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Potential Effects of Foreign Students on the Foreign Workers Market of Canada and Policy Choice.

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Canada has been an economically powerful country; moreover, its service industries now employ three out of four Canadians. This partially accounts for the reason that many foreign students and foreign workers are absorbed into Canada. Simply put, most stay in Canada and have not gone back their original country or district, instead choosing to stay in Canada and find a job. These foreign workers become a new source of employees in the Canadian labour market. Foreign students educated in Canada, who choose to stay and become employed in Canada, find it easier to take part in the Canadian community than those foreign workers without a Canadian educational experience. These educated individuals are thus both able to make the transition to a different cultural context more easily and also make considerable contribution based upon their advanced educational standing. So, foreign students employed in Canada, with the potential for broad economic implications. Given that foreign students have potential effects on the foreign workers market of Canada, this article focuses upon the structure of foreign students and compare such with the structure of foreign workers. In doing so, we reveal foreign students' potential effects on foreign students.

# Analysis of the Structure of Foreign Students

When we examine data concerning foreign students in Canada over time, we note that the trend is clear: the number of foreign students has increased every year (See Table 1). Examining Table 1 reveals that the top three countries in terms of annual flows of foreign students into Canada are the Republic of Korea, the People's Republic of China and Japan. From the years 1996 to 2005, the amount of foreign students has increased, particularly in the cases of the Republic of Korea and the People's Republic of China. Of course, any given individual country in any given year does display some fluctuation. Nevertheless, we observe a broad-based trend towards increasing flows of foreign students into Canada over time.

TABLE 1: CANADA – ANNUAL FLOWS OF FOREIGN STUDENTS BY TOP SOURCE COUNTRIES										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Korea, Republic of	7,873	8,473	3,659	6,408	10,635	13,239	13,651	12,881	12,275	12,505
China, People's Republic of	1,214	1,005	1,765	3,527	5,337	9,399	10,126	9,068	6,783	6,996
Japan	5,669	5,842	5,501	5,762	5,579	6,436	5,847	5,262	5,031	4,648
United States	3,668	3,879	4,096	4,459	4,892	4,721	4,055	3,782	3,879	3,743
France	2,418	2,882	3,109	3,707	4,031	4,048	3,350	3,300	3,469	3,563
Mexico	1,364	1,991	2,631	2,992	4,178	4,753	3,556	2,064	2,083	2,281
India	356	338	428	625	751	960	1,546	1,819	1,276	1,907
Germany	1,282	1,382	1,395	1,576	1,897	1,950	1,826	1,595	1,739	1,851
Taiwan	2,572	2,017	1,916	2,067	2,350	1,986	2,053	1,512	1,744	1,703
United Kingdom	1,098	1,174	1,249	1,358	1,328	1,461	1,112	1,043	1,210	1,278
Hong Kong	1,730	1,297	1,155	1,225	1,443	1,418	1,346	1,209	1,100	947
Brazil	488	641	999	1,290	1,617	1,760	1,261	592	738	878
Colombia	500	803	1,350	1,455	972	666	511	308	205	309
Top 10 source countries	28,888	29,942	26,671	33,311	41,959	49,753	47,356	42,492	39,489	40,475
Other countries	10,844	12,302	13,903	16,750	18,073	19,667	17,673	16,231	16,090	17,006
TOTAL	39,732	42,244	40,574	50,061	60,032	69,420	65,029	58,723	55,579	57,481

TABLE 1: CANADA - ANNUAL FLOWS OF FOREIGN STUDENTS BY TOP SOURCE COUNTRIES

Source: Citizenship and Immigration Canada

An analysis of the structure of annual flows of foreign students shows that there are the following features:

Asian countries or districts shared a larger percentage in annual flows of foreign students.
Among the top 10 source countries (again, Table 1), Asian countries or districts include The Republic of Korea, The People's Republic of China, Japan, India, Taiwan district. Foreign students coming from these countries always shared a larger percentage of the foreign student annual flows. For example, in 2005 Asian countries occupied 50% in flows of foreign students. Among Asian countries, the proportion of The Republic of Korea was the highest, achieved 21.8%. Western countries (including The United States, France, Germany, and The United Kingdom) formed 18.1%.of the foreign student annual flows during the same year.

