population ( $P_j$ ). The rates shown here are for the population of adults 25 years of age and older; and all emigrants are differentiated from emigrants with a tertiary (college) education.
- <sup>4</sup> This discussion and tabulations by the author in Figures 4 and 5 are based on the data collected by Defoort, see Defoort, Cécily. 2006. "Tendances de long terme des migrations internationales: analyse à partir des six principaux pays receveurs," EQUIPPE, Universités de Lille, ([http://www.ires.ucl.ac.be/CSSSP/home\\_pa\\_pers/docquier/oxlight.htm](http://www.ires.ucl.ac.be/CSSSP/home_pa_pers/docquier/oxlight.htm)).
- <sup>5</sup> Dumont, Jean-Christophe and Georges Lemaître (2005), "Counting Immigrants and Expatriates in OECD Countries: A New Perspective", OECD Social, Employment and Migration Working Papers No. 25.
- <sup>6</sup> Docquier, Frédéric and Abdeslam Marfouk, 2006. "Measuring the International Mobility of Skilled Workers (1990-2000) – Release 1.0," CADRE, University of Lille 2 (France) ([http://www.ires.ucl.ac.be/CSSSP/home\\_pa\\_pers/docquier/oxlight.htm](http://www.ires.ucl.ac.be/CSSSP/home_pa_pers/docquier/oxlight.htm)).
- <sup>7</sup> Russell, Sharon Stanton, n.d. "International Migration: Implications for The World Bank," Working Paper No. 54, Human Capital Development and Operations Policy, The World Bank ([http://www.worldbank.org/html/extdr/hnp/hddflash/workp/wp\\_00054.html](http://www.worldbank.org/html/extdr/hnp/hddflash/workp/wp_00054.html)); Massey, Douglas S., Joaquin Arango, Graeme Hugo, Ali Kouaouci, Adela Pellegrino, J. Edward Taylor, 1994, "An Evaluation of International Migration Theory: The North American Case", *Population and Development Review*, 20(4): 699-751.
- <sup>8</sup> Borjas, George J., 1999. "The Economic Analysis of Immigration," Pages 1697-1760 in *Handbook of Labor Economics*, Vol. 3A, ed. Orley C. Ashenfelter and David Card, Amsterdam: Elsevier.
- <sup>9</sup> Chiswick, Barry R., 2005. "High Skilled Immigration in the International Arena," IZA DP No. 1782
- <sup>10</sup> Hatton, T. J. and Williamson, J. G., 2003. "What fundamentals drive world migration?" National Bureau of Economic Research Working Paper No. 9159.
- <sup>11</sup> Mayda, Anna Maria, 2005. "International Migration: A Panel Data Analysis of Economic and Non-Economic Determinants, IZA DP No. 1590 (<http://www.csmb.unimo.it/index/other/125.migration.pdf>).
- <sup>12</sup> Orrenius, Pia M., 2003. "Do Amnesty Programs Reduce Undocumented Immigration? Evidence from IRCA," *Demography*, 40(3): 437-450; Hanson, Gordon H. and Antonio Spilimbergo, 1996. "Illegal Immigration, Border Enforcement, and Relative Wages: Evidence from Apprehensions at the U.S.-Mexico Border," World Bank Working Paper Series 328.
- <sup>13</sup> Some eight tenths of newly arrived immigrants are in this age range (author's tabulations of U.S. Census microdata). "Active" migrants are arguably older than age 20, but many bring their children with them and this age range readily demonstrates the basic argument.

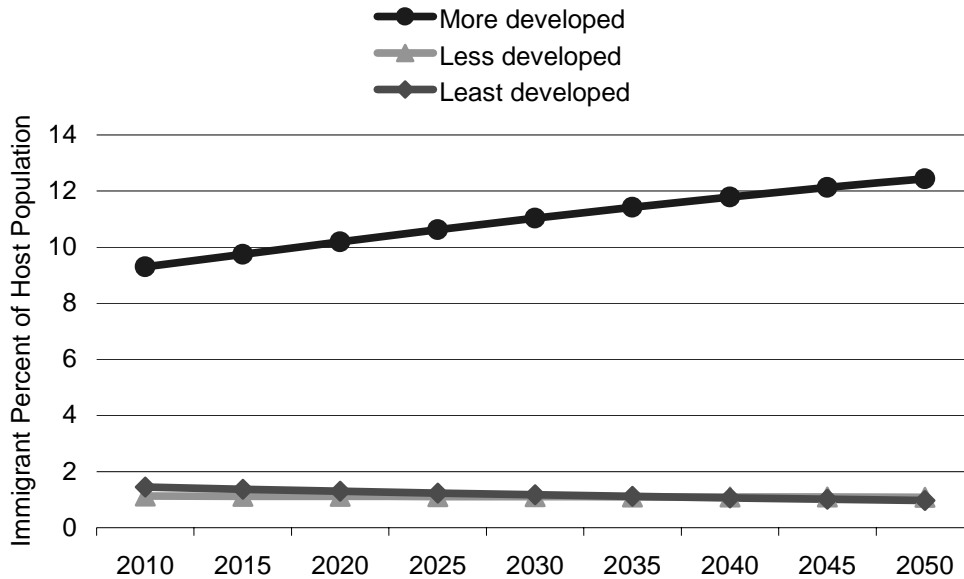
<sup>14</sup> Docquier 2006, op cit.

