Does the Statue of Liberty Still Face Out? The Diversion of Foreign Students From the US to Canada in the Post 9/11 Period

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Abstract

The terrorist attacks of September 11, 2001, have resulted in the increased scrutiny of both immigrants and nonimmigrants entering the United States. The latter group includes students who enter the US on temporary visas to complete programs of higher education. Depending on the source, the number of foreign students in the United States has remained constant or fallen since 2001, and there has been a large decline amongst students from predominantly Muslim countries. Canada, by contrast, has relaxed its entry requirements for some foreign students and there has been a concerted effort amongst Canadian universities to increase foreign student enrolment. We find that the number of foreign students in Canada has continued to increase following 9/11, especially those from predominantly Muslim countries. We discuss some of the implications of this increase in foreign students for Canadian universities and the Canadian labour market.

Keywords: Canada, United States, Foreign Students, Migration, 9/11

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I. Introduction and Background

Since the terrorist attacks on the United States on September 11, 2001, there has been a concerted effort in the US to restrict access to foreign nationals who are deemed to pose a threat to US security. Although foreign students who enter the United States are not restricted by numerical limits, they have been subjected to much greater scrutiny (Szelenyi 2003), and foreign students may perceive the academic environment in the United States to be less hospitable (Altbach 2004). Furthermore, students from the Middle East, especially those from predominantly Muslim countries (hereafter PMCs) and most closely identified with terrorism, may be more closely scrutinized when entering the United States. This may well have an impact on permanent immigration to the United States, but will certainly have a profound effect on those seeking admission using short-term (or nonimmigrant) visas, such as students (Camarota 2002). The likely outcome is that fewer foreign students are being both seeking access to and being admitted to the country. According to Lee and Rice (2007:385): "[Students'] experiences move quickly among populations of prospective international students who weigh the time and resources spent in seeking entrance to the U.S. against the less onerous regulations of other countries, such as Canada and Australia."

Indeed, universities in many other Western countries are actively involved in attracting foreign students, and these students are aware that a number of options are available to them. Increasing the cost of entry to the United States almost certainly diminished the number of

¹ In an interview with the *Chronicle of Higher Education* (January 5, 2007), Karen Hughes, the US Undersecretary of State for Public Diplomacy and Public Affairs is quoted as saying: "When I came to the State Department, on my very first trip overseas, a young man at a low-income neighborhood housing project, who had a young daughter

foreign students desiring to study in the United States, but has this been a gain for Canada? In other words, have students who might have studied in the United States chosen instead to come to Canada to further their education? If so, what are the potential gains to the Canadian economy?

It is generally thought that foreign students are beneficial for the host country.² Foreign students increase diversity on university campuses. Graduate students conduct research and staff laboratories and classrooms. Upon graduation talented students might elect to stay in and contribute their talents and education to the host country. For example, in the US, Aslanbeigui and Montecinos (1998) find that 60 per cent of their survey respondents planned to work in the US either temporarily (45 per cent) or permanently (15 per cent) following completion of their PhD programs in economics. Similarly, Finn (2001) found that over 50 per cent of the individuals who completed their doctorates in the United States in the 1990s remained in that country.³ Furthermore, science doctorates who remained in the US contributed a larger amount to the advancement of science than their native counterparts (Stephan and Levin 2001). More recently, Dreher and Poutvaara (2005) have shown that student flows are a better predictor of permanent immigrant flows in a number of OECD countries compared to more traditional determinants of migration such as per capita income differences between host and source countries.

there, asked me a very haunting question: 'Does the Statue of Liberty still face out?' He meant, Is [sic] America still a welcoming country?"

² The minority opinion is offered by Borjas (2002) who argues that the benefits to the United States tend to be grossly overestimated and that it is mainly the foreign students and host universities that benefit because of subsidized tuition and cheap labour, respectively. He writes: "Once one stops mindlessly humming the *Ode to Diversity* that plays such a central role in the modern secular liturgy – and particularly so in higher education – it is far from clear that the program generates a net benefit to the United States." (p. 13)

³ A more recent survey by Trice and Yoo (2007) found that only 32 per cent of graduate student survey respondents in the US planned on returning home immediately after completing their degrees.

If foreign student do return to their countries of origin, they may be important contacts that facilitate trade and goodwill between countries. Foreign students also bring in large amount of foreign currency to the host country; the Institute of International Education (2003) estimates that nearly 75 per cent of all international students' funding comes from sources outside the United States. Further, it notes that the US Department of Commerce describes higher education as the country's fifth largest service export as foreign students add over US \$12 billion annually to the US economy. In Canada, the equivalent figure is roughly CDN \$4 billion (Drolet 2004).⁴

Not only do foreign students tend to benefit an economy, but also it is likely that some of the most productive students come from foreign countries. For example, research has indicated that an increasing number of doctoral degree recipients in the United States are from foreign countries (Aslanbeigui and Montecinos 1998; Groen and Rizzo 2004). And many of these intended to stay in the country after obtaining their doctoral degrees (Johnson and Regets 1998; Finn 2000). Furthermore, it is well documented that scholars and professionals educated in the United States often facilitate further migration to the US through the networks that are created between foreign nationals and foreigners educated in the United States (Cheng and Yang 1998). Finally, US colleges and universities tend to hire a large proportion of US-trained PhDs, including foreign nationals (Groen and Rizzo 2004).

Given the importance of these highly trained and skilled foreign nationals in the new knowledge-based economy, the increased border restrictions in the United States since 9/11 – coupled with the fact that Canada has not imposed the same restrictions – means that Canada may be the beneficiary of the increased migration of foreign students. Insofar as these students find that a Canadian university education is a reasonable substitute for one obtained in the US,

⁴ In 2001, about 44 per cent (or some 57,000) of the 130,000 foreign students in Canada were studying at the university level (CIC 2003). In the United States, the comparable number of university-level students was about

and that they have the same probability of staying in Canada as they would have in the United States, this could represent a significant net human capital gain for Canada. The Association of University and Colleges of Canada (AUCC 2007: 16) recently noted the dramatic increase in foreign students, especially at the graduate level, over the past decade and attributed this to "universities" successful campaigns to recruit international students; rising worldwide demand for international education experiences; and changes in immigration policies and provincial agreements with other countries to attract international students."

By contrast, recent data (IIE 2006) shows that there has been a decline in students entering the US and originating from PMCs. This could be blamed on the perception that the new visa procedures make it difficult to enter the country, as well as the increasing competition for foreign students from other countries, including Canada. Altbach (2004) notes that students from developing countries – especially Islamic countries – reported being treated with disrespect by US officials in their home countries. Combined with the increased delays, new visa fees, and the implementation of a computer tracking system, the US seems to be both less hospitable and a more costly destination for a number of foreign students. Indeed, it would appear that Canadian universities have been beneficiaries of the new US visa requirements as foreign applications have increased at most Canadian universities since 2001, although the aggressive marketing of Canadian universities and their lower cost are also credited with this increase (Drolet 2004).

Indeed, since September 11, 2001, the United States has been tightening its procedures to reduce the probability of admitting suspected terrorists.⁵ In May 2002, the Enhanced Border Security and Visa Entry Reform Act (EBSVERA) was enacted. Under this act, the US State

^{445,000} out of 586,000 in 2002, or approximately 78 per cent (IIE 2003).

⁵ See Yale-Loehr, et al. (2005) for a recent and comprehensive treatment of the changes in visa procedures that have been implemented in the US since September 11, 2001. The appendix exclusively addresses changes to student visas. Warwick (2005) provides a similar review of the policy changes since 9/11.

Department has increased its scrutiny of visa applicants from certain countries, including checks with FBI and CIA data bases of suspected and known terrorists before visas are issued. Previously, consular officials simply checked visa applicants against a "look-out list" containing some six million names. In the post-September 11 world it is nationals from countries that are deemed to be "state sponsors of terrorism" who are required to demonstrate that they are not a national security threat to the United States (Yale-Loehr, et al. 2005).⁶ Furthermore, it seems that is men in the 16-45 age group that are the most scrutinized; the same age group that tends to enrol in US post-secondary institutions. The result has been increases in the backlog of applications being processed by US Citizenship and Immigration Services (USCIS) and a commensurate increase in the length of time necessary to approve visas.

