

## Chapter 9

# Immigration and Access to Tertiary Education: Integration or Marginalisation?

by

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*This chapter includes a review of trends and issues on immigration and higher education, using the United States and France as cases in point. It highlights the importance of widening access to higher education to immigrants and their children in the coming decades. It does not cover international (or foreign) students, i.e. migrants coming to their host country for the purpose of studying.*

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## 9.1. Introduction

Regional integration efforts and globalisation trends are making national boundaries more porous, causing substantial shifts in the locations and methods of producing and distributing products. The intensity and patterns of migration are also being affected. Migratory flows due in part to these phenomena are having increasingly important economic and social ramifications in many regions of the world, including in higher education.

The transition towards knowledge-based societies and economies in developed countries as well as equity issues require that their national higher education systems adapt faster to changing social demographics to ensure that they provide more ample and sustained opportunities for those seeking access to higher education. However, for migrant communities living in those societies it is often not an easy road. (Box 9.1 defines the migration vocabulary used in this chapter.)

Access to higher education is critical for migrants so that they can adapt and integrate into the societies to which they have relocated. Since economies and societies are changing rapidly and knowledge and information are becoming commodities crucial to economic competitiveness, those who do not have access to lifelong learning opportunities, including higher education, are left behind. The resulting risks are socio-economic marginalisation and other integration problems. Not only does this contribute to the creation of enclaves within society but also to the severity of inequality and in some extreme cases, instability. The current and expected scale of the problem requires deliberate action since migration rates and levels are likely to continue to increase despite restrictive migratory policies in developed countries.

The central argument of this chapter is that changes must be made in order to ensure that access to higher education for migrants is equitable – and merely possible for undocumented migrants, as it is generally the case for schooling. Migrant populations must not be relegated to a social underclass where they are sometimes located. The competitiveness and social cohesion of their newfound societies is at stake.

The chapter begins with an overview of migration trends and educational attainment of migrants. It then discusses the context and developments in the area of migrant access to higher education in the United States and France. Future implications of national actions for the provision of access to higher education for migrants are examined in conclusion.

International students – that is migrants going abroad to study at tertiary education level – are not covered by this analysis. Indeed, they do not present the same kinds of challenges and opportunities for countries (OECD, 2004a, 2006b).

**Box 9.1. A few definitions**

**Migration:** The term “migration” refers to a population movement, encompassing any kind of movement of people, whatever its length, composition and causes as defined by International Organisation for Migration (IOM) (2004). This generic definition is inclusive of the terms “immigration” (a process by which non-nationals move into a country for the purpose of settlement) and “emigration” (the act of departing or exiting from one country with a view to settle in another).

**Migrants:** At the international level, no universally accepted definition of migrant exists. The term migrant applies to persons, and family members, moving to another country or region to better their material or social conditions and improve the prospect for themselves or their family (IOM, 2004).

**Immigrants:** There are major differences in how immigrants are defined. Some countries have traditionally focused on producing data on foreign residents (European countries, Japan and Korea) whilst others refer to the foreign-born (settlement countries, i.e. Australia, Canada, New Zealand and the United States). In this paper, they refer to the foreign-born population, that is, born abroad with a foreign citizenship at birth; they can be viewed as first-generation migrants. They may consist of both foreign and national citizens (they may have acquired their host country’s citizenship).

**Foreigners and natives:** The term foreigner applies to people with a foreign citizenship. Foreigners who were born in their host country are not immigrants (as they are not foreign-born). Natives are those who had the country’s citizenship at birth. They may be born abroad.

**Second-generation immigrants, people with immigrant background or from immigrant descent:** these terms refer to native-born people whose parents are immigrants. A further distinction can be made depending on whether they have one or two immigrant parents. Immigrant families are families with immigrant family householders.

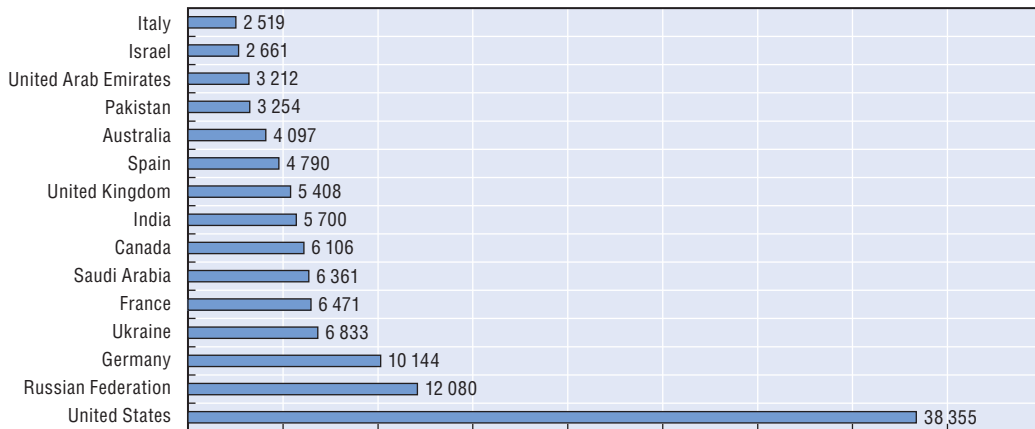
**Undocumented migrants:** Also referred as unauthorised or illegal migrants, these terms refer to persons who reside in a country, but who are not citizens of that country, have not been admitted for permanent residence, and are not in a set of specific authorised temporary statuses permitting longer-term residence and work (Passel et al., 2006).

**9.2. Migratory patterns and educational attainment****The growing migrant population**

According to the International Organisation for Migration (2008), around 193 million people, or approximately 3% of the world’s total population, reside in a country other than where they were born. The number of migrants has more than doubled since 1975, and while between 1965 and 1990 this represented an annual growth rate of about 2.1%, the current rate has increased to 2.9%.

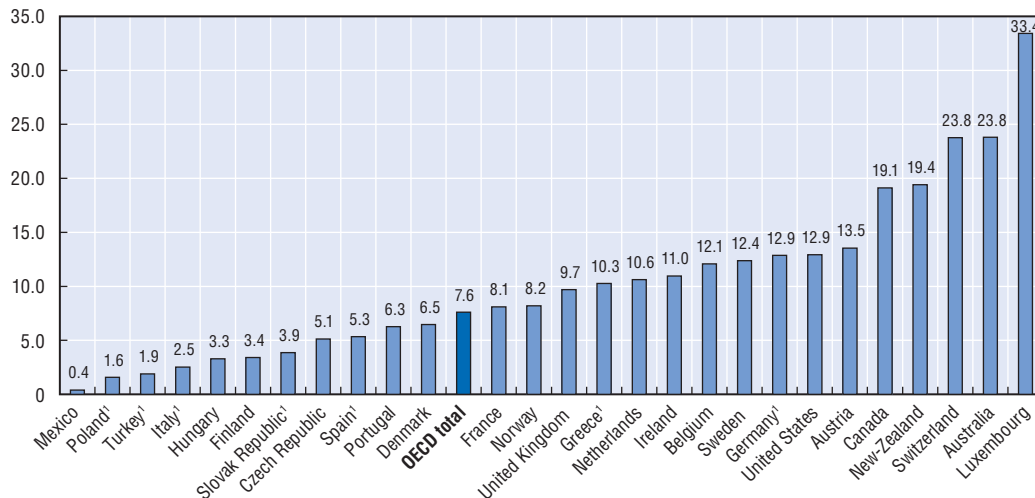
Approximately 60% of the world’s migrants reside in the more developed regions, representing nearly 10% of the population there, and 40% in the less developed regions where they represent only 1.4% of the total population. Most of the world’s migrants live in Europe (64 million), Asia (53 million) and North America (44 million). The United States is by far the country with the largest overall number of migrants at 38 million. They represent 12.9% of the country’s total population (see Figures 9.1 and 9.2). Qatar ranks first in relative terms, with a population of migrants accounting for 78.3% of its total population (Population Division of the United Nations Secretariat, 2006). Thirteen OECD countries host

Figure 9.1. **Countries with largest international migrant stock, in thousands (2005)**



Source: United Nations (2006).

Figure 9.2. **Immigrant population: foreign-born as a percentage of total population, 2005**



1. Earlier year than 2005.

Source: OECD (2007c).

more than 10% immigrants in their total population, the OECD average for the immigrant population being at 7.6% (Figure 9.2). In light of the growing concerns in public opinion about the economic, political and social consequences of migration, 44% of developed countries have implemented stricter policies aimed at lowering immigration levels, as have 39% of developing countries (United Nations, 2002; OECD, 2006a).

For an increasing number of countries, estimates of unauthorised migration are now available. Unauthorised or undocumented migrants may have entered the country illegally or may have become unauthorised after entering legally the country, for a variety of reasons. In some countries, like Greece and the United States, this population represents a significant share of the immigrant population, and of the overall population (Table 9.1).

