

STUDENT MOBILITY, INTERNATIONALIZATION OF HIGHER EDUCATION AND SKILLED MIGRATION*

CHAPTER 4

1. Introduction

The dynamics of student mobility and the internationalization of higher education have changed profoundly since the 1990s. Twenty years ago, the primary motivations to study abroad were related to academic, political, geo-strategic, cultural and development aid issues and considerations. At the time, countries took a favourable view of the mobility of students and academics as an opening to the world, in the hope of creating international networks of elites. Universities received foreign students and academics but made no special effort to recruit them. Today, even though the original motivations remain valid, cross-border education – that is, all that entails the international mobility of students and teachers, educational programmes or institutions of higher learning (Knight, 2004) – is being increasingly driven by economic considerations. Governments see it as a fulcrum of economic development and as a means of improving the quality of their higher education and their institutions of higher learning, an element of prestige (and sometimes a source of income), giving them

a competitive edge. Individuals see it as a further boost to their career both in their home country and on the international job market, or even as an investment towards possible future emigration.

A growing number of persons either go abroad to study, enrol in foreign programmes or establishments present in their country, or simply turn to the Internet to follow courses run by universities or other institutions of higher learning at a distance from other countries. Between 1998 and 2004, the number of foreign students enrolled worldwide rose by 52 per cent to 2.7 million, with the OECD countries hosting 85 per cent of the total.

This trend results from a range of different, not mutually exclusive factors: greater mobility of skilled individuals and workers in a globalized economy; the falling costs of transport and communication; the desire of countries to encourage university and cultural exchanges and to attract highly qualified personnel; the wish on the part of tertiary institutions to generate additional income or increase their prestige and raise their profiles, both nationally and internationally; or the need for a better educated workforce in emerging economies where local capabilities are often quantitatively and qualitatively insufficient.

* This chapter was written by Stéphan Vincent-Lancrin, who is an analyst at the Centre for Educational Research and Innovation (CERI), a division of the Directorate for Education of the Organisation for Economic Co-operation and Development (OECD). The analyses given and the opinions expressed in this chapter are those of the author and do not necessarily reflect the views of the OECD and of its members.

Cross-border higher education has evolved differently across countries and regions. In very general terms, student mobility has been induced by political action in Europe and by strong demand in the Asia-Pacific region. North America, for its part, has been a magnet for foreign students, although it is only in recent years that the United States has adopted a policy of more active recruitment. Though South America and Africa receive relatively few foreign students, and then mostly from within the same region, student mobility in general is also increasing in those parts of the world. However, only limited statistics are available for these regions.

The major trends in cross-border higher education and the implications for educational policies are set out and examined in two OECD publications (2004a and 2004b): *Internationalisation and Trade in Higher Education. Opportunities and Challenges*, and *Quality and Recognition in Higher Education: The Cross-border Challenge*. Also, detailed data on foreign and mobile students are collected and published each year in *Education at a Glance* (OECD, 2006a) and by UNESCO (2006).

This chapter retraces the predominant trends in student mobility and highlights the major strategies for the internationalization of higher education, while underscoring the main implications for migration. Section 2 examines the major trends in student mobility, the causes of this mobility, and describes the emergence of new forms of cross-border higher education – viz. the mobility of both programmes and educational establishments. Section 3 proposes a typology of the main strategies in the internationalization of higher education. Section 4 discusses the interplay between student mobility and migration policies, and examines the link between student mobility and brain drain. Finally, the conclusion underlines how the internationalization of higher education further complicates the link between student mobility and skilled migration.

2. Main Trends in Cross-border Higher Education

The main trends in cross-border higher education may be summed up in two words, namely growth and diversification: **growth** in the number of students enrolled in foreign education programmes (or abroad); **diversification** of the supply of cross-border education, as new forms of international mobility emerge. This section outlines the main trends in student mobility and argues that, like student mobility, the new forms of cross-border education can facilitate the migration of highly qualified professionals or skilled migration (i.e. of graduates from institutions of higher learning).

2.1 Student Mobility: Main Trends

International student mobility is the main form of cross-border higher education. In 2004, there were 2.7 million students worldwide studying outside their own countries; in other words, almost three times as many as 20 years ago.¹ OECD countries receive some 85 per cent of all foreign students, two-thirds (66%) of whom were nationals of non-OECD countries in 2004. Thus, such student flows show a strong South-North orientation, with five OECD countries hosting over half of the total (58%). In 2004, 22 per cent of all foreign students worldwide were in the United States, 11 per cent in the United Kingdom, 10 per cent in Germany, 9 per cent in France and 6 per cent in Australia. The top five English-speaking host countries (United States, United Kingdom, Australia, Canada and New Zealand) alone receive almost half (47%) the total number of foreign students (Figure 4.1). Of the ten countries hosting the largest share of foreign students (75% of the world total) only Russia and South Africa are not OECD members. The 35 leading host countries for foreign students listed in Figure 4.1a account for 95 per cent of all foreign students enrolled throughout the world.

¹ Unless otherwise indicated, the figures used in this chapter are from the OECD education database for all members and non-members covered in it (OECD, 2006a), and from UNESCO for all other countries (UNESCO, 2006). In the absence of 2004 data, the last available year was taken as an estimate.

Textbox 4.1

Foreign and International Students in International Statistics

Despite constant efforts to improve international statistical data on student mobility, some imperfections persist. Although these efforts attempt to list non-resident foreign students who have entered a country for study purposes, the national data for some countries include both resident and non-resident tertiary students (ISCED¹ 5A, 5B and 6). Hence, “foreign” students are generally an over-estimation of genuinely mobile international students. In 2006, the OECD published for the first time data on mobile international students as distinct from data on foreign students. The **foreign** students are identified by their nationality, while the **mobile** students are identified by the country where they had previously studied or by their residence. For the 12 countries for which data are available, mobile students account for an average of 70 per cent of foreign students, although there may be large variations. In Norway and Spain less than 40 per cent of foreign students are mobile, as compared with over 80 per cent in Australia, Austria, Canada, Hungary, Japan and the United Kingdom. In principle, the data do not reflect the fact that foreign students who enrol in programmes for at least one semester count as full-time students. Students sent abroad for short periods (i.e. less than a full academic year) and who remain enrolled in their institutions of origin and/or are still paying their tuition fees to that institution should not be recorded as foreign students in the host country. Lastly, a student from country A, registered in a programme offered in country B via distance learning, should, in principle, be counted as a foreign student of country B, which is not always the case in practice. The variations between the national and international data for a given country stem from the adjustments needed to make country data comparable internationally. Although foreign students may not be (mobile) international students, this chapter often uses the data on foreign students as an approximation of student mobility. This is done for practical reasons as such data are available for a greater number of countries.