In 2002, the National Security Entry-Exit Registration System (NSEERS) was implemented and required all male visitors from "politically sensitive areas" to register with the then-Immigration and Naturalization Service (INS).⁷ The NSEERS has been phased out and replaced by the US-VISIT program which requires that a number of non-immigrant visitors to the US be photographed and submit digital fingerprints – both before and upon entry to the United States – as well as registering their departures. This regulation also applies to foreign students. In addition, in 2003 a new Student and Exchange Visitor Information System (SEVIS) was implemented whereby accredited schools have to supply electronic files to the State Department on all foreign students currently enrolled or risk losing their accreditation to host foreign students.⁸

 ⁶ These state sponsors of terror were: Cuba, Iran, Iraq, Libya, North Korea, Sudan and Syria. Iraq and Libya have since been removed from this list.
⁷ The duties of the INS were taken over by the USCIS on March 1, 2003. The USCIS is a part of the new

⁷ The duties of the INS were taken over by the USCIS on March 1, 2003. The USCIS is a part of the new Department of Homeland Security.

⁸ Details can be found in Martin (2004), Rudolph (2004) and Yale-Loehr, et al. (2005).

At the same time the United States has been increasing its entry requirements for foreign students, Canada has been reducing its entry requirements. Undoubtedly the US response is due to the increased emphasis on border security, while Canadian immigration policy continues to stress the economic benefits of immigration and commitment to providing a safe destination for refugees. As such, the Canadian Immigration and Refugee Protection Act (IRPA) was implemented in June 2002. The new act, *inter alia*, stipulates that foreign students registered for courses of six months or less do not require a study permit. This has likely increased the number of foreign students in Canada, however, since Citizenship and Immigration Canada (CIC) has stopped gathering statistics on these student flows there is no way to ascertain this.⁹ As of 2001, there were more than 130,000 foreign students in Canada (about 44 per cent at the university level), more than double the number only 11 years earlier (Iturralde and Calvert 2003). The establishment of Canadian Education Centres in 17 countries, which promote study in Canada, has undoubtedly helped this increase. Turkey is the only PMC that is home to one of these centres.

Thus, the questions we are trying to answer are:

- Has there in fact been a decrease in the number of foreign students in the United States?
- If so, have these declines been more pronounced amongst students from PMCs?
- Finally, to what extent have these students been diverted to Canada?

The following section will discuss the US and Canadian data sources used, followed by an analysis of these data. The final section concludes and discusses some of the implications of these results for Canadian education and immigration policy.

⁹ In its brief submitted to the House of Commons Standing Committee of Citizenship and Immigration Canada, the Association of Universities and Colleges of Canada (AUCC) lauded these changes, but suggested that they did not go far enough in facilitating the entry of students into Canada. The document refers to the lack of a coherent and

II. Data

US data

Since no single data source is available that can adequately address the questions proposed above, a variety of data sources are utilized. First, data on foreign students admitted to the United States come from the USCIS. Each year, this department compiles a lengthy document of the various types of legal permanent and temporary admissions (or immigrant and nonimmigrant admissions).¹⁰ These statistics, however, only represent the gross flows of students into the United States since it is entries that are counted and not persons. The second source of data is the Institute of International Education (IIE). The IIE surveys universities in the United States regarding the number of foreign students enrolled in their programs each year. This is a superior source of information since we can track changes in students enrolled in programs in the United States and not simply the number of entries into the US. The IIE survey has a response rate of about 90 percent, so it is considered the most authoritative data source on foreign students in the United States.

Canadian data

The Canadian data were obtained from two sources.¹¹ CIC tracks the number of foreign students in Canada each year. These data contain both stocks (i.e., the number of foreign students in Canada), as well as flows (i.e., the number of foreign students entering Canada). Second,

coordinated national policy which is harming Canada's position in the global competition for students (AUCC 2002).

¹⁰ Prior to fiscal year 2002, these were titled the *Statistical Yearbook* of the Immigration and Naturalization Service, a branch of the Department of Justice. Since fiscal year 2002, the name has been changed to the *Yearbook of Immigration Statistics*. This move coincides with renaming of the Immigration and Naturalization Service to the USCIS.

¹¹ Another source of Canadian data comes from the Council of Ontario Universities (COU). Each year, the COU compiles data on applications and registrations into each of the public universities in that province. These data are useful because they give the researcher an idea about intention to attend university (as reflected in the application numbers) and actual attendance (as reflected in the registration numbers). The coverage is limited to new undergraduate students and do not disaggregate by country of origin, only region of citizenship, which make the use

perhaps the best sources of data are from individual universities themselves. Each year, most Canadian universities compile a "factbook" which normally contain a plethora of statistical measures, including the number of students enrolled by visa status, country of citizenship, level of study, etc. Furthermore, these data are often publicly available on each university's website. Since obtaining data from all Canadian universities over a period of time is rather impractical, we limit our search to include only public institutions from British Columbia, Alberta and Ontario. These are the three largest English-speaking provinces and likely contain the universities that are most well known to foreign students. In other words, these are the provinces containing the institutions that we consider to be reasonable substitutes for American institutions. Furthermore, we limit our search to include only those universities listed as medical/doctoral or comprehensive by the annual Maclean's magazine rankings. This was for two reasons: these are Canada's largest and best-known universities, and because they likely to contain significant numbers of both undergraduate and graduate students.¹² Our final sample consists of six universities: British Columbia, Simon Fraser, Alberta, Calgary, Carleton and Waterloo. The other institutions simply did not have data over the appropriate time period, or the data were too aggregated to be of use for our purposes. Still, the sample is of sufficient size to be representative of what is happening throughout Canada. For example, our results for 2003/04 are generally similar to those compiled with preliminary data by the AUCC (Drolet 2004). Although our numbers tend to be a little higher, this is expected given that we have chosen some of Canada's better-known universities. We have no reason to believe, however, that our sample will distort the trends in international students in Canada, the measure in which we are interested.

of these data somewhat limited for our purposes. Still calculations based on these data do show trends similar to those reported throughout this paper.

¹² The third category in the *Maclean's* ranking is primarily undergraduate institutions. These institutions are generally smaller and focus on providing education to local or regional students.

Finally, since we wish to address the extent of foreign student flows from countries that have a predominantly Muslim population and how this compares to the inflow of all students, we limit the detailed analysis to these countries. The Islamic states chosen are essentially the same as those in Camarota (2002).¹³

III. Results

Are there fewer foreign students entering the United States since the events of September 11, 2001? Table 1 lists the number of nonimmigrant students admitted to the United States in each of the fiscal years from 1999 through 2004.¹⁴ The total number of students admitted from Muslim countries increased by 29.6 per cent between 1999 and 2001, compared to an increase of 22.6 per cent amongst the group of all other countries. These numbers, however, decreased between 2001 and 2004 by 8.1 per cent for all other countries, but by 44.5 per cent for PMCs. We note again that these numbers are only for admittances, and do not count actual students.¹⁵ Thus, they may simply reflect the fact that some students are not leaving and then reentering the United States as the costs of reentering have increased (i.e., longer waiting times at airports, increased scrutiny, possible refusal of reentry, etc.). Regardless, it is interesting to see the large decline in the number of students admitted to the United States.¹⁶ It should be noted too that this decrease has been most dramatic amongst the individuals from the subgroup of nations labelled as "state-sponsored terrorist states" by the US Department of State, with a decrease of 65 per

¹³ The exception is Israel and the Palestinian Authority, which are not included in our analysis: the former because it is not a predominantly Muslim nation and the latter because it is not always appropriately disaggregated in the data. A check of the CIA World Factbook confirmed that each of the countries included has an overwhelmingly Muslim population. ¹⁴ The US fiscal year runs from October 1st through September 30th. For example, FY 2002 would be from October

^{1, 2002} through September 30, 2003.

¹⁵ See Borjas (2002) for details.