Developed countries have a higher proportion of foreign students in the top 10 source countries. Here, developed countries include Japan, The United States, France, Germany, and The United Kingdom. Again, taking 2005 as an example, the proportion of foreign students from these developed countries was 26.2%. Developing countries (the People's Republic of China and India), proportionally contributed 15.5%.of foreign students.

- Neighboring countries of Canada also occupied some share of the pool of foreign students.
   The United States and Mexico are both neighborhood countries of Canada, and the number of foreign students from The United States increased every year, from 3668 in 1996 to 4892 in 2000 (representing a 33.37% increase). Likewise, the number of foreign students coming from Mexico increased each year during the 1996 to 2001 period (representing a 248.46 increase). More recent trends show decreases in the actual number of foreign students from these neighboring countries. In 2005, the percentage of total foreign students, from these nearby countries was 6.5% in the case of the US and 4% for Mexico.
  - We might also examine the pool of foreign students based upon a sense of the population intensiveness of the source country. Population-intensive countries or districts include The People's Republic of China and India. From 1996 to 2005, the number and percentage of foreign students both jumped. Take 2005 as an example: The People's Republic of China supplied 12.2% of total foreign students, while India supplied 3.3% of the total.
  - IN SUMMARY, the percentage of stock of foreign students, using 2005 as an example, demonstrates that Asian countries or districts (the People's Republic of China, Republic of Korea, Japan, India, Hong Kong and Taiwan) provide 55.3% of the foreign students. Among these countries, the People's Republic of China occupied the largest percentage, representing 23.5%. The western countries (the United States, France and Germany) contributed 13.2% of the total during the same period. Developed countries contributed 35.4% of the students while developing countries represented 26.8% of the total foreign students contributed. Of the neighborhood countries, the United States represented 7.6% of the total while Mexico provided 2.2% of the total foreign students during 2005. We examined foreign student supply based upon population intensive countries as well, the People's Republic of China occupied 7.6% and India occupied 3.3% of the total foreign student pool. Having examined the pool of foreign students, we now turn to an examination of the foreign worker population in Canada.

## Analysis of the Structure of Foreign Workers

In the Canadian foreign workers market, the total number of foreign workers entered into Canada has increased. According to Citizenship and Immigration Canada, during 1996 to 2005, the top 10 source countries for foreign workers were the United States, Mexico, France, the United Kingdom, Australia, Jamaica, Philippines, Japan, India and Germany. An analysis of the structure of annual flows of foreign workers, offers the following observations:

Western countries occupied a larger share of foreign workers than other countries, although the Asian countries' percentage has increased. Western countries include the United States, France, the United Kingdom, Australia, and Germany. Taking 2005 as an example, the percentage of flows of foreign workers from these countries was 41.2%. The Philippines, Japan and India belong to Asian countries and the percentage of flows of foreign workers from Asia in 2005 was 15.3%, an increased of 5.3% over 1996.

Among Western countries, the United States always occupied rank 1 (1996-2005).

Asian countries, the Philippines, Japan and India have had different increases. Compared to the total trend, all these three countries have seen increases. In 1996, the percentage of flows of foreign workers from the Philippines was 2.6%, yet in 2005 the percentage achieved 6.1%; an increase of 3.5%. The percentage of flows of foreign workers from Japan was 5.8%, but in 2005, the percentage achieved was 5.9%, demonstrating little change. The percentage of flows of foreign workers from India in 1996 was 1.6%, but in 2005, the percentage achieved was 3.3%; an increase of 1.7 %.

