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# GLOBALISATION AND INTERNATIONALISATION OF TERTIARY EDUCATION

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by  
Mary M. Kritz

Population and Development Program  
and  
Polson Institute for Global Development

Cornell University  
Ithaca, New York

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## **I. Globalisation and Transnationalisation of Higher Education: The Issue**

In today's Globalisation Era, knowledge is increasingly a commodity that moves between countries. The growth of the knowledge-based economy has led not only to competition among employers worldwide for the best brains but also among the institutions that train the best brains. Rapidly increasing demand for higher education, in turn, exceeds the capacity of many countries to supply it domestically. For decades, many students have migrated to other countries to obtain higher education and today they continue to do so in increasing numbers. However, change is underway in how higher education is delivered that could affect future pathways of international student mobility. Increasingly, institutions of higher education are building partnerships with universities in other countries, delivering education using online and other technologies, and setting up branch campuses abroad that are changing the structure and relationships that traditionally existed in higher education. If these trends continue, growing numbers of students seeking higher education in the years ahead will be able to obtain quality education in their homelands or neighboring countries rather than having to travel to other regions to do so.

The traditional form of cross-border flows in higher education has been for students to migrate from one country to another to advance their studies. Several economic and social factors encourage international student mobility and competition between countries for foreign students (Clark and Sedgwick 2005, OECD 2004a). Students themselves are eager to advance their education and, if opportunity and resources permit, willing to do so by leaving their homelands and migrating to another country. In addition, universities in North America and Europe have been eager to receive foreign students for a host of reasons. Foreign students were welcomed traditionally because they brought cross-cultural and international diversity to universities. North American and European universities still value foreign students for that reason but also recognize today that foreign students can help stabilize their student bodies and revenues. As the tertiary school-age population declines in countries with aging populations, a trend already underway, foreign students become substitutes for domestic students and can allow universities to stabilize their enrollments.

Governments of countries that send or receive foreign students usually view this type of international migration flow favorably. Many receiving countries even recruit and provide scholarships to foreign students as a means of enhancing their international status and relations with other countries. Because most foreign students pay their own living costs and student fees, governments recognize that they bring in foreign exchange for expenditure in the cities and regions where education institutions are located, thereby stimulating local economies. Governments have long seen the training of foreign students as a means of advancing development (Harbison and Myers 1964). To achieve that end, governments and private foundations started scholarship programs in the 1960s and 1970s as a means of building human capacity in Asia, South America and Africa. However today, sending countries are more likely than receiving ones to provide scholarship support, particularly in science and

technology fields, but receiving countries continue to subsidize foreign students in other ways.

In the past, most foreign students went to the United States or Europe to do their studies and that continues to be the principal pathway they follow today. However, even as the overall volume of international students increased in recent decades, the composition of flows to different destinations has changed. Moreover, further change may be on the horizon as cross-border education activities grow. The development community is becoming aware of the opportunities and challenges presented by cross-border higher education (CBHE). Development experts recognize that CBHE has enormous potential for expanding the pool of human capital available to low- and middle-income countries which, in turn, could advance their economic and social development (Knight 1999, Ninnes and Hellsten 2005, OECD 2004a). Therefore, it is important to document the type of CBHE activities emerging to assure that countries wishing to strengthen their higher education capacity and increase their pool of skilled workers can take advantage of new opportunities. It is also important to document how international student mobility is changing and identify trends that may emerge in the future as CBHE grows (Davis 2003, Tremblay 2005 , United Nations Population Division 2005 pp.141-150). The main objective of this Report is to start this documentation effort by reviewing trends in CBHE and international student mobility.

#### **Box 1: Definitions**

**Globalisation** is seen here as the root cause of changes taking place in higher

## **II. The Internationalisation of Higher Education: What is Changing?**

For decades, students have gone to other countries to advance their higher education and high-income countries have awarded grants and travel assistance to their teachers and researchers to enable them to collaborate with scholars and institutions in other countries. Cross-border mobility of students, teachers and researchers has increased in recent decades and international flows of academic personnel now crisscross the globe in all directions, bringing growing numbers of people from diverse cultures into exchange with each other in a neutral environment focused on learning and intellectual exchange. Students who crossed international borders for higher education purposes used to originate mainly in countries in the South and flowed to countries in North America or Western Europe to continue their

Multilateral and bilateral agencies and private foundations have recognized for decades that to advance economic and social development, the supply of human capital in emergent economies needed expansion (Harbison and Myers 1964) and higher education capacity needed to strengthening (Thompson and Fogel 1976). In response to this perceived need, in the 1960s, private foundations and bilateral agencies developed scholarship programs that enabled students from developing country to obtain higher education in North America or Europe. However, sending students to another country for higher education was costly and fell out of favor in the 1980s as evidence accumulated that scholarship programs led to a "brain drain" for most sending countries and a "brain gain" for countries where foreign students went. In response, funding agencies phased out their scholarship programs in the 1980s. A few private foundations continued to provide scholarships for foreign students in selected fields such as agriculture and population studies, but most of those programs too were eventually phased out in the 1990s.

Support for study abroad and capacity building at home also fell out of favor in the 1980s because development experts recognized that a disproportionate share of education resources in developing countries were being spent on higher education and that investing in primary and secondary education was a more equitable and efficient means of improving health and other social indicators. Experts argued that before investing further in elite higher education, countries should invest in elementary and secondary education and seek to achieve universal education at those levels. In addition, countries were encouraged to provide short-course training to extension agents and others who need specialized skills to deliver health, agriculture and community-delivery services. "Get the job done" mentality carried the day and funds were cut back for universities at the same time that tertiary enrollments started to increase rapidly as a result of economic and population growth. As a result, education quality suffered at many third-world universities. Further deterioration in higher education capacity occurred in countries where governments passed laws that required universities to admit all qualified students but restrained them from raising student fees to cover the costs of growing student bodies. As a result, many faculty members associated with universities in Africa, Latin America and Asia left them to work in the private sector or fled their countries to work with international agencies or NGOs that sought to internationalise their staffs. Those developments led to further deterioration in higher education institutions in the developing world and exacerbated the brain drain.

Given that the global number of foreign students continued to rise in recent decades even as scholarship money for foreign students from governments and donors diminished in the 1980s, where did students get their support? While data on foreign students' sources of financial support are not generally available, the Institute of International Education (IIE) has gathered and published data since 1979 on sources of support of foreign students studying in the United States. In the 2004/05 academic year, 60 percent of U.S. foreign students drew on family or personal resources, a level of support that has remained stable throughout the 1979 to 2004 period. Trends in non-family support, shown in Chart 1, confirm that government support, in general, declined in recent decades and show that U.S. universities are



now the major source of support for most foreign students, especially at the graduate level. Whereas U.S. universities funded fewer than 10 percent of foreign students enrolled in higher education in the United States in 1979, they funded a quarter of them in 2004. At the graduate level, universities funded almost 45 percent of all foreign students. That trend occurred because of the growth in the United States of grant and contract money from the federal government, corporations, and private foundations to support research in science and technology fields. Research grants usually include funds to support graduate student assistantships. However, at the same time as research funding was increasing, fewer U.S. students were entering science and technology fields and, therefore, universities turned to foreign students to fill assistantship openings on their research projects.