¹⁶ We also produced a similar table for J1 exchange visitors. These are individuals coming to the United States on academic exchanges, but also include a number of foreign students. We found a similar, albeit less pronounced, pattern amongst this group of non-immigrant visa holders. According to the IIE (2003) in 2002/03, 86.0 per cent of undergraduates held F visas, 2.9 per cent had J visas, 0.1 per cent had M visa, and the remaining 11.0 per cent held other visas. For graduate students, these numbers were 87.0, 5.9, 0.1, and 7.0 per cent, respectively.

cent between 2001 and 2004 following an increase of 61 per cent in the two-year period preceding 9/11.

Table 2 uses data from the IIE which counts the number of foreign students on nonimmigrant visas at US institutions of higher education. These data are much more detailed than the INS data, and also much more reliable for our purposes since they count numbers of individuals in educational programs, and not number of entries into the United States. These data show a less dramatic decline in student numbers compared to Table 1. Still, following four years of steady increases, the number of students from Muslim countries slid by almost 10 per cent per annum in 2002/03 and 2003/04, and a further 5.4 and 3.7 per cent in 2004/05 and 2005/06, respectively. This compares to a decrease of 1.7 per cent in 2003/04, about one per cent in 2004/05, followed by a marginal increase in 2005/06 amongst students from Saudi Arabia in 2005/06, but this was owing to a new Saudi government scholarship which is tenable in the United States (Bollag 2006b).

Figure 1 presents a graphical representation of these same data with enrolments in 2001/02 indexed to 100 so that data trends can be more easily compared. Note that the enrolment increases are very similar for each of the three groups in the four-year period preceding 9/11. In the four-year period since, however enrolments have trended down, and this decline has been especially dramatic for those from PMCs. Finally, comparing Tables 1 and 2 also provide support for our scepticism in using the INS data; it does appear that a number of students who might have left prior to September 11, 2001 either did not leave following this date, or they left the country without returning.

The evidence from these two data sources show that the number of students from PMCs in the US has declined. Furthermore, students from other countries are not pursuing post-secondary education in the United States, at least at the same rate of growth in the period before 9/11. Unfortunately, we have no way of knowing from these two sources if it is US policy which is influencing the decision of students, or if it is institutions of post-secondary learning that are admitting fewer of these applicants. Still it is unlikely that the universities themselves, which rely so heavily on foreign students as a source of revenue and talent, are responsible for this decline.

In fact, evidence suggests that there is growing frustration amongst many universities in the United States regarding restrictive US immigration policy for foreign students: According a survey conducted by the Council of Graduate Students, graduate student applications from international sources fell by 32 per cent for fall 2004 admissions, compared to fall 2003 (itself a poor year). This finding is mirrored by five other agencies concerned with higher education in the US (CEC 2004). Indeed some 35 per cent of institutions responding to an October 2005 survey by these same agencies, cited visa application processes and concerns about delays and denials as the major cause of the decline in foreign student enrolment (AAU, et al., 2005).

We have answered the first question posed: have the number of foreign students entering the United States decreased since 9/11? The answer appears to be yes. And there has been a steeper decline in students originating in PMCs, as we expected. Still, we have to ask: are these students then coming to Canada? The global market for higher education is highly competitive, and there are a number of options for foreign students. We now turn to Canadian data sources in an attempt to answer our second question: has there been an increase in foreign students attending Canadian universities?

Tables 3 and 4 contain CIC data on the flows and stocks of foreign students to Canada by country of last permanent residence. Table 3 shows a general upward trend in the number of international students before 2001, especially for students from PMCs. Following 2001 there appears to be a drop in the growth rates (and in some cases decreases) in foreign students in both flows and stocks. It should be noted, however, that these figures for the 2002-2005 period are certainly an underestimate of the true number of students admitted to Canada. This is owing to the Immigration and Refugee Protection Act (IRPA) enacted in June 2002 which has the provision that foreign students studying in Canada for a period of six months or less do not require student authorizations.

Table 4, shows the stock of foreign students in Canada for each year since 1997. In these data, the total number of foreign students in Canada, including those from both PMCs and all other countries, exhibit positive growth rates in each of the years between 1997 and 2005. The fact that the patterns in Tables 3 and 4 are somewhat different can be attributed to the IRPA. Prior to the implementation of this act in 2002, short-term students would be accounted for in the flow data (since they would need a visa), but wouldn't necessarily be counted in the stock data (since they may not have been in Canada on December 1st, the data in which the numbers are tallied).

Figures 2 and 3 chart the data in Tables 3 and 4, respectively. These numbers are again indexed with 2001 (the base year) set to 100. In Figure 2, the flow of students from other countries increases until 2001 and then declines thereafter, again because of the introduction of new student visa procedures in 2002. This is reflected in Figure 3 where the stock of students from these areas continues to increase throughout the 1997-2005 period. What is striking is that the growth pattern of students from PMCs is almost identical to that of students from all other

countries. Following 2001, however, the trends diverge dramatically: flows of students from PMCs increase by about 28 per cent between 2001 and 2005, compared to a decline of about 20 per cent for those from all other countries. Over this same period, the stock of students from PMCs increase by almost 60 per cent, compared with a rise of only 25 per cent for those from all other countries. More dramatic is the growth in students from state-sponsored terrorists states: the flows of these students almost doubled in this period while the stock nearly tripled.

The interesting phenomena in these data is that the Canadian numbers are almost mirror images to those for the United States; the largest increase over the 2001-05 period is amongst students from PMCs followed by those from all other countries. For the United States, the pattern is opposite with the largest decreases amongst those from PMCs followed by all other countries (compare Figure 1 with Figures 2 and 3).

To further investigate and corroborate this trend, we compile data from our sample of six Canadian universities in Figure 4.¹⁷ The figure shows the increase in the number of students coming from PMCs as well as all other countries. The data show that there has been an increase in students from all countries, but this increase has been especially pronounced for graduate students originating in Muslim countries. While the number of undergraduates have more than doubled and the number of graduate students from other countries have increased by about 50 per cent since 2001/02, the number of graduate students from PMCs has almost quadrupled. Furthermore, this pattern has generally occurred at each of the six universities considered here (see Appendix for individual university details).

IV. Conclusions and Discussion

Following the events of 9/11, there has been an increase in the number of foreign students studying at the university level in Canada; this has coincided with the decrease in international

students studying in the United States. We have documented both of these phenomena. In terms of students coming to Canada, we have shown that the growth began earlier than 2001, but has continued to increase since this time, especially amongst students from PMCs. It has been argued that US immigration policy is now less hospitable to foreign students, especially those from Muslim countries. Although other factors such as the US recession in the early part of the decade and increased competition internationally for students are also important factors (Lowell, 2005), the movements of students from PMCs, coupled with other evidence, suggests that US immigration policy plays an important role here. For example, although Canadian universities have been trying to increase foreign enrolments, it is unlikely that this alone is responsible for the large increase in foreign students from PMCs. Of the 17 countries that have Canadian Education Centres, Turkey is the only country in our sample of PMCs 'which houses one, and the growth in the number of foreign students from that country has been about the same as that of all PMCs. Furthemore, the growth in students from PMCs has far outpaced the growth in students from all other countries, a phenomenon we would not expect to see if there was a secular rise in international students. While we cannot say definitively that stricter US entrance requirements have resulted in some students choosing Canada, the data presented here do support this hypothesis.

This increased flow of foreign students is continuing and may do so for some time (Dillon 2004; Alphonso 2005). There is a general increase in demand for university education worldwide, especially so amongst developing countries that do not have the capacity at the present time to provide spots to qualified students. Furthermore, the scrutiny of foreign students attempting to study in the United States is not likely to decrease in the foreseeable future, and there may be even more internal pressure in the United States to limit immigration (both

¹⁷ The complete data used to generate this chart can be found in the Appendix.

temporary and permanent) in the future. In particular, the inspection of Muslims seems likely to continue following the release of the 9/11 Commission report in July 2004. The report notes that the threat to the United States is not simply a few rogue Islamic extremists, but rather an ideology which is widespread in the Islamic world and has been given support by young, disaffected Muslims and gained sympathy amongst other Muslims as well (Pipes 2004).

