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Does the Statue of Liberty Still Face Out?[1] The Diversion of Foreign Students from the United States 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 non-immigrants entering the United States. The latter group includes students who enter the country 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 among students from predominantly Muslim countries. Canada, by contrast, has relaxed its entry requirements for some foreign students and there has been a concerted effort among Canadian universities to increase foreign student enrolment. We find that the number of foreign students in Canada did 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. Although these results support the hypothesis that changes in U.S. immigration policy are responsible, causality cannot be inferred from our data. This underlines the need for better data to adequately address the post-secondary education choices of international students.

RÉSUMÉ

Les attaques terroristes du 11 septembre 2001, ont entraîné une vérification plus minutieuse des immigrants et non-immigrants entrant

aux États-Unis. Le dernier groupe est composé des personnes qui entrent aux États-Unis, avec des visas provisoires, dans le but de suivre des études supérieures. Tout dépendamment de la source, le nombre de ces étudiants est demeuré constant ou a diminué. Le plus grand déclin est constaté parmi les étudiants en provenance des pays musulmans. Contrairement aux États-Unis, le Canada rend ses conditions d'admissibilité moins contraignantes pour certains étudiants étrangers. De plus, il y a eu un effort concerté parmi les universités canadiennes d'augmenter l'inscription des étudiants étrangers. Nous constatons que le nombre d'étudiants étrangers au Canada a augmenté suite aux événements du 9/11, particulièrement ceux des pays à prédominance musulmane. Nous discutons des implications de cette augmentation pour les universités canadiennes et le marché du travail canadien. Bien que l'hypothèse que les changements de la politique américaine en matière d'immigration en soient les responsables, la causalité n'est pas démontrée par nos données. Ceci souligne le besoin de meilleures données pour démontrer de manière plus adéquate le choix des étudiants internationaux en matière d'éducation post-secondaire.

INTRODUCTION AND BACKGROUND

Since the terrorist attacks on the United States on September 11, 2001, there has been a concerted effort by the United States to restrict access to foreign nationals who are deemed to pose a threat to its security. Although foreign students who enter the United States are not restricted by numerical limits, they are subjected to increased scrutiny (Szelenyi, 2003) and may perceive the academic environment in the United States to be less hospitable (Altbach, 2004). Students from the Middle East, especially those from predominantly Muslim countries (hereafter PMCs) most closely identified with terrorism, may undergo even greater scrutiny when entering the country. This heightened scrutiny may well have an impact on permanent immigration to the United States, but it will certainly have a profound effect on those seeking admission using short-term (or non-immigrant) visas, such as students (Camarota, 2002). The likely outcome is that fewer foreign students will seek access to and be admitted to the country. According to Lee and Rice (2007), "[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" (p. 385).

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 foreign students wishing to study there, 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 and, if so, what are the potential gains to the Canadian economy?

In general, foreign students are viewed as beneficial to the host country.[2] Foreign students increase diversity on university campuses, graduate students conduct research and staff laboratories and classrooms, and upon graduation, talented students might elect to stay in and contribute their talents and education to the host country. For example, in the United States, Aslanbeigui and Montecinos (1998) found that 60% of their survey respondents planned to work in the country either temporarily (45%) or permanently (15%) following completion of their PhD programs in economics. Similarly, Finn (2000) found that over 50% 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 United States contributed a larger amount to the advancement of science than their native counterparts (Stephan & 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 (Organization for Economic Co-operation and Development) countries compared to more traditional determinants of migration, such as per-capita income differences between host and source countries.

If foreign students do return to their countries of origin, they may become important contacts who facilitate trade and goodwill between countries. Foreign students also bring large amounts of foreign currency into the host country; the Institute of International Education (IIE, 2003) estimated that nearly 75% of all international students' funding comes from sources outside the United States. Further, it noted that the U.S. 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 American 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 some of the most productive students are likely to come from foreign countries. For example, research indicates that an increasing number of doctoral-degree recipients in the United States are from foreign countries (Aslanbeigui & Montecinos, 1998; Groen & Rizzo, 2004) and that many of them intended to stay in the country after obtaining their degrees (Finn, 2000; Johnson & Regets, 1998). Furthermore, it is well documented that U.S.-educated scholars and professionals often facilitate further migration to the United States through the networks that are created between foreign nationals and foreigners educated in the United States (Cheng & Yang, 1998). Finally, U.S. colleges and universities tend to hire a large proportion of U.S.-trained PhDs, including foreign nationals (Groen & Rizzo, 2004).