**Types of cross-border higher education arrangements.** International research and program collaborations between universities located in two or more countries are growing rapidly and have implications for international student mobility. Universities, governments and other institutions are setting up collaborative programs that usually involve the delivery of higher education itself in a different country than the one where the host institution is located. Since these program developments are relatively recent, no common terminology or typologies exist to describe or classify them. In its cross-border work on education, OECD (2004a) differentiates between who migrates: students, programs or institutions. Sauv> (2002) uses the GATS framework to classify education services into four categories: “cross-border supply” of education services from one country to another; “consumption abroad” or the supply of education services in one’s territory to a national of another country; “commercial presence” or the supply of education services by an institution (university, corporation) from a foreign country; and “movement of natural persons” or the supply of the education service by a provider from another country. Under Sauv>’s typology, foreign students would be a consumption abroad service while movement of natural persons would involve the international mobility of the supplying institution’s teachers or managers. Cross-border supply is the type of cross-border activity of interest in this Report.

Cross-border supply of higher education services, however, can take different forms depending upon the output produced. Table 1 identifies six types of transnational higher education services that have implications for whom and what migrates at different stages of the post-secondary education process, including Study Abroad programs, Program Partnerships, Branch or Offshore Campuses, Distance Learning, Corporate Training, and Outward-Bound training. Table 1 also identifies the credit or degree mode typically used by universities delivering the service and gives examples of program suppliers.

Universities can set up **Study Abroad** programs in several ways but typically they do so by collaborating directly with universities in another country; by setting up an office in another country and delivering the service themselves; or by contracting with education agents who deliver the service to their students. The Erasmus program in Europe is the largest Study Abroad program. It was set up in 1987 under the auspices of the Socrates program, Europe’s education program, and permits

European nationals to spend 3-12 months of study in another European country -- 31 European countries currently participate in the Erasmus program. Supported by the European Commission, by 2004, over 1.2 million students and 2000 tertiary institutions had participated in Erasmus. In 2003/2004, there were 135,586 European students receiving financial support from Erasmus. The United Kingdom is the biggest net importer of Erasmus funded students followed by Ireland, Sweden, and the Netherlands. Erasmus also supports teacher mobility. Information and statistics on Erasmus are available online at <http://www.erasmus.ac.uk/>. In 2003, the European Parliament and Council approved the Erasmus Mundus program to allow students from third-world countries to study in Europe. Under this extended program, third-world students will receive up to 5,000 scholarships annually and European Union graduate students can compete for 4,000 scholarships for study in third-world countries.

Growing numbers of U.S. students also participate in Study Abroad programs, 174,629 did so in 2002/03, up from 76,302 ten years earlier. Most U.S. students travel to Europe to study (63.5 percent in 2002) but that percentage has declined slightly in recent years. While Latin America receives the second largest percentage of U.S. students (15 percent), Oceania and Africa are increasingly attractive destinations for U.S. students. Most U.S. nationals have to self-finance their study abroad but some students, on a needs basis, receive subsidies from their universities.

**Program Partnerships** and **Branch or Offshore campuses** are difficult to differentiate because both involve some form of collaboration between institutions located in two or more countries. The distinction drawn here between these two types of institutional collaborations depends upon whether students receive a degree for their study as well as course credit and, if a degree is awarded, which institution awards the degree. **Program Partnerships** are defined as international institutional collaborations under which each of the participating partners awards course credit. While some Program Partnerships may require Study Abroad participation as part of the degree, as long as the degree is awarded by a single institution to students enrolled in the study program in the university's home country, it can remain outside of a country's regulatory framework. Thus, according to this definition, Program Partnerships are "informal" and mainly involve collaboration on program "content" rather than formal accreditation.

**Branch or Offshore Campuses**, on the other hand, are formal cross-border higher education initiatives (CBHE) structured from the outset with the intent of awarding participating students with a joint degree in the name of the participating partners or under the brand name of the foreign participating university even though none of the education may have taken place in the university's origin country. It is becoming common under Branch Campus arrangements for students to receive a degree from the foreign university that set up that campus even though it is not located in the country where the higher education took place. Awarding the degree in the name of the foreign university collaborator can address a concern often raised by education experts about cross-border education, namely that "quality" may be



students receive a degree either in the name of the foreign university or jointly in the name of both partner universities. Since most countries have restrictive laws regarding the delivery and certification of education services within their borders, branch campuses are relatively rare. Generally, branch campuses can only be set up in countries that have legal frameworks that enable and permit foreign institutions to provide higher education services and degrees. Countries seeking to attract foreign

2003 were the University of South Australia (5,816 students), Curtin University of Technology (5,245 students), Royal Melbourne Institute of Technology (5,493 students), Charles Sturt University (4,319 students), and the University of Western

up Dubai Knowledge Village (DKV) and invited foreign universities to establish Branch Campuses at the Village and award tertiary degrees under their brand name. Since DKV opened in 2003, 13 universities from seven countries have set up higher education programs. Several British universities participate in the program and other foreign partners come from Australia, Belgium, India, Iran, Ireland, and Pakistan. It is difficult from available sources to assess the Branch Campus arrangements at DKV but they appear to be less structured than the partnerships developed in Qatar. At least one foreign university, the University of Southern Queensland, Australia, opened up a campus in Dubai but closed it after a couple of years. Other universities listed as partners in a given year are not mentioned in subsequent years on DKV's website, suggesting that the collaboration fizzled before it officially started.

Although the typical Branch Campus arrangement is for a foreign university to collaborate with one or more universities in another country, a variant of that model occurred in the case of three British universities that opened up programs at DKV. The three universities – Edinburgh, Birmingham, and Manchester – agreed in 2004 to set up research-based, postgraduate education programs in different fields at DKV under the name of a new university, British University of Dubai. Subsequently, the University of Cardiff and the Sir John Cass Business School, City University, joined the British University partnership. However, rather than awarding degrees under their separate brand names, the participating British universities will award the degrees under the name of a new university, British University of Dubai.

As Program Partnerships and Branch Campus arrangements grow, they will expand the higher education opportunities open to nationals of countries where the programs are based and allow them to choose whether to study at the campus closer to home or to migrate to a foreign country to continue their studies. Students in some regions already have such choices and no longer need to migrate to Europe, North America, or Oceania to further their higher education. However, as will be discussed further below, there is limited evidence to date that international student pathways are changing.

Three other types of transnational higher education activity – **Distance Learning, Corporate Training, and Outward Bound** -- are identified in Table 1 but will not be discussed in detail in this Report even though they are growing rapidly

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to the United States or other advanced economies have to be certified, the Outward Bound training programs generally use the curricula that U.S. universities do.

