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## **Entrepreneurship and Migrants**



OECD Centre for Entrepreneurship,  
SMEs and Local Development (CFE)

## FOREWORD

This report presents an overview of key issues on the links between migration and entrepreneurship and proposes questions to be explored through empirical analysis. The study was conducted in the framework of the 2009-2010 programme of work of the OECD Working Party on SMEs and Entrepreneurship (WPSMEE), under Activity 1 on Globalisation, Entrepreneurship and SMEs. The work benefited from comments by the Informal WPSMEE Steering Group on Globalisation, Entrepreneurship and SMEs and by the International Migration Division of the OECD Directorate for Labour, Employment and Social Affairs (DELSA). The report incorporates comments received from delegates following the WPSMEE 36th Session.

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## **I. INTRODUCTION**

As industrialised countries face profound economic uncertainty and rising unemployment, a protectionist instinct may arise to limit international migration. That instinct is often based on the perception that the number of jobs is fixed and should therefore go toward natives rather than foreign migrants. Since the financial crisis, the United States has enacted legislation which discourages firms receiving financial bail-out funds from hiring foreign labour. The Czech Republic, Spain and Japan have each offered financial incentives for out-of-work foreign migrants to return to their native country. However, such action can be misguided, not only because migrants provide a solution to future demographic pressures and a new source of demand, but because migrants often participate in entrepreneurial activities.

This report reviews what factors influence entrepreneurship among immigrants and considers questions such as how culture influences entrepreneurship, what can enhance the success of migrant entrepreneurs and how different migration policies may help or hinder entrepreneurship. When reviewing these issues, it is important to consider different forms of migrant entrepreneurship. Some migrants start a business because they lack other employment options while, at the other end of the spectrum, often highly skilled migrants start very successful job-creating firms. This paper discusses different types of entrepreneurship and what factors can foster their success.

The document is structured as follows. Section 2 provides some background on the significance and nature of migrant entrepreneurship. Section 3 discusses what factors turn a migrant into an entrepreneur. Section 4 considers migrant involvement in high-growth, job creating firms and their contribution to innovation. Section 5 contains an overview on how migration policy differs across OECD countries and how that may have enhanced or hindered entrepreneurship. Section 6 outlines some empirical questions that can be tested and possible data sources. Finally, section 7 presents some conclusions and policy implications.

## **II. BACKGROUND**

### **Types of migrant entrepreneurship**

Immigrants in many OECD countries exhibit higher rates of self-employment than natives. Table 1 gives the self-employment rates for natives and foreign-born workers in 2007. Migrants have notably higher rates of self-employment in Belgium, France, Nordic countries, and particularly, in central and Eastern Europe. The figures measure self-employment, by no means an exhaustive measure of entrepreneurship.<sup>1</sup> It also important to note that workers classified as self-employed often only hire occasional, part-time, or seasonal workers.

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<sup>1</sup> See STD/CSTAT/STESWP(2008)5.

**Table 1. Percent of workers in self-employment**

<b>Country</b>	<b>Natives</b>	<b>Foreign-born</b>
<b>Australia</b>	16.3%	18.8%
<b>Austria</b>	9.3%	8.4%
<b>Belgium</b>	12.1%	15.5%
<b>Canada</b>	14.5%	17.5%
<b>Czech Republic</b>	15.3%	19.6%
<b>Denmark</b>	7%	9.6%
<b>Finland</b>	9.6%	14.1%
<b>France</b>	8.1%	10.8%
<b>Germany</b>	10%	9.5%
<b>Greece</b>	26.4%	10.6%
<b>Hungary</b>	10.8%	16.4%
<b>Ireland</b>	16.8%	9.3%
<b>Italy</b>	23.6%	17.5%
<b>Luxembourg</b>	5.4%	6.5%
<b>Netherlands</b>	11%	11%
<b>Norway</b>	5.8%	6.9%
<b>Poland</b>	11.2%	29.2%
<b>Portugal</b>	15.6%	12.1%
<b>Slovak Republic</b>	12.6%	26.4%
<b>Spain</b>	16%	11.7%
<b>Sweden</b>	8.5%	10%
<b>Switzerland</b>	12.4%	9.1%
<b>Turkey</b>	21.5%	18.2%
<b>United Kingdom</b>	11.9%	13.4%
<b>United States</b>	9.9%	10.2%

Source: OECD Migration Outlook 2009.

The high rates of migrant self-employment may indicate very different situations, as migrant entrepreneurship can be as diverse as migrants themselves. The scope, size and the nature of the businesses created by migrants varies with a migrant's skills and background. Some migrants start a business because they lack other employment alternatives. This tends to be the case for lower-skilled migrants who might have a small store, restaurant, day care, or laundry. Such ventures may not directly provide as much value added. They typically employ less than five people and have limited growth potential. These small businesses also tend to face very high death rates and provide low income. They may also facilitate the isolation of migrants, delaying their integration.

Though, according to a 2006 OECD report, such ventures generate a non trivial amount of economic activity. In 2005, minority owned-enterprises made up 20% of London's businesses, employed 56 000 people and generated GBP 90 billion in revenue which accounted for 11% of all business revenue in London. Racial and ethnic minorities are often migrants in Britain. Further, these small scale ventures do

offer benefits from their second order effects. These businesses provide low cost services to natives which can enhance economic growth.

Such ventures may also be a preferable alternative to unemployment. While the business may have limited growth prospects, it does provide some income. According to Borjas (2006) some economic success of the household can be instrumental to ensuring the success of a migrant's children.

The *2009 OECD Migration Outlook* cautions that migrant-owned business may now be exceptionally vulnerable. Many migrants start businesses in tourism, restaurant, wholesale and construction, and these industries have been disproportionately affected by the recession. In Spain, between June 2008 and February 2009, the number of self-employed immigrants fell by nearly 10%, while unemployment rose substantially. Also, tightening credit and lower consumption demand makes it harder for migrants to start or stay in business.

Another notable type of migrant entrepreneurship comes from a typically skilled migrant whose business grows rapidly into a large firm. Such ventures, known as high-growth firms, account for most of the job growth in many OECD countries. At least in the United States, high-skilled immigrants often are their founders. According to Wadhwa et al. (2007), 25.3% of technology and engineering firms founded in the United States between 1995 and 2005 had at least one key founder who was foreign born. In Silicon Valley, a centre of technological innovation, more than half of technology and engineering firms had a migrant founder. Different types of migrant businesses can fall anywhere in the spectrum between high-growth and small, low-skill businesses. For example, some skilled migrants are self-employed as a doctor or dentist.

### **Crowd-in or crowd-out native entrepreneurs?**

Migrants often have higher rates of self-employment than natives. But do migrant ventures possibly crowd out natives from entrepreneurship? On all ends of the typology spectrum the answer appears to be no. Fairlie and Mayer (1997) did not find evidence that black American self-employment rates were any lower in poorer areas with many migrant-owned businesses.

Borjas (2005) found high-skill migrants can lower the wages of native skilled workers by increasing the pool of skilled labour. But more high-skill migrants can also increase the pace of innovation in aggregate, and perhaps for natives. In the United States, Kerr and Lincoln (2008) found that increasing the number of H1-B visas<sup>2</sup> granted to Chinese and Indian migrants increased the number of patents granted to migrants, while there was no evidence this decreased the number of patents granted to native born innovators. There was even some evidence of more patents granted to innovators with Anglican surnames. Kerr and Lincoln results suggest some evidence of a crowding-in effect in innovation from more migration. Hunt (2008) also found having more skilled immigrants increases the number of patents. She found they may crowd-out the number of patents filed by natives in the short-run, but she finds some evidence suggesting crowding-in over the long run.

### **III. WHAT MAKES A MIGRANT BECOME AN ENTREPRENEUR?**

Because entrepreneurship can be an engine to sustainable economic growth, numerous studies speculate on what factors compel someone to become an entrepreneur. The common reasons why a migrant, or anyone, might attempt entrepreneurial activity are: cultural and personal predispositions, a regulatory environment supportive of entrepreneurship, if they have commercially viable business idea,

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<sup>2</sup> Temporary work visas granted to skilled foreigners in the United States

access to capital and alternative employment options. These factors can have particular implications for migrants and explain why they often become entrepreneurs.

## Culture

Cultural predisposition plays a large role in determining whether someone decides to start a new business. It can influence risk aversion and the ability to trust others, each crucial to embarking on entrepreneurial activity. A culture of entrepreneurship can result from a particular ethnic groups' history of discrimination. For example, Jews descended from Middle Age Europe have strong entrepreneurial traditions and history of discrimination that forbade them from entering guilds. The legacy of Jim Crow laws in the United States (which prohibited business ownership) may explain the lower rates of entrepreneurship among black Americans. Even if these groups no longer face the same discrimination, an attitude toward risk and entrepreneurship can persist and be passed down within the family and community. According to Hout and Rosen (1999) the human capital necessary to become a successful entrepreneur (low levels of risk aversion and business savvy) is inherited from parents. They found having a father who owned a business significantly increases the probability of being self-employed.

If a migrant comes from a more entrepreneurial culture, he may be more likely to start a business than natives in his host country. Hout and Rosen found that while being an immigrant increases rates of self-employment, immigrants with self-employed parents are no more likely to become entrepreneurs than other immigrants. This suggests the migrant effect may be stronger than the parent effect. There may also be some selection bias amongst migrants. Many migrants (particularly foreign students and labour migrants) left their home country, often in pursuit of better economic opportunity. So they are by definition more ambitious, independent and less risk averse than many of their counterparts who stayed in their native country.