Given the importance of these highly trained and skilled foreign nationals in the new knowledge-based economy, increased U.S. border restrictions 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 United States, 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. Recently, the Association of Universities and Colleges of Canada (AUCC, 2007) noted the dramatic increase in foreign students, especially at the graduate level, over the past decade, attributing 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" (p. 16).

By contrast, recent Institute of International Education data (IIE, 2006) showed a decline in the number of students originating from PMCs who enter the United States. As well as the increasing competition for foreign students from other countries, including Canada, the perception that the new U.S. visa procedures make it difficult to enter the country may account for this decline. For example, Altbach (2004) noted that students from developing countries—especially Islamic countries—reported being treated with disrespect by U.S. officials in their home countries. Combined with increased delays, new visa fees, and the implementation of a computer tracking system, the United States seems to be both less hospitable and a more costly destination for a number of foreign students. Indeed, Canadian universities appear to have been beneficiaries of the new U.S. visa requirements; 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).

Since September 11, 2001, the United States has tightened 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 U.S. State department has increased its scrutiny of visa applicants from certain countries, including checks with FBI and CIA databases of suspected and known terrorists, before visas are issued. Previously, consular officials simply checked visa applicants against a "look-out list" containing some 6 million names. In the post-September 11 world, nationals from countries deemed to be "state sponsors of terrorism" are required to demonstrate that they are not a national security threat to the United States (Yale-Loehr, Papademetriou, & Cooper, 2005).[6] Furthermore, men in the 16 to 45 age group—the age group that also tends to enrol in U.S. post-secondary institutions—seem to be the most scrutinized. The result of these tightened procedures has been increases in the backlog of applications being processed by U.S. Citizenship and Immigration Services (USCIS) and a commensurate increase in the length of time necessary to approve visas.

Other security measures were also introduced. In 2002, the implementation of the National Security Entry-Exit Registration System (NSEERS) required all male visitors from "politically sensitive areas" to register with the then-Immi-

gration and Naturalization Service (INS).[7] The NSEERS has since been phased out and replaced by the US-VISIT program, which requires a number of non-immigrant visitors to be photographed and submit digital fingerprints—both before and upon entry to the United States—and to register 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 must supply the State department with electronic files on all foreign students currently enrolled or risk losing their accreditation to host foreign students.[8]

At the same time as the United States has been increasing its entry requirements for foreign students, Canada has been attempting to attract students by easing employment restrictions for working off-campus while studying, as well as after graduation, with its Post-Graduation Employment Permit Program. In addition, new scholarships were designed to attract foreign graduate students.[9]

Although the American response to foreign students is undoubtedly due to the increased emphasis on border security, Canadian immigration policy continues to stress the economic benefits of immigration and the provision of a safe destination for refugees, and, to this end, the Canadian Immigration and Refugee Protection Act (IRPA) was implemented in June 2002. The new act, *inter alia*, stipulated that foreign students registered for courses of six months or less do not require a study permit, which has likely increased the number of foreign students in Canada. However, because Citizenship and Immigration Canada (CIC) has stopped gathering statistics on these student flows, there is no way to confirm this.[10] As of 2001, there were more than 130,000 foreign students in Canada (about 44% at the university level), more than double the number only 11 years earlier (Iturralde & Calvert, 2003). This increase was undoubtedly helped by the establishment of Canadian Education Centres in 17 countries to promote study in Canada, although Turkey is the only PMC to have one of these centres.

For the purposes of this article, then, two main questions need to be answered: 1) Has there been a decrease in the number of foreign students in the United States since the events of September 11, 2001? And, if so, have these declines been more pronounced among students from PMCs? 2)To what extent have these students been diverted to Canada?

The following section describes the U.S. and Canadian data sources that were used to answer these questions, followed by an analysis of these data. The final section offers some conclusions and discusses some of their implications for Canadian education and immigration policy, as well as the need for better data to further examine the motivations of international students studying in Canada. Although the results of the current analysis are consistent with the hypothesis that U.S. policy has resulted in the diversion of students to Canada, existing data sources are simply not up to the task of ascertaining the precise motives for the decrease in the number of foreign students—especially those from Muslim countries—studying in the United States, along with the commensurate increase in Canada.

DATA

U.S. Data

Since no single data source is available that can adequately address the questions posed above, a variety of data sources was utilized. First, data on foreign students admitted to the United States come from U.S. Citizenship and Immigration Services (USCIS). Each year, this department compiles a lengthy document of the various types of legal permanent and temporary admissions (or immigrant and non-immigrant admissions).[11] These statistics, however, only represent the gross flows of students into the United States, since entries are counted and not persons. The second source of data is the Institute of International Education (IIE). The IIE surveys U.S. universities on the number of foreign students enrolled in their programs each year, which is a superior source of information since changes in students enrolled in those programs can be tracked, not simply the number of entries into the country. The IIE survey has a response rate of about 90%, so is considered the most authoritative data source on foreign students in the United States.