St. George School of Medicine, Grenada, is an example of an **Outward Bound** training program. It was set up in 1977 to train medical doctors for the U.S. medical market but today it trains medical personnel for the United Kingdom as well. Three state governments (New York, New Jersey and California) have approved St. George's medical program and allow U.S. students enrolled in the program to do their clinical training in teaching hospitals in those states. In 2005, St. George set up a partnership with the University of No



reasons but also because it brings in foreign exchange and expands the revenue base of higher education providers.

The global higher education market should grow rapidly in the future. Table 3 shows estimates of the current and projected supply of higher education students in OECD and non-OECD countries and regions. The current and projected numbers of students in the 20-24 age group is used as the tertiary education referent population by UNESCO and other agencies to calculate tertiary gross enrollment ratio (TGER) and compare trends across countries. While UNESCO asks countries to report their numbers of students enrolled in higher education, it does not ask them to give the age distribution of those students and thus it is not possible to calculate refined enrollment rates for different countries by age.<sup>3</sup>

Whereas 16 percent of the world's population aged 20-24 lived in OECD countries in 2000, only 13 percent will live in those countries in 2025. The numbers of 20-24 year olds in non-OECD countries, in contrast, will rise to 87 percent by 2025. In 2002/03, UNESCO calculated a TGER of 56.8 for OECD countries and 20.8 for non-OECD countries. Future global demand for higher education will depend on age structure changes and changes in enrollments. However, trends in these two factors will differ for OECD and non-OECD countries. The TGER gap between OECD and non-OECD countries should narrow in the years ahead since demand for higher education is rising rapidly in the latter and TGERs have leveled off in the former. However, non-OECD countries will also face increased demand due to expected growth in the size of their 20-24 age populations.

The results of an estimate of higher education enrollments in 2025 in OECD and non-OECD countries from growth of the 20-24 age population and a rise in the TGER to the 2002/03 mean TGER is given in Table 3. The projection is straightforward since the 20-24 age population includes persons aged 0-4 in 2005. No international migration was assumed. The projections in Table 3 shows that student enrollments will expand only modestly in OECD countries by 2025, rising from 46 to 51 million, but in non-OECD countries, enrollments will rise from 69 to 255 million.

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<sup>3</sup> While the appropriate age base to use for cross-country comparisons also affects primary and secondary education indicators, it is particularly difficult to identify the appropriate age-group for higher education students because many of them delay their entry or only attend school part time. Standardized denominators are preferred even though they may produce statistics greater than 100% at primary and secondary levels. However, that is unlikely to occur at the higher education level because enrollments are not universal at that level.

<b>Table 3: Population and Tertiary Enrollment in OECD and Non-OECD Countries, 2000-2025*</b>		
	<b>OECD</b>	<b>Non-OECD</b>
2000 - Population aged 20-24 (000s)	81,896 (16%)	428,561 (84%)
2025 – Population aged 20-24 (000s)	77,106 (13%)	517,518 (87%)
2000 - % of total 20-24 population	16.0%	84.0%
2025 – % of total 20-24 population	13.0%	87.0%
2002/03 - Tertiary Gross Enrollment Ratio (TGER) **	56.8	20.8
2002/03 - Number students enrolled in higher education (000s)	46,347	69,395
2025 - Projected tertiary enrollment with change in age group but no change in TGER (000s)	44,688	71,958
2025 – Projected tertiary enrollment with increase in TGER (000s) to 2002 OECD level but no change in age group***	6,583	182,564
2025 - Projected tertiary enrollment with change in age group size <b>and</b> increase in TGER to 2002/03 OECD mean (000s)***	51,271	254,522
Source: Estimates of 2000 and 2025 population are from the United Nations medium variant projection prepared by the Population Division, Department of Economic and Social Affairs, United Nations Secretariat, <i>World Population Prospects: The 2004 Revision</i> and <i>World Urbanization Prospects: The 2003 Revision</i> , <a href="http://esa.un.org/unpp">http://esa.un.org/unpp</a> . Estimates of gross enrollment ratios are for 2002/3 and from the UNESCO Institute of Statistics, <i>Global Education Digest</i> . <a href="http://www.uis.unesco.org/ev.php?ID=6086_201&amp;ID2=DO_TOPIC">http://www.uis.unesco.org/ev.php?ID=6086_201&amp;ID2=DO_TOPIC</a>		
*	Statistics are for the 149 countries in UNESCO’s Institute of Statistics database in 2000. The 149 countries had 96 percent of world population in 2000.	
**	TGER is the ratio of total tertiary enrollment to the population aged 20-24. Since all students enrolled are not in this age group, the TGER can be larger or smaller than the percent of the population aged 20-24 that is actually enrolled.	
***	Countries with 2002/3 TGERs higher than the OECD mean are assumed to have the same TGER in 2025 as in 2002 for the age structure projection. However, for the change in TGER projection (last 2 rows), the OECD countries with a TGER lower than the OECD mean were raised to the OECD mean.	

It will be difficult for developing countries to build sufficient higher education capacity to meet projected growing demand in the years ahead. At the same time, declining enrollments due to demographic changes in developed countries mean that many tertiary institutions in Europe, North America, and Oceania will have surplus capacity that will not be used unless enrollment rates of domestic students increase. Foreign students, on the other hand, are potential substitutes for domestic students and will be sought after by both the traditional host countries and new countries that seek to recruit foreign students.



aggregation of eight countries (Austria, Belgium, Denmark, Ireland, Italy, Netherlands, Sweden, and the Netherlands)

Since the United States receives double the number of tertiary foreign students as the next largest receiver, the United Kingdom, it is in a category of its own. From 1990 to 2002, foreign student enrollments in the United States increased by 44 percent but declined slightly since 9/11, especially among undergraduate students (see Chart 5). Changes in government visa requirements for foreign students and in reporting required from universities could be the cause of the declining

provided 2,083 scholarships to foreign students but in 2003 it awarded 9,746 scholarships. Australia's numbers are lower in Chart 4 than reported in other places because they are restricted to foreign students studying onshore in Australia (see Box 2).

China's numbers are growing rapidly too due to policy and program changes made by its Government and universities. China is one of several Asian countries that want to strengthen and expand its higher education capacity, increase its pool of high skilled labor in science and technology fields, attract back expatriates living or studying abroad, and increase its training of foreign students.<sup>7</sup> China also wants to increase its international and regional profile in foreign affairs. Recent reports

capital and institutional capacity there.

multiplying by 10,000. This provides a standardized rate of student out-migration that allows one to compare levels across the 37 countries (Table 4). The measure ranged from a high of 51.8 in Greece to 0.7 in India. Ranking countries by their emigration measure reveals that countries with larger populations generally have the lowest emigration rates. For instance, China, the largest sender, sent only one student per 10,000 abroad. Chinese from other origins, however, had considerably higher odds of being a foreign student. Hong Kong had a rate of 36.8, Singapore had a rate of 33.5, and Taiwan's was 18.7.