If different cultures are more predisposed to entrepreneurship, you might expect certain nationalities to have higher self-employment rates. Tables 2 and 3 give self-employment rates among immigrants in the United States and Germany respectively, by country of origin.

**Table 2. Self-employment rates in the United States by country of origin**

Country of origin	% paid-workers in self-employment in the US	Number in paid employment in the US
<b>Native</b>	11.5%	53 133
<b>Europe</b>	15.3%	1 126
<b>Africa</b>	8.7%	283
<b>Mexico</b>	7.8%	2 411
<b>Canada</b>	14.7%	215
<b>South America</b>	9.4%	2 015
<b>Asia/Oceania</b>	12.6%	2 230
<b>Middle East</b>	21.3%	203
<b>India/Pakistan/Bangladesh</b>	9.5%	373
<b>East Asia</b>	17.6%	979

Source: Current Population Survey, January 2007.

**Table 3. Self-employment rates in Germany by country of origin**

<b>Country of origin</b>	<b>Self-employment rate (as a % of employed) in Germany</b>	<b>Total population employed (in thousands) in Germany</b>
<b>Natives</b>	11.20%	31 804
<b>Europe</b>	10.42%	3 781
<b>EU-27</b>	13.72%	1 815
<b>Greece</b>	16.24%	197
<b>Italy</b>	12.28%	391
<b>Poland</b>	15.53%	322
<b>Romania</b>	7.50%	120
<b>Other Europe</b>	7.38%	1 966
<b>Bosnia and Herzegovina</b>	4.35%	138
<b>Croatia</b>	6.88%	189
<b>Russian Federation</b>	5.24%	248
<b>Serbia</b>	6.88%	160
<b>Turkey</b>	8.16%	968
<b>Ukraine</b>	8.70%	69
<b>Africa</b>	8.84%	181
<b>Americas</b>	13.99%	143
<b>North America</b>	15.49%	71
<b>Asia, Australia and Oceania</b>	14.56%	577
<b>Middle East</b>	11.79%	263
<b>South- and Southeast Asia</b>	16.82%	105

Source: Federal Statistical Office of Germany: Migration in Germany 2007, Results of the Micro Census, Fachserie 1, Reihe 2.2, Table 16, Wiesbaden 2008.

It appears in Germany and the United States that certain nationalities are more prone to self-employment. The Swedish Agency for Economic and Regional Growth also found similar patterns of entrepreneurship among Swedish migrant groups. Migrants from Southern Asia tend to have higher rates of entrepreneurship in Sweden, as they do in Germany and the United States. Migrants from South America, in all three countries, appear to have lower rates of entrepreneurship compared to other nationalities and natives. The figures above do however not include underground business. If a migrant is self-employed, but works illegally he/she will not be included. This may understate the incidence of self-employment for certain groups in countries like the United States, which, according to the *2009 OECD Migration Outlook*, has a significant population of undocumented workers.

It may be that certain cultures import their entrepreneurial ambitions or that some groups face more difficulty in labour market in their host country and pursue entrepreneurship as an alternative. Galloway (2006) found that immigrants from certain countries were more likely to move out of poverty in Norway. That may be explained by culture or the circumstances under which migrants from particular countries immigrate. For example, asylum seekers have access to more social programs in Norway than family or labour migrants. A more rigorous empirical analysis that controls for how long the migrants have been in the host country, their immigration status (economic, humanitarian, or family) and their personal characteristics will be necessary to better understand the relationship between nationality and self-employment.



## **Social networks**

Access to a cohesive social network also tends to spur entrepreneurship. Migrants tend to form tight social networks with fellow nationals. These networks can facilitate entrepreneurial activity by providing capital, support, knowledge and a supply or customer base. Mentoring, access to sufficient capital and a reliable supply and customer base are often key factors in the decision to undertake an entrepreneurial endeavour. These networks can also make up for the fact that migrants often do not have the contacts and local understanding of regulations and culture that natives often do. Social networks have been known to enhance business relationships and encourage trade. According to Saxenian (2002) some of the Chinese and Indian business associations give seminars on language, negotiation and stress management.

## **Lack of other job options**

For low-skill immigrants a lack of other employment opportunities might drive entrepreneurial activity. Migrants typically have lower rates of employment, labour-force participation and earn lower wages than natives. This is often due to language barriers, employers' inability to recognise foreign credentials, lack of contacts in the domestic market (so migrants do not hear about job opportunities or obtain references) and racial or ethnic stereo-typing. Entrepreneurship circumvents these obstacles. The new venture can even provide jobs for other migrants, facing the same challenges. According to Oliveria and Rath (2008), a structural shift away from unskilled labour in the 1970s and 1980s, which decreased the number of unskilled jobs available, can account for much of the increase in migrant entrepreneurship in Europe. Unskilled migrants, left with few other job options, became more likely to start their own business. Fairlie (2008) found, in the United States, that uneducated migrants were much more likely to start a new business than uneducated natives. The relationship between being a business owner and years of education follows a U-shaped pattern for migrants, while for natives the probability of owning a business increases monotonically with years of education.

## **Regulation in host country**

The nature of regulation in the host country also can influence a migrant's decision to become an entrepreneur and how successful they are at it. Klapper, Laeven and Rajan (2006) conducted a cross-country comparison and found entrepreneurship levels can largely be explained by different institutional regulations across European countries. Regulations impose higher costs to starting a business. For example: due to prohibitive institutional barriers, Italy has had lower firm birth rates than the United Kingdom, France or Germany. These costs may be even higher for migrants because they are more likely to be unfamiliar with the laws and regulations in their host country. Klapper et al. relied on data from limited liability companies and regulatory costs from 1998 to 1999, so their results do not reflect the changes in regulation enacted in Europe during the last decade. The OECD Product Market Regulation Indicators, last updated in 2008, quantify the extent of regulations. It includes barriers such as the regulatory costs to starting a business. It finds many EU countries have relaxed their regulatory burdens since 1998. Italy, in particular, has relaxed many of its regulatory burdens. It would be interesting to see how entrepreneurship has fared there under the new regulatory regime.

Ardagna and Lusardi (2008) also cite regulatory barriers as one of the primary determinants of entrepreneurship. Regulation determines ease of entering a market, contract enforcement and access to capital. They find each of these can have a profound effect on the decisions to be an entrepreneur, at times dominating entrepreneurial personal characteristics. Regulatory impediments on entry and contract enforcement can be particularly burdensome for migrants. Regulation can also enhance a fear of failure. Some European countries might have lower rates of entrepreneurship than the United States because bankruptcy laws mean tougher punishment for failure. For example, Germany has had a law that anyone who declared bankruptcy is forbidden from ever serving as a CEO.

## **Access to capital**

Access to capital also can be a major constraint when it comes to starting or growing a business. According to Oliveira and Rath (2008) migrants who have poor language skills and are a racial or ethnic minority face additional constraints when it comes to obtaining capital in traditional credit markets. The Swedish Agency for Economic and Regional Growth found that in Sweden foreign-born small business owners are twice as likely to have their application for loans or credit rejected as natives. They are also less likely to apply for credit, just 29% of foreign-born small business owners applied for and received it, compared to 40% of natives. This may be because migrants face discrimination or often lack the credit history, collateral, or perhaps a co-signer on the loan that natives might.

Oswald and Blanchflower (1998) maintain the primary factor in determining whether or not someone starts business is access to capital. They found individuals who receive inheritances and gifts are more likely to become entrepreneurs. Many new businesses get their start up capital from personal savings or angel investors. Angel investors typically provide capital to a relative or close friend. Migrants may not have the same access to angel investors because members of their extended family live in their home country and may have less wealth. If they are new migrants, or have not had success in the labour market, they may have a smaller stock of savings to start a business.

Alternatively, migrants tend to form tight social networks of fellow nationals. This may facilitate obtaining capital. In a survey of Silicon Valley entrepreneurs conducted by Saxenian, Motoyama and Quan (2002), one third of migrant respondents named their associations through social and business networks as providing a major source of capital. The Swedish Agency for Economic and Regional growth found that foreign entrepreneurs are less likely than natives to start a business using their own savings, and more likely to rely on friends or family for start-up capital. A reliance on social networks may over-come some of the difficulties migrants have securing the capital needed to start and grow a business.

Though even for the Silicon Valley, high-skill migrant obtaining capital can be difficult. According to Saxenian et al. (2002) 47% migrants cited access to investors as the primary source of difficulty in obtaining financing, compared to 39% of native born business owners. The Swedish Agency for Economic and Regional Growth found foreign business owners were significantly more likely to cite access to external equity capital and loans as a major hurdle to expansion than natives.

## **Success rates**

Another important question is if migrants are more likely to be successful entrepreneurs. Low-skilled migrants face many challenges in their host country. They may lack language skills and familiarity with local laws and markets. Heibert (2008) found many Canadian migrants started business, had difficulty adjusting, became frustrated with local regulations and taxes, and ultimately closed their businesses.

Being from certain ethnic groups also may enhance the probability of successful entrepreneurship. Iyer and Schoar (2008) look at the market for wholesale pens in India amongst three different ethnic groups. They found the Marwari group, known for being particularly business savvy, were better at fostering long term business relationships, especially within their own community, than other ethnic groups. Migrants from certain countries also may be more prone to success for a variety of reasons. Research by Galloway (2006) found that migrants in Norway from Sri Lanka and Vietnam are more likely to escape poverty than migrants from Pakistan or Turkey. That may be because migrants from the former group are more likely to come as refugees and therefore are entitled to more financial and educational resources when they first arrive. The latter group typically comes under family or labour migration and are not entitled to the same benefits. Different ethnic groups also may face more discrimination than others.