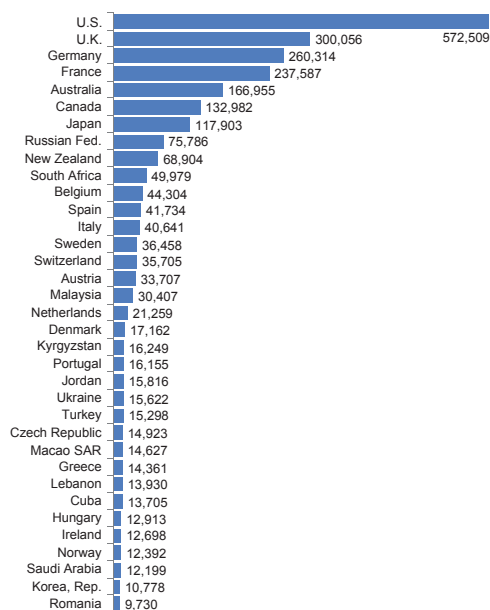
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¹ ISCED - International Standard Classification of Education.

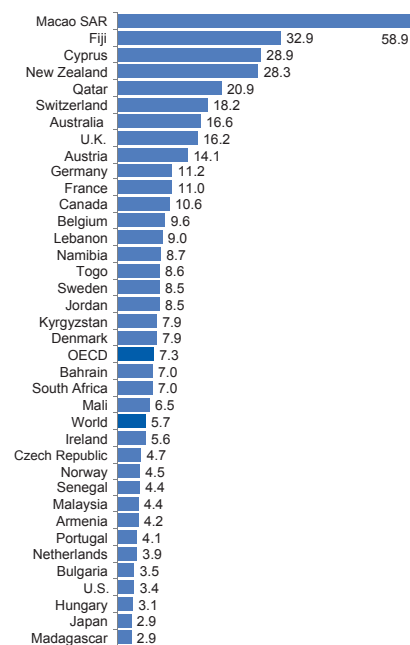
Figure 4.1:

Numbers and Percentages of Foreign Students in the 35 Main Host Countries, 2004

4.1a: Numbers



4.1b: Percentage enrolled in higher education



Sources: OECD and UNESCO.

In relative terms, i.e. as a percentage of the size of the higher education systems of various countries, the situation varies somewhat. Cyprus, Fiji, New Zealand, Switzerland and Macao SAR are among the countries and regions with the largest proportion of foreign students in their national higher education systems, while the United States drops from first place (Figure 4.1a) to rank thirty-second among host countries (Figure 4.1b). Against a country average of 5.7 per cent of foreign students worldwide, the average for OECD countries stood at 7.3 per cent of their total student body in 2004 (up from 4.5 per cent in 1998). In 2004, the overall student body in nine smaller, English-speaking countries included at least 15 per cent international students. Generally speaking, the fewer foreign students a country receives, the greater the tendency for those students to come from neighbouring countries or from within the same continent. Hence, 99 per cent of foreign students studying in sub-Saharan African countries are themselves from sub-Saharan Africa, and the percentages are about 80 per cent for the countries in Latin America, South Asia and the Pacific, and almost 70 per cent for the Arab and Central Asian countries - as against a mere 27 per cent for western Europe and North America taken together (UNESCO, 2006).

In the OECD area, Europe is the main destination with 1.2 million, or 52 per cent of foreign students on record there (see Table 4.1). It is the leading host region for students from Europe and Africa and is also attractive to students from the Americas and Asia. North America is host to 31 per cent of foreign students, and the Asia-Pacific region to the remaining 17 per cent.

The geographical distribution of foreign students varies across the major OECD regions (Table 4.2). While North America receives fewer foreign students (707,000 in the United States, Canada and Mexico in 2004), it is the most attractive region for Asian students (Table 4.1). Accordingly, over half (61%) of all foreign students in North America come from

Asia, compared to Europe (14%), South America (12%), Africa (8%) and North America (5%). In the European OECD countries, students come first and foremost from Europe (44%), followed by Asia (29%), Africa (18%), and the Americas (8%), while Asian countries receive 85 per cent of students from within the Asian region.

Asia ranks first in terms of students going abroad to pursue higher studies. In 2004, almost half (48%) of the foreign students in the OECD area came from Asia, followed closely by Europe (27%), Africa (12%), South America (7%), North America (4%) and Oceania (1%).

International students choose their study destinations according to their region of origin. As Table 4.1 shows, student mobility in Europe occurs largely within Europe. Among European students registered abroad, 81 per cent are studying in another European country, while among Asian and North American students registered as studying abroad, 28 per cent and 44 per cent, respectively, remain within their continent. The preference of European students to remain in Europe can no doubt be attributed to the Bologna Process and to the new Erasmus Programme promoting this type of mobility (though the introduction of Erasmus Mundus has since expanded the new Erasmus Programme to cover the whole world). For their part, African students have a clear preference for Europe – France alone receives 55 per cent of all African students in Europe and 42 per cent of all international African students enrolled in the OECD area. In turn, students from the Americas most often choose to stay in the region, though almost 40 per cent also opt to study in Europe. Asian students aim mainly for North America (40%) and, though 28 per cent also go to study in the Asia-Pacific region, in particular in Australia, 32 per cent also choose to go to Europe. Here again, the averages conceal major variations, as the United Kingdom (43%) and Germany (29%) together host 72 per cent of Asian students studying in Europe.

Table 4.1:**Destinations of Foreign Students Studying in OECD Countries by Origin, 2004 (%)**

Origin	Destination			OECD
	North America	Europe	Asia-Pacific	
Africa	20	77	3	100
North America	44	43	13	100
South America	56	41	2	100
Asia	40	32	28	100
Europe	16	81	3	100
Oceania	27	19	54	100
World	31	52	17	100

Source: OECD.

Table 4.2:**Composition of Foreign Student Bodies in the OECD Area, 2004 (%)**

Origin	OECD area			Total OECD
	North America	Europe	Asia-Pacific	
Africa	8	18	2	12
North America	5	3	3	4
South America	12	5	1	7
Asia	61	29	85	48
Europe	14	44	5	29
Oceania	1	0	3	1
Total	100	100	100	100

Note:

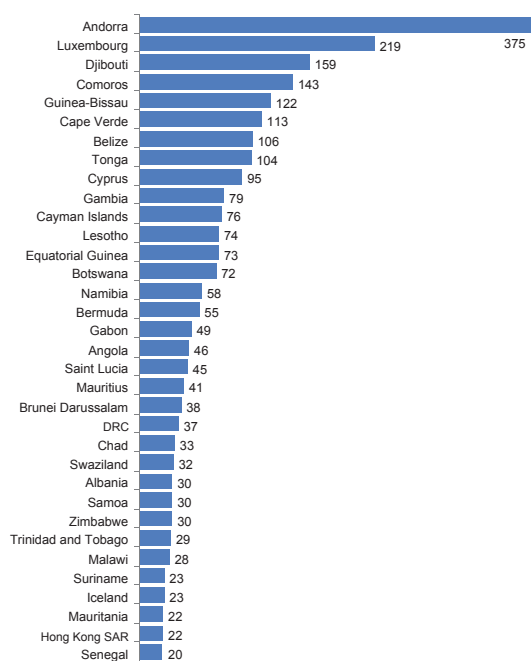
The percentages do not always add up to 100 per cent because of rounding.