Regarding the top destinations selected by foreign students, Table 4 identifies the top receivers for each sending country. In 2000, the United States was the top receiver for foreign students from 15 origins, the United Kingdom for 8 origins, and Germany for 6 origins. The attraction of those destinations for foreign students becomes even more apparent if one looks at which countries is the number one or two destination for the largest senders. The Unite



Foreign students were classified by their

**Changing composition of foreign student flows: The U.S. case:** If trend data were available on student origins for different countries across various years, they would likely show that the regional and country origins of students have changed, particularly to countries that draw large numbers of foreign students from different regions (such as Australia, Canada, France, Germany, New Zealand, and USA) . Since the United States does have data available for several decades and is the largest receiver of foreign students, its trends are examined. The regional origins of U.S. foreign students from the 1979/80 academic year to 2004/05 are shown in Chart 6. In 1979, the Middle East was the origin for a third of U.S. students. All other regions in 1979 accounted for less than 16 percent of foreign students and the smallest number came from Eastern Europe. However, the composition of student flows to the United States changed rapidly in the 1980s as government support for scholarships dried up. For the period shown, the absolute and relative share of foreign students from the Middle East declined until 1994/95 and then stabilized. Declines in relative share also occurred for foreign students coming from Latin America and sub-Saharan Africa in that same period.

Keeping in mind that the absolute number of foreign students coming to the United States was climbing at the same time that relative shares from different regions were changing (compare Charts 5, 6, and 7), trend analysis indicates that big regional gains were experienced by East Asia (mainly China, Japan, Korea, Taiwan) and South and Central Asia (mainly India, Pakistan). The relative share of students from Southeast Asia, on the other hand, has steadily declined since 1984, as has the absolute number since 1994. Eastern Europe is another region that has sent increasing numbers of foreign students to the United States in recent years and its trends have increased both absolutely and relatively. Since 1994/95, growing numbers of students come from sub-Saharan Africa, leading to increasing absolute and relative shares from that region.

Regional trends can disguise the extent to which student flows are highly concentrated. In order to illustrate that concept, data were compiled from IIE's *Open Doors* for various years on the top 15 origins of foreign students from 1954-2004<sup>11</sup>. If a country made it into the top 15 listing in any given year, that country's data for other years was added to the database in order to monitor trends for specific countries from four world regions: Latin America, Europe and Canada, Middle East and Africa, and Asia (Chart 8). Twenty-seven countries were a top 15 sender of foreign students to the United States at some point in the 1954 to 2004 period. Although the Chart is somewhat dense due to the number of countries, it does show both the tendency for flows to change and documents the large increases in foreign students coming from India, China, Korea, and Japan. Chart 8 also documents the decreases in foreign student flows from less well-off countries in Southeast Asia, Africa, and South America that occurred after scholarship funding was reduced. In the case of a few countries, such as Brazil, Colombia, Mexico, and Nigeria those declines eventually

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<sup>11</sup> Data were compiled for 1954, 1959, 1964, and 1969 and later years using the same five-year interval.

stabilized and increasing numbers of foreign students are again coming to the United States from those countries.

**The evidence that international student mobility is changing.** The changes that have occurred in flows of foreign tertiary students to the United States raise the question of whether there is a connection between the increase in cross-border education activities in Australia and elsewhere in Asia and changing composition of



steps to improve and expand their higher education services by setting up CBHE





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**Table 1: Examples of Different Types of Transnational Higher education Activity**

<b>Educational service provided by universities</b>	<b>Type of arrangements set up in another country to deliver service</b>	<b>Credit and Degree Mode</b>	<b>Selected program examples</b>
<b>Study Abroad programs</b>	University may set up an office in the foreign country with staff and faculty (permanent or temporary) that allows it to deliver the education directly or it may contract with faculty or a university in the host country to provide a study program for their students.	Students receive full credit from their own university	<ol style="list-style-type: none"> <li>1. Socrates/Erasmus program was set up by the European Commission to allow students to study abroad for 3-12 months.</li> <li>2. <i>IIE Passport: Academic Year Abroad 2006</i>, 35<sup>th</sup> Edition lists</li> </ol>

Table 4: Descriptive Statistics on Volume, Emigration Rates and Top Destinations for the Largest Sending Countries

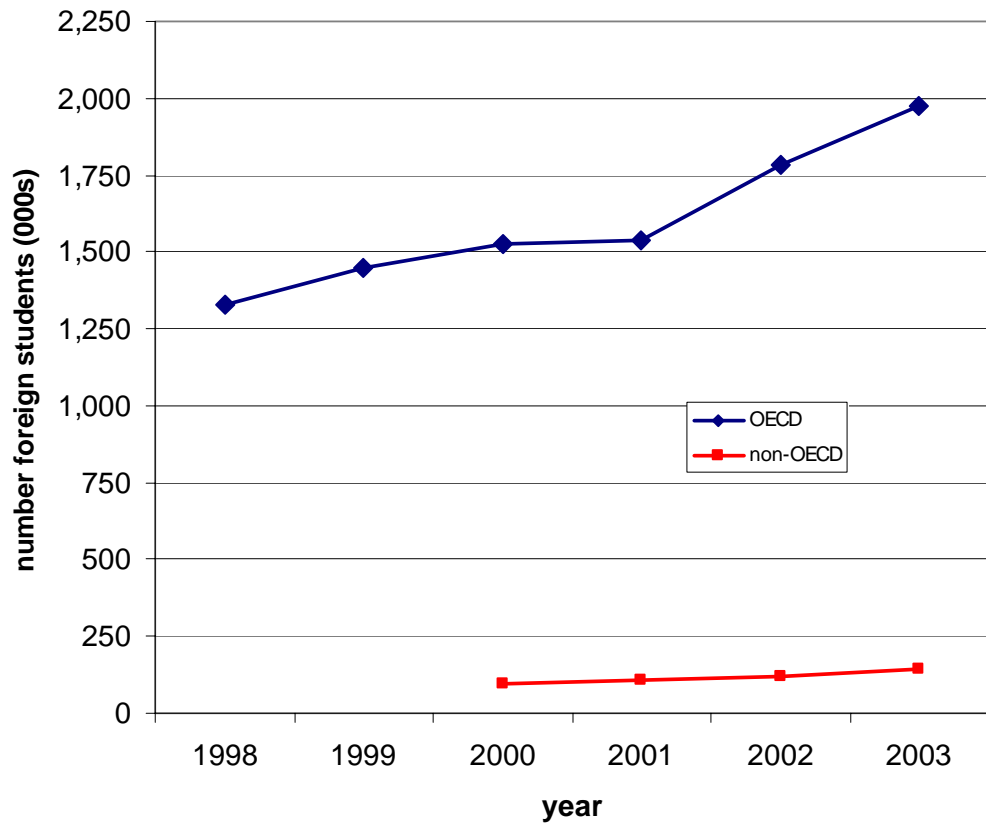
<b>Sending Country</b>	<b># Abroad</b>	<b>Population (millions)</b>	<b>Emigration Rate (per</b>
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**Table 5: Region of Origin of Foreign Tertiary Students for 21 Countries That Reported Data on Foreign Students to IIE Atlas (cerca 2000)**