Canadian Data

The Canadian data were obtained from two sources: Citizenship and Immigration Canada (CIC) and individual universities.[12] CIC tracks the number of foreign students in Canada each year, and these data contain both stocks (i.e., the number of foreign students in Canada) and flows (i.e., the number of foreign students entering Canada). However, these data are potentially biased (although likely only to a small extent) for two reasons. First, how foreign students are classified can change over time; for example, a student on a study permit may change to a work permit and yet still be a student, which results in an undercounting of the true number of students.[13] Second, students are classified by country of last permanent residence, and although this count is likely to be highly and positively correlated with students by country of citizenship and country of birth, these data could potentially provide misleading results, especially if a significant number of students were internationally mobile before studying in Canada.

Perhaps the best sources of data are from individual universities. Each year, most Canadian universities compile a "fact book," which normally contains a plethora of statistical measures including the number of students enrolled by visa status, country of citizenship, level of study, etc., and they often make these data publicly available on their websites. Since obtaining data from all Canadian universities over a period of time is rather impractical, this study's search was confined to public institutions from British Columbia, Alberta, and Ontario. These are the three largest English-speaking provinces and their universities are likely the most well known to foreign students. In other words, their institutions are reasonable substitutes for American institutions. Furthermore,

the search was limited to only those universities listed as medical/doctoral or comprehensive by the annual *Maclean's* magazine rankings because they are Canada's largest and best-known universities and are likely to contain significant numbers of both undergraduate and graduate students.[14] The final data sample consists of six universities: British Columbia, Simon Fraser, Alberta, Calgary, Carleton, and Waterloo. (The other institutions either did not have data over the appropriate time period or the data were too aggregated to be of use for the purposes of this study.) The sample is of sufficient size to be representative of what is happening throughout Canada; for example, this study's results for 2003/04 are generally similar to those compiled with preliminary data by the Association of Universities and Colleges of Canada (AUCC) (Drolet, 2004). Although the study's somewhat higher numbers are expected given that they are from some of Canada's better-known universities, there is no reason to believe they distort the trends in international students in Canada, which is the measure of interest in this article.

Finally, in order 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, detailed analysis is limited to those countries. The Islamic states chosen are essentially the same as those chosen by Camarota (2002).[15]

As noted earlier, there is no single source of adequate data to address the questions asked in this article, and this becomes even more problematic when cross-country comparisons are performed. For example, the American Council on Education (2006) explained that even the definition of foreign or international students differs across countries. In the United States, these students are defined as those who are not American citizens, immigrants, or refugees, which excludes permanent residents in the foreign student count even though it may decrease that count. Likewise, in Canada, the official tally of student permits likely underestimates the true number of foreign students since some of them may also have work permits and thus not be counted as students. Furthermore, data collected are based on an individual's country of last permanent residence, not country of birth or citizenship. The university-level data utilized here employ various definitions of student origin, all of which are highly and positively correlated. The definitions used *within* each data source are consistent over time and so comparisons of the trends between Canada and the United States are still valid. Finally, although the results presented below show the changing numerical patterns in both countries, they do not explain why international students choose to study in either country.

RESULTS

Are fewer foreign students entering the United States since the events of September 11, 2001? Table 1 lists the number of non-immigrant students admitted to the United States in each of the fiscal years from 1999 through 2004.[16] The total number of students admitted from PMCs increased by 29.6% between 1999 and 2001, compared to an increase of 22.6% for all other countries. These

numbers decreased between 2001 and 2004 by 8.1% for all other countries and by 44.5% for PMCs. Because these numbers are only for admittances and do not count actual students,[17] they may simply reflect the fact that some students are not leaving and then re-entering the United States due to the increased costs of re-entering (e.g., longer waiting times at airports, increased scrutiny, possible refusal of re-entry). Regardless, it is interesting to observe the large decline in the number of students admitted to the United States.[18] The decline among individuals from the subgroup of nations labelled "state-sponsored terrorist states" by the U.S. Department of State has been the most dramatic, with a decrease of 65% between 2001 and 2004, following an increase of 61% in the two-year period preceding 9/11.