Source: OECD.

At the country level, China (including Hong Kong SAR) ranks first as the country with the largest share of its nationals studying abroad, i.e. 17 per cent of all foreign students in the OECD area, followed by India (5%), South Korea (4%), Germany, Japan, Morocco and France (3% each). Two-thirds (66%) of all Asian students abroad are concentrated in four English-speaking countries, namely Australia, Canada, the United Kingdom and the United States. Whereas Asians generally turn to cross-border education to follow full courses, bearing the real cost of their studies themselves, American and European students prefer short stays, mainly to attend courses

subsidized by European institutions (OECD, 2004a).

In relative terms, the situation again differs (Figure 4.2). The small countries are often those with the largest numbers of nationals studying abroad relative to the size of their higher education system. Frequently their offer, both quantitatively and in terms of the range of disciplines available is limited, and, consequently, their nationals most often study in neighbouring countries under more or less tacit agreements. A case in point is Luxembourg, which, in 2004, had twice as many students enrolled abroad than at home. For many larger African countries, the high degree of student mobility is no doubt attributable to limited capacity at home. In absolute terms, the number of students from the major source countries studying abroad is, in fact, relatively low considering the size of their system of higher education.

Figure 4.2:**Countries with over 20 per cent of all Tertiary-level Students Studying Abroad, 2004**

Source: UNESCO.

While some migration flows often display marked gender differences, these are less significant in student mobility, though not entirely absent. Thus, female students accounted on average for 50 per cent of foreign students in OECD countries in 2004, against a (national) average of 49 per cent male students in higher education (Table 4.3). The share of female students has steadily increased since 1998. While the share of European female students in international mobility reflects their share in higher education, female students from the United States are more willing to go abroad than their male counterparts, the reverse being true in Asia. In the case of the United States, this over-representation of women in international student mobility is no doubt related to the preponderance of female students in the humanities, which is the main discipline pursued by mobile U.S. students. Concerning Asia, apart from reasons related to the favoured disciplines pursued (many Asian students study science and technology), the under-representation of women in international student mobility is perhaps due to the fact that families are more willing to invest in males rather than females (OECD, 2004a). Hence, countries hosting many Asian students often have a smaller number of female students among their overall foreign student contingents.

In countries for which numbers are available for 2004, an average of 32 per cent of international students were enrolled in the social sciences, 24 per cent in sciences and engineering (13% and 11%, respectively²), 16 per cent in the human sciences and art, 16 per cent in medicine, with agriculture, education and services making up the remaining ten per cent. Yet, the choice of disciplines by international students varies appreciably from one country to another. For example, in Australia, Germany, Norway, Switzerland and the United States,

² In line with the ISCED classification (1997) this includes personal services, transport services, environmental protection, security services and other similar fields, some of which may be offered in a vocational tertiary education establishment and not a university.

Table 4.3:
**Percentage of Women among Foreign Students
in OECD Countries**

	1998	2004
Australia	49	46
Austria	48	52
Canada	43	47
Czech Republic	37	50
Denmark	59	54
Finland	40	45
France	n.a.	49
Germany	45	50
Hungary	41	53
Iceland	66	66
Ireland	53	n.a.
Italy	50	57
Japan	46	48
South Korea	38	46
Netherlands	n.a.	54
New Zealand	52	52
Norway	52	56
Poland	47	55
Portugal	n.a.	49
Slovak Republic	n.a.	41
Spain	49	51
Sweden	56	54
Switzerland	45	45
Turkey	27	32
U.K.	46	50
U.S.	42	44
Country mean	47	50

Notes:

France - 2003 instead of 2004; United States - 2002 instead of 2004.
n.a. = not available

Source: OECD.

the proportion of foreign students enrolled in the sciences in 2004 was clearly higher than the average for all the countries for which data were available; this was the case for the social sciences in Australia, the Netherlands and New Zealand; the human sciences in Iceland, Japan, Austria and Germany; the medical sciences in Belgium, the Slovak Republic, Italy, Hungary, the Czech Republic, Denmark and Poland; engineering in Finland and Portugal; and agriculture in Hungary, Belgium and the Slovak Republic (OECD, 2006a: Table C3.5). Thus, different disciplines in

different countries attract either more or fewer foreign students than the international average. Yet, while these disciplines are undoubtedly centres of attraction for foreign students in a given system of higher education, there is nothing to support the conclusion that they are centres of attraction (or excellence) at the international level. Indeed, some countries actually receive very few foreign students in their most attractive disciplines.

Generally speaking, almost 90 per cent of international students are enrolled in higher education. In 2004, the only countries where a significant percentage of international students had chosen vocational training (ISCED 5b) were Canada (30% of international students in a vocational education programme), Greece (29%), Belgium (26%), Japan (24%) and New Zealand (24%). Although cross-border students enrol mainly in undergraduate courses, relative to local students a proportionally greater number follow postgraduate courses. Compared to the student body as a whole, a higher proportion of foreign students is enrolled in advanced research programmes (i.e. doctorate level). In 2001, foreigners enrolled in such courses represented on average 10.2 per cent of all students in higher education, but a mere 3.8 per cent of the total number of students (foreign and national) in the countries for which statistics were available. Although this varies significantly depending on the country, international (or foreign) students in 2004 made up a significant portion of graduates from advanced research programmes (ISCED 6) in Switzerland (41.1%), the United Kingdom (36.8%), Canada (27.3%), the United States (26.4%), Belgium (23.4%) and France (23.5%). In these countries, international students represent a genuine contribution to the country's scientific output, as well as to its output of scientists (OECD, 2004a and 2006a). In 2003, more than half the recipients of doctoral degrees in the United States were born abroad (versus 27% in 1973), with 50 per cent in the physical sciences, engineering (67%) and economic sciences (68%) (Bound et al., 2006).

2.2 The Causes of Mobility

The decision to study abroad and where depends on a broad spectrum of cultural, educational, economic and social factors. The factors determining the choice of a foreign destination include:

- The destination country's immigration (or visa) policy for foreign students: Potential determinants are the ease of obtaining a visa, the possibility to work while studying or to remain in the country upon completion of studies.
- Employment possibilities in the host country and the country of origin: A host country will be more attractive if students can work there after completing their studies, or if their qualifications are highly regarded on the local job market when they return home.
- Recognition of skills and foreign qualifications in the country of origin and the host country: The frequent absence of any formal framework for such recognition partly explains the success of student mobility under joint university programmes or partnerships between establishments - leading to double degrees or automatic recognition of credits obtained in the partner establishment. On the one hand, the lack of recognition of degrees and professional qualifications obtained at home can induce mobility. Students may choose to pursue studies in another country because they may have decided to establish themselves and work there and have no choice but to obtain the local qualifications and degrees that would allow them to do so. Moreover, the degrees and qualifications obtained in the host country may enjoy greater international recognition. On the other hand, the lack of recognition of foreign qualifications inhibits mobility as it may oblige students to take up their studies again from scratch abroad or limit their job prospects on return to their country of origin. UNESCO and OECD jointly drew up the Guidelines for Quality Provision in Cross-border Higher Education, calling for greater transparency

and international cooperation as a means of facilitating the international recognition of skills (OECD, 2005b).