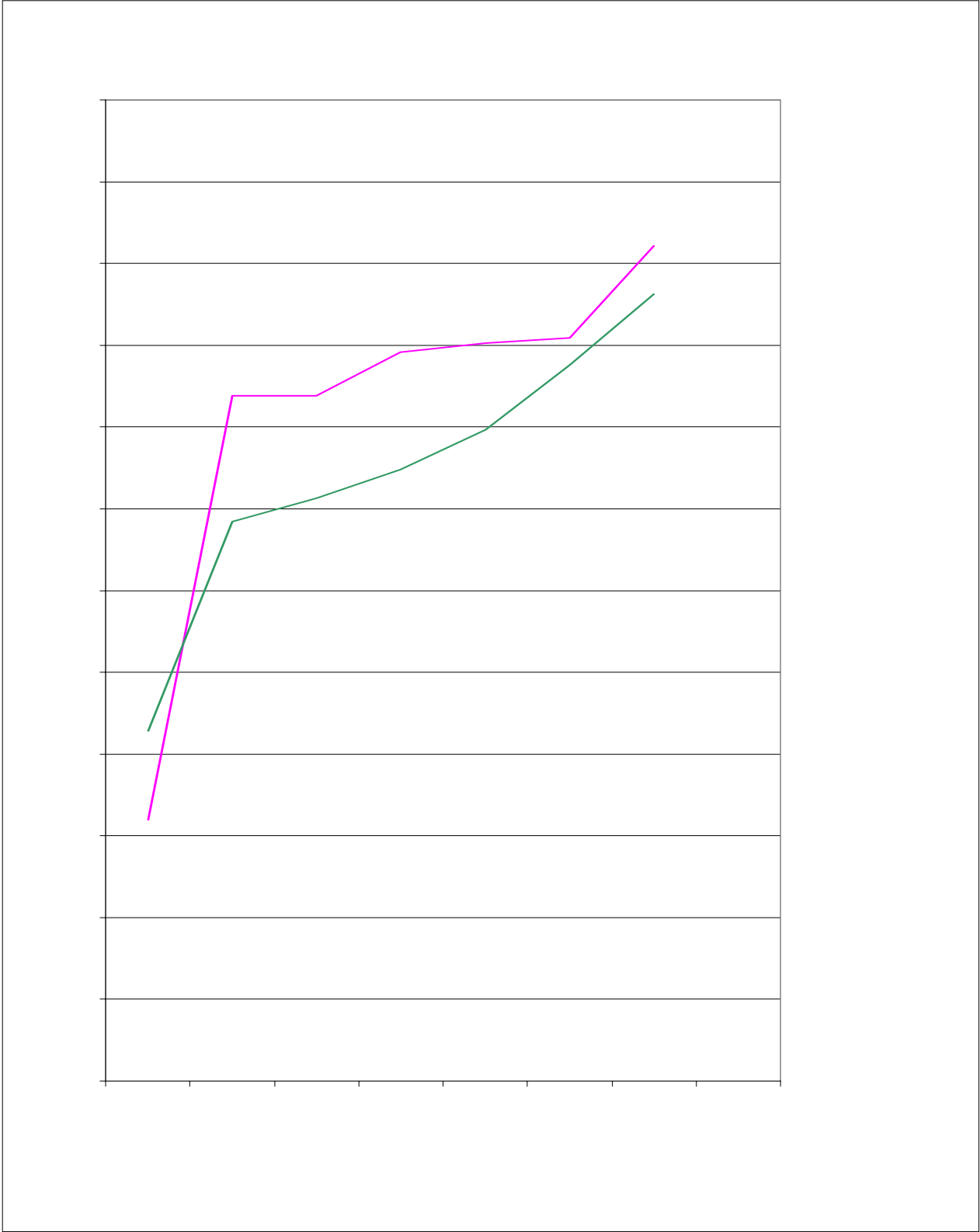
Destination	Region of Origin (percent)									Top 5 Senders (ranked from largest)
	Oceania	Latin America & Caribbean	North America	Europe	North Africa & Middle East	Sub-Saharan Africa	South East Asia	South & Central Asia	East Asia	
USA	1	12	5	17	5	5	7	13	35	China, India, Japan, Korea, Taiwan
UK	1	3	7	51	5	7	8	4	14	Greece, Germany, France, Ireland, United States
Germany	0	3	2	64	11	5	2	2	10	Turkey, Poland, China, Greece, Russia
France	0	5	3	32	31	24	2	1	4	Morocco, Algeria, Niger, Germany, Somalia
Australia	2	1	5	8	1	2	48	10	24	Malaysia, Indonesia, Singapore, Hong Kong, India
Japan	1	2	2	4	1	1	9	3	78	China, Korea, Malaysia, Indonesia, United States
Spain	0	25	2	58	10	3	0	0	1	France, Italy, Germany, Morocco, United Kingdom
Belgium	0	2	1	61	17	15	1	1	2	France, Morocco, Italy, Netherlands, Congo DPR
Canada	1	9	12	25	10	10	6	5	22	France, United States, China, Hong Kong, Japan
Austria	0	1	1	86	5	2	0	1	4	Italy, Germany, Bulgaria, Turkey, Hungary
Switzerland	0	4	2	82	4	4	1	1	3	Germany, Italy, France, Spain, Austria
Italy	0	4	1	77	9	6	0	1	1	Greece, Albania, Croatia, Switzerland, Cameroon
Sweden	1	3	6							



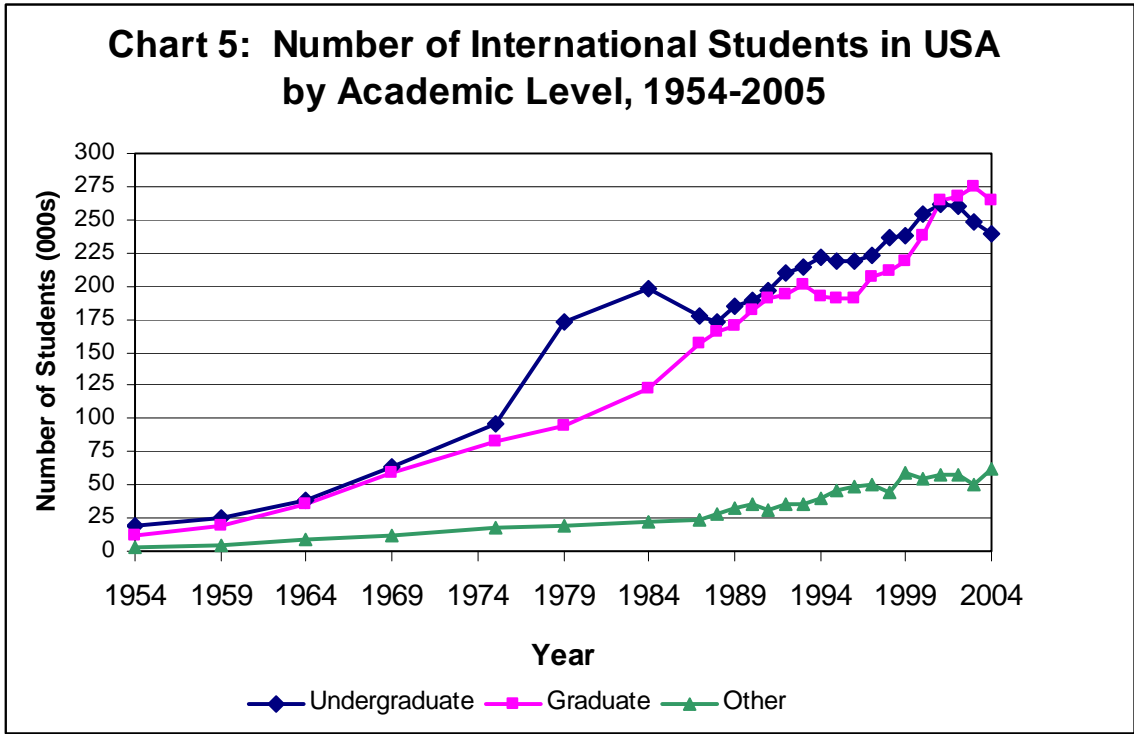
**Chart 2: Trends in Number of Foreign Tertiary Students, 1998-2003 (based on country reports to OECD)**