Table 2 uses data from the Institute of International Education (IIE), which counts the number of foreign students on non-immigrant visas at U.S. institutions of higher education. These data are much more detailed than the USCIS data and much more reliable for our purposes, since numbers of individuals in educational programs are counted rather than the number of entries into the United States. Although the Table 2 data show a less-dramatic decline in student numbers compared to Table 1, following four years of steady increases, the number of students from PMCs slid by almost 10% in both 2002/03 and 2003/04 and by a further 5.4% and 3.7% in 2004/05 and 2005/06, respectively. This compares to a decrease of 1.7% in 2003/04 and about 1% in 2004/05, followed by a marginal increase in 2005/06, for all other countries. Numerically, there was a large increase in students from Saudi Arabia in 2005/06 due to a new Saudi government scholarship that is tenable in the United States (Bollag, 2006b).

Figure 1 is a graphical representation of the data from Table 2, with enrolments in 2001/02 indexed to 100 so that trends can be more easily compared. Enrolment increases were very similar for each of the three groups in the four-year period preceding 9/11, but in the four-year period after 9/11, enrolments trended down, especially among those from PMCs. Finally, Figure 1 supports our scepticism about using USCIS data: a number of students who might have left prior to September 11, 2001, appear to have either not left after this date or left the country without returning.

The evidence from these two data sources show that the number of students from PMCs in the United States has declined. Furthermore, students from other countries are not pursuing post-secondary education in the United States, at least not at the same rate of growth as in the period before 9/11. Unfortunately, these two sources cannot tell us if U.S. policy is influencing the decision of these students or if post-secondary learning institutions are simply admitting fewer of these applicants. Still, it is unlikely that the universities, which rely so heavily on foreign students as a source of revenue and talent, are responsible for this decline.[19]

In fact, evidence suggests that there is growing frustration among many U.S. universities regarding restrictive U.S. immigration policy for foreign stu-

dents. According to a survey conducted by the Council of Graduate Students (Bollag, 2006a), graduate student applications from international sources fell by 32% for Fall 2004 admissions, compared to Fall 2003 (itself a poor year), a finding that is mirrored by five other agencies concerned with higher education in the United States (Canadian Education Centre [CEC], 2004). Indeed, some 35% 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 causes of the decline in foreign student enrolment (Association of American Universities [AAU] et al., 2005).

So, has the number of foreign students entering the United States decreased since 9/11? The answer appears to be yes. And, as expected, there has been a steeper decline among students originating in PMCs. However, whether or not these students are then coming to Canada still needs to be determined. The global market for higher education is highly competitive, and foreign students have a number of options. We now turn to Canadian data sources to help answer our second question: To what extent have these students been diverted to Canada?

Tables 3 and 4 contain Citizenship and Immigration Canada (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, the growth rates (and in some cases decreases) in foreign students in terms of both flows and stocks appear to have dropped. However, the figures for the period from 2002 to 2005 are certainly an underestimate of the true number of students admitted to Canada because the Immigration and Refugee Protection Act (IRPA), enacted in June 2002, includes 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, which includes those from both PMCs and all other countries, exhibits 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 enactment of the IRPA. Prior to its implementation, short-term students would be accounted for in the flow data (since they would need a visa) but would not necessarily be counted in the stock data (since they may not have been in Canada on December 1, the date on 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, due to the introduction of new student visa procedures in 2002. This trend 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

Table 1.
Non-immigrant Students Admitted to the United States by Country of Citizenship, Fiscal Years 1999-2004

	Fiscal Year						% 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		

Note. 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.

From Institute of International Education, *Open Doors*, various years.

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
Algeria	210	219	214	220	196	177	148	143	132
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
Egypt	1,831	1,834	1,964	2,255	2,409	2,155	1,822	1,574	1,509
Iran	*1,863*	*1,660*	*1,885*	*1,844*	*2,216*	*2,258*	*2,321*	*2,251*	*2,420*
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		*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		*2.01*	*4.85*	*6.44*	*6.41*	*0.57*	*-2.36*	*-1.30*	*-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*

Note. Includes all foreign individuals on non-immigrant visas enrolled in programs leading to associate degrees, bachelor's degrees, and graduate or first professional degrees, and others that include language schools, vocational training, etc. The total numbers for 2003/04 include 2,506 cases of unknown level of education. From Institute of International Education, *Open Doors*, various years.

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

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

Note. 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 authorizations by year. Although individuals may hold other immigrant authorizations, they 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.

From Citizenship and Immigration Canada, Facts and Figures, various issues, and special tabulations.

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

Country	Year								
	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*	*93*	*93*	*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*	*943*	*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

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

From Citizenship and Immigration Canada, Facts and Figures, various issues, and special tabulations.