Table 9.1. **Estimates of the unauthorised immigrant population in selected OECD countries**

	Number	% of total population	Year	Method of estimation
Australia	50 000	0.2	2005	Double card system
Japan	210 000	0.2	2005	Double card system
United States	10300 000	3.6	2004 (18)	Residual method
Netherlands	125 000 – 230 000	0.8-1.4	2004	Capture/recapture
Switzerland	80 000 –100 000	1.1-1.5	2005	Delphi method
Spain	690 000	1.6	2005 (4)	Regularisation
Italy	700 000	1.2	2002 (4)	Regularisation
Portugal	185 000	1.8	2001 (6)	Regularisation
Greece	370 000	3.4	2001 (3)	Regularisation

Note: The number in parentheses indicates the number of years since the previous major regularisation. The regularisation numbers cover only persons applying and thus are a lower bound for the number of unauthorised immigrants. The methods of estimation are detailed in OECD (2006a).

Source: OECD (2006a).

### Costs and benefits of migration

Most concerns regarding migration are social and economic. The perceived costs and benefits associated with migrants generally relate to the social and economic impact that they have on their sending and receiving countries. There are a variety of arguments in favour of and against migration, as well as perceived incentives and disincentives for governments in developed and developing nations to regulating migrant movement.

A major driving force in contemporary migration is economic. Migrants often go abroad in the hope of brighter economic prospects in their receiving country, where their expected income will generally be higher than in their sending country (notwithstanding the relative cost of living in both countries). For example, according to Freeman (2006) a Mexican with five to eight years of schooling earned six times more in the United States than in Mexico in 2000 (USD 11.20 an hour in the United States against USD 1.82 in Mexico). At the same time, societies in countries experiencing a substantial influx of migrants enjoy the benefits of their relatively inexpensive labour and products as immigrants generally earn less than the native-born overall and less than the native-born with the same years of schooling in many cases (Freeman, 2006). Since many developed country societies are ageing and reproduction rates are not adequate to fully replace the labour force, migrants also assume many of the economic functions for which there might otherwise be serious labour shortages, not only in a variety of low-skill low-pay jobs (such as agriculture, construction and services), but also in high-skill higher pay jobs, such as health professionals. Shortages of labour workforce are projected in some sectors. For instance, in Canada the shortage of nurses is expected to reach 78 000 by 2011 and 113 000 by 2016 (Dawson, 2006). In Spain, in 2005, one of each three new doctors entering into the labour market were foreign-born and foreign-trained (Benito, 2006). Migration can also follow some labour market shortages related to economic cycles (e.g. the massive influx of engineers in the United States during the dotcom boom) or sometimes to migration pattern themselves (e.g. the shortage of bilingual teachers in elementary schools located in high migrant-receiving cities in the United States).

Concerns about the economic cost of migration in receiving countries include the views 1) that migrant labour increases the competition for those naturally born citizens who would work in the same capacities given the opportunity; 2) that migrants use similar

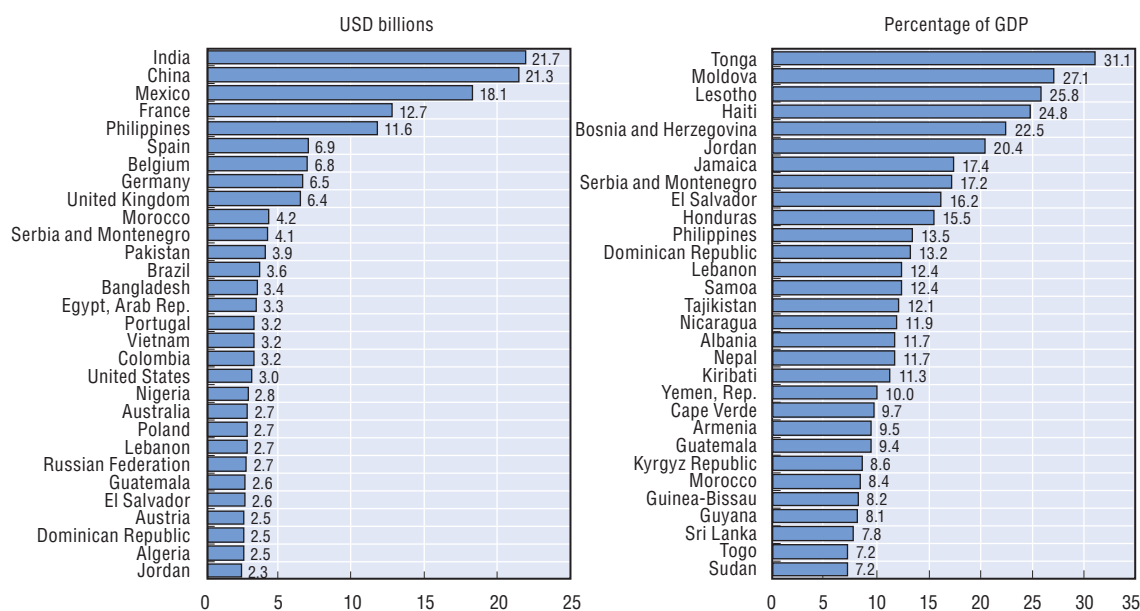
(or higher) levels of publicly funded services as non-migrants; and 3) that in the case of unauthorised migrants labour is frequently not taxed or “under-the-table” and that migrants do not pay taxes. While migrants can in principle have a lowering effect on wages in some sectors, this has to be balanced with the welfare increase they offer their receiving society; moreover, empirical evidence shows differing impacts according to the receiving countries (Freeman, 2006). In countries like the United States, recent research shows that the two last arguments are unfounded. Undocumented workers do pay taxes, including unrecoverable payments to social security and sales taxes; the majority are concentrated into labour market niches which are principally constituted by migrants; and they use public services at a lesser rate than non-migrant users. For instance, migrants in the United States use less than half the dollar amount of health care on average than do US citizens, and only about 25% of migrant health care expenditure are reimbursed by government programmes (NILC, 2006a). Actually, migrants spend a large share of their income in their host country and thus contribute to its economic activity and public income. In the United States, Latin American immigrants are estimated to have over USD 500 billion of purchasing power, more than 90% of which is spent in the states and towns where they live as a direct contribution to their local economies (IADB, 2006). Migration presents clear economic benefits for receiving countries and economies.

In developing countries which are net exporters of migrants, governments sometimes implement measures to moderate the exodus of their population in order to appease receiving countries. Migration can also be viewed as a cause of social disruption since it leads to the disintegration of families who are separated as a result of family members going abroad in search of work. Finally, the issue of “brain-drain” has gained notoriety in recent years. Highly skilled migration (that is, the migration of tertiary-educated people) can be viewed as a loss of human capital, although highly skilled migrants still represent a minority of expatriates in most cases (OECD, 2005). However, migration also presents important economic benefits for sending countries. Governments of sending countries have little incentives for limiting emigration because remittances sent back by those who have moved abroad to family members or friends who remain behind are an important source of income for many developing nations. In the case of Mexico, for instance, while remittances represent only about 10% of Mexican immigrants in the United States, they represent the second largest source of external income, exceeded only by oil revenues. In some other countries, remittances are by far the largest source of international revenue: in Tonga, Moldova, Lesotho, Haiti and Bosnia and Herzegovina they represented from 22% to 31% of GDP in 2004 (Figure 9.3). Remittances now overtake official development aid and are regarded as a major lever of development in the developing world (World Bank, 2006; OECD, 2006a). While highly skilled workers tend to remit less than workers, they contribute to the development of their country of origin by facilitating investment and business between their host country and their country of origin. Recent research shows that highly skilled migration can benefit both “exporters” and “importers”, especially in the case of scientists (Hudson, 2005; OECD, 2007a) – although this is not always necessarily the case in practice. In conclusion, the benefits of migration reaped in both the host and home countries are significant.

### ***Educational attainment of migrants, integration and (higher) education challenges***

Migrants do present different challenges for their host country depending on their level of educational attainment.

Figure 9.3. **Top 30 countries with the highest total remittances received, in billion USD and as a percentage of GDP, 2004**



Note: "Remittances" refer to the sum of the "compensation of employees", "worker's remittances", and "other current transfers in other sectors".

Source: Based on World Bank (2006).

Highly-skilled migrants (that is, foreign-born tertiary education graduates) are generally welcomed by receiving countries. Recent migration policies have tended to facilitate this type of migration (OECD, 2004, 2005, 2006a). On average, highly skilled immigrants accounted for about 12% of the tertiary educated residents in the OECD area around 2000 (OECD, 2006a, 2007a) and represented the largest group of migrants in Canada, Ireland and Mexico (Table 9.2). On average, they represent more than one quarter of the migrant population in the OECD area. When they migrate after their studies, destination countries benefit from the investment in education which has been assumed by the country of origin as well as from their skills. As highly skilled migrants tend to be "middle class", well paid and relatively "invisible" (Salt, 1997). However, as noted above, they generally earn less and participate less in the labour market than native-born with the same level of education (Freeman, 2006; OECD, 2006a). Some highly-skilled migrants can encounter difficulties in having the qualifications they received abroad recognised in their destination country and can end up working in jobs requiring lower skills than one would expect given their educational qualification: immigrants are more often overqualified than their native-born workers (OECD, 2006a, 2007a). Finally, unauthorised migrants are frequently forced to work in "low-paid low-skill" jobs, despite any formal preparation they might have.