Recently the US State Department has undertaken a number of initiatives to expedite the issuance of student visas (Warwick 2005; Bollag and Field 2006) and US-based university international offices have reported having fewer students with visa problems lately (McCormack 2005). In fact, the most recent data (see Table 2) show that that the decline in foreign students studying in the US has been halted (though not reversed), although student numbers from PMCs continue to fall. Undoubtedly, part of this increase has likely been due to the increased efforts of the universities themselves as they have put more resources into the recruitment of foreign students students. This has seemed to pay off, as preliminary data from the Council of Graduate Students shows a slight increase in foreign graduate students enrolments for fall 2006, the result of large increases in students from India and China (Bollag 2006a).

Still, Yale-Loehr, et al. (2005) argue that the US government has not done well in reversing the exaggerated perception that the United States is not hospitable to foreign students and that other countries, including Canada, are ready to take advantage of this negative perception. The end result may be that the US government may be successful in keeping out undesirable students originating from specific regions, but the net may be cast too wide and desirable students may also be excluded from studying in the US. The result has been that students from Muslim countries still desire to study abroad, but they continue to choose countries other than the US (Woo 2006).

Canada too, while perhaps not taking advantage of this situation, is certainly benefiting from it and is also following policies to continue to increase the number of students choosing Canada as the place to study. As mentioned, Canada has waived the visa requirement for students studying in Canada for six months or less, and foreign students are eligible to work off-campus on a part-time basis during the school year and on a full-time basis during school breaks. They are also able to extend their stays in Canada under certain conditions following graduation to work in areas related to their fields of study. These measures are aimed at making Canada a more attractive destination for foreign students. Minister of Citizenship and Immigration Monte Solberg has said that this Canadian work experience will help foreign students integrate into the Canadian labour market (CIC 2006).

Future research may do well to consider if this possible diversion of international students is in fact a loss to the US and a commensurate gain for Canada. The answer to this question is not simple. In the short-term the logic is straightforward: foreign students pay tuition – usually more than domestic students – and increase diversity on campus. Graduate students also contribute to the research and teaching missions of the institution in a cost-effective way since they paid relatively little. In the longer term, foreign students have a high propensity to remain in the country where they received their education and will be paid higher salaries – and hence pay more taxes – than those who are not as educated. Furthermore, because these foreign students are educated in the host country, they do not suffer the problem of credential recognition in the host nation. In summary, with domestic birth rates declining in Western countries, coupled with an aging work force, foreigners will become increasingly necessary to ensure that economies continue to grow and that citizens of these economics will have the health care resources and public pension benefits necessary, without being a larger burden on successive generations.

Generally, the importance of foreign students is connected to the rise in economic globalization, the related importance of the knowledge economy, and the decline of the industrialization model of economic development popular throughout the 19th century and most of the 20th century. Today, labour-intensive industries based in Western economics are not competitive internationally. This US-model of innovation-led productivity growth is the most recent in a long line of economic development strategies (Laidler 2002) and governments around the world are labouring to help create new ideas which can ultimately be transformed into marketable goods and services. The key to the knowledge economy is – obviously – knowledge, and it is mainly universities that are in the business of creating and disseminating (and increasingly commercialising) this knowledge. This leads us to the importance of a fresh crop of students and, in the absence of domestic sources, the increased emphasis on and competition for foreign students.

While there is still a dearth of evidence regarding the linkages between universities and economic growth (Beach 2005), this model of innovation shows no sign of losing momentum. If the benefits of foreign students to a host economy do indeed accrue to that nation's citizens, then any northward diversion of foreign students from the United States should be beneficial to Canada.

Recently, there has been talk of increasing integration between Canada and the US to include the freer movement of labour between the two countries (Hart, 2004). In the wake of September 11th, this would undoubtedly require some sort of joint border policy, and this would have implications for the current disparate immigration policies of the two countries.¹⁸ While politically this might be a prudent policy to follow, the economic implications of such a policy –

¹⁸ See Green (2004) for a discussion of this issue and how harmonization of immigration policies (likely towards the US model) would result in costs to the Canadian economy.

including implications for the movement of foreign students and the benefits they bring to a nation – should be fully explored.

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		% change						
Country	1999	2000	2001	2002	2003	2004	1999-2001	2001-2004
Afghanistan	20	17	31	16	28	35	55.00	12.90
Algeria	214	159	224	144	74	75	4.67	-66.52
Bahrain	755	852	808	589	477	431	7.02	-46.66
Bangladesh	2,213	2,451	2,517	1,490	1,382	1,346	13.74	-46.52
Egypt	1,646	1,926	1,796	1,137	979	911	9.11	-49.28
Iran	401	624	852	295	255	329	112.47	-61.38
Iraq	36	35	36	10	13	28	0.00	-22.22
Jordan	1,968	2,253	2,522	1,670	1,492	1,421	28.15	-43.66
Kuwait	4,374	4,445	4,146	3,110	2,434	2,202	-5.21	-46.89
Lebanon	1,443	2,015	2,709	1,741	1,437	1,391	87.73	-48.65
Libya	16	10	9	1	3	8	-43.75	-11.11
Mauritania	224	325	253	127	92	65	12.95	-74.31
Morocco	1,913	2,455	2,668	1,982	1,826	1,449	39.47	-45.69
Oman	702	824	906	685	466	424	29.06	-53.20
Pakistan	4,588	5,761	7,496	5,274	5,433	4,343	63.38	-42.06
Qatar	686	761	844	515	363	258	23.03	-69.43
Saudi Arabia	7,356	8,286	8,765	5,080	2,869	2,340	19.15	-73.30
Sudan	246	290	310	82	57	64	26.02	-79.35
Syria	444	510	630	328	231	212	41.89	-66.35
Tunisia	420	487	594	326	315	264	41.43	-55.56
Turkey	12,293	16,165	17,624	15,434	15,178	14,518	43.37	-17.62
United Arab Emirates	4,015	4,528	3,957	2,408	1,578	1,171	-1.44	-70.41
Western Sahara				3				
Yemen	428	432	436	168	104	113	1.87	-74.08
Predominantly Muslim Countries	46,401	55,611	60,133	42,615	37,086	33,398	29.59	-44.46
% change over previous year		19.85	8.13	-29.13	-12.97	-9.94		
State-sponsored Terrorist States	1,143	1,469	1,837	716	559	641	60.72	-65.11
% change over previous year		28.52	25.05	-61.02	-21.93	14.67		
All Other Countries	520,745	603,470	638,462	603,401	587,831	586,812	22.61	-8.09
% change over previous year	~	15.89	5.80	-5.49	-2.58	-0.17		
Total	567,146	659,081	698,595	646,016	624,917	620,210	23.18	-11.22
% change over previous year	*	16.21	6.00	-7.53	-3.27	-0.75		

Table 1: Nonimmigrants Students Admitted to the United States by Country of Citizenship, Fiscal Years 1999-2004

Notes: Includes both F1 and M1 visa holders admitted during the relevant fiscal year, but does not include spouses and children of visa holders. Over this time period there are seven state-sponsors of terrorism, so declared by the U.S. Department

of State. In addition to the five listed above, Cuba and North Korea are also included. Data for 2005 are available, but they

aggregrate all students along with their spouses and children. This makes these data incomparable with the data presented here and so are excluded.

Source: INS, Immigration Yearboook, and Office of Immigration Statistics, Yearbook of Immigration Statistics.