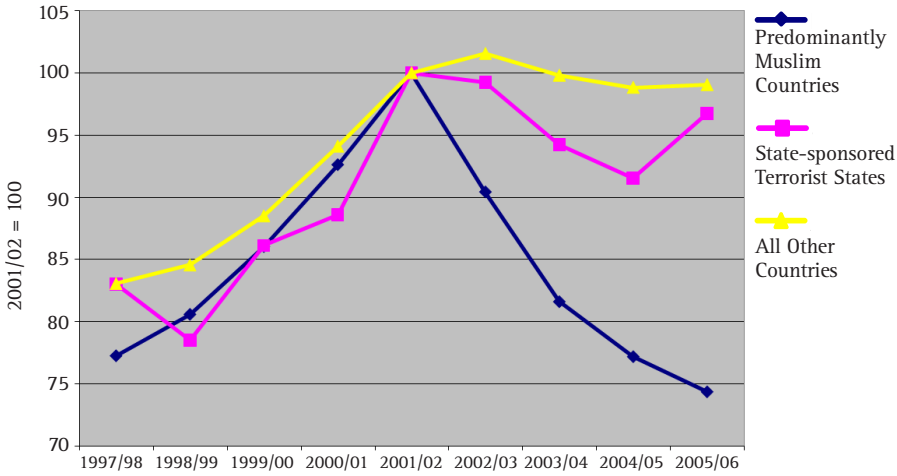

Figure 1. *Growth in International Students to the United States from Different Source Regions, 1997/98-2005/06 (2001/02=100)*

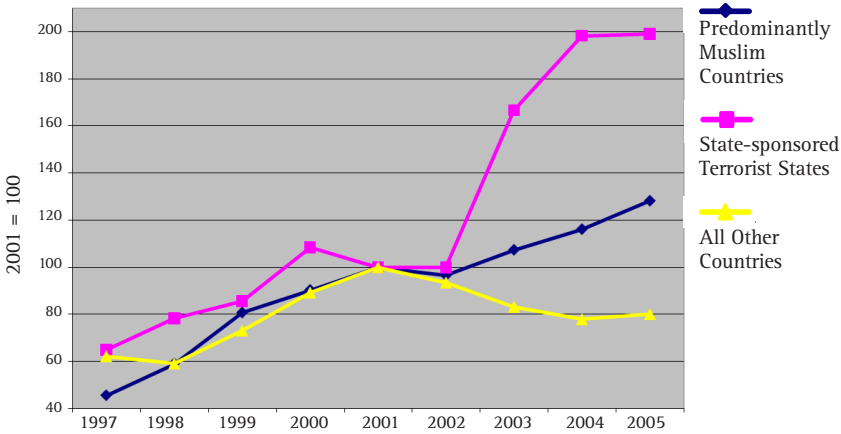

Figure 2. *Flows of Foreign Students to Canada by Source Region, 1997-2005 (2001=100)*

students from PMCs increase by about 28% between 2001 and 2005, compared to a decline of about 20% for all other countries. Over this same period, the stock of students from PMCs increases by almost 60%, compared with a rise of only 25% for all other countries. More dramatic, still, is the growth in students from state-sponsored terrorist states: the flows of these students almost doubled in this period while the stocks nearly tripled.

Of particular interest is the fact that the Canadian numbers are almost mirror images of those for the United States. The largest increase in Canada over the period from 2001 to 2005 is among students from PMCs, followed by those

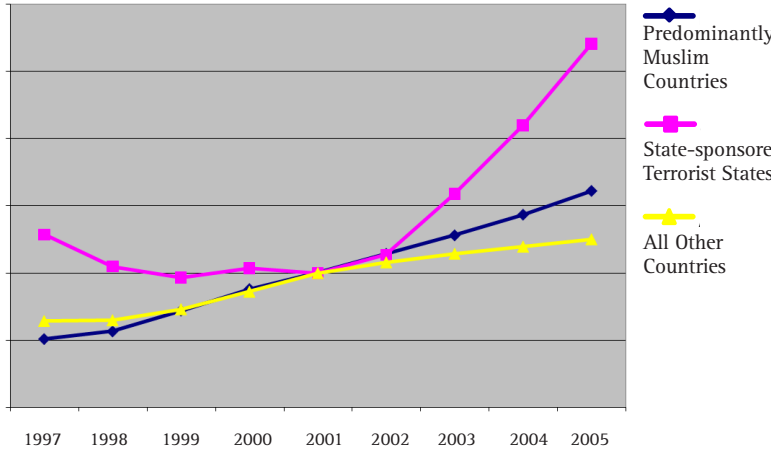

Figure 3. *Stocks of Foreign Students in Canada by Source Region, 1997-2005 (2001=100)*