Whereas according to recent research (Hinojosa-Ojeda et al., 2000; NILC, 2006b) migrants with limited formal training represent for the most part a net gain to the receiving country, frequently this view is not shared by all citizens, political groups and policy makers in the host country. At the global level, a majority of migrants fall into the low-skilled category (United Nations, 2002; Solimano, 2001). Within the OECD area, low and medium skilled migrants accounted on average for 69% of the migrant population

Table 9.2. **Size and composition of the foreign born population in OECD countries by level of educational attainment, 2003-04**

	% of foreign born by level of educational attainment			Immigrant population (thousands), 2004
	Tertiary	Upper secondary	Secondary and under	
Australia	<b>36</b>	40	24	4 751
Austria	<b>19</b>	45	<b>37</b>	1 059
Belgium	25	27	<b>48</b>	1 220
Canada <sup>1</sup>	<b>46</b>	32	22	5 774
Czech Republic	<b>16</b>	55	<b>29</b>	499
Denmark	<b>38</b>	38	<b>24</b>	343
Finland	28	<b>48</b>	<b>24</b>	166
France <sup>1</sup>	21	28	<b>51</b>	4 811
Germany	17	44	<b>37</b>	10 620 <sup>1</sup>
Greece	19	<b>42</b>	38	1 123
Hungary	<b>28</b>	56	16	319
Ireland	<b>45</b>	31	24	443
Italy	<b>11</b>	<b>40</b>	49	1 447
Japan <sup>1</sup>	30	<b>44</b>	26	1 157
Korea <sup>1</sup>	32	<b>44</b>	24	141
Luxembourg	<b>23</b>	41	<b>37</b>	150
Mexico <sup>1</sup>	<b>38</b>	26	37	406
Netherlands <sup>1</sup>	24	32	<b>44</b>	1 736
New Zealand <sup>1</sup>	<b>38</b>	<b>47</b>	16	764
Norway	<b>36</b>	47	<b>17</b>	361
Poland	<b>23</b>	<b>50</b>	27	776
Portugal	<b>22</b>	<b>26</b>	52	714
Slovak Republic	<b>17</b>	62	<b>21</b>	207
Spain	<b>30</b>	<b>29</b>	41	2 172
Sweden	<b>20</b>	49	<b>22</b>	1 100
Switzerland	28	43	<b>30</b>	1 738
Turkey <sup>1</sup>	17	34	<b>49</b>	973
United Kingdom	<b>34</b>	44	<b>22</b>	5 552
United States	35	35	<b>30</b>	37 592
OECD	30	37	32	88 114
Country mean	27	41	31	

1. Earlier year than 2003-04.

Note: Migrants with unknown educational attainment were assumed to follow the known distribution across the three groups. Bold figures indicate an overrepresentation of foreign-born at that level of education compared to natives. Data refer to the population aged 15-64 for Australia. Figures for upper secondary education include post-secondary non-tertiary education.

Source: OECD (2007c).

in 2003-04. About 32% of the migrant population had at most secondary educational attainment. Like for the native population, the higher the level of educational attainment of migrants, the lower their unemployment rates and the higher their employment rates. But with the same level of qualification, migrants are more likely to be unemployed and not to participate in the labour force than natives with the same educational attainment. Actually, the disadvantage of migrants relative to their native counterparts increases with their level of educational attainment when measured by unemployment and employment rates. While the picture varies according to countries (Table 9.3), low skilled migrants in an OECD country will typically have an unemployment rate one third higher than natives, while it will be twice as high for highly skilled migrants.



Table 9.3. **Ratio of foreign-born unemployment and employment rates to native ones, by level of education, 2003-04**

	Unemployment			Employment		
	Level of education			Level of education		
	Low	Medium	High	Low	Medium	High
Australia	0.84	1.05	1.98	0.86	0.86	0.91
Austria	1.47	2.50	2.35	1.24	0.94	0.92
Belgium	2.25	2.35	3.15	0.81	0.81	0.88
Canada	0.96	1.40	2.35	0.96	0.91	0.90
Czech Republic	1.13	1.41	0.61	1.61	0.87	1.01
Denmark	2.29	2.58	2.80	0.73	0.70	0.73
Finland	1.68	1.83	3.54	0.82	0.89	0.82
France	1.51	1.84	2.05	1.01	0.88	0.90
Germany	1.31	1.42	2.82	1.12	0.90	0.81
Greece	1.04	0.98	1.89	1.31	1.08	0.84
Hungary	0.56	0.76	1.15	0.93	1.01	1.00
Ireland	1.43	1.73	1.94	0.93	0.89	0.88
Italy	0.94	1.08	0.97	1.31	1.02	0.97
Luxembourg	0.70	2.38	3.19	1.89	1.04	0.95
Netherlands	1.99	4.05	2.13	0.79	0.86	0.89
Norway	1.87	2.45	1.91	0.83	0.87	0.91
Poland	0.51	1.44	0.41	0.48	0.44	0.64
Portugal	1.68	1.17	1.64	1.02	1.12	0.95
Slovak Republic	0.88	1.46	1.11	2.17	0.80	1.01
Spain	1.21	1.17	1.50	1.15	1.15	0.92
Sweden	2.29	2.20	3.03	0.80	0.83	0.87
Switzerland	2.17	2.64	2.94	1.11	0.92	0.89
United Kingdom	1.39	1.69	1.88	0.75	0.86	0.93
United States	0.59	0.85	1.33	1.63	0.99	0.93
<b>Country mean</b>	<b>1.36</b>	<b>1.77</b>	<b>2.03</b>	<b>1.09</b>	<b>0.90</b>	<b>0.89</b>

Note: Data refer to 2002 for the Netherlands, 2003 for Canada and to 2004 for Australia, Denmark and the United States. Read that in Australia the unemployment rate of low skilled foreign-born populations is 84% the unemployment rate level of low skilled natives.

Source: Based on OECD (2006a), Table I.10. European countries: European Community Labour Force Survey (data provided by Eurostat) except Denmark (Population Register); United States: Current Population Survey March Supplement; Australia: Survey of Education and Work; Canada: Survey of Labour and Income Dynamics.

Given current demographic trends and because the immigrant population, especially recent arrivals, tend to be younger than the native population, its share in the labour force and in populations is expected to continue to grow in the coming decades. If current patterns continue, this implies that countries' labour force will increasingly be composed of foreign-born workers, so that the challenge of building a knowledge economy will increasingly depend on their skills. This also means that the percentage of foreign-born in the unemployed population will continue to grow relative to natives, with the risk that this group becomes increasingly marginalised and that social cohesion becomes at risk. Facilitating the contribution of migrants and their children to the knowledge society and economy will thus increasingly become a major stake for education policies.

While a variety of employment and migration policies and measures can help integrate immigrants in the labour market and society (OECD, 2006a), education (and especially tertiary education) plays a key role as it is often a critical means of social and economic mobility for migrants and their families, especially when they are low-skilled migrants. This might partly explain why immigrants and their children have on average

higher (and, compared with their measured performance at school, unrealistic) expectations about their future educational attainment than natives (OECD, 2006e): they know education will be their main resource for upward social mobility. Economic, linguistic, cultural, educational, and sometimes legal, barriers limit their participation and success in the mainstream education available to non-migrants, especially in higher education. Results from the OECD Programme for International Student Assessment (PISA) of 2003 show that 15-year-old first-generation immigrants (foreign-born) and second-generation immigrant students (whose both parents are foreign born) perform less well in maths, science and reading than their native counterparts, except in Canada (OECD, 2006e).<sup>1</sup> In general, second-generation immigrant students tend to outperform first-generation immigrant students but in Germany, Denmark, Belgium (Flemish Community) and New Zealand second-generation students lag behind native and first-generation students. Factors such as socio-economic status, knowledge of the language of instruction and the age at migration explain some part of immigrant students' outcomes from education in most OECD countries (OECD, 2006b). Whatever the reasons, this underperformance slows or prevents the progress of migrants in integrating into society and enjoying higher levels of economic and social welfare – especially the low-skilled. One challenge for the future will be to improve the participation and graduation levels of migrants and their children in tertiary education – which will first require a stronger graduation rate from upper secondary school, but not only.