Table 2: Foreign Student Totals by Place of Origin, 1997/98 to 2005/06

					Year				
Place of Origin	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Afghanistan	90	77	110	75	92	102	109	155	175
Afghanistan Algeria	210	219	214	220	92 196	102	109	133	173
Bahrain	399	421	542	562	601	451	444	377	373
Bangladesh	3,458	3,650	3,845	4,114	3,935	3,596	3,198	2,758	2,581
8	1,831	5,630 1,834	5,845 1,964	2,255	2,409	2,155	1,822	2,738	1,509
Egypt	,	,	1,904	2,233 1,844	2,409	,	2,321	2,251	2,420
Iran	1,863	1,660				2,258			
Iraq	155	159	112	155	147	127	120	142	190
Jordan	2,027	2,039	2,074	2,187	2,417	2,173	1,853	1,754	1,733
Kuwait	2,810	3,013	3,298	3,045	2,966	2,212	1,846	1,720	1,703
Lebanon	1,321	1,315	1,582	2,005	2,435	2,364	2,179	2,040	1,950
Libya	41	47	38	39	42	33	39	39	38
Mauritania	41	58	62	73	79	87	68	58	63
Morocco	1,168	1,419	1,607	1,917	2,102	2,034	1,835	1,571	1,502
Oman	595	649	661	702	623	540	445	354	337
Pakistan	5,821	5,905	6,107	6,948	8,644	8,123	7,325	6,296	5,759
Qatar	339	409	416	463	461	441	354	290	254
Saudi Arabia	4,571	4,931	5,156	5,273	5,579	4,175	3,521	3,035	3,448
Sudan	328	326	354	366	378	431	279	290	309
Syria	534	570	641	713	735	642	556	498	446
Tunisia	277	300	344	385	458	381	341	268	277
Turkey	9,081	9,377	10,100	10,983	12,091	11,601	11,398	12,474	11,622
United Arab Emirates	2,225	2,524	2,539	2,659	2,121	1,792	1,248	1,158	978
Western Sahara	5	6	5	2	8	4	23	13	3
Yemen	341	329	372	411	436	375	284	238	246
Predominantly Muslim Countries	39,531	41,237	44,028	47,396	51,171	46,274	41,756	39,496	38,048
% change over previous year	,	4.32	6.77	7.65	7.96	-9.57	-9.76	-5.41	-3.67
State-sponsored Terrorist States	2,921	2,762	3,030	3,117	3,518	3,491	3,315	3,220	3,403
% change over previous year	,	-5.44	9.70	2.87	12.86	-0.77	-5.04	-2.87	5.68
All Other Countries	441,749	449,696	470,695	500,471	531,825	540,049	530,753	525,543	526,718
% change over previous year	11,712	1.80	4.67	6.33	6.26	1.55	-1.72	-0.98	0.22
Total	481,280	490,933	514,723	547,867	582,996	586,323	572,509	565,039	564,766
% change over previous year	401,200	2.01	4.85	6.44	6.41	0.57	-2.36	-1.30	-0.05
% enange over previous year		2.01	4.05	0.74	0.41	0.57	-2.50	-1.50	-0.05
Other	50,494	43,705	59,293	42,621	42,368	36,829	35,068	47,851	59,844
% change over previous year		-13.45	35.67	-28.12	-0.59	-13.07	-4.78	36.45	25.06
Undergraduate degrees	223,276	235,802	237,211	260,848	269,446	268,864	255,859	247,255	239,218
% change over previous year	,	5.61	0.60	9.96	3.30	-0.22	-4.84	-3.36	-3.25
Graduate degrees	207,510	211,426	218,219	244,398	271,182	280,630	279,076	269,933	265,704
% change over previous year	, -	1.89	3.21	12.00	10.96	3.48	-0.55	-3.28	-1.57

Notes: Includes all foreign individuals on nonimmigrant visas enrolled in programs leading to

associate degrees, bachelor's degrees, and graduate or first professional degrees, and others which

includes language schools, vocational training, etc. The total numbers for 2003/04 include 2,506 cases of unknown level of education.

Source: Institute of International Education, Open Doors, various years.

Country					Year				
	1997	1998	1999	2000	2001	2002	2003	2004	2005
Afghanistan	0	0	0	0	0	0	0		
Algeria	24	15	23	38	30	37	36	53	55
Bahrain	9	8	45	43	32	30	42	44	53
Bangladesh	85	169	249	176	316	366	362	317	314
Egypt	63	71	93	147	141	122	150	196	192
Iran	151	164	201	226	301	425	598	796	792
Iraq				4	5	0		0	
Jordan	76	101	98	136	81	91	75	76	107
Kuwait	45	48	78	65	58	75	65	95	110
Lebanon	32	60	95	149	243	200	178	166	149
Libya	165	210	199	273	146	49	204	162	150
Mauritania	10	4	8	7	11	8	13	19	8
Morocco	336	350	449	485	509	418	417	394	520
Oman	16	30	38	24	36	33	51	63	70
Pakistan	279	358	525	382	327	236	280	291	307
Qatar	4	7	17	21	24	87	35	36	28
Saudi Arabia	136	164	191	226	266	321	528	586	743
Sudan			4	6					
Syria	7	16	22	30	45	23	26	27	47
Tunisia	173	224	280	357	548	422	366	333	327
Turkey	73	125	280	388	410	412	333	415	525
United Arab Emirates	88	156	243	330	362	398	395	423	464
Yemen		15	12	16	13	17	42	47	49
Predominantly Muslim Countries	1,779	2,307	3,153	3,529	3,904	3,770	4,196	4,539	5,010
% change over previous year	,	29.68	36.67	11.93	10.63	-3.43	11.30	8.17	10.38
State-sponsored Terrorist States	323	390	426	539	497	497	828	985	989
% change over previous year		20.74	9.23	26.53	-7.79	0.00	66.60	18.96	0.41
All Other Countries	40,767	38,689	47,882	58,487	65,516	61,259	54,527	51,040	52,471
% change over previous year	,	-5.10	23.76	22.15	12.02	-6.50	-10.99	-6.39	2.80
Total	42,546	40,996	51,035	62,016	69,420	65,029	58,723	55,579	57,481
% change over previous year	,	-3.64	24.49	21.52	11.94	-6.33	-9.70	-5.35	3.42
5 · · · · · · · · · · · ·									

Table 3: Flows of Foreign Students to Canada, Selected Countries and Total, 1997-2005

Notes: No data for Western Sahara. Blank cells are the result of data suppression due to too few student permits issued. As a result, column totals may not add. Data are for total student authorisations by year. Although individuals may hold other immigrant authorisations, the are categorized by their main activity in the country. Individuals are classified by country of last permanent residence. Note also that these numbers can change over time as individuals who change visa status have their status updated retroactively in the database. A similar analysis using an earlier set of numbers did not substantially change the results. Thanks to Eden Thompson at Citizenship and Immigration Canada for pointing this out.

Source: Citizenship and Immigration Canada, Facts and Figures, various issues, and special tabulations

Country				Yea	r				
v	1997	1998	1999	2000	2001	2002	2003	2004	2005
Afghanistan	0	0	0	0				5	
Algeria	67	61	68	87	90	95	106	124	134
Bahrain	28	37	62	102	108	111	119	130	148
Bangladesh	140	143	287	412	585	885	1,108	1,290	1,342
Egypt	131	159	176	262	334	369	431	523	570
Iran	831	677	571	575	600	804	1,143	1,594	2,117
Iraq	8	2	5	4		0			6
Jordan	124	161	190	236	258	274	272	280	310
Kuwait	63	104	151	157	177	219	215	238	296
Lebanon	100	134	186	253	408	530	549	589	586
Libya	383	308	326	369	282	202	304	356	405
Mauritania	25	20	21	22	28	23	25	50	43
Morocco	810	923	1,090	1,286	1,378	1,387	1,344	1,324	1,421
Oman	34	54	80	92	105	124	138	154	187
Pakistan	441	659	1,053	1,154	1,140	1,016	1,025	1,037	1,085
Qatar	6	11	24	40	51	121	124	123	129
Saudi Arabia	348	368	428	493	577	670	871	1,093	1,403
Sudan	10	8	7	11	7	9	10	9	11
Syria	23	29	34	52	86	<i>93</i>	<i>93</i>	88	104
Tunisia	476	521	605	771	929	1,080	1,098	1,009	924
Turkey	138	181	328	461	572	711	763	881	1,031
United Arab Emirates	134	239	415	621	766	955	1,092	1,214	1,333
Yemen	5	12	25	39	42	55	76	107	141
Predominantly Muslim Countries	4,325	4,811	6,132	7,499	8,523	9,733	10,906	12,218	13,726
% change over previous year		11.24	27.46	22.29	13.66	14.20	12.05	12.03	12.34
State-sponsored Terrorist States	1,255	1,024	<i>943</i>	1,011	975	1,108	1,550	2,047	2,637
% change over previous year		-18.41	-7.91	7.21	-3.56	13.64	39.89	32.06	28.82
All Other Countries	72,187	72,875	82,007	96,594	112,088	121,108	128,246	134,143	140,270
% change over previous year		0.95	12.53	17.79	16.04	8.05	5.89	4.60	4.57
Total	76,512	77,686	88,139	104,093	120,611	130,841	139,152	146,361	153,996
% change over previous year		1.53	13.46	18.10	15.87	8.48	6.35	5.18	5.22

Table 4: Stocks of Foreign Students in Canada, Selected Countries and Total, 1997-2005

Notes: Data are for number of individuals by country of last permanent residence as of December 1st each year. See also notes for Table 3.