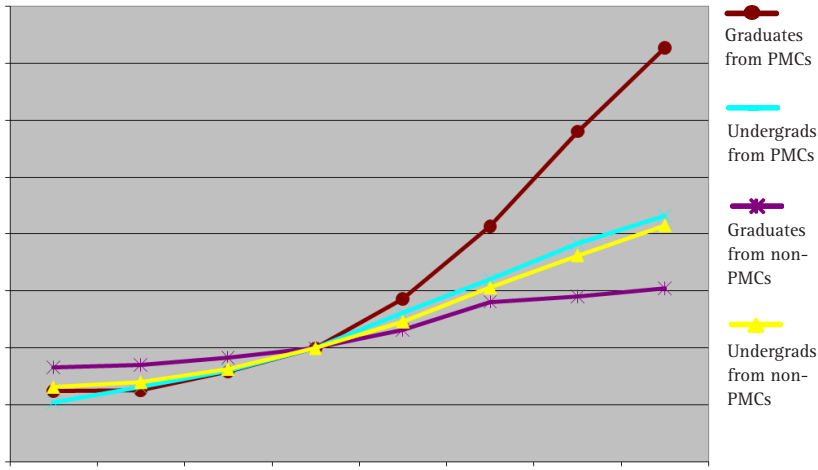

Figure 4. *Growth in International Student Numbers, Selected Universities, by Student Type and Region, 1998/99-2005/06 (2001/02=100*

from all other countries. For the United States, the pattern is the opposite: the largest decreases are among those from PMCs, followed by all other countries (compare Figure 1 with Figures 2 and 3).

To further investigate and corroborate this trend, data from the sample of six Canadian universities were compiled in Figure 4.[20] This figure shows that there was an increase in the number of students coming from PMCs, as well as from all other countries, and that there was an especially pronounced increase in graduate students originating in Muslim countries. More specifically, while the number of undergraduates more than doubled and the number of gradu-

ate students from other countries increased by about 50% from 2001/02 to 2005/06, the number of graduate students from PMCs almost quadrupled in that same period. Furthermore, this pattern has generally occurred at each of the six universities considered here. The data used to generate this chart are available from the author upon request.

CONCLUSIONS AND DISCUSSION

Following the events of 9/11, the number of foreign students studying at the university level in Canada increased, a pattern that coincided with a decrease in international students studying in the United States. Both of these phenomena are documented in the preceding sections of this article. In terms of students coming to Canada, the growth began earlier than 2001 but has since continued to increase, especially among students from PMCs. It has been argued that U.S. immigration policy is now less hospitable to foreign students, particularly those from Muslim countries. Although other factors such as the U.S. recession in the early 2000s and increased competition internationally for students are also important (Lowell, 2005), the movement of students from PMCs away from the United States, coupled with other evidence, suggests that U.S. immigration policy plays a critical role here. Clearly, Canadian universities have been trying to increase their foreign enrolments, but this alone is unlikely to be responsible for the large increase in foreign students from PMCs. Of the 17 countries with Canadian Education Centres, Turkey is the only country in our sample of PMCs that has a centre and the growth in the number of students from Turkey has been about the same as that for all PMCs. Furthemore, the growth in students from PMCs has far outpaced the growth in students from all other countries, a phenomenon that would be unexpected if there was a secular rise in international students. Although we cannot say definitively that stricter U.S. entrance requirements have resulted in some students choosing Canada, the data presented here do support this hypothesis.

An alternative explanation for the decline in students entering the United States, especially those from PMCs, is the increase in the number of Western-based universities that have recently opened in Muslim countries. Universities from Australia, Great Britain, the United States, India, Russia, and even Canada have entered the global higher-education market in a number of places, including the Persian Gulf region. According to the American Council on Education (2006), the Middle East is home to two new educational hubs—Knowledge Village in Dubai (United Arab Emirates) and Education City in Doha (Qatar)—both of which were established as centres for foreign educational institutions to provide education and training to students in the region. Although the existence of these institutions might explain some of the decrease in students entering the United States, it does not explain the corresponding increase in numbers at Canadian institutions. It may be that students from these areas who desire to study abroad view Canada as a better option than simply studying at a foreign institution in their home region.[21]

The increased flow of foreign students to Canada is continuing and may do so for some time (Alphonso, 2005; Dillon, 2004). There is a general increase in demand for university education worldwide, especially for students from developing countries that do not presently have the capacity 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 temporary and permanent) in the future. In particular, the heightened inspection of Muslims seems likely to continue—the 9/11 Commission report, released in July 2004, noted that the threat to the United States is not simply a few rogue Islamic extremists but rather an ideology that is widespread in the Islamic world and supported by young, disaffected Muslims, and with which other Muslims sympathize (Pipes, 2004).