- The cost of studies abroad (tuition fees, living expenses, taking financial assistance into account) compared with the country of origin: The smaller the cost differential, the more mobile students are likely to be. In addition to geographical and cultural proximity, one of the reasons why students from the European Union (EU) prefer the United Kingdom as an English-speaking country in which to study is undoubtedly the fact that they pay the same tuition fees as local students.
- The reputation and supposed quality of the institutions of learning and educational system in the host country compared to the country of origin: A destination country perceived as having an advantage in this field is an inducement to mobility. Even if they are open to challenge, international classifications are making it increasingly possible to compare institutions of higher learning throughout the world (Salmi and Saroyan, 2007).
- The choice of post-secondary education offered in the country of origin and the possibilities of access: The limitation of admissions to higher education and the *numerus clausus* for some courses could prompt students to go abroad.
- The existence of networks of students or former students from the country of origin: When information about institutions abroad is relatively scant, the recommendations of other students will play an important role, as will the prospect of becoming integrated into one's own (student) community abroad. While academic standards undoubtedly become more stringent at the higher levels of education, studies show that the presumed quality of higher education in the destination country is more decisive than that of the programme being followed or the establishment where students enrol (OECD, 2004a).
- The language of the destination country and the language of instruction: Knowing that English

currently ranks first as the main international language and second as the most widely spoken language in the world, the English-speaking countries have a comparative edge in this regard, that some universities in non-English-speaking countries are attempting to offset by also offering programmes in English.

- The perceived quality of life in the host country: As with all forms of travel, the activities offered by the host city and country, climate, cultural and tourist attractions, culture and religion, in short, the desired quality of life, are decisive factors.
- The geographical and cultural proximity of the host country and the country of origin, as well as historical ties: This, for example, is what accounts for the substantial student flows between the Nordic countries, between the Commonwealth countries and the United Kingdom, between the countries of French-speaking Africa and France, and between the former republics of the Soviet Union and the Russian Federation.
- The infrastructure and social benefits available to foreign students in the host country (i.e. medical coverage, university accommodation, language learning centres, etc.).

The choice of a host establishment by foreign students (and their families) may be viewed as the outcome of an assessment of the monetary and non-monetary costs of studying abroad, and the monetary and non-monetary benefits that the students (and their families) hope to reap from it. The tuition fees and cost of living in the host country are thus far from being the only important determinants. Asian students are often accustomed to paying (relatively) high tuition fees and hence do not necessarily consider the lack of subsidies as an obstacle to mobility. In contrast, students originating from the EU, who benefit from sizeable subsidies in their countries, are less willing to study in countries where tuition fees are significantly higher. Even so, low tuition fees do not determine student mobility: flows of foreign students are relatively negligible in

some countries where tuition fees are relatively low, or even non-existent, such as the Nordic countries. The cost factor is undoubtedly more important for educational programmes in English-speaking countries. Similarly, there is no evidence to suggest that the wish to emigrate to a country is necessarily a deciding factor in the choice of a country in which to study. A student may well choose to study in one country and then emigrate to another or indeed return home.

2.3 What are the New Forms of Cross-border Higher Education?

Student mobility is but one form of cross-border higher education. A growing number of students are gaining access and benefiting from the new possibility of pursuing higher or post-secondary distance education offered by a foreign university without having to leave their own country. The international virtual mobility of programmes and establishments and the possibility of distance learning, initially as correspondence courses and, more recently, via the internet, has increased over the past decade, especially towards Asia and the Middle East. The link between such new forms of cross-border higher education and physical mobility of people, whether immediate or subsequent, is uncertain.

The mobility of educational programmes is the second most common form of cross-border higher education after international student mobility. Although it encompasses distance learning - including cyber-education (or e-learning) (OECD, 2005a; Larsen and Vincent-Lancrin, 2006) generally complemented by onsite courses at local partner establishments - it mostly takes the form of traditional face-to-face learning, made possible through a partner establishment abroad. Relations between foreign and local establishments have given rise to a variety of contractual arrangements, ranging from development aid to commercial contracts. Commercial cross-border education is now prevalent in the Asia-

Pacific region, chiefly in the form of franchises or twinning, though many other forms also exist. Under a franchise, a local provider is generally authorized by a foreign establishment to offer all or some of its academic courses under very precise contractual arrangements. In most cases, such courses lead to a foreign qualification. Franchises may take numerous other forms, however. Under a twinning programme, students pursue studies with a foreign provider and follow a foreign programme; they undergo some of their training in their country of origin and complete it in the country of the foreign establishment. This type of cross-border education usually involves mobility of both students and programmes.

It is difficult to put a number on cross-border educational programmes or students registered in foreign programmes offered in their own country. The two countries most active in this field - the United Kingdom and Australia - have some 300,000 students registered in their cross-border programmes, mainly in Asia (McBurnie and Ziguras, 2007). Today, all of Australia's 38 public universities offer courses abroad, and their numbers have risen from a mere 25 in 1991 to 1,600 in 2003. Over 85 per cent of these courses are located in China (including Hong Kong SAR), Singapore and Malaysia, while the others are scattered throughout the rest of the world, from India to Canada, including Indonesia and South Africa. The number of students following Australian programmes in their countries represented 33 per cent of all international students registered in Australian establishments in 2004, a nine per cent increase since 1996. Hence, educational services represented Australia's third most important services export item in 2003, worth AUD 5.03 billion (IDP Australia, 2007).

Perhaps on account of the greater entrepreneurial risks entailed, the mobility of establishments is still limited, but has nonetheless become a significant dimension of cross-border higher education. It represents the foreign direct investments made

by institutions of higher learning or educational enterprises. The most typical form of such mobility is the opening of campuses abroad by universities and of training centres by other educational service providers. According to the *Observatory on Borderless Higher Education*, there were about a hundred of these worldwide in 2005 (OBHE *Breaking News*, 27 June 2005). One can point to the examples of Nottingham University (U.K.) with campuses in China and Malaysia; Liverpool University (U.K.) set to open a campus in China; and Monash University (Australia), which has opened campuses in Malaysia and South Africa, while Australia's Royal Melbourne Institute of Technology (RMIT) University has a campus in Viet Nam. Mobility of establishments also includes creating entirely new educational establishments (not affiliated to any establishment of origin), as well as the partial or total acquisition of an establishment abroad. This latter form, for example, is preferred by the stock-listed U.S. group Laureate International Universities, which owns universities in the Americas (Brazil, Chile, Costa Rica, Ecuador, Honduras, Mexico, Panama, Peru), in China and in Europe (France, The Netherlands, Spain, Switzerland).