Neighborhood countries of Canada contributed some share of the foreign workers. From 1996 to 2005, the number of foreign workers coming from the United States increased every year (from 23,848 in 1996 to 27,845 in 2000, an increase of 16.76%), but the rate of increase from 2001 to 2005 has slowed. From 1996 to 2002, the number of foreign workers coming from Mexico also increased every year, from 5,719 in 1996 to 11,629 in 2002(a 103.34% increase). However in the case of Mexico, from 2002 onward, there were up and down fluctuations. Taking 2005 as an example, the percentage of foreign workers from the United States was 16.5% and the percentage of Mexican foreign workers was 12.7%, of the total.

Developing countries also contributed some share of foreign workers. Among the top 10 source countries, Philippines and India ranked 7 and 9 respectively. From the total trend, foreign workers coming from these two countries have increased. In 1996, foreign workers coming from Philippines were 1,830, but increased by 229.39% to a total of 6,028 by 2005. In the case of India, foreign workers numbered 1,129 in 1996, but by 2005, were 3,273, an increase of 189 .90%.

So, the number of foreign workers in Canada in terms of an overall trend has increased. The country ranked 1 was the United States. From 1996 to 2005, the number of foreign workers coming from the United States has increased, from 18,505 in 1996 to 23,206 in 2005, increased 25.40%, the percentage of stock of foreign workers achieved 15.9% in 2005. The country ranked 2 was Philippines, from 5,478 in 1996 to 17,742 in 2005, increased 223.88%, the percentage of stock of foreign workers achieved 12.2% in 2005. The top 10 source countries were the United States, Philippines, Mexico, the United Kingdom,

Australia, Japan, France, Jamaica, India and the People's Republic of China. In 2005, western countries occupied 33.9%, Asian countries occupied 25.5%, developed countries occupied 39.4%, and developing countries occupied 20% (Citizenship and Immigration Canada).

As Asian countries developed in the global economy, the numbers of foreign students in Canada have increased. The People's Republic of China, Republic of Korea, Japan and India have all had increased numbers of foreign students. These countries are the top countries in terms of economy within the Asian countries. It seems that a strong economy in a country is related to the number of foreign students who enter into Canada. Likewise, foreign students have become a new source of foreign workers of Canada. The more the foreign students increase, the greater the foreign students become potential foreign workers.

### Potential Effects of Foreign Students on Foreign Workers Market of Canada

Foreign students who have studied in Canada, take on a basic role in learning Canadian culture, transmitting cultural, economic, political information with their country of origin, and thus promote economic and cultural communication. This role will become greater as the number of foreign students increases. The increased foreign students thus have potential effects on the foreign workers market of Canada. Should foreign students find a job and stay in Canada after they graduate from university, these potential effects will turn into actual effects.

From the December 1 stock of foreign students by top source countries, from 1996 to 2005, the total trend was an increase. During this period, the number of foreign workers also increased. Comparing stock of foreign students with foreign workers, we learned that foreign students will affect aggregate total supply of foreign workers market. Taking 2004 – 2005 and the People's Republic of China as an example, the stock of foreign students coming from the People's Republic of China was 34,369. In the same year, the stock of foreign workers coming from the People's Republic of China was 3,407. In 2005, stock of foreign students come from the People's Republic of China were 36,137, yet the stock of foreign workers coming from the People's Republic of China were 36,137, yet the stock of foreign workers coming from the People's Republic of China were 36,137, yet the stock of foreign workers coming from the People's Republic of China were 36,137, yet the stock of foreign workers coming from the People's Republic of China were 36,137, yet the stock of foreign workers coming from the People's Republic of China were 36,137, yet the stock of foreign workers coming from the People's Republic of China were 36,137, yet the stock of foreign workers coming from the People's Republic of China were 36,137, yet the stock of foreign workers coming from the People's Republic of China were 36,137, yet the stock of foreign workers coming from the People's Republic of China were 36,137, yet the stock of foreign workers coming from the People's Republic of China were 36,137, yet the stock of foreign workers coming from the People's Republic of China were 36,137, yet the stock of foreign workers coming from the People's Republic of China were 36,137, yet the stock of foreign workers coming from the People's Republic of China were 36,137, yet the stock of foreign workers coming from the People's Republic of China were 36,137, yet the stock of foreign workers coming from the People's Republic of China were 36,137, yet the stock of foreign