Source: Citizenship and Immigration Canada, Facts and Figures, various issues, and special tabulations

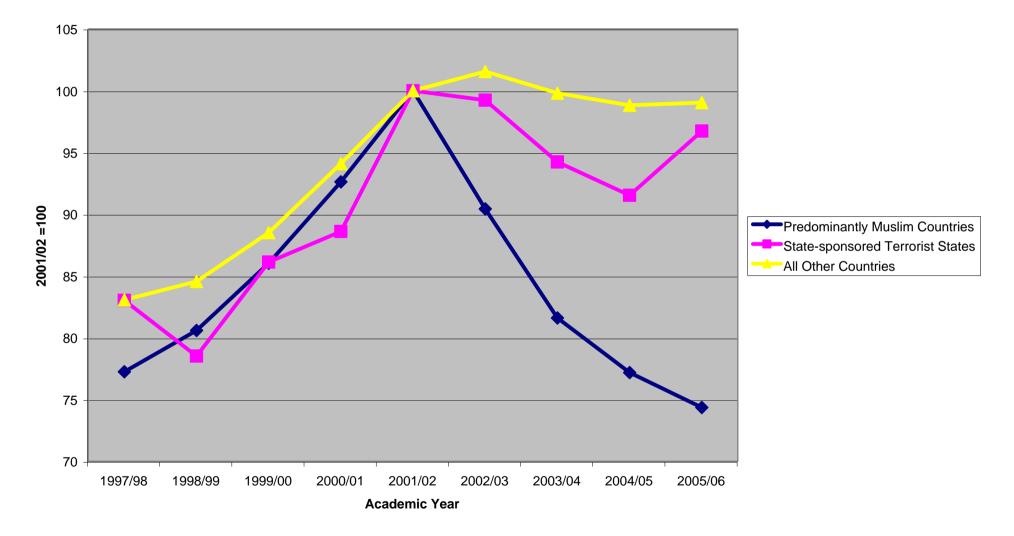


Figure 1: Growth in International Students to the United States from Different Source Regions, 1997/98-2005/06 (2001/02=100)

Figure 2: Flows of Foreign Student to Canada by Source Region, 1997-2005 (2001=100)

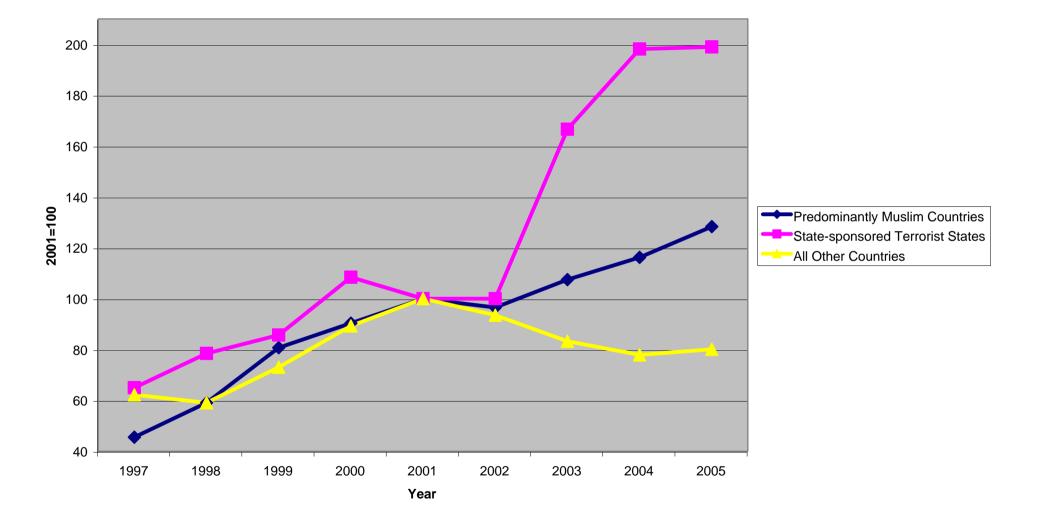


Figure 3: Stocks of Foreign Students in Canada by Source Region, 1997-2005 (2001=100)

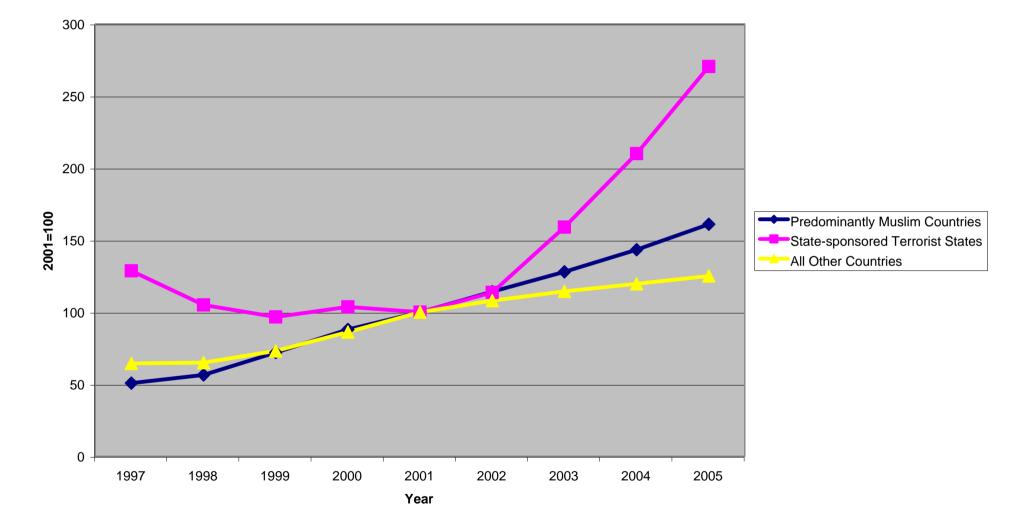
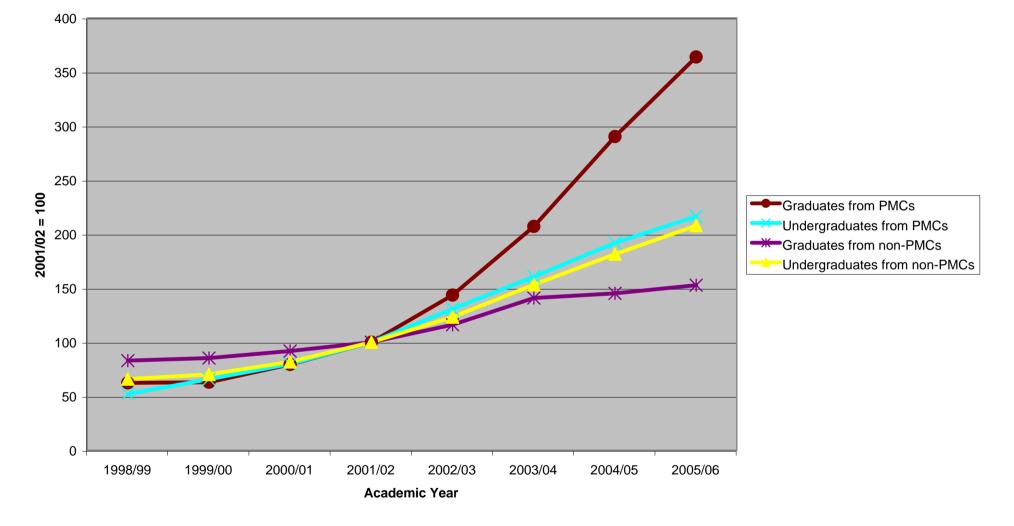


Figure 4: Growth in International Student Numbers, Selected Universities, by Student Type and Region, 1998/99-2005/06 (2001/02=100)