Table 4 presents the ratio of firm openings to firm closures by nationality in Germany, from 2005 to 2008. In each year the ratios are higher for most foreign groups than native Germans. It is important to note that the data do not control for how long the business has been in operation or how long the migrant has been in Germany.

**Table 4. Ratio of firm births to firms closures in Germany by founders country of origin**

Nationality	2005	2006	2007	2008	Number of new enterprises 2008
<b>German</b>	<b>1.07</b>	<b>1.04</b>	<b>0.96</b>	<b>0.91</b>	<b>288 718</b>
Greek	0.82	0.84	0.75	0.74	2 195
Italian	0.93	0.91	0.88	0.88	4 392
EU-15-Countries without Germany	0.99	0.99	0.96	0.96	13 903
10 newly acceded EU-Countries (since 1 May 2004)	3.02	2.20	1.48	1.16	35 727
EU-25-Countries without Germany	1.85	1.69	1.30	1.10	49 630
Russian	1.58	1.66	1.77	1.56	1 452
Turkish	1.05	1.02	0.97	0.98	13 243
Other European Countries (Non EU-25)	1.16	1.14	1.41	1.30	38 564
African	1.20	1.18	1.18	1.10	1 771
American	1.30	1.31	1.22	1.17	1 426
Asian	1.28	1.18	1.19	1.09	8 285
Australia and Oceania	1.06	1.10	1.60	1.57	96
Foreign enterprise owners	1.44	1.39	1.29	1.15	101 909

Source: Federal Statistical Office of Germany: Business Notification Statistics, Wiesbaden 2009; Calculations of IfM Bonn.

Many of the foreign groups, particularly, from Eastern Europe have much higher ratios than native Germans. The high ratios of Eastern European countries might reflect how many Eastern Europeans moved to Germany and started a business during the period, rather than signifying their relative success. Also, migrants often start businesses in the service sector, while natives are more likely to have businesses in manufacturing. Migrants also may maintain a failing business longer because they have fewer work alternatives. Further empirical investigation is necessary to study the relative success rate of foreign migrant founded businesses. Still the higher ratios of the foreigners suggest migrant owned businesses are becoming a larger part of the German economy. The same may be true in other OECD countries. According to the Center for an Urban Future, in New York City between 1990 and 2000 the number of self-employed migrants increased by 53%, while the number of self-employed natives declined by 7%.

When it comes to globalisation and taking advantage of foreign markets, migrants may have an advantage. According to a 2008 OECD report on barriers to internationalisation of SMEs, the primary constraints are: access to adequate capital, a lack of awareness of foreign business opportunities, limited knowledge of foreign markets, few foreign contacts and an ability to communicate with foreign customers. A migrant is better poised to overcome many of these obstacles because he has the contacts and understanding of at least one foreign market, his country of origin. According to Saxenian (2002) much of the remarkable success of some Silicon Valley entrepreneurs can be attributed to their ability to exploit opportunities in foreign markets quickly.

Even on the lower end of the skill spectrum, a migrant can take advantage of globalisation. A migrant has the knowledge, skills and authority to offer new goods and services from their native country, for example: *doner kebab* shops in Germany or Chinese restaurants in France.

#### **IV. MIGRANTS, HIGH GROWTH FIRMS AND INNOVATION**

As mentioned in the previous section, the relative success of migrant-owned businesses is an important policy question. One notable aspect of successful migrant businesses is the extent to which migrants are involved in extremely successful high-growth firms. High-growth firms account for a disproportionate number of new jobs in OECD member countries. At least in the United States, it has been found that migrants are founders of a non-trivial fraction of firms in high-growth industries. Less is known about migrants' contributions in other OECD countries. If migrants are often the founders of high-growth firms, migrant entrepreneurship can be an important source of job creation for both migrants and natives.

##### **What are high-growth firms and why are they significant?**

One of the most elusive questions in entrepreneurial literature is what factors make a new enterprise, which almost always starts out small, grow quickly into a large and successful firm. Such firms are known as high-growth firms. There are different ways of defining and measuring high-growth firms. The OECD has recently developed definitions based on either the growth rate of jobs created or turnover. A high-growth firm is defined here, using the OECD definition, as an enterprise, which experiences average annualised growth rate of at least 20% a year, over a three-year period. Also, the OECD definition considers only enterprises with more than 10 employees.<sup>3</sup>

High-growth firms are important because they disproportionately account for the creation of new jobs in OECD member countries. According to a 2002 OECD study in France, Italy, the Netherlands and Greece, between 50% and 60% of employment gains can be associated with high-growth firms. According to Acs, Parsons and Tracy (2008) who looked at the United States economy, high-growth firms accounted for almost all job and revenue growth between 1994 and 2006. Despite their contribution to job growth, high-growth firms make up a small fraction of businesses. The table below gives the percent of firms that are high growth, measured using an increase in employment, and are gazelles (firms that experience their employment growth in their first five years of existence).

When it comes to migration policy, to what extent migrants start or contribute to the success of these firms is an interesting question. If many high-growth firms are founded by foreign migrants, migrants may play an important role in job creation in their host country. At least in the United States, migrants are often involved in high growth firms. According to the Centre for an Urban Future, at least 22 out of the 100 fastest growing companies in Los Angeles had a migrant founder. Wadhwa et al. (2007) found about one quarter of science and technology firms have at least one foreign-born founder.

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<sup>3</sup> See Eurostat, OECD (2007), *Eurostat-OECD Manual on Business Demography Statistics*.

**Table 5. Rate of high-growth firms and gazelles, 2006**

as a percentage of all enterprises with ten employees or more

Country	High growth rate	Gazelles rate
Canada (2005)	3.5%	0.5%
Denmark(2005)	2.9%	0.6%
Finland (2005)	2.9%	0.6%
Italy	8.1%	0.4%
Luxembourg	4%	0.9%
Netherlands (2005)	3.6%	0.1%
New Zealand	3.9%	0.5%
Norway	3%	0.4%
Spain	4.3%	0.8%
Sweden	4%	0.3%
United States	5.5%	0.2%

Source: OECD, Measuring Entrepreneurship. A Collection of Indicators, 2009.

High-growth firms can be found in all industries and regions. The table below gives the high growth rate by industry for some OECD countries around the year 2006. It shows all industries experience high growth, but it tends to be slightly more prevalent for some countries in professional services, including technology and science (ISIC code 65 and higher), with the notable exception of the construction industry. The high-growth rate in the construction industry may have been driven by the real estate boom that occurred during this period in some of the countries listed below, such as Spain and the United States. This is also reflected in high-growth rates of the real estate service sector (ISIC code 70 to 74).

**Table 6. Rate of high-growth firms by Industry, 2006**

as a percentage of all enterprises with ten employees or more

ISIC code	Denmark (2005)	Finland (2005)	Italy	Netherlands (2005)	New Zealand	Norway	Spain	Sweden	United States
10_14: Mining and quarrying	0.0%	1.8%	6.1%	0.0%	3.1%	4.2%	4.2%	1.4%	9.5%
15_37: Manufacturing	1.7%	1.7%	8.0%	2.2%	3.7%	2.5%	2.8%	2.9%	5.8%
40_41: Electricity, gas and water supply	0.0%	0.0%	10%	0.0%	2.4%	4.4%	3.9%	4.5%	2.5%
45: Construction	2.4%	3.0%	11.7%	1.7%	5.3%	3.0%	5.4%	4.0%	8%
50_52: W/sale and retail trade, repair of motor vehicles/cycles, personal and h/hold goods	2.9%	2.8%	5.5%	3.0%		2.1%	3.7%	2.9%	4.3%
55: Hotels and restaurants	2.2%	3.4%	3.7%	5.3%	2.5%	2.8%	3.5%	2.7	3.3%

ISIC code	Denmark (2005)	Finland (2005)	Italy	Netherlands (2005)	New Zealand	Norway	Spain	Sweden	United States
<b>60_64: Transport, storage and communications</b>	4.2%	2.8%	9.1%	4.2%	5.5%	4.5%	5.0%	5.0	6.7%
<b>65_67: Financial intermediation</b>	3.7%	2.7%	16.3%	4.5%	7.5%	5.8	5.9%	3.7	5.6%
<b>70_74: Real estate, renting and business activities</b>	4.5%	5.0%	8.8%	6.2%		4.7%	5.8%	6.4%	7.1%

Source: OECD, Measuring Entrepreneurship. A Collection of Indicators, 2009.

There is evidence, in some countries, that high-growth firms tend to be more innovative (have some R&D activities) than typical firms. Sometimes R&D activities can be prohibitively expensive for small firms. But research used toward innovation can also occur at a university and later adopted by the new business venture. Research by Hunt (2009) found immigrants who came to America initially as students, particularly at the graduate or post-doctoral level, have higher rates of patenting, commercializing patents and publishing than natives. Much of the difference she found can be explained by the fact that the foreign students tended pursue more education and be in the sciences and engineering fields compared to natives. Though Hunt did find that these migrants are more likely to commercialise their innovation and start a business even after controlling for education levels and field of study.

In the United States, high-growth firms are often at least partially owned by someone other than the founder. That is probably because firms with equity finance have more capital to fund expansion. Also an ability to attract equity investors may be an indicator of a well run company and growth potential. High-growth firms also typically have strong networks providing a base of customers, suppliers and access to capital. On the one hand this may be challenge to migrants who are relatively new to the host country. They may also be less familiar with the ways of doing business which might hinder the process of obtaining equity finance. One the other hand, the tight social networks that foreign migrants form amongst themselves may aid financing and building relationships in the early business stage.