<sup>15</sup> Sassen, Saskia, 2006. *Territory, Authority, Rights: From Medieval to Global Assemblages*, Princeton University Press; Price, Marie and Lisa Benton-Short, 2006. "Counting Immigrants in Cities across the Globe," Migration Information Source, (<http://www.migrationinformation.org/Feature/display.cfm?ID=567>), Smith, Heidi, 2002, "Global Migration: New Zealand and European Union Experiences and Challenges," Paper delivered at the Inaugural New Zealand European Studies Conference at the National Centre for Research on Europe, University of Canterbury, Christchurch, May.

<sup>16</sup> Hatton and Williamson, 2003, op cit.

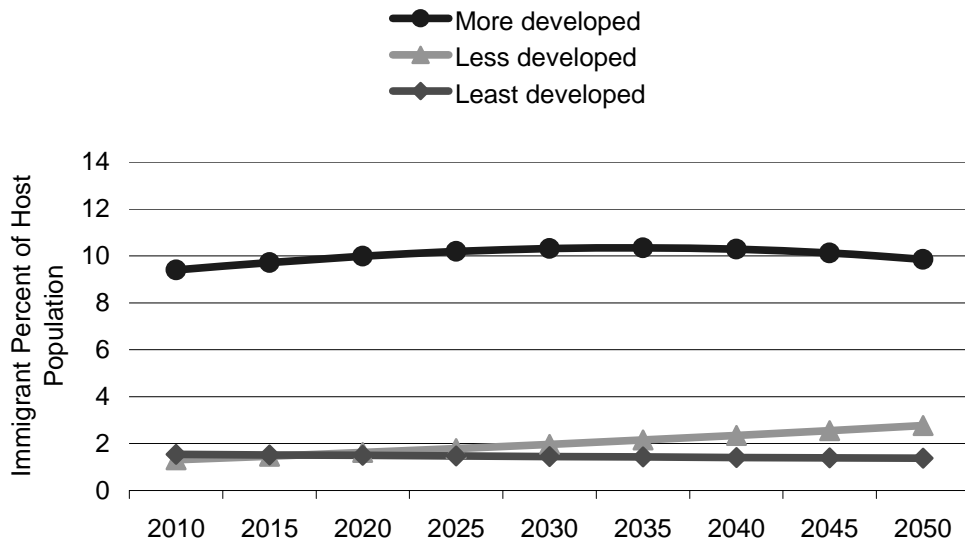
<sup>17</sup> United Nations, World Population Policies 2005, op cit.

**Appendix Figure 1. Projection of Immigrant Share of Host Population: At Today's Rates of Emigration and Destinations**



Source: Author's estimates.

**Appendix Figure 2. Projection of Immigrants' Share of Host Nation: Assuming Today's Emigration Rates from MDCs, Doubling Rates from LDCs, and Shift in Destination to LDCs**



Source: Author's estimates.



**OECD SOCIAL, EMPLOYMENT AND MIGRATION WORKING PAPERS**

Most recent releases are:

- No.57 UNAUTHORIZED MIGRANTS IN THE UNITED STATES: ESTIMATES, METHODS, AND CHARACTERISTICS  
Jeffrey Passel
- No. 56 *LA POLITIQUE MIGRATOIRE FRANÇAISE À UN TOURNANT (2007)*  
Martine Durand et Georges Lemaître
- No. 55 *THE UNIFICATION OF THE SOCIAL INSURANCE CONTRIBUTION COLLECTION SYSTEM IN KOREA (2007)*  
Sinchul Jang
- No. 54 *ASSESSING THE IMPACT OF LABOUR MARKET POLICIES ON PRODUCTIVITY: A DIFFERENCE-IN-DIFFERENCES APPROACH (2007)*  
Andrea Bassanini and Danielle Venn
- No. 53 *PENSION REFORM IN CHINA: PROGRESS AND PROSPECTS (2007)*  
Felix Salditt, Peter Whiteford and Willem Adema
- No. 52 *INTERGENERATIONAL TRANSMISSION OF DISADVANTAGE: MOBILITY OR IMMOBILITY ACROSS GENERATIONS? A REVIEW OF THE EVIDENCE FOR OECD COUNTRIES (2007)*  
Anna Christina d'Addio
- No. 51 *WHAT WORKS BEST IN REDUCING CHILD POVERTY: A BENEFIT OR WORK STRATEGY? (2007)*  
Peter Whiteford and Willem Adema
- No. 50 *THE LABOUR MARKET INTEGRATION OF IMMIGRANTS IN DENMARK (2007)*  
Thomas Liebig
- No. 49 *THE LABOUR MARKET INTEGRATION OF IMMIGRANTS IN AUSTRALIA (2007)*  
Thomas Liebig
- No. 48 *THE INTEGRATION OF IMMIGRANTS INTO THE LABOUR MARKET: THE CASE OF SWEDEN (2007)*  
Georges Lemaître
- No. 47 *THE LABOUR MARKET INTEGRATION OF IMMIGRANTS IN GERMANY (2007)*  
Thomas Liebig
- No. 46 *MINIMUM WAGES, MINIMUM LABOUR COSTS AND THE TAX TREATMENT OF LOW-WAGE EMPLOYMENT (2007)*  
Herwig Immervoll
- No. 45 *PUBLICLY PROVIDED SERVICES AND THE DISTRIBUTION OF RESOURCES (2006)*  
François Marical, Marco Mira d'Ercole, Maria Vaalavuo and Gerlinde Verbist
- No. 44 *THE TURKISH PENSION SYSTEM: FURTHER REFORMS TO HELP SOLVE THE INFORMALITY PROBLEM (2006)*  
Anne-Marie Brook and Edward Whitehouse
- No. 43 *THE ROLE OF DERIVED RIGHTS FOR OLD-AGE INCOME SECURITY OF WOMEN (2006)*  
Jongkyun Choi
- No. 42 *ACTIVATION STRAGIES AND THE PERFORMANCE OF EMPLOYMENT SERVICES IN GERMANY, THE NETHERLANDS AND THE UNITED KINGDOM (2006)*  
David Grubb and Peter Tergeist

Recent available working papers can be found on the OECD website: <http://www.oecd.org/els/workingpapers>.

Other series of working papers available from the OECD include: OECD HEALTH WORKING PAPERS

**RECENT RELATED OECD PUBLICATIONS:**

*JOBS FOR IMMIGRANTS (VOL. 1): LABOUR MARKET INTEGRATION IN AUSTRALIA, DENMARK, GERMANY AND SWEDEN* (2007)

*FACING THE FUTURE: KOREA'S FAMILY, PENSION AND HEALTH POLICY CHALLENGES* (2007)

*PENSIONS AT A GLANCE: Public policies across OECD countries* (2007)

*SOCIETY AT A GLANCE: OECD Social Indicators* (2006)

*JOBS FOR YOUTH: BELGIUM* (2007)

*JOBS FOR YOUTH: SPAIN* (2007)

*JOBS FOR YOUTH: SLOVAK REPUBLIC* (2007)

*OECD EMPLOYMENT OUTLOOK* (2007)

*INTERNATIONAL MIGRATION OUTLOOK - 2007 Edition*

*WOMEN AND MEN IN OECD COUNTRIES* (2006)

*PENSIONS PANORAMA: RETIREMENT INCOME SYSTEMS IN 53 COUNTRIES*  
(joint publication with the World Bank) (2006)

*SICKNESS, DISABILITY AND WORK: BREAKING THE BARRIERS (VOL. 1) – NORWAY, POLAND AND SWITZERLAND* (2006)

*AGEING AND EMPLOYMENT POLICIES: LIVE LONGER, WORK LONGER* (2006)

*BABIES AND BOSSES: Reconciling Work and Family Life, Volume 4 Canada, Finland, Sweden and the United Kingdom* (2005)

*EXTENDING OPPORTUNITIES – How active social policy can benefit us all* (2005)

*AGEING AND EMPLOYMENT POLICIES: AUSTRALIA* (2005)

*AGEING AND EMPLOYMENT POLICIES: AUSTRIA* (2005)

*AGEING AND EMPLOYMENT POLICIES: CANADA* (2005)

*AGEING AND EMPLOYMENT POLICIES: DENMARK* (2005)

*AGEING AND EMPLOYMENT POLICIES: FRANCE* (2005)

*AGEING AND EMPLOYMENT POLICIES: GERMANY* (2005)

*AGEING AND EMPLOYMENT POLICIES: IRELAND* (2006)

*AGEING AND EMPLOYMENT POLICIES: NETHERLANDS* (2005)

*AGEING AND EMPLOYMENT POLICIES: UNITED STATES* (2005)

*MIGRATION, REMITTANCES AND DEVELOPMENT* (2005)

*BENEFITS AND WAGES: OECD Indicators* (2004)

For a full list, consult the OECD On-Line Bookstore at [www.oecd.org](http://www.oecd.org)