The relationship between these new forms of cross-border higher education on the one hand, and student mobility and skilled migration on the other, is somewhat unclear. For one thing, these are alternatives to student mobility that do not afford the same cultural and linguistic experience as a stay abroad, but which are less costly. It is conceivable that, apart from their potentially beneficial developmental spin-offs for their host countries (Vincent-Lancrin, 2006), these new forms are limiting the exodus of skills that could otherwise possibly result from student mobility. Moreover, these study courses sometimes entail brief stays abroad and often, though not invariably, lead to degrees and qualifications recognized in the country of the foreign partner university, and could pave the way for subsequent migration to countries where such qualifications are recognized. Subsequent

migration could therefore be an underlying motive. In the Philippines, for example, the number of nursing students has increased dramatically in recent years, often driven by the hope of emigrating to an industrialized, generally English-speaking country. Obtaining a nursing qualification from these countries in the Philippines can only facilitate out-migration. Besides, the British Council encourages British tertiary institutions wishing to engage in cross-border activities in the Philippines to give preference to the medical disciplines. Nevertheless, these new forms of cross-border higher education are still in their early stages, and it would be premature to undertake an assessment of their impact on migration.

3. Today's Major Strategies for the Internationalization of Higher Education

By no means do all countries have an express policy aimed at the internationalization of higher education. Yet, based on current practice, it is possible to identify four major strategies that reflect the range of motivations and policy tools at work in this field. These strategies are not always coordinated and even less directly decided at government level, and their outcomes vary considerably from one country to another. They nevertheless make it possible to paint a picture of the current policy landscape. Each strategy takes a different approach to migration, but the objectives they pursue are not mutually exclusive. The traditional strategy in this field is based on mutual understanding, while the three others - those based on skilled migration, income generation and capacity building - which emerged during the 1990s, are quite clearly dictated by economic considerations. Migration is sometimes an integral part of these considerations.

The goals pursued by the strategy based on **mutual understanding** are primarily related to political, cultural, academic and development aid considerations. The strategy authorizes and encourages international mobility of students and

staff, both national and foreign, through scholarship and university exchange programmes, as well as partnerships between institutions of higher learning. This strategy does not generally recruit foreign students through intensive campaigns, but instead targets a tiny elite of national and foreign students. The coordination aspect is mainly addressed under development aid and geo-strategic choices. Under this approach, it is not rare for scholarship programmes to fall within the purview of the Ministry of Foreign Affairs. As for the migration aspect, foreign students are expected to return to their country of origin and are not infrequently barred from remaining in their host country for more or less extended periods after completing their studies. This traditional strategy of internationalization is still the main approach pursued by countries like Japan, Republic of Korea, Mexico, Spain and, in fact, most developing countries. In the United States, the Fulbright Commission programmes are typical examples of this and associated with J-1 visas (which oblige the students concerned to leave the territory for at least two years before being able to apply for a residence permit allowing them to work in the country). The EU has also launched the Socrates-Erasmus programme in keeping with the same philosophy: student and teacher exchanges, the networking of university departments and establishments throughout Europe, and the joint design of study programmes were intended to foster a feeling of "European citizenship" among European youth, thanks to better mutual understanding and knowledge of several European languages. Although their knowledge of languages and of neighbouring countries could pave the way for subsequent migration by students and contribute to the emergence of a common labour market, stays abroad still tend to be short and part of the educational institution's study programme in the country of origin. Therefore, the principle that students should return to their country of origin is central to the concept of the programme.

The strategy based on **skilled migration** pursues the same goals as the preceding one, but in addition entails the more deliberate and targeted recruitment of foreign students. It is in line with the philosophy of the knowledge-based economy, but also aims to attract talented students (and university personnel) who could become knowledge workers at the service of the host country's economy or boost the competitiveness of research and higher education in that country. The internationalization of higher education enables national systems to compare themselves to foreign systems of higher education and often leads establishments and universities to come up with innovative ideas to adapt themselves to the requirements of foreign students (or of their own students returning from abroad). It also paves the way to attract foreign talent to the host country. Though scholarship programmes could remain an important part of this strategy, they are also complemented by other measures, such as actively promoting a country's higher education system abroad while simultaneously relaxing the visa or immigration regulations for the target groups. Dedicated entities are sometimes created to assist foreigners in relation to their studies and their stay in the host country. Instruction in English might be developed and encouraged in non-English-speaking countries. As such, studies pursued by international students are subsidized by the host country in the same way as for local students. They may target students from certain regions, postgraduate students or future researchers, rather than undergraduate students or students specializing in a particular field. This strategy generally leads to an increase in the number of foreign students received in the country, but has no real impact in terms of the mobility of courses and institutions. It can also prove difficult or impossible to implement, and generally remains embedded in development aid policy or in conventional university partnerships. The countries that have adopted this approach include. Canada (some provinces), France,

Germany, the United Kingdom (for students from the EU) and the United States (for postgraduate students).

The Bologna Process, launched in 1992, marked a reorientation of the policy of internationalization adopted throughout Europe. In particular, it moved the EU Socrates-Erasmus programme closer to the skilled migration strategy. Today, the mobility of students and university personnel is helping to create a European area of higher education and research designed to boost the attractiveness (outside Europe and, more specifically, in Asia) of higher education in Europe and to transform Europe's economies into knowledge-based ones (Huisman and van der Wende, 2004). The harmonization of European systems is not only aimed at promoting intra-European mobility, but also at enhancing the international appeal of tertiary education in Europe, especially vis-à-vis the United States. In 1998, the United States was host to 47 per cent of foreign students from Asia, a figure that had fallen to 40 per cent by 2004. Still, competition is as intense as cooperation among the countries of Europe.

The strategy based on **income generation** pursues the same goals as those based on mutual understanding and skilled migration but, in addition, it directly pursues commercial ends. One specific feature of that approach is that higher education services are invoiced at their real cost to international students, who, by and large, do not benefit from any public subsidies. By comparison with local students, therefore, international students often represent extra income for tertiary institutions, a factor that encourages them to be enterprising on the international education market. For the purposes of this strategy, government authorities allow institutions a high degree of autonomy with a view to creating a solid reputation for their higher education sector and protecting foreign students by means of quality assurance mechanisms. This strategy generally leads to a sizeable increase in the

number of international students paying for their tuition at cost and to the development of profit-oriented mobility programmes and establishments. This sometimes goes hand-in-hand with a reduction of the relative share of public funding in university resources or even with a cut in government funding per student. It may also entail an active policy of commercial negotiations aimed at reducing the obstacles to cross-border educational activities. That may be undertaken via bilateral agreements or through negotiations on trade in educational services in the framework of the World Trade Organization's General Agreement on Trade in Services (GATS).³ Generally speaking, the terms and conditions governing paid work by students are relaxed during the course of their studies but, as under the strategy based on mutual understanding, there are often different policies in place both to limit subsequent permanent immigration by students in general and to facilitate subsequent settlement for some. Public authorities and educational establishments must therefore come to grips with the issue of geographical balance among international students, not only in commercial terms (diversifying the countries of origin to ensure financial stability), but also in terms of immigration. The countries having opted for this approach include Australia, Canada (some provinces), New Zealand, the United States (for undergraduate students), but also Denmark, Ireland, the Netherlands and the United Kingdom (for non-EU students, as EU rules require countries to apply the same registration fees to nationals and to students from elsewhere in the Union).