Another factor that typically limits the growth of SMEs is an inability to take advantage of global markets. According to a 2008a OECD study, the main barriers toward globalisation for SMEs are lack of capital, ability to identify foreign investment opportunities, lack of understanding of domestic markets, inability to contact foreign costumers, difficulty in obtaining foreign representation, lack of managerial capacity and excessive transport costs. Foreign migrants are in a unique position to overcome many of these hurdles. By definition they were born in a foreign market. This often leaves them with contacts there and an understanding of its market. According to Saxenian et al (2002), it is typical for migrant founders to trade with their country of origin. The Swedish Agency for Economic and Regional Growth found 22% of foreign-owned business target their goods and services, at least partially, for the international market, compared to 15% of natives.

Less is known about the profile of the typically high-growth firm founder. Wahwa et al. (2009) surveyed founders of successful (meaning they have been in existence for several years) science and technology firms in the United States and found about 95% had at least an undergraduate degree. Restricting data to the science and technology fields probably biases the level of education of successful firm founders. Success in these fields often requires some academic training. There may be more disparate levels of education in other industries which often contain high-growth firms, such as construction. Nonetheless, successful firm founders may be presumed to often be better educated. More education can

increase the size of an entrepreneur’s network, his ability to secure capital, navigate regulatory hurdles and enhance his command of the local language. Heibert (2008) found in Canada that having more education increased a migrant’s probability of starting a successful business.

The foreign entrepreneurs in Sweden also tend to be more ambitious, 86% of foreign small business owners hope to expand their business, compared to 76% of natives. Also, 65% of foreign-born small business owners aspire to hire more employees as part of their expansion, compared to just 48% of Swedish-born small business owners.

## Innovation

An ability to innovate, either finding new production methods or products and services, can spur the creation of new firms which wish to capitalise on the new technology. Thus the relationship between migrants and innovation is an interesting question that can have many implications for job-creating entrepreneurial activity. Table 7 below gives the percent among the science and engineer population that is foreign-born for some OECD member countries from the 2000 census. Relatively recent movements of skilled labour to Europe are not reflected in the data currently available. Even still, in many countries a significant fraction of the science and engineering population is foreign-born. One might expect more recent data to reveal even more foreign born scientists and engineers in many OECD countries.

**Table 7. Immigrants as a % of engineers and scientists**

Country of residence	
Australia	41.5%
Austria	12.5%
Canada	35.3%
Czech Republic	6.3%
Denmark	7.9%
Finland	2.5%
Greece	12.7%
Hungary	6.9%
Ireland	19.1%
Mexico	1.1%
New Zealand	24.9%
Norway	8.7%
Slovak Republic	3.6%
Spain *	5.8%
Sweden	17.7%
Turkey	4.2%
United States **	21.1%
OECD - Total	15.5%

Source: OECD Data base on Immigrants in OECD countries (DIOC) 2000.

Notes: \* includes only engineering \*\* Field of study not available, included engineering and science occupations

In Canada, according to the Survey on Financing Small and Medium enterprises, 67% of SMEs are founded by native English speakers, 18% are founded by native French speakers, and 15% are founded by someone whose mother tongue is neither French nor English (an imperfect measure of being a foreign migrant). But when one looks at firms who spend at least 20% on R&D activities, 60% are English speakers, 19% are French speakers, and 21% are non-native English or French speakers. That suggests migrants are more likely to have a small business which puts a greater fraction of their resources towards R&D.

Hunt (2009) found immigrants who came to America initially as students or as skilled-temporary labour migrants have higher rates of patenting, commercializing patents and publishing than natives. She found, among a population of people with masters degrees and doctorates, that migrants were significantly more likely to start a business than natives. She notes that among natives in the United States, advanced degree holders typically do not start businesses. This suggests immigrants are more likely to use their credentials to start new businesses. She also found migrants who initially entered the United States with a permanent residency visa, often family migrants in the United States, do not outperform natives. In another paper, Hunt (2008) also found migrants who studied in the United States tend file more patents than migrants who gained their credentials abroad. Her results suggest attracting educated migrants, often who come as students, can boost the rate of innovation and commercialising the new discoveries.

Even low skill migration can enhance productivity. Peri (2009) found a positive correlation between productivity gains and migrant inflows between 1960 and 2006 in the United States. He found more immigration increased productivity, but not necessarily because migrants engaged directly in innovation. Many of the migrants in his sample had few skills and took menial jobs. He found this resulted in a more efficient allocation of skills to jobs. A larger pool of unskilled labour resulted in natives working in more capital and communication oriented industries; jobs better suited to their education level. The more efficient allocation of labour resulted in increased total factor productivity. Unfortunately, most of the evidence on migrant innovation comes from the United States. Less is known about the relationship in other OECD member countries.

Mare, Stillman and Fabling (2009) estimate the relationship between the probability that a firm successfully innovates (on both new products and new production process) and the fraction of migrants in region where the firm is located. They did not find a significant relationship between the two. This result is quite different than work by Hunt (2008) and Kerr and Lincoln (2008) who, using at patent filings as an indicator of innovation, found a positive correlation between the pace of innovation and skilled immigrants in the United States. The difference may be because Mare et al. measure the number of migrants in a region, but not how much of the work force at the innovative firm is foreign. Also rather than looking at patent filings, they measured innovation at the firm level which is not directly comparable. The results may also differ because many skilled migrants in New Zealand come to work temporarily. It is not clear how many migrants pursue work in their field during their stay or how much work experience they have when they arrive. Hunt (2009) found that it was the migrants who came as skilled labour (with a job offer) or to pursue an advanced degree who were the most innovative. Mare et al only looked at the local migrant population, this does not control for how involved migrants are in the innovative process.

## **V. MIGRATION POLICY AND ENTREPRENEURSHIP: SOME RELEVANT ISSUES**

The relationship between migrants and entrepreneurship suggests migration policy can have a meaningful impact on the level of and scope of entrepreneurship in OECD countries. As discussed in earlier sections, migrants from particular countries and backgrounds, or migrants in general, may be more prone to entrepreneurship. But it is important to keep in mind the type of migration a country promotes can influence the scope of entrepreneurship. If a country promotes more family or humanitarian migration they



can expect a different type of entrepreneurship than typically comes from skilled labour migrants. This suggests the appropriate policies, meant to promote entrepreneurship, must suit a particular country's migration profile.

Certain countries, particularly traditional settlement countries, Australia, New Zealand, Canada and the United States, have had large stocks of migrants. But demographic pressures, the fall of the Soviet Union and the free movement within the European Union has resulted in more migration to European countries. Japan and Korea have much lower rates of migration than the OECD average. The table below gives the net migration rate for some OECD countries between 1998 and 2007.

**Table 8. Net Migration rate per 1000**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Australia	4.76	5.50	5.79	7.01	5.60	5.54	5.29	6.72	8.79	10.26
Austria	1.06	2.48	2.16	4.10	4.12	4.91	6.22	5.39	2.91	4.18
Belgium	2.06	2.66	2.45	3.44	4.00	3.86	4.16	4.45	4.81	..
Canada	3.88	5.20	6.49	8.10	7.02	6.67	6.64	7.04	6.88	7.26
Czech Republic	0.92	0.85	0.64	-0.84	1.20	2.53	1.82	3.54	3.41	8.12
Denmark	2.07	1.69	1.69	2.24	1.67	1.11	0.93	1.22	1.83	4.23
Finland	0.58	0.58	0.39	1.16	0.96	1.15	1.34	1.72	1.90	2.46
France	0.77	1.02	1.19	1.43	1.59	1.66	1.73	1.55	1.48	1.13
Germany	0.57	2.46	2.03	3.30	2.65	1.73	1.01	0.96	0.28	0.53
Greece	5.08	4.14	2.66	3.47	3.46	3.27	3.71	3.51	3.59	3.57
Hungary	1.66	1.66	1.66	0.98	0.39	1.58	1.78	1.69	1.89	1.39
Iceland	3.21	4.04	6.10	3.40	-0.96	-0.46	1.81	13.01	17.30	16.48
Ireland	4.48	6.35	8.43	10.04	8.39	7.76	11.55	15.87	..	..
Italy	1.61	1.75	3.13	2.18	6.07	10.59	9.59	5.17	6.40	..
Japan	0.31	-0.10	0.30	-0.40	0.53	-0.27	-0.41	0.01	0.03	-0.35
Luxembourg	9.61	10.87	8.21	2.48	5.83	11.96	9.60	13.11	11.42	12.50
Netherlands	2.75	2.55	3.38	3.17	1.51	-0.02	-1.00	-1.68	-1.92	-0.35
New Zealand	-1.65	-2.34	-2.93	2.49	9.66	8.67	3.67	1.69	3.58	1.42
Norway	3.16	4.26	2.00	1.77	3.75	2.41	2.83	3.89	5.15	8.49
Poland	-0.34	-0.37	-0.52	-0.44	-0.47	-0.37	-0.24	-0.34	-0.94	-0.52
Portugal	3.16	3.74	4.60	6.31	6.75	6.13	4.48	3.60	..	..
Slovak Republic	0.24	0.27	0.27	0.19	0.17	0.26	0.53	0.63	0.72	1.30
Spain	3.10	4.86	8.94	10.07	15.68	14.47	14.73	15.00	14.24	15.95
Sweden	1.24	1.58	2.82	3.26	3.47	3.24	2.78	2.99	5.62	5.90
Switzerland	0.17	2.26	2.82	5.79	6.72	5.86	5.41	4.84	5.21	9.93
United States	4.21	4.36	4.56	3.84	3.70	3.01	3.08	3.31	3.24	2.88

Source: OECD Population and Vital Statistics Dataset (a subset of the Annual Labour Force Statistics Database.)