In the past few years, the U.S. State department has undertaken a number of initiatives to expedite the issuance of student visas (Bollag & Field, 2006; Warwick, 2005) and U.S.-based university international offices have reported having fewer students with visa problems (McCormack, 2005). In fact, recent data (see Table 2) show that the decline in foreign students studying in the United States has been halted (though not reversed), although student numbers from PMCs continue to fall. Part of this trend has likely been due to the increased efforts of universities to put more resources into the recruitment of foreign students. Their efforts seemed to have paid off, as preliminary data from the Council of Graduate Students showed a slight increase in foreign graduate student enrolments for Fall 2006, the result of large increases in students from India and China (Bollag, 2006a). This is part of a broader global trend whereby countries such as Great Britain and Canada are following the "Australian model" of aggressively attracting foreign students through coordinated marketing campaigns and generous financial incentives. This trend is in response to traditional host countries' anxiety that the numbers of Indian and Chinese students will begin to decline as India and China expand their existing institutions and establish new ones (often with foreign partners), thus capturing students before they consider studying abroad.

Still, Yale-Loehr et al. (2004) have argued that the United States has not succeeded in reversing the exaggerated perception that it is inhospitable to foreign students and that other countries, including Canada, are ready to take advantage of this negative perception. As a result, students from PMCs who still desire to study abroad continue to choose countries other than the United States (Woo, 2006). In the end, the United States may be successful in keeping out undesirable students originating from specific regions, but its net may be cast too wide and desirable students may also be excluded.

Canada appears to be benefiting from this situation and has implemented a number of policies to continue to increase the number of students choosing Canada as their place of study. As mentioned earlier, Canada has waived the visa requirement for students studying in Canada for six months or less, and

since 2006 qualifying foreign students have been eligible to work off-campus on a part-time basis during the school year and on a full-time basis during school breaks (CIC, 2006). These students are also able to extend their stays in Canada, under certain conditions, following graduation to work in areas related to their field of study. In addition, the current Minister of Citizenship and Immigration, Diane Finley, recently introduced the new Canadian Experience Class. This program expands previous programs by expediting the permanent-residence process (under certain conditions) for those educated in Canada and/or with Canadian work experience (CIC, 2008).

However, is this possible diversion of international students in fact a loss to the United States 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 contribute to the research and teaching missions of the institution in a cost-effective way since they are 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 well educated; furthermore, because they are educated in the host country, they do not suffer the problem of foreign-credential recognition. With domestic birth rates declining in Western countries, coupled with an aging workforce, foreigners will become increasingly necessary to ensure that economies continue to grow and that citizens of these economies have the health-care resources and public-pension benefits they require, without being a larger burden on successive generations.

Generally, the importance of foreign students is connected to increasing economic globalization, the related importance of the knowledge economy, and the decline of the industrialization model of economic development that was popular throughout the 19th century and most of the 20th century. Today, labour-intensive industries based in Western economies are not competitive internationally. The U.S. 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 striving to create new ideas that can ultimately be transformed into marketable goods and services. Obviously, the key to the knowledge economy is knowledge, and it is mainly universities that are in the business of creating and disseminating (and increasingly commercializing) this knowledge. This, in turn, 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. Although there is a dearth of evidence on 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 diversion of appropriately qualified foreign students from the United States, or elsewhere, should be beneficial to Canada.

There has been talk of increasing integration between Canada and the United States to include the freer movement of labour between the two countries (Hart, 2004). In the wake of September 11, 2001, this would undoubtedly require some sort of joint border policy, which would have implications for the two countries' current disparate immigration policies.[22] Politically, this may be a prudent policy, but its economic implications—including the effect on the movement of foreign students and the benefits they bring to a nation—should be fully explored beforehand. Of course, in order to fully investigate the issues related to international students in Canada, appropriate data are necessary. The student visa data from Citizenship and Immigration Canada generally do not provide an accurate accounting of foreign students, and data from individual universities can be difficult to collect, if they are available at all. The development of a national database similar to that compiled by the Institute of International Education would be a welcome addition for researchers in this area.