Finally, the strategy based on **capacity building** involves encouraging the importation of higher education, regardless of how it is supplied, in order to quickly strengthen the human and productive capacities of a developing country. When a country lacks the capabilities to fully respond to its higher education requirements, or when its national system is still weak, cross-border education can help build local capacities both as regards courses available and

³ See OECD (2004a) for a presentation of the GATS and its implications for education.

the human capital needed for the local economy and system of higher education (Vincent-Lancrin, 2005; Middlehurst and Woodfield, 2004; Larsen and Vincent-Lancrin, 2002). While the two preceding strategies are oriented primarily towards the export of education services, the strategy based on capacity building is predominantly import-oriented. In that connection, the scholarship programmes available to support the international mobility of civil servants, teachers, university personnel and students are crucial tools, as are the steps taken to encourage establishments, programmes and foreign universities to come forward and provide their teaching services on a commercial basis. Countries could use the GATS negotiations to signal their interest in transnational services of this kind, though they may also use other less formal means. By and large, the mobility of programmes and institutions falls under government regulations designed to ensure that these activities are in line with the country's academic and economic development strategy. Twinning arrangements and partnerships with local providers are encouraged (and sometimes imposed) so as to open the way for the transfer of know-how between foreign and local academic institutions. The short-term impact of this approach is a considerable increase in the number of national students going abroad, as well as of the number of profit-oriented foreign programmes and educational institutions entering the country to meet local demand. In principle, once the country's capacities are strengthened, there is no further justification for this approach, and its success should in theory lead to a change of the underlying strategy. It attaches capital importance to coordinating educational policy with economic and commercial policy. In particular, countries must ensure that their quality assurance systems cover foreign courses and institutions and that the latter do, indeed, contribute to the achievement of the country's objectives. Their migration policy must favour temporary mobility for professionals, and they often incorporate measures to encourage the return of their nationals going abroad to study or to complete their training so

as to avoid a substantial outflow of needed skills. This strategy is being followed mainly in Southeast and East Asia and the Middle East — China, Hong Kong SAR, Indonesia, Malaysia, Singapore, Viet Nam and Dubai (as well as in other states part of the United Arab Emirates).

4. What are the Links Between the Internationalization of Higher Education, Student Mobility and Skilled Migration?

The internationalization of higher education raises new challenges for policymakers with respect to education policy (OECD, 2004a and b), as well as the coordination of their economic, social, migration and development policies (OECD, 2006b). The links between migration and the internationalization of higher education are reciprocal in that migration strategies and policies encourage and facilitate the internationalization of higher education while, at the same time, they are becoming increasingly influenced by, and dependent on, that process. The two major issues therefore pertain to reconciling the aims of migration with the internationalization of higher education and to the brain drain. To what extent are student mobility and the internationalization of higher education giving rise to skilled migration? In the absence of figures in reply to that question, this section will attempt to illustrate the current scale of the issues involved.

Visa policy for students and university personnel and, more generally, immigration policy are an important part of the machinery for the internationalization of higher education. Attracting international students to a country will make sense only if they are able to enter to pursue their studies and, ideally, to do so without undue difficulties. If international students are to be attracted while they are also being expected to pay market-driven tuition fees, authorization to work in the host country will go a long way to persuading them to come. Similarly, attracting foreign teaching establishments and educational

programmes often entails facilitating temporary migration for professionals (university personnel, etc.). Many countries now attach growing importance to attracting foreign students and have therefore simplified or reviewed their application procedures for visas and residence permits for foreign students, not least by improving the available information concerning these procedures.

Yet, a country's migration policy can also hamper its strategy for the internationalization of higher education, above all when that strategy is decentralized. Migration authorities are sometimes fearful that any relaxation of the procedures to obtain student visas may lead to abuses or fraud. Moreover, other political priorities may conflict with these policies. After the events of September 11, 2001, the United States, for example, clamped down on the conditions governing the admission of foreigners to the country. This meant tightening the procedures to obtain student visas and introducing longer verification periods (each applicant for a student visa must be interviewed face-to-face by a representative of the U.S. authorities). Perhaps this policy acted in combination with stronger competition from other countries to reduce the number of candidates and to slow the rate of foreign student enrolment in the United States. The number of foreign students increased by a mere 0.6 per cent between 2002 and 2003, as against 6.4 per cent during the two preceding years. It contracted by a further 2.4 per cent between 2003 and 2004, and by 1.3 per cent between 2004 and 2005 - the first decline in the number of foreign students in the past 32 years (Institute for International Education (IIE), 2005). The geographical composition of the foreign student body also changed, with fewer students arriving from Arab countries and the Middle East, offset by an increase in the number of Indian and Chinese students. Academic institutions raised their concerns with the U.S. authorities, who have somewhat relaxed and improved the efficiency of their visa policy for foreign students and university personnel since 2003. The result was a nine per cent

increase in the amount of student visa applications during the first half of 2004 (U.S. Department of State, 2005). That was the first increase since the 9/11 attacks, and student visa applications again reached pre-9/11 levels in 2006.

Furthermore, migration policies and strategies are themselves becoming increasingly dependent on the internationalization of higher education, although the available data are not sufficient to gauge the true impact of cross-border higher education on migration and, more specifically, on the migration of qualified individuals. In some instances, the pursuit of studies abroad is part of a deliberate migration strategy on the part of individuals, since obtaining a foreign qualification is sometimes indispensable to working in their particular field of specialization in the host country and an asset that often weighs favourably in the balance when applying for a residence permit. The free movement of persons in the EU no doubt partly explains the scale of student mobility in Europe relative to the more limited student mobility between North American countries. The North American Free Trade Agreement (NAFTA) does not provide for the free movement of labour across a common labour market. In some cases, the permanent establishment of students abroad after completing their studies is unintentional. Whether internationally mobile or not, students are often of an age to start families and may marry and stay in the country where they are studying. Moreover, the competition among countries to attract highly qualified individuals has intensified in recent years, as reflected in recent migration policy trends (Tremblay, 2005; OECD, 2006c; see also Chapter 2). As observed above, migration is becoming an increasingly important component of the internationalization strategies being pursued by source countries. Moreover, migrants who also hold a degree obtained in the host country frequently find it easier and are more ready to integrate. Therefore, migration policies are increasingly factoring in the authorization or facilitation of permanent residence for international students in the host country after

their studies. Australia, Canada, New Zealand and the United Kingdom, for example, facilitate the settlement of foreign citizens with qualifications from their universities by granting them extra points in their immigration application file. Although they have no points system, France, Germany and some other countries have introduced more flexible immigration policies for qualified migrants and for foreign students wishing to work there after their studies.

Given these developments, the potential brain drain from developing countries encouraged by cross-border higher education is becoming a major concern and a topic of extensive discussion. While it may assist developing countries in their efforts to strengthen their own human resource capacities (Vincent-Lancrin, 2005), cross-border education can indeed favour brain drain rather than the circulation of skills between host and home country. There is no record of systematic data on the relationship between the mobility of students and researchers, and subsequent variations in immigration patterns. What little exists, however, confirms that there is a link. Some 75 per cent of Chinese students who studied abroad between 1978 and 1999 have not returned to China (Iguchi, 2003).