Many countries have experienced increased flows during this period. Some; Australia, Austria, Canada, Iceland, Ireland, Luxembourg, Norway, Spain, Sweden, Switzerland, the Czech Republic and Italy; have experienced notable changes in their population from migration during the last decade. Countries like Poland experienced more emigration than immigration, resulting in a net loss. This was often free

movement to Western Europe. The recent downturn, which has tightened labour markets, may reverse some of the trends seen above.

### Where do migrants typically come from?

Traditionally, OECD countries have had very different migration policies resulting in flows of migrants from particular countries with different skill levels. The table in the appendix summarizes some aspects of the current immigration policies in OECD countries that can impact migrant entrepreneurship.

Table 9 gives the immigrant population (meaning it includes information from households who are foreign born) as a percent of the total population in 2000. The table also includes the number of immigrants from different regions as a percent of total immigration. The data come from the OECD Database on International Migration in member countries, which is collected from censuses conducted in OECD member countries carried out about every ten years. These data provide some of the most detailed and consistent information on the stocks of immigrants across OECD member countries. Dumont and Lemaitre (2005) provide a complete description of the data set. As the data is collected every ten years, the data set does not reflect the change in policies and increase in flows that occurred in the last decade.

In the United States most migration comes from Latin America and East Asia. In the European Union most migration has been free moving migration, migration that comes from other EU countries, often from new member countries from Eastern Europe. This type of migration often winds up being temporary. Extra-European migration to Europe often comes from countries that have a colonial history and share a common language. For example, France has many migrants from Northern Africa, the United Kingdom from Pakistan and India and Spain (which has historically restricted migration) from Latin America. The small amount of Japanese immigration tends to be ethnic Japanese migrants from South America. As mentioned earlier, the country of origin can have important implications for entrepreneurship because different cultures may be more predisposed to entrepreneurial activity.

**Table 9. % population foreign-born and % of immigrants by country of origin**

Country of residence	% foreign-born	Africa	Asia	Europe	North America	Oceania	South and Central America and Caribbean	Other and unknown places of birth
Australia	26.0%	4.3%	27.0%	54.4%	1.8%	10.5%	1.9%	0.0%
Austria	13.8%	2.4%	6.4%	89.1%	0.8%	0.2%	1.1%	0.0%
Belgium	12.0%	22.8%	6.1%	67.6%	1.4%	0.1%	2.0%	0.0%
Canada	22.4%	5.2%	35.2%	43.1%	4.6%	0.9%	11.0%	0.0%
Czech Republic	5.1%	0.4%	4.7%	92.9%	0.5%	0.1%	0.3%	1.1%
Denmark	7.3%	8.2%	30.2%	55.7%	3.0%	0.6%	2.4%	0.0%
Finland	2.6%	7.2%	13.5%	74.3%	3.2%	0.5%	1.4%	0.0%
France	11.7%	49.0%	7.7%	40.8%	0.9%	0.1%	1.5%	0.0%
Greece	10.8%	5.1%	8.4%	80.8%	3.1%	2.0%	0.6%	0.0%
Hungary	3.2%	0.6%	3.7%	94.3%	0.9%	0.1%	0.4%	0.0%
Ireland	11.0%	6.5%	7.5%	77.8%	5.4%	1.9%	0.9%	0.1%
Italy	4.1%	20.2%	9.3%	55.4%	3.4%	0.9%	10.9%	0.0%
Japan	1.1%	0.4%	76.0%	2.4%	3.5%	0.7%	16.9%	0.0%
Luxembourg	36.4%	4.1%	2.8%	90.4%	0.9%	0.1%	1.1%	0.7%
Mexico	0.4%	0.3%	4.1%	18.5%	46.5%	0.3%	30.3%	0.1%

Country of residence	% foreign-born	Africa	Asia	Europe	North America	Oceania	South and Central America and Caribbean	Other and unknown places of birth
Netherlands	11.2%	15.2%	22.6%	37.2%	0.8%	0.4%	20.5%	3.2%
New Zealand	21.6%	4.8%	24.6%	43.3%	2.9%	23.8%	0.7%	0.0%
Norway	8.3%	9.5%	30.5%	50.1%	4.9%	0.4%	4.5%	0.1%
Poland	2.4%	0.3%	1.3%	95.3%	0.8%	0.0%	0.1%	2.1%
Portugal	6.7%	56.7%	2.7%	27.3%	1.8%	0.1%	11.4%	0.0%
Slovak Republic	2.6%	0.2%	1.3%	97.5%	0.8%	0.0%	0.2%	0.0%
Spain	5.5%	19.4%	4.1%	37.3%	1.0%	0.2%	37.9%	0.0%
Sweden	14.4%	6.0%	24.1%	62.1%	1.5%	0.3%	6.0%	0.0%
Switzerland	24.1%	4.2%	6.4%	77.8%	1.7%	0.3%	3.4%	6.1%
Turkey	2.4%	0.4%	6.4%	91.4%	1.0%	0.2%		0.7%
United Kingdom	9.4%	16.9%	32.8%	34.5%	4.3%	3.5%	7.2%	0.9%
United States	14.5%	2.7%	25.0%	17.3%	2.8%	0.8%	51.5%	0.0%
OECD total	8.7%	9.8%	22.4%	35.2%	2.8%	1.6%	28.0%	0.3%

Source: OECD Data base on Immigrants in OECD countries (DIOC) 2000.

### Policy has evolved to encourage more skill biased migration

Typically, many European countries did not target skilled migrants. Traditionally, European migration policy favoured particular countries rather than skills. The guest worker programs in the 1960s and 1970s meant many European countries actually targeted low-skilled migrants. Italian migration policy still is oriented toward low-skill migrants. More recently, many European countries have adopted policies to encourage skilled migration and develop a more cohesive migration policy across the European Union. The European Union has proposed a “blue card” which expedites entry of skilled migrants with an EU employer. According to Jean et al. (2007), policies promoting skilled migration have resulted in more than a ten percentage point increase in the share of tertiary-educated immigrants in France, Luxemburg, Ireland and Belgium over the last decade. This share has doubled in the United Kingdom. Southern Europe and Germany tends to still attract low-skill immigrants. Historically, these countries had very small flows of skilled immigrants. Table 10 gives the share of immigrants by educational attainment. The data are from 2000 so they do not yet reflect the increased flows of skilled workers to Europe.

Table 10. % of immigrants by education

Country of residence	ISCED 0/1/2	ISCED 3/4	ISCED 5/6	Unknown education
Australia	37.2%	29.6%	23.2%	10.0%
Austria	49.4%	39.3%	11.3%	0.0%
Belgium	43.5%	19.4%	18.7%	18.4%
Canada	30.1%	31.9%	38.0%	0.0%
Czech Republic	38.2%	48.2%	12.6%	1.0%
Denmark	30.1%	31.9%	19.5%	18.5%
Finland	52.6%	28.5%	18.9%	0.0%
France	54.8%	27.2%	18.1%	0.0%
Greece	41.1%	39.9%	15.3%	3.7%

Country of residence	ISCED 0/1/2	ISCED 3/4	ISCED 5/6	Unknown education
Hungary	41.1%	39.1%	19.8%	0.0%
Ireland	27.9%	27.6%	38.7%	5.8%
Italy	54.3%	33.5%	12.2%	0.0%
Japan	21.0%	35.9%	24.4%	18.7%
Luxembourg	31.2%	35.3%	18.4%	15.1%
Mexico	37.0%	24.9%	33.0%	5.1%
Netherlands	48.7%	31.3%	19.0%	0.9%
New Zealand	16.4%	44.3%	27.3%	12.0%
Norway	13.1%	36.6%	21.8%	28.5%
Poland	47.3%	39.8%	11.7%	1.2%
Portugal	54.7%	25.9%	19.3%	0.0%
Slovak Republic	29.1%	54.6%	15.5%	0.7%
Spain	56.0%	22.4%	21.0%	0.7%
Sweden	27.1%	42.5%	22.3%	8.1%
Switzerland	33.4%	27.9%	19.0%	19.7%
Turkey	50.5%	29.3%	14.3%	5.8%
United Kingdom	35.6%	21.5%	30.5%	12.4%
United States	39.2%	34.7%	26.1%	0.0%
OECD - Total	40.1%	32.1%	24.6%	3.1%

Source: OECD Data base on Immigrants in OECD countries (DIOC) 2000.

According to Chaloff and Lemaitre (2009) skilled labour migration often comes in two forms: demand and supply driven, or some combination of the two. Supply driven migration means the migrant can move to the host country without a job offer based on personal characteristics. This typically comes in the form of a point system as seen in Canada, Australia, New Zealand, Denmark and the United Kingdom. Their point systems are based on a number of characteristics such as an advanced degree and language skills. Australia has been targeting skilled migrants since the mid 1990s and recently over-hauled its point system in 2006. It is important to note that, while Australia has a history of supply-based migration, much of its labour migration is demand driven, requiring employer-sponsorship. In 2008 and 2009 employer-sponsored migrants accounted for one-third of skilled labour visas in Australia and this share is expected to increase in the future. In 2007 New Zealand adopted a point system to encourage the migration of skilled workers. The United Kingdom has recently adopted a point system and has actively encouraged skilled migration since 2002.