Appendix

	Academic Year										
	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06		
Carleton University											
Undergraduate Students											
Afghanistan									**		
Algeria			1								
Bahrain			1	5	6	3	4	1	**		
Bangladesh	1	2		1	4	7	10	15	18		
Egypt	2	2	10	10	15	16	23	24	21		
Iran	3	1	4	7	11	12	26	30	27		
Iraq	1										
Jordan	3	4	4	4	6	8	8	8	11		
Kuwait		1	2	3	3	13	10	10	17		
Lebanon	1	1	4	8	7	7	8	8	**		
Libya		1	1			1	2	1	3		
Morocco		1	1		1				**		
Oman		3	6	7	8	10	9	6	**		
Pakistan	6	11	11	7	12	9	19	4	27		
Qatar		2	2	2	2	1	1	14	12		
Saudi Arabia	2	3	10	12	8	17	16	19	33		
Sudan			1	2	3	2	1	1	**		
Syria			1		1	2	4	3	**		
Turkey	4	3	6	7	12	13	14	10	12		
United Arab Emirates	1	2	10	15	12	29	20	27	40		
Yemen		1	4	2	3	4	1		**		
Predominantly Muslim Countries	24	38	79	92	114	154	176	181	221		
% change over previous year		58.33	107.89	16.46	23.91	35.09	14.29	2.84	22.10		
All Other Countries	406	367	378	444	567	814	1,116	1,289	1,343		
% change over previous year		-9.61	3.00	17.46	27.70	43.56	37.10	15.50	4.19		
Graduate Students											
Bangladesh	1	1	3	7	13	9	13	11	9		
Egypt	2	7	6	16	22	23	22	11	13		
Iran	7	5	13	19	20	37	49	88	114		
Jordan			2	2	3	3	6	3	3		
Kuwait							1	1			
Lebanon						1	2	1	**		
Libya	13	10	5	5	5	4	4	5	6		
Morocco						1		1	**		
Oman								3	**		
Pakistan	2	5	6	1	3	5	5	2	3		
Saudi Arabia	1	1	1				3	6	11		
Sudan				1			1	1			
Syria					1		1	2	**		
Turkey	7	3	5	6	14	18	18	17	15		
United Arab Emirates					1	2	6	7	5		
Predominantly Muslim Countries	33	32	41	57	82	103	131	159	179		
% change over previous year		-3.03	28.13	39.02	43.86	25.61	27.18	21.37	12.58		
All Other Countries	166	164	156	197	188	198	280	221	239		
% change over previous year		-1.20	-4.88	26.28	-4.57	5.32	41.41	-21.07	8.14		

				Acs	demic Year				
	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Simon Fraser University									
Undergraduate Students									
Afghanistan		1	1	1	1	1	1	1	
Bahrain					1	1	1		
Bangladesh			1	1	2	1	4	7	4
Egypt				1	2	2	3	4	5
Iran	3		3	5	6	8	14	19	26
Iraq								1	1
Jordan		1	2	2	1	2	4	2	2
Kuwait								1	3
Lebanon									
Libya					1			1	1
Morocco								1	1
Oman							1	2	2
Pakistan			1	2	6	9	5	6	4
Saudi Arabia								1	2
Turkey	2	4	2	1	3	5	5	5	9
United Arab Emirates	1	1	1	1					1
Yemen									1
Predominantly Muslim Countries	6	7	11	14	23	29	38	51	61
% change over previous year		16.67	57.14	27.27	64.29	26.09	31.03	34.21	19.61
All Other Countries	475	508	535	694	815	1,028	1,300	1,573	1,758
% change over previous year		6.95	5.31	29.72	17.44	26.13	26.46	21.00	11.76
Graduate Students									
Bangladesh	1	1	2		3	5	9	6	6
Iran	3	4	7	11	10	20	33	49	63
Jordan			1	1	1	3	1	1	1
Lebanon							1		
Libya									1
Mauritania						1	1	1	1
Morocco		1							
Pakistan	1	2	3	2	1	2		1	3
Saudi Arabia									2
Sudan					1	1	1	1	1
Turkey	1	1			1	3	6	6	10
United Arab Emirates						1	1	1	
Predominantly Muslim Countries	6	9	13	14	17	36	53	66	88
% change over previous year		50.00	44.44	7.69	21.43	111.76	47.22	24.53	33.33
		20100							
All Other Countries	317	336	332	350	335	330	382	404	477

				A	demic Year				
	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
University of Alberta									
Undergraduate Students									
Afghanistan									1
Algeria						1			1
Bahrain			1						
Bangladesh						4	4	6	7
Egypt					2	2	2	5	1
Iran	1	1	1	2	1	2	2	4	5
Iraq	1		1	1	2				
Jordan							1	2	1
Kuwait	2	3	3	3	3	1	1	1	4
Lebanon					2	6	5	7	6
Libya					2	3	2	2	3
Morocco								1	
Oman						2	2	5	5
Pakistan	1	2	3	10	6	6	10	10	14
Qatar	1	2	2	3	3	2	1	1	1
Saudi Arabia	22	22	24	29	26	37	42	42	58
Sudan				1				2	2
Syria				1	1				
Tunisia								1	2
Turkey			3	2	3	4	9	1	3
United Arab Emirates	1	3	3	4	8	10	10	22	6
Yemen			1			1	2	5	4
Predominantly Muslim Countries	29	33	42	56	59	81	93	117	123
% change over previous year		13.79	27.27	33.33	5.36	37.29	14.81	25.81	5.13
All Other Countries	393	469	511	556	628	743	885	919	1,139
% change over previous year		19.34	8.96	8.81	12.95	18.31	19.11	3.84	23.94
Graduate Students									
Algeria	1	1							
Bahrain		1	1	1					
Bangladesh	8	9	14	15	21	30	33	28	27
Egypt	2	5	3	4	4	9	10	17	25
Iran	26	22	15	16	11	24	37	61	94
Iraq				1	2				
Jordan			1	2	2	2	3	5	7
Kuwait	1	1	1	2					
Lebanon	1	1	1						3
Libya	2	2	1	1	1	1	1	1	5
Morocco	1	1			1				
Oman	1	1	1		-	2	2	2	3
Pakistan	7	9	5	8	7	16	14	12	9
Saudi Arabia	3	1	1	2	1	1	2	4	5
Sudan		1							1
Syria					1				1
Tunisia			1	1	-				
Turkey	4	8	7	8	9	10	13	20	22
United Arab Emirates		-	1	2	-			8	
Predominantly Muslim Countries	57	63	53	63	60	95	115	158	202
% change over previous year		10.53	-15.87	18.87	-4.76	58.33	21.05	37.39	27.85
	450	400	40.4		(20)	= 42	050	00 -	0.25
All Other Countries	479	498	491	538	639	743	878	897	937

				Aca	ademic Year				
	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
University of British Columbia									
Undergraduate Students									
Afghanistan								2	
Algeria			1						
Bahrain		3	3	1	1	1	3	4	1
Bangladesh		1			1	1	3	7	4
Egypt		1					1	1	3
Iran		6	5	6	7	6	15	21	24
Iraq								1	
Jordan				1	1	2	3	3	3
Kuwait		10	10	11	10	20	15	15	19
Lebanon		2	2	2	3	2	2	2	2
Libya		1	1		2	2	2	6	8
Morocco			1	1					
Oman				1	1	1	3	2	7
Pakistan		3	6	5	7	7	8	9	11
Qatar						1	6	4	2
Saudi Arabia		45	24	29	38	42	48	56	66
Sudan		1	1	1	1				
Tunisia						1			
Turkey				1	2	4	8	7	11
United Arab Emirates		2	2		1	3	4	3	4
Yemen							1		
Predominantly Muslim Countries		75	56	59	75	93	122	141	165
% change over previous year			-25.33	5.36	27.12	24.00	31.18	15.57	17.02
All Other Countries		1,093	1,132	1,283	1,573	1,885	2,329	2,798	3,408
% change over previous year			3.57	13.34	22.60	19.83	23.55	20.14	21.80
Graduate Students									
Algeria					1				1
Bahrain		2	1	1		1			
Bangladesh		1	3	6	10	15	25	29	22
Egypt			1	1			2	6	12
Iran		28	27	29	29	43	71	93	105
Iraq		1	1				1		1
Jordan		2	2			1	2	3	2
Kuwait		2	2	2	2	3	5	4	5
Lebanon			1	1		1	4	5	6
Libya		7	6	4	3	2	2	3	2
Morocco		1	1					1	1
Oman							1	1	3
Pakistan		2	3	5	5	8	10	7	9
Saudi Arabia		1	1	3	6	6		14	20
Sudan				1	1	1	7	1	1
Syria							1	1	1
Tunisia		1	1						
Turkey		6	7	9	10	14	18	17	18
United Arab Emirates		1	1	1	1		1	1	1
Predominantly Muslim Countries		55	58	63	68	95	150	186	210
% change over previous year			5.45	8.62	7.94	39.71	57.89	24.00	12.90
All Other Countries	1,081	940	913	988	1,085	1,263	1,603	1,635	1,697
% change over previous year		-13.04	-2.87	8.21	9.82	16.41	26.92	2.00	3.79