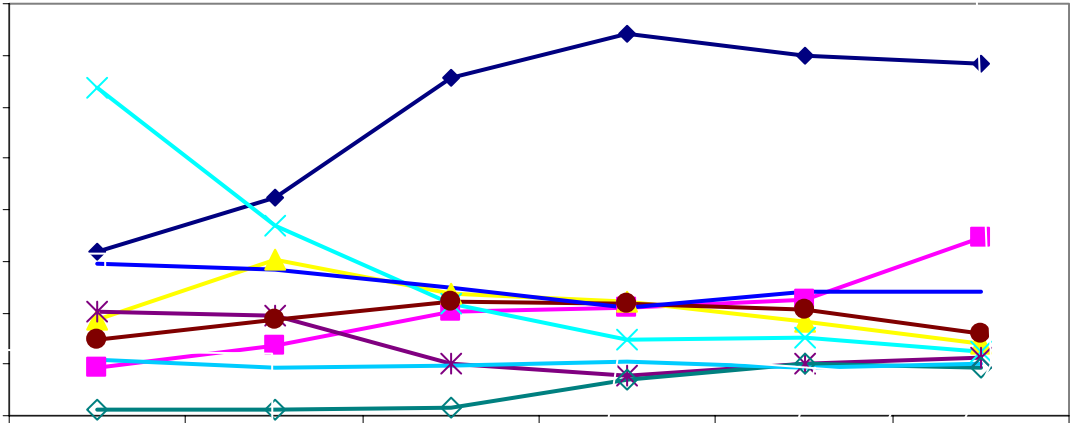




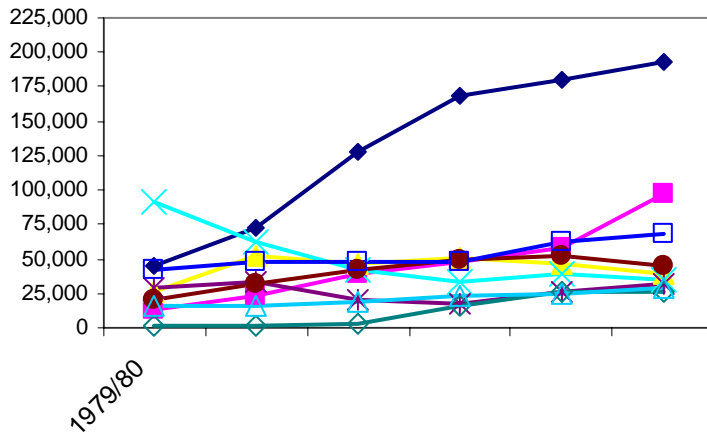




Source: *Open Doors 2005: Report on International Educational Exchange*. Annual reports, 1954 to 2004. New York: Institute of International Education.