The other alternative is demand driven, where the migrant secures a job offer prior to obtaining what is usually a temporary, but renewable, work visa. The applicant is often subject to labour market tests for these visas, facing wage and skill requirements. These visas may also only be available to certain occupations. The restrictions vary across OECD member countries, but they generally target occupations in science and technology.

The United States has traditionally been a popular destination for skilled migrants. A common route to permanent migration is to have an employer sponsor a migrant for an H1-B visa, which has existed since 1990. It is temporary work permit, requiring employer sponsorship, renewable for up to six years, and is valid so long as the migrant stays with his employer or finds another one. In most cases it requires the migrant to have at least a four-year post secondary degree. An employer can eventually sponsor him or her

for permanent residency. 80% of H1-B visa holders are considered highly skilled. However, only a fixed number of H1-Bs visas are available each year, with a certain number set aside for migrants with advanced degrees. There are typically more applicants for H1-Bs than there are available visas. Permanent residence often comes by obtaining a “Green Card.” An employer can sponsor their employee for a Green card while he/she has an H1-B, or can be sponsored by a family member or through a lottery for eligible countries. Supply driven migration is also possible in the United States, under the EB visa program. This program requires the migrant to prove he/she possesses “extra-ordinary ability.” This program is extremely selective and proving such ability can be onerous.

Supply driven migration may be harder to implement in countries where the language is not widely spoken outside its borders. Migrants may arrive with no job offer and knowledge of the local language. This can result in a difficult, protracted period of adjustment. Chaloff and Lemaitre (2009) found high skill migrants are more likely than natives to hold a job that does not make use of their skills. On the other hand, supply driven migration may encourage entrepreneurship. It means the migrant is not dependent on his employer for residency. It would be interesting to see how entrepreneurship among skilled migrants differs in supply rather than demand driven countries.

Even if a country targets skilled migrants, 44% of migration to OECD countries is family migration, family members or fiancés migrating to join a migrant. Only 14% of migrants are labour migrants. According to the 2008 OECD Migration Outlook, 70% of migration to the United States is family migration. This can dilute the proportion of skilled migrants. According to Jean et al. (2007) this explains why, when it comes to skills, immigration tends to be U-shaped; either high or low-skill immigrants tend to be over-represented. Though, family migration can be important for entrepreneurial activity, it may facilitate the migrant feeling more settled and investing in his host country. This could make him/her more inclined to partake in business ventures that may require years of labour.

## **Foreign students**

Many skilled, migrant entrepreneurs do not come to the host country to start a business; they come to study. According to Wadhwa et al. (2007) 52.3% of immigrant firm founders came to the United States initially to study at an American university, 39.8% percent entered the country because of a job opportunity, 5.5% percent came for family reasons, and only 1.6% percent came to start a business. Hunt (2009) found immigrants who came to the United States as students are more likely to innovate than immigrants, with a similar level of education, who gained their credentials abroad. In 2007 the United States and the United Kingdom had the largest number of international students. The number of international students in OECD countries increased 50% between 2000 and 2005. Although international students tend to favour English speaking countries, according to the *2008 OECD Migration Outlook* France, the Czech Republic, Japan, Korea and the Netherlands have all seen an increase in the number of foreign students.

When it comes to encouraging skilled migration, it is not sufficient to simply attract foreign students. They must also be able to stay in the host country after finishing their studies and find work. According to the *OECD 2008 Migration Outlook* only about 15 to 20% of international students stay on after finishing their studies. Traditionally, many European OECD countries had quarantine restrictions for students from developing countries. The quarantine restrictions stipulated that foreign students had to leave the host country for a certain number of years immediately after finishing their studies. The purpose of this policy was often to encourage skilled workers to return to their home country, limiting a brain-drain effect. According to Chaloff and Lemaitre (2009), the quarantine restrictions could often be overcome, by marriage or other means, yet they did provide a barrier. Norway eliminated its quarantine restrictions in 2001 and they still exist in Austria for certain fields. Many European countries now allow foreign students

to stay and look for work in their field of study for a set amount of time. Often this policy favours students who studied scientific or technical subjects.

### **How much migration is selective?**

The history of migration policy in OECD member countries answers the question of causality, i.e. do more skilled and/or entrepreneurial migrants target countries that are conducive to entrepreneurship or do countries with more migrants have higher rates of entrepreneurship because they attract more migrants? According to the *2008 OECD Migration Outlook* it is often the latter. The study finds little evidence of “selective” migration on the part of migrants. Migration policy has been so restrictive in most OECD countries that most migrants could not choose the country in which they wished to settle. Despite OECD countries beginning to targeting more skilled migrants, there exists some inertia due to networking effects and a significant fraction of migration remains non-discretionary, associated with signed treaties and conventions.

According to Chaloff and Lemaitre (2009), this may even be the case in countries with supply-driven migration, where migrants can move without a job offer. They argue that the scope of such migration policy is meant to lower bureaucratic hurdles for aspiring migrants rather than attracting prospective ones.

A few OECD countries have migration policies which directly encourage entrepreneurial migrants. In 1976, *Australia* introduced the Entrepreneurial Migration Category, which allows migrants with detailed business proposals and sufficient capital to enter and settle. This has evolved to the current business development permanent visa program, which contains several different business visa categories. It grants residence to migrants who demonstrate a commitment to developing the Australian economy or bestows permanent residency status to temporary migrants who have already started a business in Australia. Australia currently grants about 7 500 permanent visas per year through this program. There also exists investor visa categories which grant residency to migrants who plan to make a large capital investment in Australia.

*Canada* targets migrants with a background of business success. *Germany* enacted a policy in 2002 where migrants who plan to start a business which can create at least ten jobs and has a minimum investment of EUR 1 million are entitled to a temporary residence permit. If the business is successful, after three years they can settle permanently. Since 2007, *New Zealand* has had an active investor migrant program. Potential migrants are granted residency if they intend to make a significant financial contribution to the New Zealand economy, in particular: NZD 10 million investment for three years for category 1 and NZD 1.5 investment over four years for category 2. The second category places more restrictions on the migrant’s personal characteristics (education, language skills) in exchange for requiring a smaller capital investment. *France* has also recently introduced a program which grants residency to migrants who plan to start a new business and create jobs.

The EB-5 program in the United States grants residency to aspiring migrants who demonstrate that a “qualified investment” (at least USD 500 000 to USD 1 000 000 depending on employment in the region) will be made to start a new commercial enterprise.

Overall, migrants under these types of program make up a very small fraction of annual flows, perhaps because satisfying all the requirements can be difficult and prohibitively expensive. So far, there does not seem to be compelling evidence that different countries are competing for entrepreneurial migrants.

## VI. PROPOSED EMPIRICAL QUESTIONS AND NECESSARY DATA

The preliminary evidence suggests that foreign migrants make a significant contribution to entrepreneurship. In many OECD countries migrants have higher rates of self-employment. But these figures may mask migrants with few other employment options or firms that struggle by having inadequate capital, founders who lack an understanding of local regulations and are exceptionally vulnerable to the business cycle. The more that can be understood about migrant entrepreneurship, the better policy can be formed to aid their endeavours. Their success is vital to migrant integration and can facilitate economic growth and job creation.

Several questions could be investigated concerning the success of migrant entrepreneurs. How do migrant-owned firms survival rates compare to similar firms started by natives and what factors contribute to these firms' success and failures? This would involve data on firm founders (their education, how long they have been in the host country, what kind of migrants they are), firm survival rates, types of firms, revenue and how they secured financing.

An area of particular interest is the extent to which foreign migrants contribute to the creation of high-growth firms and innovative enterprises. While there appears to be a correlation between migrants and self-employment, the role migrants play in the success of high-growth firms still needs to be explored. The research of Wadhwa et al (2007) and Hunt (2009) suggest migrants often are founders of firms in some high growth industries, particularly science and technology. Less is known about migrant contributions to high-growth firms in other OECD member countries.

To learn more about this, data on firm founders, their revenue, R&D activities and employees would be helpful. It would also be useful to know how long the founder has been in the host country, what kind of migrant he is and how he gained access to the resources necessary to become a successful entrepreneur (capital, social networks etc.). The data necessary to conduct a cross-country study may be difficult to collect because the incidence of high-growth firms is relatively rare. Collecting detailed data on the firm founders may also prove unfeasible.

One solution is to widen the sample by looking at all firms founded by migrants and how many people they employ. This is not high-growth firms because it does not limit the sample to firms that grew quickly in a certain time span. But such data would give some indication of the number of jobs created by migrant businesses, a crude measure of high-growth. An example of a useful data set in the United States is the National Survey of College Graduates, provided by the National Science Foundation. This is a longitudinal survey of US residents, a stratified random sample of 2000 census participants, who have obtained at least a Bachelor's degree. The survey focuses on individuals with an education and/or employment in the science/engineering fields.

The survey charts the employment of college graduates and asks questions about the respondents level of education, if he engages in research, publishes, commercialises his findings and if he is a business owner. Specific questions are asked about business ownership. It includes how many people the migrant employees and how long he has been in business. Of particular interest is the immigration module which asks specific questions about the circumstances under which the migrant moved to the United States. Such information is necessary to understand how different migration policy can influence job creation. A data set like this has many advantages because it compares the experience of natives, with a similar education.