				Aca	ademic Year	•			
	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
University of Calgary									
Undergraduate Students									
Afghanistan								1	1
Algeria					1				
Bahrain				1			2	2	3
Bangladesh		1	3	4	2	3	8	5	3
Egypt	2	1		1					
Iran	1	2	3	3	8	10	10	11	14
Iraq		1	1	1	2				
Jordan			1	2	2	2	1		
Kuwait	8	9	5	4	3	4	3	3	2
Lebanon		1	1	1	1	2	2	2	2
Libya	2	5	5	4	4	3	2	1	
Morocco					1	1	1	1	1
Oman					1	1	1	1	3
Pakistan	1	2	5	5	7	7	8	10	12
Qatar	-	_	-	7			1		
Saudi Arabia	8	13	13	15	18	22	31	45	38
Sudan	1	10	10	10	10		01	10	20
Syria	1						1	1	
Turkey	1	2	3	2	2	2	1	1	2
United Arab Emirates	1	2	5	-	3	3	2	2	3
Yemen		1	7	12	18	23	31	36	32
Predominantly Muslim Countries	24	38	47	62	73	83	104	121	115
% change over previous year	24	58.33	23.68	31.91	17.74	13.70	25.30	16.35	-4.96
All Other Countries	408	445	458	484	584	597	23.30 726	807	852
% change over previous year	400	9.07	2.92	5.68	20.66	2.23	21.61	11.16	5.58
Graduate Students									
Afghanistan									1
Bahrain									3
Bangladesh	2	1	3	6	7	10	12	15	16
Egypt	6	4	2	5	13	16	22	23	23
Iran	15	11	2	6	27	31	53	175	229
Iraq						1	1	1	4
Jordan	1	2	3	3	1	3	4	3	5
Kuwait					1	1	1	2	3
Lebanon			1	2	1		1	1	5
Libya	1	1			1		2		
Morocco							1	1	
Oman									1
Pakistan		1		1	2	4	5	5	6
Saudi Arabia					2	3	11	12	18
Sudan							1	2	1
Tunisia			2	2					
Turkey		2	2		1	2	2	1	1
Yemen							1	1	1
Predominantly Muslim Countries	25	22	15	25	56	71	117	242	313
% change over previous year		-12.00	-31.82	66.67	124.00	26.79	64.79	106.84	29.34
All Other Countries	295	251	341	305	318	414	492	525	538
% change over previous year		-14.92	35.86	-10.56	4.26	30.19	18.84	6.71	2.48

				Aca	ademic Year				
	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
University of Waterloo									
Undergraduate Students						1	1	4	4
Bahrain Bangladesh		2	3	4	7	110	1 13	4 24	4 28
Egypt		2	5	4	2	10	15	24	28 4
Iran	1	2	2	2	6	8	8	15	15
Jordan		-	-	1	2	2	3	3	2
Lebanon					1	1	2	2	1
Libya							1		1
Morocco						1	1	2	
Oman			1		1				1
Pakistan		5	11	16	18	34	51	69	86
Saudi Arabia							1	2	1
Tunisia							1		1
Turkey					2	2		1	
Yemen	1	0	17	22	2 39	2	02	104	144
Predominantly Muslim Countries	1	9 800.00	17 88.89	23 35.29		61 56.41	82	124 51.22	144 16.13
% change over previous year All Other Countries	240	252	322	55.29 426	69.57 584	50.41 788	34.43 919	1,226	1 ,372
% change over previous year	240	5.00	27.78	32.30	37.09	34.93	16.62	34.49	1,372
o change over previous year		5.00	27.70	52.50	57.09	54.95	10.02	54.47	11.00
Graduate Students									
Algeria			1	1	1	1	1		
Bangladesh	2	2	1	3	8	16	22	22	20
Egypt	3	2	3	14	12	15	19	19	28
Iran	15	11	11	16	23	44	68	90	121
Iraq									2
Jordan			1	1	1	2	2	3	3
Kuwait	2	2	2	1	1	1	1	1	4
Lebanon			2	1	1	3	4	5	11
Libya	10	9	8	5	3		2	4	10
Oman				2	_			0	
Pakistan		1	2	3	5	4	6	8	8
Qatar Saudi Ambia		1	1	1	2	1	7	1 11	25
Saudi Arabia Tunisia	3	1	1	1 1	2	1	1	11	25 1
Turkey	5	5	1	1		1	6	12	12
Predominantly Muslim Countries	35	31	34	48	57	88	138	176	245
% change over previous year		-11.43	9.68	41.18	18.75	54.39	56.82	43.18	39.20
All Other Countries	150	189	212	253	301	379	401	480	489
% change over previous year		26.00	12.17	19.34	18.97	25.91	5.80	19.70	1.88
All Selected Universities									
Total from non-PMCs		5,512	5,781	6,518	7,617	9,182	11,311	12,784	14,249
% change over previous year		3,312	4.88	12.75	16.86	20.55	23.19	13.02	11.46
Total from PMCs		412	466	576	723	989	1,319	1,722	2,066
% change over previous year			13.11	23.61	25.52	36.79	33.37	30.55	19.98
Undergraduates from non-PMCs		3,134	3,336	3,887	4,751	5,855	7,275	8,622	9,872
% change over previous year			6.45	16.52	22.23	23.24	24.25	18.52	14.50
Undergraduates from PMCs		200	252	306	383	501	615	735	829
% change over previous year			26.00	21.43	25.16	30.81	22.75	19.51	12.79
Graduates from non-PMCs		2,378	2,445	2,631	2,866	3,327	4,036	4,162	4,377
% change over previous year			2.82	7.61	8. <i>93</i>	16.09	21.31	3.12	5.17
Graduates from PMCs		212	214	270	340	488	704	987	1,237
% change over previous year			0.94	26.17	25.93	43.53	44.26	40.20	25.33
Standardized (2001=100)		<i>(</i> -)	T ⁰ 2 0	01.01	100.00	102.24	150.10	101.10	207 77
Undergraduates from non-PMCs		65.97	70.22	81.81	100.00	123.24	153.13	181.48	207.79
% change over previous year		50.00	6.45	16.52	22.23	23.24	24.25	18.52	14.50
Undergraduates from PMCs		52.22	65.80 26.00	79.90	100.00	130.81	160.57	191.91	216.45
% change over previous year Craduates from non-PMCs		82.97	26.00 85.31	<i>21.43</i> 91.80	25.16 100.00	<i>30.81</i> 116.09	22.75 140.82	<i>19.51</i> 145.22	<i>12.79</i> 152.72
Graduates from non-PMCs % change over previous year		02.97	2.82	91.80 <i>7.61</i>	100.00 8.93	16.09	140.82 21.31	145.22 3.12	5.17
Graduates from PMCs		62.35	62.94	79.41	100.00	143.53	207.06	290.29	363.82
% change over previous year		02.33	02.94	26.17	25.93	43.53	44.26	40.20	25.33
			5.71	_3.17	20.70				20.00

Note: Totals include only students registered full-time on student or other visas whenever possible. If these data are not available, similar measures such as country of citizenship and headcounts are used. Comparability of data within institutions is always maintained from year-to-year. University of British Columbia totals include only the Vancouver campus and are not publicly available for 1997/98. ** means data were suppressed.