Clearly, the collection of such data in Canada would provide an accurate accounting of student numbers, yet the exercise would continue to be silent on the reasons for students' destination choices. Detailed surveys of foreign students would allow researchers to garner vital information about the complex decision-making process undertaken by foreign students regarding their studies. The market for post-secondary education is increasingly global, with a number of countries, including Canada, labouring to attract an increasing share of the pool of international students. For example, in Canada, the Council of Ministers of Education (consisting of ministers of education from all 13 provinces and territories) has launched the "Imagine: Education au/in Canada" campaign, which offers a "brand" of Canadian higher education in order to compete for international students. The success of this type of campaign—either alone or in combination with other factors that influence a student's choice of location—depends heavily on the availability of appropriate data for researchers to analyze. Although longitudinal data such as the Youth in Transition Survey (YITS) are useful in ascertaining the post-secondary education choices, the completion rates, and (ultimately) the labour-market experiences of both Canadian- and foreign-born youth, the sample sizes are far too small to appropriately address the higher-education paths of foreign students. Nor do these data contain detailed information on the reasons for favouring Canada over other destinations. Thus, in order to move the research program in this area forward, development of survey data that assess the motivations of foreign students is vital, especially since Canadian post-secondary educational institutions and their industry groups have stated their desire to increase international student representation on campus in the face of increasing global competition for students.

NOTES

1. In an interview with the Chronicle of Higher Education (January 5, 2007), Karen Hughes, the U.S. 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 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 it is mainly 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% of graduate student survey respondents in the United States planned on returning home immediately after completing their degrees.
4. In 2001, about 44% (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 445,000 out of 586,000 in 2002, or approximately 78% (IIE, 2003).
5. See Yale-Loehr et al. (2004) for a recent and comprehensive treatment of the changes in U.S. visa procedures that have been implemented since September 11, 2001; the Appendix exclusively addresses changes to student visas. Warwick (2005) provides a similar review of U.S. policy changes since 9/11.
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 part of the new Department of Homeland Security.
8. Details can be found in Martin (2004), Rudolph (2004), and Yale-Loehr et al. (2004).
9. The federal government announced in its February 2008 budget that foreign students would be eligible for the new Canada Graduate Scholarships, which are intended not only to increase the pool of talented graduate students from Canada and abroad studying at Canadian universities but also to encourage Canadian graduate students to study at home.
10. In its brief to the House of Commons Standing Committee on Citizenship and Immigration Canada, the Association of Universities and Colleges of Canada (AUCC, 2002) lauded these changes but suggested they did not go far enough in facilitating the entry of students into Canada. The document notes that the lack of a coherent and coordinated national policy is harming Canada's position in the global competition for students.

11. 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 then, the name has been changed to the Yearbook of Immigration Statistics, a move that coincides with the renaming of the INS to the USCIS.
12. Another source of Canadian data comes from the Council of Ontario Universities (COU). Each year, the COU compiles data on applications and registrations for each of the province's public universities. These data are useful because they give researchers 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 does not disaggregate by country of origin, only region of citizenship, which limits the use of these data for our purposes. However, calculations based on these data do show trends similar to those reported throughout this article. Although the Canadian Association for Graduate Students publishes numbers of graduate school enrolments, these data are not disaggregated by student country of origin.
13. Similarly, students may be entering Canada as permanent residents, which could potentially bias the results. Citizenship and Immigration Canada publishes data on source countries of permanent residents (which include all classes of immigrants—refugee, family class, independent, and others), but these data do not show any definitive trend among those from individual PMCs over the period 2000 to 2006, implying that these immigrants are unlikely to bias the student number trends.
14. The third category in the Maclean's ranking is primarily undergraduate institutions, which are generally smaller and focus on providing education to local or regional students.
15. 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. The CIA World Factbook confirms that each of the countries included in the analysis has an overwhelmingly Muslim population.
16. The U.S. fiscal year runs from October 1 through September 30. For example, FY 2002 would be from October 1, 2002, through September 30, 2003.
17. See Borjas (2002) for details.
18. A similar table was produced for J1 exchange visitors (individuals coming to the United States on academic exchanges but including a number of foreign students), and a similar, albeit less-pronounced, pattern was found among this group of non-immigrant visa holders. According to the IIE (2003), in 2002/03, 86% of undergraduates held F visas, 2.9% had J visas, 0.1% had M visas, and the remaining 11% held other visas. For graduate students, these numbers were 87%, 5.9%, 0.1%, and 7%, respectively.
19. Numerous media reports have discussed the efforts of American universities to maintain their international student enrolments. *The Chronicle of Higher Education* routinely reports on these and related issues.

20. The complete data used to generate this chart can be found in the Appendix.
21. The ACE report also shows that the United States had the lowest growth in enrolments of international students over the 1999 to 2004 period among the six countries studied—a growth of 16.6% over the 5-year period compared to the United Kingdom (29%), Germany (46.1%), France (81.4%), Australia (42.1%), and Japan (108.5%).
22. See Green (2004) for a discussion of this issue and how harmonization of immigration policies (likely toward the U.S. model) would result in costs to the Canadian economy.

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