Another, generally unknown, issue lies in the accessibility of higher education for unauthorised migrants. In many countries access to the primary and secondary education, and sometimes appropriate remedial services, is mandatory and guaranteed regardless of the migratory or legal status of students. However, access to higher education is much more limited, costly, selective, and in some cases legally forbidden in the case of unauthorised migrants. If unauthorised immigrants have received their primary and secondary education in their host country (as is sometimes the case) it is a potential waste of human capital if their legal status prevents them from accessing tertiary education. In some cases, they might be regularised and become legal residents in their host country, especially as some of them cannot be deported under the law of their host country. Were they to go back to their home country, their tertiary education qualification would not be a loss to their host country either, as is widely recognised for foreign students when they go back home (OECD, 2004, 2006b): they would indeed probably continue to have social and business links with their host country. Their tertiary education degree could actually facilitate their departure. Limits on access to tertiary education exacerbate the stratification of the societies in which migrants live, which affects the whole society. While the issue is still minor in most OECD countries, depending on the magnitude of the issue countries should consider the pragmatic choice of removing legal and financial barriers that sometimes prevent undocumented migrants from gaining access to higher education. While allowing undocumented migrants into tertiary education may be at odds with firm policies against unauthorised migration, excluding these groups may prove counterproductive in the long term.

The magnitude of the educational problem for migrants is such that national and international bodies such as the United Nations (UN) are taking steps to ensure the protection of the rights of migrants, including in education. The UN has enacted the *United Nations International Convention on the Protection of the Rights of all Migrant Workers and Members of their Families* which entered into force on 1 July 2003. This Convention has been

signed by 49 countries (UNESCO, 2006) most of which are net exporters of migrants but is not signed by any of the net importers of migrants such as the United States and Canada. Actually, Mexico and Turkey are the only OECD countries which have signed the Convention. This agreement has specific provisions guaranteeing for migrants and their families “equality of treatment with nationals of the host country in relation to access to educational institutions and services subject to the admission requirements and other regulations of the institutions and services concerned”.

### 9.3. Access of migrants to higher education: the cases of the United States and of France

This section focuses on two large migrant-receiving countries with different types of immigration, different policies of integration for immigrants and different types of education and tertiary education systems. Both countries face challenges of access to tertiary education for documented and undocumented immigrants or their children – and are increasingly addressing them. While the access of undocumented migrants to tertiary education is a relatively well-known issue in the United States, it is still largely unknown in France, partly because the problem has a very small scale. However, beyond their differences, the two countries face similar problems of access of migrant students or their children to higher education.

#### ***Migrants in higher education in the United States***

Regarded as a migrant-receiving or settlement country, the United States has experienced historically significant waves of migrants which have changed in demographic composition in recent years. In 2005 there were approximately 27.3 million foreign born inhabitants in the United States, of which it was estimated that 16.8 million were legal residents, and 10.5 million were undocumented migrants and 1.2 million are temporary migrant workers (US Census Bureau, 2006). Among the immigrants, 53.5% were born in Latin America (37.7% in Central America, mainly Mexico, 9.7% in the Caribbean, and 6% in South America), 25.4% in Asia, 13.6% in Europe, and the remaining 7.5% in the rest of the world. Immigration flows in the 1990s exceeded those in any decade in the history of the United States, with flows from 700 000 to 1 million a year, and this high pace has continued between 2000 and 2004 with an immigrant population increasing by over 1 million a year (US Census Bureau). The immigrant population more than doubled from less than 5% for the total US population in 1970 to 12% in 2004, and is expected to reach 42-43 million or 13% of the total US population by 2010 (Capps et al., 2005).

The share of children of immigrants among the school age population has also increased quickly from 6% in 1970 to 19% in 2000, that is, 11 million children. About three quarters of them are native-born, while foreign-born children represented 5% of the school age population (up from 2% in 1970). This growth is also noticeable in tertiary education. For example, the number of foreign-born students has increased from one third in 1990 to almost one half in 2000 at the City University of New York (CUNY), a public higher education institution in the city that has historically played a central role in the education of minority and immigrant New Yorkers (Leinbach and Bailey, 2006). In terms of educational attainment, foreign-born people have on average similar characteristics to the native-born population, one in four holding a bachelor degree or more (27.3% for foreign born over 25 against 27.7% for native-born over 25 in 2004). However, immigrants’ (and children of immigrants’) characteristics vary greatly by country and region of origin. While

only 11.1% of immigrants over 25 from Latin America held a bachelor degree or more in 2004, the percentage was 49.7% for immigrants from Asia, 36.4% for those from Europe, and 37.7% for those from the rest of the world. Foreign-born who were born in Latin America represent 51% of all immigrants but only 21% of immigrant tertiary graduates. Immigrants from Central America (mainly Mexico) have the lowest educational attainment with only 6.1% of tertiary graduates among them: they represent 7.8% of all foreign-born tertiary education graduates (against 35% of the foreign-born population over 25).

Given that since the second half of the 20th century, most migrants to the United States have arrived from Latin American countries, principally Mexico, and that access to higher education is more of an issue for them, this section will primarily focus on Mexican-born immigrants and their children. There are now more than 11 million Mexican born individuals living in the United States, equivalent to almost 10% of the total population in Mexico, and representing 3.6% of the total population living in the United States. It is estimated that over 6 million of them are undocumented, of which 40% arrived between 2000 and 2004 and at least 40% are younger than 18 years of age. Among immigrants below 19, 45.4% were born in Central America (mainly Mexico). In addition, over 14 million US inhabitants are of Mexican descent. According to the US Census Bureau the Hispanic population increased by 58% from 1990 to 2000, now totalling more than 40 million, most of whom are Mexican American or Mexican born. In fewer than 50 years, the Hispanic population in the United States is forecast to exceed 100 million. Among the 2 million foreign-born children enrolled in high school, 37% were born in Mexico.

Most migration from Mexico to the United States is motivated by economic conditions on either side of the border. In Mexico, as mentioned above, remittances represent an important source of revenue, helping to alleviate what are often conditions of extreme poverty in the migrant sending communities. On the US side migrants fill labour market needs that would be difficult to satisfy if the country were relying solely on the existing non-immigrant labour pool. Migrants represent 23% of production workers and 20% of service workers (Bureau of Labour Statistics, 2004).

Especially true for undocumented migrants, work in low-salary low-skill jobs is the norm. According to a study by the Pew Hispanic Center (2006b), undocumented migrants in the United States represent almost 25% of domestic workers, a half of agricultural workers and 9% of restaurant workers. Also, approximately 43% of immigrants work in jobs offering less than the minimum wage, in comparison with 28% of the total labour market (Fix *et al.*, 2001; Marmolejo, 2004a).

This migratory pattern is a historic reality, strongly interlinked with the economic, social and political dynamics of both the United States and Mexico. In the United States, federal legal regulations have established strong restrictions on the use of public benefits by migrants and even more stringent rules relating to the public benefits usage of undocumented migrants.<sup>2</sup> Implications for education, and more specifically higher education, are largely ignored or minimised. Not being able to further their education, migrants – especially the younger ones – are more likely to experience unemployment or to work in low-skill, low-paid jobs.

Why does this matter? In general, as mentioned earlier, migrants have limited economic and educational opportunities. This keeps migrants trapped in a circle of poverty. The children of migrants are more likely to be disadvantaged than those of non-migrants. On one side, they are more likely to be poor (24% vs. 16%), uninsured (22%

vs. 10%), etc. (Capps, 2001), while on the other side, given that parental levels of educational attainment have strong positive correlations with those of their children (Swail *et al.*, 2005a and b), they are also more likely to have low educational attainment. This educational vicious circle is a real problem as for migrants, education, if available, is generally the principal means of social and economic mobility.

Ultimately this problem goes beyond migrants themselves to become a social liability. For example, studies conducted in the state of California show that economic and social inequality has increased substantially, a fact that can be partially explained by the high number of immigrants in the state whose low education levels contribute to their low earnings. The growth in inequality is due in part to the rising education *premia*. These factors suggest that one way to reduce income inequality would be to raise the earnings of workers at the bottom of the income distribution by improving their education (Reed, 1999).

How big is the problem? Accurate figures are difficult to obtain since data on migration, especially with regards to undocumented migration, are usually based on estimates. However, a compilation from a variety of sources shows that between 65 000 and 80 000 undocumented students graduate from US high schools each year; in 2000 there were as many as 79 000 undocumented aliens under 21 who had graduated from US high schools but who had not enrolled in college, and in the same year as many as 607 000 undocumented aliens age 12 to 20 were enrolled in US schools and about 25 000 undocumented students were enrolled in public higher education (Marmolejo, 2004b).

The challenges faced by the migrant population, both regular and undocumented, have a powerful effect on their weaker than average educational performance. In this context, the questions of whether or not to make tertiary education more accessible to migrants, and furthermore, whether or not to allow access to tertiary education for undocumented migrants, and under what conditions, become paramount.