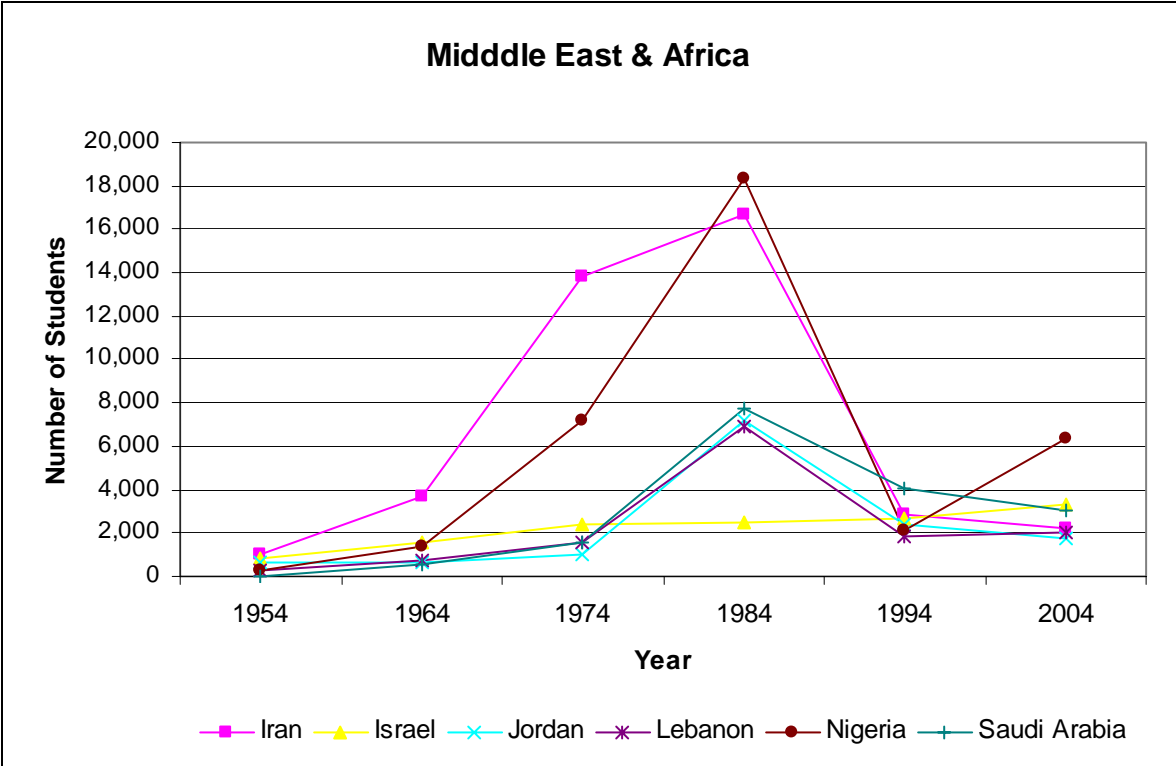


**Chart 7: Trends in Absolute Size of U.S. Foreign-Student Populations by Region**

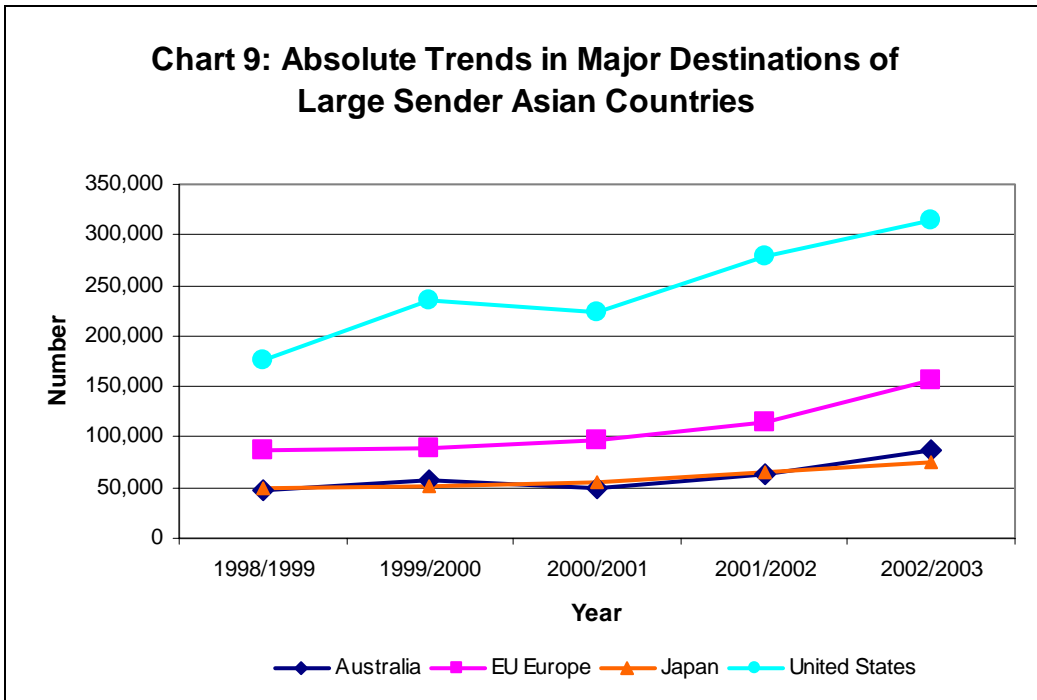




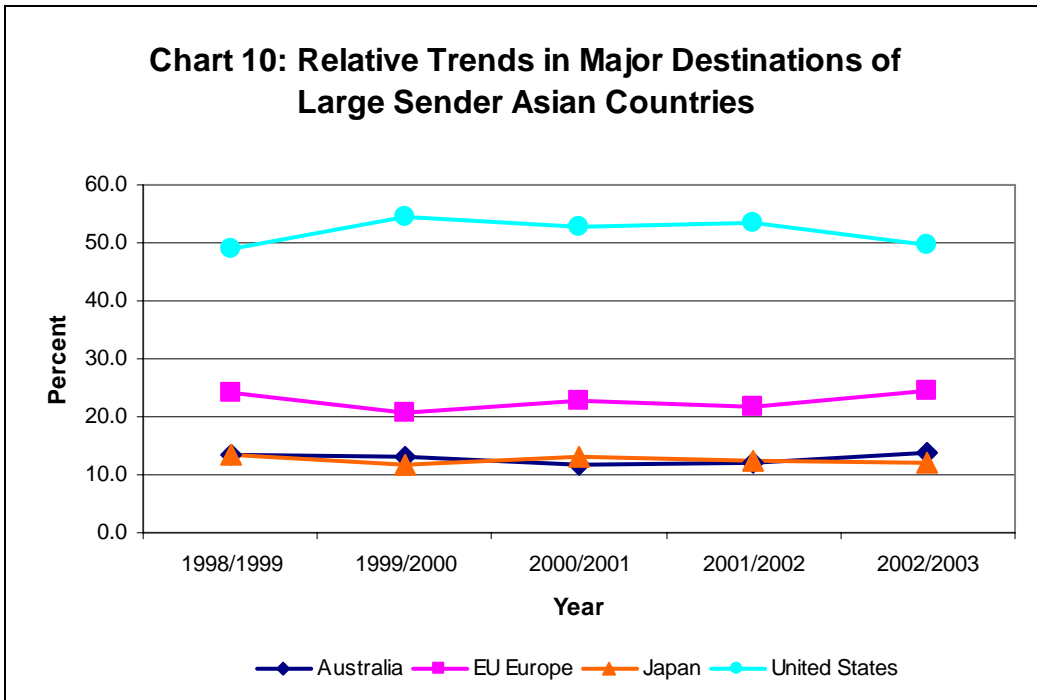
**Chart 8: Trends in Regional Origins of Foreign Students in the USA  
(continued)**



**Chart 9: Absolute Trends in Major Destinations of Large Sender Asian Countries**



**Chart 10: Relative Trends in Major Destinations of Large Sender Asian Countries**



Source: *Open Doors 2005: Report on International Education Exchange*. Annual reports, 1998-2002, New York: Institute of International Education. Australian Education International (AEI), *Research Snapshots*, “Comparison of Major English Speaking Destinations for Top Five Source Markets” and “International Student Enrolments in Higher Education in 2005”. *AEI Research Snapshots* are available online at <http://aei.dest.gov.au/AEI/PublicatonsAndResearch/Default.htm>.

Appendix A: Selected listing of universities that have partnership or branch campuses programs abroad







**Appendix B: Number of Foreign Students Enrolled in Tertiary Education in Selected Countries, 1990 to 2003<sup>a</sup>**

	1990 <sup>b</sup>	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04
Australia <sup>c</sup>	14,000	109,437	117,485	105,764	120,987	116,236	135,683
Austria <sup>d</sup>	18,000	28447	29,819	30,382	31,682	28,452	31,101
Belgium <sup>e</sup>	27,000	na	36,136	38,799	38,150	40,384	41,856
Canada <sup>f</sup>	35,000	32,890	35,543	40,033	45,315	52,235	61,303
China <sup>g</sup>							
Germany <sup>l</sup>	107,000	171,151	178,195	187,033	199,132	219,039	240,619
Hungary <sup>m</sup>		6,636	8,869	9,904	11,242	11,783	12,226
India <sup>n</sup>	na	na	na	5,323	6,988	8,145	7,738
Ireland <sup>o</sup>	na	6,904	7,183	7,413	8,207	9,206	10,201
Italy <sup>p</sup>	21,000	23,206	23,496	24,929	29,228	28,447	36,137
Japan <sup>q</sup>	41,347	51,298	55,755	64,011	78,812	95,550	109,508
Jordan <sup>r</sup>							

<sup>a</sup> The data in this table come from several sources. To enhance comparability, data gathered annually since 1998 by OECD and UNESCO (Institute for Statistics) for the World Education Indicators Programme

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were used. That database, however, only covers the 30 OECD countries and 19 non-OECD countries and does not have data available for all countries in the database. UNESCO gathers additional data for all countries and, thus those data were used for selected countries. Since OECD and UNESCO collaborate on their foreign student enrollment data, the statistics in the two databases usually match although the classification of the enrollment year in the 2 databases usually differs by one year. For instance, if UNESCO classified the enrollment year as 2001/02 in its database, OECD classified it as 2002/03 in its database. Therefore, if UNESCO data were used, a one-year adjustment was made in the enrollment year so the statistics would be comparable to those in the OECD database. In both the UNESCO and OECD databases, statistics on foreign students enrolled in most countries of Europe are inflated because they include foreigners who are resident in Europe in the totals. The ATLAS Project of the Institute of International Education aims to compile a database for non-resident foreigners studying in different countries but at this point its database includes a small number of countries and is only available for 1-2 years for most destinations. Some countries provide statistics on foreign student enrollments online, in which case those statistics were used.