In 1999, around 25 per cent of temporary migrants to the United States under the H1-B visa programme had been previously enrolled in U.S. universities (Cervantes and Guellec, 2002). For some years now, almost half of the candidates admitted under Australia's skilled migration programme hold an Australian degree (OECD, 2006c). A recent study of migration policies intended for international students sets out other estimates (Suter and Jandl, 2006) (see Textbox 4.2). In Canada, it is estimated that between 15 and 20 per cent of foreign students have stayed on and are working in the country; in New Zealand, 13 per cent of the foreign students who entered the country between 1998 and 2005 to study obtained a residence permit by 2006; in Norway, 18 per cent of the foreign students studying there between 1991 and 2005 and originating from outside the European Economic Area (EEA) remained in the country, as against nine per cent of foreign students from within the EEA; lastly, in the United Kingdom, a recent study showed that, in 2005, 27 per cent of international students from within the EU were employed in the U.K. six months after obtaining their degrees. However, statistics on the incidence of foreign students remaining in their host country following the completion of their studies are still insufficient.

Textbox 4.2

National and Regional Retention Policies for Foreign Graduates in Industrialized Countries

Today's labour markets in industrialized countries face two main challenges: the demographic decline of the native population and the transformation of the global economy into a knowledge-based and increasingly interdependent economy. For politicians as well as policymakers in the field of immigration and labour, both phenomena have given rise to significant new questions, particularly in the case of economies that must now depart from their traditional reliance on mostly low-skilled employment in heavy industrial production based on available local natural resources.

Many countries are responding to this development by seeking to attract and retain highly skilled migrants to fill particular labour shortages. Australia and Canada have long pursued proactive migration policies targeting highly skilled migrants through their points-based selection systems for permanent immigration. Other countries are following this example as offering an ideal response to the current labour shortages in specific sectors and to attract and retain highly skilled migrants.

In view of the growing competition for human capital, it is not surprising that policymakers are targeting international students to satisfy the growing demand for highly skilled human resources. Foreign graduates are seen to possess characteristics that facilitate integration both professionally and socially, which makes them particularly attractive for recruitment and retention. They are usually young, have a high propensity for acculturation and possess widely recognized professional and academic credentials and appropriate professional training in relevant fields of activity. This last point is especially important as many

migrants encounter difficulties in having their foreign academic and professional credentials recognized and gaining access to the labour market.

The retention policies applied by a number of countries facilitate access to employment and, directly or indirectly, lead to permanent settlement. Some national immigration schemes have special provisions for the highly skilled and grant extra points under the points selection system for one or two years of studies in the country, while others have designed labour schemes specially targeting foreign graduates. In France, Germany and New Zealand, for example, foreign students are permitted to stay in the country for up to one year after graduation to look for a job.

The impact of such retention policies is difficult to evaluate as only few countries are currently able to produce statistics concerning the settlement of foreign students. Yet, some indicators are available. Thus, in Canada, between 15 and 20 per cent of foreign students can be expected to eventually settle and work; however, this estimate includes residence permits issued on all possible grounds, including family reunion. In 2001, Australia introduced the possibility of permanent settlement for overseas students and in 2002-03, nearly 8,500 permanent residence permits were granted to former students, representing about five per cent of all foreign students enrolled in 2001-02. In 2004-05, this number almost doubled to 16,700, accounting for eight per cent of all overseas students enrolled in 2003-04. In the United Kingdom, 19 per cent of EU-domiciled graduates had found employment in the country in 2000-01, rising to nearly 27 per cent in 2004-05. While such figures do not reflect the full story, they nevertheless indicate a trend in the interest among foreign students to settle and work in the country where they studied as well as the willingness on the part of the countries concerned to facilitate these processes.

Some constituent units of federal countries or regions¹ which have, or felt that they had been neglected or unable to fully participate in national immigration schemes, have started to pursue their own labour schemes either of a general nature or specifically aimed at foreign graduates to meet their labour market and demographic needs. Regional programmes aiming to attract and retain international students usually offer favourable conditions for admission, such as either allocating more points if a job offer is secured, lowering the minimum points threshold for admission or extending the validity of a temporary work and residence permit.

There is evidence to show that universities exert a strong and direct impact on the economic, social and political development in the regions where they are located and that they play an increasingly important role in national migration management schemes aimed at attracting and retaining foreign graduates. Their influence now extends well beyond the provision of quality education and community-building facilities such as theatre, museums and coffee shops where students can meet and mingle to include migration-oriented endeavours. Universities are increasingly seen as a source of highly skilled human capital for the national and regional labour markets while, from the perspective of migrants, they have come to be seen as stepping-stones to permanent immigration.

Note:

¹ E.g. some Canadian provinces and territories, Australian federal states, and Scotland in the U.K.

Source: *Brigitte Suter, Malmö Institute for Studies of Migration, Diversity and Welfare (MIM), Sweden.*

The United States remains the only country to systematically compile data on the stay rates of foreign students after receiving their degree (Finn, 2003). There is no doubt that receiving international students is one way of attracting skills to the United States, and this attraction has increased steadily since the early 1990s as a result of the combined effect of the larger number of doctorates being delivered by American universities to foreign nationals and the increasing share of doctorate holders born abroad who remain in the United

States. The average stay rate⁴ for foreign recipients of science and engineering doctorates in the United States four to five years after earning their degrees rose from 41 to 56 per cent between 1992 and 2001.

⁴ What the stay rate shows is not whether foreign students have remained permanently in the United States, but how many foreign doctorate recipients from a specific year were still in the United States some years later. Some of these degree holders may have left the country and returned again later. For example, the stay rate for 1991 graduates was 58 per cent in 2001, but would be 81.5 per cent if the rate were to reflect the proportion of persons who had worked in the United States for at least one year during the 1992-2001 period (Finn, 2003).

The figures leapt from 65 to 96 per cent for Chinese and from 72 to 86 per cent for Indian nationals. Stay rates in countries following the completion of studies vary considerably depending on the country of origin and the academic discipline pursued. But in most cases stay rates do not decline significantly over time and partly depend on the level of economic development of the country of origin, though there seems to be no systematic pattern in that regard. Concerning students from Argentina, China, Greece, India, Iran, Israel, eastern European countries as well as New Zealand and the United Kingdom, about 50 per cent are still in the United States five years after receiving their doctorate (Finn, 2003).