A specific example is related to financial barriers. In the United States, residents of a state can enrol in public higher education institutions where they pay “in-state” tuition. In general, this amounts to approximately one third of the cost of “out-of-state” tuition. In addition, they have access to state and federal financial aid programmes which subsidise the cost of attendance. Within the current legal framework, recent legal migrants have to pay out-of-state tuition and are not always eligible for federal financial aid.

In the case of undocumented migrants, there is frequently not even the possibility to enrol since they often cannot properly document their residence and in some cases even their legal identity,<sup>3</sup> and they are obviously not eligible to apply for federal financial aid. Higher education for this group is out of reach. Moreover, in 1996 the US federal government enacted ambiguous legislation discouraging state governments from offering in-state tuition to undocumented immigrants.<sup>4</sup> Given the law’s vague language, and the decentralised nature of the educational system in the United States, the needs to address the issue of access led a number of US state governments to enact legislation permitting in-state tuition to undocumented students, under certain eligibility conditions in any case. On the contrary, other states have considered, and eventually approved, stricter regulations to impede the possibility of paying in-state tuition but also to simply deny access to undocumented students even if they are academically eligible and are willing to pay full tuition. Just in a few states no action in either direction has been taken. In a parallel development, attempts by a bipartisan group of federal legislators to further amend the

Immigration and Naturalisation Act to allow undocumented students access to in-state tuition in public higher education institutions have failed several times. This proposal, known as the DREAM Act, was last submitted for vote in the US Congress in 2007.

Ten out of the 50 US states, including the most populated Texas, California, and New York, are the ones which have implemented measures to provide access to higher education for undocumented migrants making them eligible for “in-state” tuition in public institutions, and, in some cases, even providing state financial assistance.<sup>5</sup> Each has enacted laws which permit in-state tuition to students regardless of immigration status, as long as they have attended school for a certain minimum number of years in the state, completed high school or passed a national equivalency exam known as the General Equivalency Diploma (GED), and sign an *affidavit* promising to apply for permanent residency once eligible to do so. However, this pattern is not followed in all the states, and even in some cases, sporadically, some proposed laws are intending to forbid undocumented migrants and their dependents access to higher education.

Even those able to attend an educational establishment face big challenges. First, fewer immigrant students are eligible for college. The findings of many studies demonstrate that, for instance, Hispanics in the United States, most of them Mexican-American or Mexican-born, are the demographic group performing among the weakest in elementary education and have the highest drop-out rate in secondary schools. Some estimates show that in 2000 school drop-out rates of 15-to-17-year-old foreign-born youths were much higher (11.3%) than native-born (3.3%) (Fry, 2005). This figure is much higher in recently arrived migrants. As an example, in the same period, Mexican-born migrants registered a high school drop-out rate of 32.6% in comparison to 8.1% of early childhood arrivals. As shown in Table 9.4, there are significant differences between migrants of different geographic origin: Hispanic foreign-born students are more likely to drop-out than other migrant groups, some of whom can perform better than natives.

Second, some migrant groups, especially Hispanics, have among the lowest participation and success rates in higher education. Less than one quarter (23.2%) of Hispanic students graduate with a four-year degree within 10 years of leaving high school, in comparison with 47.3% of white students (Swail *et al.*, 2005b). Moreover, migrants more often rely on 2-year community colleges for their studies. According to Vernez and Abrahamse (1996), migrants who had some exposure to US high school were 10% more likely than native-born to begin and complete their higher education at community colleges. Among Hispanics, immigrants were more likely than native-born to then transfer to a 4-year institution, possibly illustrating the stronger democratising effect community colleges can have for them. Overall, Hispanics, and especially Hispanic immigrants rely disproportionately on community colleges. While they are under-represented in higher education, they are over-represented in community colleges where the majority of them (53%) enrol. However, they tend to experience to a lesser extent the disadvantages of community colleges than other groups (Leinbach and Bailey, 2006).

Finally, in the case of students of Mexican descent, lower educational achievement continues over time, as shown by De la Garza *et al.* (1994) (see Table 9.5). While second-generation migrants have higher educational attainment than first-generation migrants, fourth generation migrants – or students of Mexican descent – continue to have much lower educational attainment than average in the United States, which illustrates the existence of a persistent vicious circle between low educational attainment and

Table 9.4. **United States: school drop-out rates of 15-to-17-year-old foreign-born youths, 2000**

Place of birth	Percentage		
	Early childhood arrival	Recent arrival	Total
Canada	2.8	4.7	3.8
Mexico	8.1	32.6	22.8
El Salvador	5.3	24.0	16.1
Guatemala	6.5	26.8	18.9
Honduras	9.1	20.3	16.8
Nicaragua	3.7	7.9	5.2
Other Central America	4.2	7.2	5.8
Cuba	11.0	4.9	6.0
Dominican Republic	4.7	5.5	5.2
Puerto Rico	6.4	13.2	9.2
Haiti	2.8	6.8	5.5
Jamaica	1.7	3.8	2.9
Trinidad & Tobago	5.1	0.9	3.0
Other Caribbean	0.8	2.9	1.4
Brazil	0.7	5.4	4.2
Colombia	2.2	4.4	3.6
Ecuador	4.8	15.2	11.6
Guyana/British Guyana	0.5	0.0	0.3
Peru	4.1	4.7	4.5
Venezuela	1.4	1.3	1.4
Other South America	2.6	4.8	3.7
England	5.1	1.9	3.5
Other United Kingdom	0.0	2.0	1.1
Germany	6.1	3.1	4.2
Poland	0.9	2.5	2.0
Russia	3.2	2.9	3.0
Ukraine	2.1	2.3	2.2
Other former USSR	1.1	3.8	2.6
Other Europe	4.3	5.4	5.0
China	2.5	5.3	4.4
Hong Kong (China)	2.5	0.0	1.1
Taiwan	1.0	1.7	1.4
Japan	0.4	2.0	1.4
Korea	0.8	3.2	1.9
Philippines	1.2	2.9	2.2
Thailand	5.3	4.7	5.2
Vietnam	4.2	2.6	3.2
Other Indochina	2.1	2.5	2.2
India	1.2	0.8	1.0
Pakistan	1.5	2.4	2.1
Iran	1.2	4.1	2.4
Other Asian	0.9	5.3	3.6
Africa	1.4	3.5	2.9
Australia, New Zealand and other countries	2.2	2.5	2.4
Residual other <sup>1</sup>	15.4	8.0	11.4

1. "Residual other" includes youths born in Bermuda and Cape Verde.

Source: Fix et al. (2001).

Table 9.5. **Inter-generational analysis of educational attainment of Mexican Americans in the United States (1989-90)**

Percentage					
Educational level	First generation	2nd generation	3rd generation	4th generation	Average USA
Less than high school	<b>69.9</b>	51.5	33	41	<b>23.5</b>
High school	<b>24.7</b>	39.2	58.5	49.4	<b>30.4</b>
More than high school	<b>5.4</b>	9.3	8.5	9.6	<b>45.1</b>

Source: De la Garza et al. (1994).

disenabling socio-economic background. A recent study of access and achievement of Hispanics and Hispanic immigrants at the City University of New York shows that in 2000 Hispanics tended to have lower rates of bachelor's degree attainment when compared with other racial/ethnic populations, and that Hispanic immigrants have very low rates of achievement compared to other native- and foreign-born populations (Leinbach and Bailey, 2006).

Mitigating barriers to access to higher education for migrants in the United States, and especially Hispanic migrants, will and should become a higher priority for political decision makers, as the implications in the long run are cause for concern. Although the scale of the challenge is quite different, some similar patterns as well as dissimilarities are present in other countries.

### **Migrants in higher education in France**

Although it is not regarded as a migrant-receiving country, France has long been a country of migration. It hosts the third largest population of immigrants in Europe, after Germany and Russian Federation (Figure 9.1). Although France is a country of many immigrants from a variety of origins, the French conception of the state is secular and republican and its related conception of migrant integration is assimilationist rather than pluralist or multiculturalist. French citizens are expected to be and become first and foremost French as individuals rather than French as members of a particularistic group or community (van Zanten, 1997; Jennings, 2000). One practical implication of this philosophy is that educational statistics by "minority" or "community" background are not collected whereas statistics by parental occupation abound. Most information on the educational participation and achievement of immigrants and their descendants comes from census data or specific surveys rather than educational statistics collections.

Substantial immigration to France started in the 18th century, when it began to industrialise and to experience a decline of its fertility rate. At the turn of the 20th century, it hosted over 1 million immigrants, that is 3% of its population. France has encouraged immigration through labour migration programmes from 1919 until 1974 in order to fill gaps in the labour pool and to rectify demographic deficits after the two world wars. Migration brought substantial waves of Europeans, mainly from Southern Europe and Poland, and also, after World War II, from its former colonies in Africa, especially from Maghreb countries (Vaillant, 2006; INSEE, 2005). From 1974, the French government officially ended its labour migration programmes and instituted provisions against the hiring of undocumented immigrants, and most of the subsequent migration was family migration.