<sup>b</sup> Except for Japan, Korea, and the USA, the source of data in the 1990 column is Table 53, “Number of foreign students in higher education...,” World Population Monitoring 2003, Population, Education and Development, Department of Economic and Social Affairs, Population Division, United Nations, New York, 2005. The 1990 data for Japan, Korea, and USA come from country sources. The 1990 statistic of 80,000 for the UK is from the 2005 UN report but has not been verified. The large gap between the UK 1990 and 1998 statistics suggests that there may be an error in the 1990 UK statistic.

<sup>c</sup> 1998/99-2001/02 Australian data are from the joint UNESCO/OECD World Indicator Program and available online in OECD Statistics database on Foreign Students Enrolled ( <http://oecd.org/> ). 2002/03 and 2003/04 data are from the Australian Government, Australian Education International, Table G, “Overseas Student Enrolments in Australia by State/Territory and Major Sector, 2002 to 2005” and available online at [http://aei.dest.gov.au/AEI/MIP/Statistics/StudentEnrolmentAndVisaStatistics/Recent\\_TableG\\_pdf.pdf](http://aei.dest.gov.au/AEI/MIP/Statistics/StudentEnrolmentAndVisaStatistics/Recent_TableG_pdf.pdf). Australia compiles statistics on students enrolled onshore and offshore. The statistics in Appendix B are for onshore students only. In addition, Australia compiles statistics on foreign students enrolled in English-language courses (ELICOS). Most of those students enroll in higher education programs after they complete their studies. The statistics in Appendix B do not include the ELICOS students.

<sup>d</sup> 1998/99-2003/04 Austrian data are from the joint UNESCO/OECD World Indicator Program and available online in OECD Statistics database on Foreign Students Enrolled ( <http://oecd.org/> ).

<sup>e</sup> 1998/99-2003/04 Belgium data are from the joint UNESCO/OECD World Indicator Program and available online in OECD Statistics database on Foreign Students Enrolled ( <http://oecd.org/> ).

<sup>f</sup> 1990 Canadian data are from the World Population Monitoring Report, 2003. 1998/99-2000-01 data are from the joint UNESCO/OECD World Indicator Program and available online in OECD Statistics database on Foreign Students Enrolled ( <http://oecd.org/> ). 2001/02 Canada data are from The National Report on International Students in Canada, 2002, the Canadian Bureau for International Education (CBIE), 2005 (ISBN 1-894129-58-X) by researcher Christine Savage and CBIE Project Coordinator, Mary Kane. 2003/04 Canada data are from the Atlas of Student Mobility, Institute of International Education and available online at <http://www.atlas.iienetwork.org/>? Source for 2002/03 data needs to be identified.

<sup>g</sup> 1998/99, 2002/03 and 2003/04 are from the Atlas of Student Mobility, Institute of International Education, and available online at <http://www.atlas.iienetwork.org/?p=53467>. 1999/00 statistic is an estimate based on reports that the number of foreign students rose 20 percent annually since 2000 ( [www.chinaview.cn](http://www.chinaview.cn), 2006, “Foreign students in China increase 20% annually”). 2000/01 and 2001/02 China data are from the China Scholarship Council and available online in OECD Statistics database on Foreign Students Enrolled ( <http://oecd.org/> ).

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<sup>h</sup> 1998/99-2002/03 Cuba data are from the UNESCO database and available online at <http://stats.uis.unesco.org/ReportFolders/reportFolders.aspx> in table entitled “Foreign Students by country of origin (for all countries).”

<sup>i</sup> 1998/99-2003/04 Czech data are from the joint UNESCO/OECD World Indicator Program and available online in OECD Statistics database on Foreign Students Enrolled ( <http://oecd.org/> ).

<sup>j</sup> 1998/99-2003/04 Denmark data are from the joint UNESCO/OECD World Indicator Program and available online in OECD Statistics database on Foreign Students Enrolled ( <http://oecd.org/> ).

<sup>k</sup> 1998/99-2003/04 French data are from the joint UNESCO/OECD World Indicator Program and available online in OECD Statistics database on Foreign Students Enrolled ( <http://oecd.org/> ).

<sup>l</sup> 1998/99-2003/04 German data are from the joint UNESCO/OECD World Indicator Program and available online in OECD Statistics database on Foreign Students Enrolled ( <http://oecd.org/> ).

<sup>m</sup> 1998/99-2003/04 Hungary data are from the joint UNESCO/OECD World Indicator Program and available online in OECD Statistics database on Foreign Students Enrolled ( <http://oecd.org/> ).

<sup>n</sup> 2000/01-2003/04 Indian data are from the joint UNESCO/OECD World Indicator Program and available online in OECD Statistics database on Foreign Students Enrolled ( <http://oecd.org/> ).

<sup>o</sup> 1998/99-2003/04 Irish data are from the joint UNESCO/OECD World Indicator Program and available online in OECD Statistics database on Foreign Students Enrolled ( <http://oecd.org/> ).

<sup>p</sup> 1998/99-2003/04 Italian data are from the joint UNESCO/OECD World Indicator Program and available online in OECD Statistics database on Foreign Students Enrolled ( <http://oecd.org/> ).

<sup>q</sup> Japanese data are from the Outline of the Student Exchange System in Japan, Student Services Division, Higher Education Bureau, Ministry of Education, Culture, Sports, Science and Technology, Japan (MEXT), 2004, Table entitled “Number of foreign students enrolled at universities, special training college or others (as of 1 May each year), page 7. Available online at [http://www.mext.go.jp/a\\_menu/koutou/ryugaku/05020201/001.pdf](http://www.mext.go.jp/a_menu/koutou/ryugaku/05020201/001.pdf).

<sup>r</sup> Jordan data are from the joint UNESCO/OECD World Indicator Program and available online in OECD Statistics database on Foreign Students Enrolled ( <http://oecd.org/> ).

<sup>s</sup> Korean data for 1990 (actually for 1992) and for 1998/99 to 2001/02 are from Study in Korea, a report available online at [http://www.studyinkorea.go.kr/ENGLISH/E200/E200\\_Co7.jsp](http://www.studyinkorea.go.kr/ENGLISH/E200/E200_Co7.jsp). Data for 2002/03 and

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<sup>v</sup> 1999 Netherlands data are from 1970 to 1999. UN-4.5(ESCO)-4.5(O)-4.5(ECO2(D))-4.5(O)