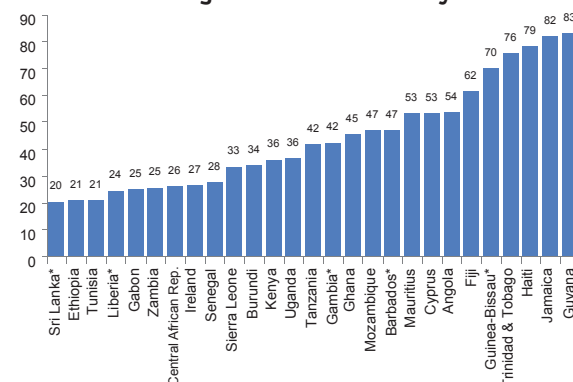
In this context, there are grounds to fear that cross-border education could reinforce brain drain as much as it builds capacities in developing countries. As noted earlier, 85 per cent of foreign students throughout the world were in the OECD area in 2004, but most of them (61%) arrived from non-OECD countries. The highly sensitive topic of skilled migration can represent a cost, while it also yields advantages for the countries of origin. On the one hand, countries of origin lose the human capital (and productivity) represented by their skilled people and, if they were educated at public expense, the investment made in their primary, secondary and higher education. On the other hand, this highly qualified diaspora could contribute to the home economy through investments, remittances and the links they establish between countries of origin and destination in terms of trade, innovation and know-how. Naturally, a clear distinction must be made between temporary and permanent out-migration. If they return to the country of origin with their acquired international expertise and experience and are able to employ their skills productively, this would represent a positive contribution to local capacity building and the sharing of expertise in the country of origin (see also Chapter 12).

The OECD's migration database yields unprecedented information regarding the scale of the brain drain (OECD, 2005c). Countries in Africa and the Caribbean

are most affected: over 80 per cent of Jamaican and Guyanese graduates have migrated to an OECD country. In contrast, despite the high stay rates for Indian or Chinese students in the United States following their studies, they account for less than three per cent in OECD countries. The picture is similar for Brazil, Indonesia and Thailand, where an average of 17 per cent of skilled nationals migrated to an OECD country.⁵ Figure 4.3 shows that the countries of Africa, as well as small countries, mainly in the Caribbean, are those most affected by high rates of skilled migration. One may be tempted to see a correlation between these findings and the data in Figure 4.2, which show that, in relative terms (i.e. relative to the country's overall student body), African students have the highest stay rates abroad. Conceptual and methodological problems aside, the countries for which data are available on these two indicators do not provide a sufficiently solid basis on which to establish a correlation. There is no way of determining whether these individuals received their degrees outside their country.

Figure 4.3:

Countries with over 20 per cent of their Graduates Living in an OECD Country



Note:

* Calculations using the Barro and Lee database on the human capital stock. The Cohen and Soto database is otherwise used for all countries for which data are available. The findings from the two databases are not perfectly comparable. It should be noted that the data reflect (accumulated) stocks, not flows.

Source: OECD, migration database.

⁵ Not to be confused with 17 per cent of the world's skilled population, as this per-country average takes no account of population size.

Even for countries affected by brain drain, turning in upon themselves is no solution. Taking part in international higher education exchanges is their best option in their attempts to minimize the cost of the brain drain. Countries have been coming up with new initiatives designed to offset these movements which, it should be recalled, reflect individual desires and decisions. When foreign students are funded by their home authorities, the United Kingdom sometimes makes their admission contingent on prior authorization from their country of origin. Supported mainly by international organizations, including the International Organization for Migration (IOM), many developing countries are now attempting to harness the resources of their diasporas to develop the needed expertise at home by providing funds to enable their expatriates to undertake temporary but regular work in the country. Even in better-off countries, many programmes have been introduced to encourage renowned scientists to return and resettle in their country of origin.

5. Conclusion

Student flows grew rapidly over the past decade and show no signs of diminishing in the decades ahead. However, the proliferation of other forms of cross-border higher learning and capacity building in emerging economies could well transform this dynamic - without, for all that, reducing flows in the medium term. Globalization, increased migration flows of all types, the strategies followed by institutions of higher learning and the policies of developing countries are all combining to create a more competitive, homogeneous and globalized arena of higher education, which, in turn, makes for continuing student mobility. The growing worldwide movements of professionals, in particular, are generating pressures for greater harmonization and comparability of qualifications and degrees throughout the world. Undoubtedly, international cooperation between professional bodies and

academic disciplines will thus go some considerable way towards increasing comparability and the recognition of studies abroad. This will make it less useful or necessary for skilled persons to go abroad to study, while at the same time, making it easier to do so.

Within the European Union, a certain convergence of quality assurance and accreditation systems can be observed for both vocational training and higher education. One of the aims of the Bologna Process is to implement European quality assurance mechanisms using comparable yardsticks and methods. The UNESCO/Council of Europe Convention on the Recognition of Qualifications concerning Higher Education in the European Region, adopted in 1997 in Lisbon, is yet another significant initiative. No longer does it simply take the approach of "equivalence" of degrees and diplomas based on the concepts of "recognition" and "accreditation". It is based more on **cooperation** and **trust** between national systems. When a country ratifies this Convention, it is required to recognize the degrees and diplomas delivered by the other signatories as similar and corresponding to the qualifications granted under its own system, unless a substantial difference between the respective degrees and diplomas issued by the respective parties can be shown to exist.

Of the international agreements on the mutual recognition of professional diplomas, the one that goes farthest is the 1989 Washington Accord concerning engineers and associations representing their profession in Australia, China, Hong Kong SAR, Ireland, New Zealand, South Africa, the United Kingdom and the United States have also recently signed and Japan has acceded to it provisionally. The Accord recognizes "the substantial equivalence" of engineering academic programmes in satisfying the academic requirements for the practice of engineering at the professional level, but does not yet envisage official mutual recognition of professional degrees

and diplomas. The Accord also stipulates the rules and procedures for accrediting engineering academic programmes. The signatories mutually accept the respective accreditation decisions and therefore recognize the equivalence of each country's national accreditation mechanisms.

Is student mobility a major source of skilled migration? While there is no doubt that some countries are facing an exodus of skills (i.e. human capital with diplomas from higher education), especially in Africa and the Caribbean, there is still very scant evidence linking it to student mobility and cross-border higher education. In numerical terms, international students do not represent a very significant source of skilled migration. Assuming that one-quarter of the stock of international students complete their studies each year and that 25 per cent of this group stay in the country where they studied, that would represent no more than 20 per cent of the current level of skilled migration (and less than five per cent of migration flows) (OECD, 2006c). Although it is known that in some countries former students may account for a much larger proportion of skilled migrants, it is probable that most skilled migrants emigrate with

diplomas received in their country of origin. In the future, however, it will be increasingly difficult to tell whether a skilled migrant holding a diploma from the host country actually studied and received it there, or whether it was obtained from the external branch of a foreign academic institution established in the country, or through distance learning, e.g. via the internet. Nor will it be evident whether diplomas not earned directly by studying in the host country were obtained in a country other than the home country. In short, the linkages between the internationalization of higher education, student mobility and skilled migration are growing more complex, and it will be increasingly difficult to view them strictly in terms of stay rates of international students in countries where they have studied. The internationalization of higher education will continue to be one of the driving forces behind skilled migration. This type of migration should continue to prompt countries to harmonize their systems of higher education and to implement mechanisms for the international recognition of professional diplomas and qualifications, thereby facilitating and further strengthening migration flows of students and graduates of higher education.

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