According to the 2004 and 2005 census, there were 4.9 million immigrants in (metropolitan) France in 2004, representing 8.1% of the population. About 40% of them are



of French citizenship. The immigrant population has increased by 18% since 1990 against 7% for the rest of the population. This growth is partly due to recent migration as 960 000 new migrants, that is one in five immigrants, have entered France between 1999 and 2004, with 25% coming from Europe (EU25). While most immigrants come from Europe (40%), the share of European immigrants has steadily decreased since 1975; conversely, the shares of immigrants from the Maghreb countries (31%) and from other parts of the world (29%) have increased. The number of migrants from (mainly francophone) sub-Saharan Africa has increased by 45% since 1999 to reach 570 000. Immigrants born in Algeria were the largest single group of migrants in France in 2004 and represented 11% of immigrants, followed by Morocco (10%), Portugal (10%), Italy (6%), Spain (5%), Turkey (4%), Tunisia (4%), Germany (2%) and the United Kingdom (2%) (Borrel, 2006; INSEE, 2005). Immigrant and second-generation immigrants represented 22.4% of the French population in 1999, and 19% of families in France (INSEE, 2005). In Europe, France has the largest number of migrants or descendants of migrants coming from Islamic countries: people from Muslim culture are estimated to be 4 million (HCI, 2000).

Undocumented migrants (“*sans-papiers*”) have become a high profile recurring political and sensitive issue in France. In 1993, legislation aimed at reducing immigration and eliminating illegal immigration was met with protests in the streets by the “*sans-papiers*” (undocumented migrants) and their supporters, which gave them a new public profile. While subsequent legislation, including the latest from 2003, has continued to deter undocumented immigration, France has recently implemented two regularisation programmes in 1997-98 (79 500 regularisations out of 144 000 applications) and in 2006 (targeting undocumented migrants whose children are schooled in France, which led to 7 000 regularisations out of 30 000 applications). According to several official estimates, there are currently 200 000 to 400 000 undocumented migrants in France (Cour des Comptes, 2004). These estimates are extrapolated from a variety of sources: the number of applications to the regularisation programmes, the growth of asylum demands, and the number of users of a special public health care programme for undocumented foreigners unable to benefit from regular social security, called *Aide médicale d’État* (AME). As for flows, 30 000 to 100 000 undocumented migrants are estimated to settle in France annually, though sometimes only on a temporary basis (Cour des Comptes, 2004; Vaillant, 2006). While undocumented migrants are estimated to account for almost one in three US immigrants, they represent thus at most one in fifteen immigrants in France.

Like in the United States, the immigrant population in France has a different, younger, age structure than the total French population, but school age immigrants are relatively few. According to the 2004 and 2005 census results, about 8% of the immigrant population was under 18 (374 000 persons), representing 3% of the total population in that age group. Young immigrants represented 3% of the total French compulsory school age cohort (6-15) and 8% of the total 20-29 age cohort (the typical age cohort for participation in higher education). In 2004, 39 100 non-francophone students entered French schools (18 400 in primary school, 18 200 in middle high school, and 2 500 in upper high school); 70% of them had a foreign citizenship (and were thus probably immigrants). The French Ministry of Education estimates enrolments of foreign students in French schools at about 5% of total enrolments in 2000. However, immigrants are not equally distributed within France and within schools and are highly concentrated in some regions and schools: 40% of immigrants live in Ile-de-France (Paris and its surroundings). Moreover, given the age of arrival of immigrants, most of their children are generally not immigrants but natives.

The percentage of tertiary education graduates in the immigrant population has quadrupled between 1982 and 2005, from 6% to 24%, and is now close to the share of tertiary education graduates in the native French population (which increased from 12% to 29% in the same period). Several studies of immigrants' educational achievement within the French education system consistently show a decreasing gap between foreign and French students, and between students with no, one or two immigrant parents. But given that most immigrants arrive after school age, this increase is probably due to a great extent to the change in the qualification of recently arrived migrants. Tertiary education in France still focuses on initial training and further training of older students in higher education is probably as low for immigrants as for natives. Thirty-three per cent of the migrants who arrived in France between 1995 and 2004 had a tertiary education degree, against 27% for those arrived between 1985 and 1994. Recent migrants are thus more educated than older ones (although there has been a slight decline of tertiary education graduates in immigrants arrived in the past 5 years) (Borrel, 2006). This increase probably reflects the overall increase of educational attainment in sending countries (Teichler and Bürger, 2008), but also the recent shift in French immigration policy. In 1997, legislation was passed to provide highly skilled workers, scholars and scientists with special immigration status. Subsequent laws eased admission requirements even further for highly skilled employees and university graduates.

The access of immigrants to higher education in France is more limited than the access of the total population because immigrants have lower performance at school level and fewer immigrant students are eligible to enter higher education. According to a longitudinal cohort survey of pupils who entered middle high school in 1989 (and who were thus typically expected to enter higher education around 1997 or 1998), 46.9% of foreign pupils<sup>6</sup> against 63.7% of French pupils hold a *baccalauréat* (the degree granting access to tertiary education in France) (Cour des Comptes, 2004). The percentage was 62.3% for the full cohort, which reminds us of the modest number of foreigners in the schooling system. All indicators converge with the results of PISA 2003 (OECD, 2006e) showing that immigrant students under-perform compared to the overall and native populations, and that the gap is reduced for second-generation immigrants (that is, native French students with two immigrant parents). The difference in performance can be observed at all educational levels between immigrants, second-generation immigrants and natives, although the gap has been closed over the past decades. It can also be observed at the level of students' study paths, which are significantly different according to students' migrant characteristics (students from immigrant descent are more likely to be enrolled in vocational high school programmes, less likely to lead to higher education). The probability of leaving school without any degree is almost twice as high for a grade 6 (*sixième*) foreign student than for a French student (15.1% against 8%).

In the 1998 cohort who transited from tertiary education to work, there were 9% of students from an immigrant background (probably including some immigrant students) (Frickey, Murdoch and Primon, 2004). By comparison, about 16% of the cohort entering middle high school in 1995 had an immigrant background: 10% of the students had two immigrant parents (and may be immigrant themselves), 3.4% had an immigrant father (only) and 3.1% an immigrant mother (only) (Cour des Comptes, 2004). Students from immigrant background who managed to access tertiary education had higher drop-out rates than the overall student cohort, but with significant variations between students of different immigrant backgrounds: while 25% of all tertiary education students dropped out

without any degree, the percentage was 29% for students from southern European immigrant background against 46% for students with immigrant backgrounds from the Maghreb countries. Female students with immigrant background from Maghreb countries are the only group with more participation than their male counterparts in all tertiary education levels, including the highest tertiary education level (“advanced studies”). Tertiary education graduates with immigrant background from Maghreb countries also have more difficulty finding a job and getting a permanent job than their peers of French and southern European descent, which can be explained by discrimination in the labour market but also by a comparative lack of social capital and by their more disadvantaged family backgrounds (Frickey, Murdoch and Primon, 2004).

Most studies on educational achievement show that socio-economic background is a greater determinant of success than immigration status and that most of the difference in educational attainment can be explained by socio-economic status (Schnapper, 1991; van Zanten, 1997; Tavan, 2005; Cour des Comptes, 2004; Education et formation, 1996; Brinbaum and Kieffer, 2007). In PISA 2003, the gap between first generation, second generation immigrant and native students is also reduced for France after controlling for the socio-economic background of students, though not totally. The most significant reduction is observed for second generation immigrants (OECD, 2006e). But immigrant families are on average of lower socio-economic means, and even more so for immigrant families from Maghreb countries compared to those from southern European countries: they are more likely to be workers (40.5% against 24.7% for non-immigrants in 2002), to have lower income, to be poor (18% against 5.1% for non-immigrants), to live in overcrowded housing (28.4% against 5% for non-immigrants in 2002) (INSEE, 2005). There is also an increasing tendency to urban segregation of migrant populations within France (Fitoussy, Laurent and Maurice, 2004): using census data, Maurin (2004) finds that adolescents who have foreign-born parents generally live in a neighbourhood where the percentage of foreigners is 4 to 5 times higher than those with native-born parents – the same result holding true when they have one or two foreign-born parents. The ratio is twice as high as in the United States. Finally, all these factors result in lower access to effective social networks, in less information and understanding of the system, and contribute to less access and success of migrants in education in relation to non-migrant peers (van Zanten, 1997). While second-generation migrants do much better than immigrants in terms of access to higher education and experience upward social mobility, deliberate measures to maintain and improve the proportional representation and equality of opportunity for migrant in higher educational attainment, including in the most selective institutions, are increasingly discussed and considered as a crucial factor of social cohesion in France.