However, the National Survey of College Graduates is an imperfect measure of high-growth founders. The sample only includes respondents who either studied science and engineering or work in those fields. High-growth firms occur in all industries. According to a 2002 OECD study and Acs et al (2008), some of

the more frequent incidences of high-growth occurred in manufacturing and construction. Limiting the sample to science and technology understates high-growth and makes for an even smaller sample. Hunt (2009) used the National Survey of College Graduates. When she measured firm creation, she had large standard errors due to a small sample. Also, many OECD countries already encourage migration of scientists and engineers, but less is known about migrants with skills in other fields. An ideal data set would include graduates in all disciplines. Though science and technology firms are important to study because they are often among the most innovative and they tend to be more capital intensive. These factors may favour sustainable growth in many OECD countries.

The Survey of College Graduates is also appropriate to explore the role migrants play in innovation. In the United States, it seems that skilled migrants often engage in innovative activities. They are more likely than natives to file patents and commercialise their work. But less is known about this relationship in other countries. New Zealand also has policies which encourage skilled labour migration, but preliminary evidence shows that it is not clear how much that has contributed toward innovation and productivity. Many OECD member countries have recently changed their immigration policies to encourage more skilled migration. A few countries even have programs to promote entrepreneurship by aiding access to capital and social networks. A cross-country comparison study of migration and innovation could illuminate what policies, either regulatory, funding for education, or migration, can enhance innovation in OECD countries.

A 2008 ad-hoc module of the European Union Labour Force Survey has tracked the labour market outcomes of migrants. This data, which is currently unavailable, may prove useful in understanding migrant contributions to high-growth firms and employment. The module includes questions about the circumstances under which the respondent migrated and how long they have been in the host country. It also collects data on whether the migrant is self-employed, how many employees he has, the industry he works in, how long he has been in business and the highest level of education he completed. There is also a question on whether the migrant relied on any networks, social programs, friends or relatives to start their current business. These data have also the potential to improve the understanding of the job creating role of migrants in Europe and what resources aided their success. Other countries, outside of Europe, might consider collecting similar data in the future.

## **VII. CONCLUSION AND POLICY IMPLICATIONS**

It seems that in many OECD countries foreign migrants often pursue entrepreneurial activities. This can include many types of firms: from ones which employ only a few workers and have limited growth potential to firms that grow quickly, creating many new jobs and everything in between. How these firms may fare and provide for migrants varies across countries and their regulatory framework. Thus it is important to understand how successful these firms are, the challenges they may face and what scope exists for policy makers to aide their success. Migrant-founded firms often face high rates of mortality, provide limited income and may be even more vulnerable to the recession than firms founded by natives. Yet, self-employment may offer a viable alternative if the migrant is shut out of the traditional labour market and contributes a non-trivial amount of economic activity in the host country.

It would be particularly interesting to understand the contribution of migrants to innovation and high-growth firms. Because innovation is one of the key components to sustainable growth and job creation, a better understanding of the relationship between migrants, high-growth firms and innovation would be useful to policy makers.

The evidence so far suggests that if policy makers desire higher rates of successful and sustainable entrepreneurship, it is not sufficient to simply encourage more international migration. Canada has an



immigration policy that attempts to attract entrepreneurial migrants, by allowing migration of foreigners with a history of successful business. But according to Heibert (2008), merely welcoming an entrepreneurial migrant has not been adequate to ensure success. He looked at the Canadian Business Class experiments and found many migrants started a business, but still failed to integrate, continued to earn lower wages than natives and ultimately closed their businesses. Heibert attributes this to poor language skills, a misunderstanding of labour codes, regulations and a resentment of high Canadian taxes. Migrants with more education tended to be more successful. Heibert concluded that migrants must also receive adequate support in their host country. In contrast, Ramsden (2008) studied the Phoenix Fund in the United Kingdom, which provided capital, loan guarantees and mentoring to migrants. He found it has been relatively effective at promoting successful entrepreneurship among migrants.

The Canadian experience suggests that promoting successful entrepreneurship among migrants will require targeting more skilled migrants and providing support to migrants (of all skill levels) to help them understand local regulations, products and financial markets. Since 2008, the Swedish Agency for Economic and Regional growth has been commissioned by the government to start a three year program which promotes foreign-born entrepreneurship. The program targets areas that normally pose a challenge from migrants. Specific action items of the program include: encouraging banks to be more aware of the needs of migrant business owners and establishing networks and venues to advise and mentor foreign business owners.

Facilitating access to capital, promoting social networks and education on local laws and regulations enhance the probability of success. More successful entrepreneurship may also come from migration policy. This may involve more skilled labour migration or encouraging certain kinds of temporary migrants to transition into permanent residency. For example, foreign students tend to be amongst innovative and entrepreneurial in the United States, yet in most OECD countries many leave after graduation. Several European countries have changed their immigration policy to encourage students who study particular fields, normally science and engineering, to remain beyond graduation. Though further study is needed to understand how students in other disciplines contribute to entrepreneurship. Students with expertise in other areas may have the potential to be successful entrepreneurs in high-growing areas of the service industry.

A few OECD countries have started to pursue more supply based migration, where skilled migrants can come to the host country and work without employer sponsorship. This may or may not have consequences for entrepreneurship. On the one hand, it means migrants are free to start businesses without being tied to their employers. Alternatively, these migrants may flounder without adequate language skills or understanding of local regulations and labour markets. It is an area which merits further exploration.

Migrants may be a source of job creation rather than taking a limited number of jobs from natives. But once in the host country, they need support to gain access to capital, learn the language and deal with regulatory hurdles. These constraints do not necessarily only apply to low-skill migrants. Even high-skill migrants have had difficulty obtaining capital and negotiating local regulations. OECD countries may want to consider policies that support business ownership and integration among its migrants. Migration policy in many OECD member countries, especially in Europe, has begun to target higher skill and more entrepreneurial migrants. This is a first and important step towards generating more successful entrepreneurship, but institutions which facilitate success when migrants, of all types and skill levels, settle in the host country are also vital.

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## APPENDIX

### **MIGRATION POLICIES AND ENTREPRENEURSHIP: RELEVANT ISSUES IN SELECTED OECD COUNTRIES**

OECD member countries have traditionally had a diverse scope and set of policies. The table below summarizes certain aspects of policies for a select group of OECD countries. The policies discussed for each country describes aspects of recent migration policy that has consequences for entrepreneurship. The type of migration encouraged can result in a very different entrepreneurial outlook and appropriate prescriptive policies which can aid entrepreneurial activity. The breakdown of migration flows in 2006 by type of migration (labour, family, free-moving, or humanitarian) and the most common nationality of migrants are given. Also included is a brief discussion of some notable aspect of migration policy that may be relevant for entrepreneurial migrants.

The common trend in OECD countries has been a move toward more skilled labour migration. But for many countries there is still far more family or humanitarian migratory flows.

There are several different trends that emerge across the different countries. Countries such as Canada, Australia, New Zealand, Denmark and the United Kingdom have a supply driven skilled labour program that operates under a point system. Supply driven migration allows skilled labour migration even without an employer sponsor.

In contrast, Sweden has relatively little labour migration but a notable amount of humanitarian migration. Norway has a very large proportion of family migrants. In the past decade many Western European countries have experienced a notable amount of free-moving migration. Japan and Korea, still have relatively closed labour markets. Most of the inflows are temporary, low-skill migrants. More skilled migrants tend to come through intra-company transfers.

When it comes to labour migration most countries do not initially grant permanent residency. Migrants often initially come as temporary migrants on a renewable visa. Sometimes this visa can be converted to a permanent one (sometimes having had temporary work permit is a necessary precondition) or migrants continuously renew their temporary work permit. Though some temporary work permits are not renewable or may require the migrant leave the host country after it expires (such as the EPS program in Korea).

Several OECD countries, France, New Zealand, Germany and the United States even grant residency for migrants who plan to make a significant investment in a new business. However, the level of required investment can be prohibitively high.

Table A presents for each country the percent of migration that is labour, family, free moving and humanitarian (when available). The figures refer to migration flows in 2006 and not migration stocks. The information presented comes from Part IV of the *2008 OECD Migration Outlook*, the appendix of Charloff and Lemaitre (2009) and individual country websites.