Like in the United States, undocumented migrants have more difficulties than French citizens or legal migrants to gain access to higher education. The barriers do not relate as much to the level of tuition fees though, as French citizens and foreign citizens pay the same level of highly subsidised fee. However, while nationality is not a criterion for eligibility for public maintenance grants, only documented foreigners can apply for them. Access to the first level of higher education is not totally closed to undocumented immigrants holding a French *baccalauréat*, a case that is not explicitly considered in French law. This depends instead on the admission requirements set by higher education institutions. The legal admission procedure to gain access to universities does not include a mandatory check of the legal status of immigrant students in France, but many

institutions do include one.<sup>7</sup> French universities have the autonomy to set their own admission requirements. But the anxiety associated with the possibility of being deported if their documentation status is revealed during their application process does probably discourage many from applying. Undocumented immigrants holding a foreign secondary school degree cannot gain access to university at the undergraduate level at all, as the pre-admission procedure is open only to foreigners who can produce a one-year residence document. However, this procedure does only apply to the university sector, and not to other (generally selective) higher education institutions (general or vocational). At the master's level, it all depends again on the admissions requirements of the higher education institution, including for universities. In the case of France, the admission of possibly eligible undocumented immigrant students is hindered by administrative requirements set by institutions rather than by legal barriers.

#### 9.4. Conclusion

There is accumulating evidence that the foreign-born and their children are significantly worse off than the native-born in terms of educational attainment, access to and success in tertiary education. In the context of the ageing of societies in many OECD countries, of population changes in others (with *e.g.* the white population ageing in the United States while this is not true for the overall population), and of migration growth in the past and coming decades, it is likely that immigrants will represent a higher share in OECD countries labour forces and populations in the coming decades. Migrants who relocate to developed countries constitute, in general, the demographic group which is growing at the fastest rate. According to a recent study, immigrant workers will likely account for between one-third and one-half of the total national labour force growth through 2030 in the United States (Lowell, Gelatt and Batalova, 2006). Economies will thus increasingly rely on the skills of migrants and their children.

Many experts believe that a transition towards knowledge economies is taking place and that OECD countries will increasingly need a highly skilled, tertiary educated workforce. They concur that desirable characteristics for inhabitants are that they reach high levels of education and develop their capacities to become economic and social “agents of change” within a rapidly changing, highly competitive, technology based, and most importantly, knowledge-based global environment. These requirements cannot be met merely by facilitating the migration of highly skilled people but will also require more participation in and graduation from tertiary education among migrants and their children.

The vicious circle of immigrants and their children having less access to tertiary education than natives might also raise other problems for the societies where they live. Beyond the loss of some positive social outcomes of learning for society (see *e.g.* OECD, 2006d; OECD, 2007b), one important adverse effect lies in the risk of marginalisation of this group. Education, and particularly tertiary education, is often a necessary (though not sufficient) condition for migrants and their children to experience upward social mobility as they typically lack the social capital that could help them to experience it by other means. Given that educational attainment and socio-economic background of parents are important for the success of their children, children of migrants are generally not in a good position to significantly better their social position. While not all individuals can experience the same upward mobility, it is important for social cohesion in meritocratic democracies that there is not too much imbalance between different groups of society in

terms of their access to the different positions in the society. An identifiable link between specific immigrant groups and low social positions can generate negative prejudices and stereotypes about the concerned groups in the population and make their integration more difficult over time, as these prejudices become pervasive, including in the labour market.

According to PISA 2003, immigrant students tend to be motivated learners, have positive attitudes towards school, and have high expectations about their educational attainment (OECD, 2006e). This might also be true for their parents, as a study shows in the case of France (Education et formation, 1996; Brinbaum and Kieffer, 2007). These favourable dispositions towards learning can help facilitate immigrant students' educational performance. On the other hand, the discrepancy between their expectations and the reality of underperformance might lead to some disappointment and frustration, and become a challenge to the equity principles of their society.

Governments face the difficult issue of improving the socio-economic condition of immigrants and their children and of providing access to better education for them and their children. Continued globalisation will probably lead to a continued growth of migration in the coming decades, which in turn will change the demographic composition of the population in OECD countries. Equity issues will be increasingly related to migration.

As a consequence, proactively addressing the need to increase the general level of education among the demographic segment of immigrants and their children should be considered a top priority for the future of higher education in OECD countries. First, this should rely on policies helping them to be eligible for higher education. In addition, not only should their participation in higher education be encouraged, including within the most selective of higher education institutions, but the ultimate goal of programme completion should be supported. Finally, this involves a closer statistical monitoring of the study paths and educational achievement of immigrants and their children.

## Notes

1. In PISA 2003, "natives" refer to students with one or two native parents.
2. Undocumented immigrants are not eligible for federal public benefits, such as income supplements, health care, and food stamps. Federal law also imposes harsh restrictions on lawfully present immigrants' eligibility for public benefits. Most documented immigrants cannot receive some federal benefits during their first five years or longer in the United States, regardless of how much they have worked or paid in taxes (National Immigration Law Center, 2006a).
3. In the United States, there is not a national identity card like in some other countries. Instead, a number assigned to citizens and legal residents, known as Social Security Number, is commonly used as identifier. Undocumented individuals cannot obtain this number.
4. The Illegal Immigration Reform and Immigrant Responsibility Act in Title V, Section 505 states that: "...an alien who is not lawfully present in the United States shall not be eligible on the basis of residence within a State (or a political subdivision) for any postsecondary education benefit unless a citizen or national of the United States is eligible for such a benefit (in no less an amount, duration, and scope) without regard to whether the citizen or national is such a resident." . Source: 104th Congress (1996), *Illegal Immigration Reform and Immigrant Responsibility Act of 1996*, Government of the United States of America, Washington, DC.
5. California, Illinois, New York, Utah, Washington, Kansas and Nebraska allow undocumented students to enrol in public higher education by paying "in-state" tuition. In addition, Texas, Oklahoma and New Mexico also make available financial assistance for eligible undocumented students. An updated list can be consulted at <http://educamexus.org>.
6. Foreigners are not necessarily immigrants (foreign-born with a foreign citizenship), but this will be true for a majority of them, so that this is an acceptable indicator.

7. According to a *circulaire* from March 20th 2002 the Ministry of Education need not know whether immigrants have a residence permit until their legal majority (18). As for admissions of foreign students into higher education, an inter-ministerial *circulaire* (15 October 2002) by the Ministries in charge of education, migration and foreign affairs says that “all applications should be examined substantially on an individual basis, regardless of the legal status in France of the applicant”, but asks institutions to inform foreign applicants of the entry conditions governing student visas and residence permits in France.

## References

- Benito, E. de (2006), “Uno de cada tres nuevos médicos en España ya es extranjero”, *El País*, 2 December 2006, Madrid.
- Borrel, C. (2006), “Enquêtes annuelles de recensement 2004 et 2005. Près de 5 millions d’immigrés à la mi-2004”, *Insee Première*, No.1098, Insee, Paris.
- Brinbaum Y. and Kieffer A. (2007), “Aspirations et parcours scolaires des jeunes issus de l’immigration: réussites et désillusions, transmission et rupture entre générations”, 3<sup>e</sup> Rencontres Jeunes et Sociétés en Europe et autour de la Méditerranée, Marseille.
- Bureau of Labour Statistics (2004), *Labour Force Characteristics of Foreign-Born Workers in 2003*, Economic News Release, December 1, BLS, Washington.
- Capps, R. (2001), *Hardship among Children of Immigrants: Findings from the 1999 National Survey of America’s Families*, Urban Institute.
- Capps, R., M. Fix, J. Murray, J. Ost, J. Passel and S. Herwantoro (2005), *The New Demography of America’s Schools. Immigration and the No Child Left Behind Act*, Urban Institute, Washington, DC, [www.urban.org/UploadedPDF/311230\\_new\\_demography.pdf](http://www.urban.org/UploadedPDF/311230_new_demography.pdf).
- Cour des Comptes (France) (2004), “L’accueil des immigrants et l’intégration des populations issues de l’immigration”, Paris, [www.ccomptes.fr/CC/documents/RPT/Immigration.pdf](http://www.ccomptes.fr/CC/documents/RPT/Immigration.pdf).
- Dawson, L. (2006), *A Managed Temporary Movement Program for Nurses from the Caribbean to Canada: The Short (but Interesting) Life of a Policy Advocacy Proposal*, FOCAL, Ottawa.
- De la Garza, R. et al. (1994), “Mexican Immigrants, Mexican Americans and American Political Culture”, in B. Edmonston and J. S. Passell (eds.), *Immigration and Ethnicity: The Integration of American’s Newest Arrivals*, Urban Institute, Washington.
- Education et formation (1996), “Les élèves étrangers ou issus de l’immigration dans l’école et le collège français. Une étude d’ensemble”, French Ministry of Education, Direction de l’Evaluation et de la Prospective, Paris.
- Fitoussy, J.-P., E. Laurent and J. Maurice (2004), *Ségrégation urbaine et intégration sociale*, Conseil d’analyse économique, Report No. 45, La Documentation française, Paris.
- Fix, M. (2001), “Urban Institute Tabulation of Current Population Survey”, Urban Institute, Washington.
- Fix, M. et al. (2001), *The Integration of Immigrant Families in the United States*, Urban Institute, Washington.
- Freeman, R. (2006), “People Flows in Globalization”, *Journal of Economic Perspectives*, No. 20(2), pp. 145-170.
- Frickey, A., J. Murdoch and J.-L. Primon (2004), “Les jeunes issues de l’immigration. De l’enseignement supérieur au marché du travail”, CEREQ, Bref No. 205, Marseille.
- Fry, R. (2005), *The Higher Dropout Rates of Foreign-Born Teens: The Role of Schooling Abroad*, Pew Hispanic Center, Washington.
- Haut Conseil à l’intégration (HCI) (France) (2000), *L’islam dans la République*, La Documentation française, Paris.
- Hinojosa-Ojeda, R. et al. (2000), “The US Employment Impacts of North American Integration After NAFTA: A Partial Equilibrium Approach”, unpublished manuscript, North American Integration and Development Center, School of Public Policy and Social Research, UCLA, Los Angeles, [http://naid.sppsr.ucla.edu/pubs&news/public/wp\\_012\\_01/migrationpolicyreport.PDF](http://naid.sppsr.ucla.edu/pubs&news/public/wp_012_01/migrationpolicyreport.PDF).
- Hudson, R. (2005), “Scientific Migration: A Drain, or a Gain ... or Something Else?”, *Science Business*, 24 November.
- INSEE (2004), *La France en faits et chiffres: Immigrés selon le pays d’origine*, INSEE, Paris.

- INSEE (2005), *Les immigrés en France – Édition 2005*, Paris, [www.insee.fr/fr/ppp/publications/fiche\\_ref.asp?ref\\_id=IMMFRA05](http://www.insee.fr/fr/ppp/publications/fiche_ref.asp?ref_id=IMMFRA05).
- Inter American Development Bank (IADB) (2006), *Sending Money Home: Leveraging the Development Impact of Remittances*, IADB, Washington.
- International Organisation for Migration (IOM) (2004), *International Migration Law: Glossary on Migration*, IOM, Geneva.
- Jennings, J. (2000), "Citizenship, Republicanism and Multiculturalism in Contemporary France", *British Journal of Political Science*, Vol. 30, No. 4, pp. 575-597, Cambridge University Press, Cambridge.
- Leclerc, J. (2006), *Histoire de la langue française*, Université Laval, Québec, [www.tlfq.ulaval.ca/axl/francophonie/histlngfrn.htm](http://www.tlfq.ulaval.ca/axl/francophonie/histlngfrn.htm).
- Leinbach, D.T. and T.R. Bailey (2006), "Access and Achievement of Hispanics and Hispanic Immigrants in the Colleges of the City University of New York", CGRC, Columbia University.
- Lowell, B.L., J. Gelatt and J. Batalova, (2006), "Immigrants and Labor Force Trends: The Future, Past, and Present", Migration Policy Institute, Washington.
- Marmolejo, F. (2004a), "La educación de nuestra comunidad: urgente y prioritaria", *MX Sin Fronteras*, No. 7, July, Chicago.
- Marmolejo, F. (2004b), "La educación de mexicanos en el extranjero: oportunidades para las instituciones de educación superior de México", *Educación Global*, No. 8, Asociación Mexicana para la Educación Internacional, Guadalajara.
- Maurin, E. (2004), *Le ghetto français*, Seuil, Paris.
- MRI (Migrant Rights International) (2003), "MRI Notes on the 59th Session of the Commission on Human Rights", MRI, Geneva.
- NILC (National Immigration Law Center) (2006a), "Facts About Immigrants' Low Use of Health Services and Public Benefits", NILC, Los Angeles.
- NILC (2006b), "Paying Their Way and Then Some: Facts about the Contributions of Immigrants to Economic Growth and Public Investment", NILC, Los Angeles.
- OECD (2002), *International Mobility of the Highly Skilled*, OECD Publishing, Paris.
- OECD (2004), *Internationalisation and Trade in Higher Education. Opportunities and Challenges*, OECD Publishing, Paris.
- OECD (2005), *Trends in International Migration: SOPEMI 2004*, OECD Publishing, Paris.
- OECD (2006a), *International Migration Outlook: SOPEMI 2006*, OECD Publishing, Paris.
- OECD (2006b), "The Internationalisation of Higher Education. Towards an Explicit Policy", *Education Policy Analysis 2005-2006*, OECD Publishing, Paris.
- OECD (2006c), *Education at a Glance 2006 – OECD Indicators*, OECD Publishing, Paris.
- OECD (2006d), *Measuring the Effects of Education on Health and Civic Engagement*, OECD, Paris, web publication.
- OECD (2006e), *Where Immigrant Students Succeed: A Comparative Review of Performance and Engagement in PISA 2003*, OECD Publishing, Paris.
- OECD (2007a), *Cross border Tertiary Education: A Way towards Capacity Development*, OECD Publishing, Paris.
- OECD (2007b), *Understanding the Social Outcomes of Learning*, OECD Publishing, Paris.
- OECD (2007c), *International Migration Outlook: SOPEMI 2007*, OECD Publishing, Paris.
- Paral, R. (2005), *Essential Workers: Immigrants Are a Needed Supplement to the Native-Born Labor Force*, Immigration Policy Center, American Immigration Law Foundation, Washington, [www.aifl.org/ipc/essentialworkersprint.asp](http://www.aifl.org/ipc/essentialworkersprint.asp).
- Passel, J.S. et al. (2006), *Narrative Profile with Adjoining Tables of Unauthorized Migrants and Other Immigrants, Based on Census 2000: Characteristics and Methods*, Sabre Systems, Alexandria.
- Pew Hispanic Center (2006a), *Estimado del tamaño y características demográficas de la población indocumentada*, Pew Hispanic Center, Washington.

- Pew Hispanic Center (2006b), *Estimates of the Unauthorized Migrant Population for States based on the March 2005 CPS*, Pew Hispanic Center, Washington, <http://pewhispanic.org/files/factsheets/17.pdf>.
- Reed, D. (1999), *California Rising Income Inequality: Causes and Concerns*, Public Policy Institute of California, San Francisco.
- Salt, J. (1997), "International Movements of the Highly Skilled", Directorate for Education, Employment and Social Affairs, International Migration Unit, Occasional papers No. 3, OECD Publishing, Paris.
- Schnapper, D. (1991), *La France de l'intégration: Sociologie de la nation en 1990*, Éditions Gallimard, Paris.
- Solimano, A. (2001), "International Migration and the Global Economic Order: An Overview", World Bank Policy Research Working Paper No. 2720, November, World Bank, Washington DC.
- Swail, W.S. et al. (2005a), *Latino Students and the Educational Pipeline Part II: Latino High School and Baccalaureate Graduates: A Comparison*, Education Policy Institute, Washington, [www.educationalpolicy.org/pdf/LatinoII.pdf](http://www.educationalpolicy.org/pdf/LatinoII.pdf).
- Swail, W.S. et al. (2005b), *Latino Students and the Educational Pipeline Part III: Latino High School and Baccalaureate Graduates: Pathways for the Bachelor's Degree for Latino Students*, Education Policy Institute, Washington.
- Teichler, U. and S. Bürger (2008), "Student Enrolments and Graduation Trends in the OECD Area: What can We Learn from International Statistics?", *Higher Education to 2030, Volume 1: Demography*, OECD Publishing, Paris.
- Tavan, C. (2005), *Les immigrés en France: une situation qui évolue*, INSEE, Paris.
- UNESCO (2006), *Present State of Ratifications and Signatures of the UN Migration Convention*, UNESCO, Paris.
- United Nations (2002), *International Migration Report 2002*, United Nations Department of Economic and Social Affairs Population Division, New York.
- United Nations (2006), *International Migration 2006 Wall Chart*, United Nations Department of Economic and Social Affairs Population Division, New York.
- Vaillant, E. (2006), *L'immigration*, Éditions Milan, Toulouse.
- Vernez, G. and A. Abrahamse (1996), *How Immigrants Fare in US Education*, Rand, Santa Monica.
- Weil, P. (2005), *La République et sa diversité : Immigration, intégration, discriminations*, Éditions du Seuil et La République des Idées, Paris.
- World Bank (2006), *Global Economic Prospects. Economic Implications of Remittances and Migration*, World Bank, Washington.
- van Zanten, A. (1997), *Schooling Immigrants in France in the 1990s: Success or Failure of the Republican Model of Integration?*, American Anthropological Association, Arlington, Virginia.



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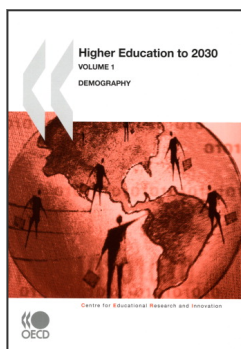
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