**Table A. Migration Policies and Entrepreneurship: Relevant aspects in selected OECD countries**

Type of migration % of total flow, 2006 (Source: 2008 OECD Migration Outlook)	labour	family	free movement	other (including humanitarian)	Most popular nationality of foreign migrants
<b>Australia</b>	25.9	51.1	14.8	8.3	United Kingdom
<p><i>Issues:</i> Australia has been promoting skilled migration for some time. This goes through the skilled migration scheme, 55% of skilled migrants come as “General Skilled” and do not require sponsorship. This is a point system which awards education, work experience and language skills. Employers can also nominate potential migrants for certain occupations. More demand-driven skilled, labour migration (requiring employee sponsorship) is anticipated in the future.</p>					
<b>Austria</b>	1.5	41.0	46.2	11.4	Germany
<p><i>Issues:</i> Net migration has been declining since 2002. Between 2002 and 2006, number of asylum seekers fell 40%. The 2006 law makes family migration tougher, by requiring minimum income from sponsoring partner. The 2006 law allows foreign students to apply for residency. There is little labour migration; most is either family or free-moving. There exists a program for skilled labour, but standards may be prohibitively restrictive, so there are proposals to lower them.</p>					
<b>Belgium</b>	8.2	35.4	49.8	6.6	France
<p><i>Issues:</i> Most migration to Belgium is free-moving, from neighbouring countries. In 2006 63% of labour permits went to migrants from EU8 countries, 90% of whom were Polish nationals in fields with labour shortages. For skilled labour there exists a “Professional Card.”</p>					
<b>Canada</b>	22.1	60.8	-	17.1	China
<p><i>Issues:</i> There exists a Provincial Nominee program which requires sponsorship, but relieves employers from a labour market test for certain occupations. There also exists a point system that allows permanent migration without sponsorship for qualified migrants. There has been a notable increase in number of foreign students granted residency and given temporary working privileges. Post-Graduation Work Permit Program grants foreign graduates of Canadian universities a 3 year work permit, which can go towards qualifying for permanent residence.</p>					
<b>Czech Republic</b>					Ukraine
<p><i>Issues:</i> There have been recent attempts to follow EU directives on labour. Since 2003 Project of Selection of Qualified workers speed residency state for young skilled migrants, 2007 “green cards” where temporary workers in certain professions can obtain residency. Program for skilled workers has, so far, not attracted as many migrants as hoped.</p>					
<b>Denmark</b>	15.2	23.8	50.5	10.5	Germany (closely followed by Poland)
<p><i>Issues:</i> Denmark has experienced a notable increase in labour migration. It’s been encouraging labour migration by expanding the Job Card program, a 3 year work permit, to more occupations. There also exists a Green Card which allows qualified migrants to come to Denmark without sponsorship to look for work. To stay longer the Green Card must be converted to a Job Card. There have been stricter conditions on obtaining permanent residency, migrants must pass Danish language test and have had a full time job for 2 and a half years.</p>					
<b>Finland</b>	9.1	35.9	38.7	16.3	Estonia
<p><i>Issues:</i> There are many temporary labour migrants in low skill jobs. Demographic pressures have led to more promotion of migration. But most migration is free-moving or family. Foreign students can apply for a work permit for a maximum of 6 months.</p>					

Type of migration % of total flow, 2006 (Source: 2008 OECD Migration Outlook)	labour	family	free movement	other (including humanitarian)	Most popular nationality of foreign migrants
<b>France</b>	6.1	59	20	14.9	Algeria
<i>Issues:</i> Most migration is family and, traditionally, asylum seekers. Family reunification migrants now must pass test on French language and values. There is still relatively little labour migration. France has been easing restrictions on labour market migration for certain occupations. Temporary residence permits for highly sought skills are available on a case by case basis. Students with a French Masters degree can get a 6 month permit to find work in their field and get a work permit exempt from a labour market test.					
<b>Germany</b>	6.1	23.3	64.2	6.4	Poland
<i>Issues:</i> Since 2005 settlement permit for highly qualified migrants (still not common method of entry). Foreign students are allowed to stay for one year and look for job.					
<b>Greece</b>	Traditionally, popular destination for asylum seekers				Russia
<i>Issues:</i> A significant amount of migration to Greece is irregular and difficult to measure. Traditionally a popular destination for Albanians, and popular with asylum seekers because of its location. Since 2005, there have been new laws aimed at simplifying the permit system					
<b>Ireland</b>	New EU-10				
<i>Issues:</i> There have been record inflows in to Ireland during the last few years, mostly within EU. EU migrants account for 88% of non-Irish employment growth. There exists a "Green Card" for high-skill employees who earn more than EUR 60 000, or are employed in certain sectors. Green cards are issued for 2 years and can be converted to residency. Ireland allows students (from third level Irish institution) to stay for 6 months and apply for Green card.					
<b>Italy</b>	30.8	41.7	22.4	5.1	Romania
<i>Issues:</i> Most labour migration comes at the behest of employers and according to quotas. Labour migration still is mainly low skill. There exists 1 000 permits for high skilled workers, but under-subscribed. Many delays and bureaucracy slow down migration process.					
<b>Japan</b>	29.8	31.1	-	38.9	China
<i>Issues:</i> Japan has relatively low inflows. Most migration is temporary and from Korea, China and Brazil. Japan now allows scientists and engineers to stay 5 instead of 3 years and is keeping better track of foreigners and their working conditions					
<b>Korea</b>	China				
<i>Issues:</i> Inflows of migrants to Korea remain small. The Employment Permit System (EPS) allows low-skilled workers in for just 3 years, they must then leave and can only re-enter after 6 months. The EPS is limited to 15 countries (in Southern and Central Asia) in 5 select industries (requiring low skill labour). There are also 1 year temporary renewable work permits for skilled workers in a narrow range of occupations. Gaining permanent residence often requires proving exceptional ability.					
<b>Luxembourg</b>	Portugal				
<i>Issues:</i> In Luxembourg 42% of the resident population is foreign. Most migrants are free moving from within the EU. It is notable that 40% of employed workers reside outside of Luxembourg, thus many foreign workers in Luxembourg are not migrants.					

Type of migration % of total flow, 2006 (Source: 2008 OECD Migration Outlook)	labour	family	free movement	other (including humanitarian)	Most popular nationality of foreign migrants
<b>Netherlands</b>	5.4	46.6	23.6	24.3	Germany (closely followed by Poland)
<i>Issues:</i> In 2006, 75% of work permits in the Netherlands were granted to Poles most of whom work in agriculture. Since 2007, work permits are no longer required for new EU countries. There are moves to encourage more skilled labour; research scientists no longer need permits. Recently, there has also been a large inflow of asylum seekers. The integration program requires migrants to learn Dutch. Foreign students can stay on 3 months and look for work.					
<b>New Zealand</b>	23.6	57.9	9	9.6	United Kingdom
<i>Issues:</i> Most migration comes from temporary workers. There exists a skilled migration policy based on points, qualified migrants can work in New Zealand without a job offer and become a permanent resident.					
<b>Norway</b>	7.6	50	30.4	12	Poland
<i>Issues:</i> Norway has recently experienced record high flows of migrants, 1/3 of who come from new EEA member states, particularly Poland. Non-EEA migration has also increased especially from India. In 2000, Lifted anti-discrimination provisions which required students to return to their home country. Now students with a job offer can be granted a one year work permit. Most migration is family migration; in 2006, 20% of all marriages in Norway involved a foreign national and a Norwegian.					
<b>Poland</b>					Ukraine
<i>Issues:</i> Poland has recently experienced a small increase in inflows, mainly migrants from the former Soviet Union who come for short-term seasonal work. Emigration to other EU countries has been notable, but slowing as Polish economy strengthens and job market in other EU countries weaken. Many changes to Polish immigration policy were enacted in 2007, including making it easier to obtain seasonal labour and allowing residency to ethnic Poles in the former Soviet Union.					
<b>Portugal</b>	28.7	62.1	8.8	0.4	Brazil
<i>Issues:</i> Migrant inflows to Portugal have been small. There has been a recent shift from less labour and more family migration. Currently, Portugal is in the process of adopting EU directives and modernising the immigration system. There exists a residence visa for foreigners who intend permanent migration for regular work, family reunification and entrepreneurial activities.					
<b>Spain</b>					Romania
<i>Issues:</i> Most non EU migration comes from Morocco and Latin America. Until 2005, there existed few labour migration channels in Spain. Now employers can recruit positions that are on list of areas considered in short supply or they must submit to labour market tests. Work permits can be renewed if the migrant has a job contract. After five years they can apply for permanent residence. There exists temporary work permits (D and E) specifically for self-employed migrants.					
<b>Sweden</b>	0.5	37.1	34.5	27.9	Iraq
<i>Issues:</i> Sweden experienced a large influx of asylum seekers up 40% from 2002, the highest per capita rate among OECD countries. Recent steps have been taken to facilitate migrant entry into the labour force. Employers who hire newly arrived foreign labour are exempt from paying those employees' payroll taxes for one year. Since 2006 immigrants have been offered possibility of part-time work in their field along with Swedish language training.					
<b>Switzerland</b>	1.9	20.9	69.9	7.4	Germany
<i>Issues:</i> Since 2007 the labour market has been open to EU 17 nationals and self-employed nationals from the EU8. The 2008 New Alien Act attempts to limit labour migration from non EEA areas to skilled labour. Nationals of EFTA, Canada and the USA can obtain a settlement permit (for permanent residency) after 5 years, other countries' nationals can do so after 10 years.					

<i>Type of migration % of total flow, 2006</i> (Source: 2008 OECD Migration Outlook)	<b>labour</b>	<b>family</b>	<b>free movement</b>	<b>other (including humanitarian)</b>	<b>Most popular nationality of foreign migrants</b>
<b>The United Kingdom</b>	28.9	31.8	24.3	14.9	Australia
<p><i>Issues:</i> Recently, the UK has experienced large inflows from A8 countries (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland Slovakia, Slovenia). A new Point Based system was introduced in 2008. There are multiple tiers; tier one replaced the high skill migrant program and allows qualified workers residence without job offer. Lower tiers require employer sponsorship, Tier 2 contains skilled works with a job offers for certain occupations. Foreign students can stay for up to 12 months and look for a job which qualifies them for relevant tier.</p>					
<b>The United States</b>	5.6	70.3	-	24.1	Mexico
<p><i>Issues:</i> Most migration is family migration. Skilled labour migrants often are sponsored for a H1-B (a temporary work permit intended for skilled workers) visa by their employer. It is a common pathway for temporary to permanent residence. The US is a popular destination for foreign students. Students, especially with advanced degrees, often obtain H1-Bs after graduation. There is a special quota of H1-Bs reserved for foreign students with advanced degrees from a US university. About 5% of the labour force is undocumented foreigners (meaning they work illegally). Employer or family member can sponsor migrant for permanent residency permit, "Green Card." Migrants of "extraordinary ability" can apply for permanent residence without sponsorship.</p>					