#### TABLE 2: COMPARISON OF FOREIGN STUDENTS AND FOREIGN WORKERS FROM CHINA

	2004	2005	
stock of foreign students	34,369	36,137	
stock of foreign workers	3,407	5,492	

Source: Citizenship and Immigration Canada

The data suggests that foreign students stayed in Canada and entered into the foreign workers market. Moreover, the more the foreign students were, the more the number of foreign workers increased. This illustrates that foreign students potentially affected the supply of foreign workers.

Interestingly, even though the number of foreign workers from western countries has increased, the actual percentage of the total has declined. From 1996 to 2005, the number of the foreign workers coming from these countries went up but the percentage has a down trend in the same direction as in

the case of with the change in stock of foreign students. At the same time the number and percentage of the stock of foreign workers coming from Asian countries all have increased. From 1996 – 2005, the number and percentage of the stock of foreign workers coming from these countries has an upward trend and the stock of foreign students of these countries has also been raised.

Changes in terms of foreign students potentially affect the structure of foreign workers in Canada. Foreign students educated in Canada, who stay and become employed, likely find it easier to take part in the Canadian community (when compared with those foreign workers not educated in Canada). Moreover, they have a much higher level education and may contribute to helping the Canadian economy achieve greater development. So, foreign students employed in Canada can not only increase the total amount of foreign workers, and supplement shortage of workers, but may also adjust foreign workers structure of Canada through enhancing the skill level of foreign workers and the total level of economic development.

Because these foreign students educated in Canada and have higher knowledge, they can take part in the Canada community better than other foreign workers might, it may in fact promote and increase in the total skill level of the larger pool of foreign workers. At the same time, because such foreign students have a high level education, the relative cost is higher after they are employed. This could affect the salary level of foreign workers, moving it upward, and consequently the salary level of foreign workers market in general could be enhanced.

## **Policy Choices**

We have shown that the potential effects of foreign students upon the foreign workers market in Canada has many aspects which are especially relevant to policy choices. By way of a practical conclusion, we suggest that policy choice should be adjusted according to the practical situational demands. Foreign students' choices after their graduation will have an effect upon the foreign workers market, and policy choice may be used to positively shape such an effect. With this in mind, we offer the follow suggestions:

#### ENCOURAGE FOREIGN STUDENTS TO STAY AND BECOME EMPLOYED IN CANADA.

Because these students have high level education, they can rapidly take part in the Canadian community and push Canadian economic development.

### ADJUST THE STRUCTURE OF FOREIGN STUDENTS ACCORDING TO ECONOMIC DEVELOPMENT DEMAND

Foreign students have many potential aspects effects on the foreign workers market, and once foreign students stayed and employed in Canada, the potential effects will turn into practical effect. This interrelation should be noticed when making policy and therefore cause the adjustment of the total number and the structure of foreign students according to both economic development demand and the demand of employment structure. This would practically evidence itself in differing enrollment allocations of foreign students from different countries.

3.	STABILIZE AND SUITABLY STRUCTURE THE NUMBER OF FOREIGN STUDENTS OF WESTERN COUNTRIES.					
	Western countries have a developed economy and their students can easily take part in the Canadian community. Among western countries, participation of foreign students from the United States should be increased, because the United States is Canada's neighborhood country, it is convenient to go back and forth, and the two countries have a similar cultural. Moreover, the economic development of the United States is faster than Canadian economic development so absorbing more foreign students from the United States will benefit Canadian economic development.					
4.	ENLARGING THE NUMBER OF FOREIGN STUDENTS AND FOREIGN WORKERS OF ASIAN COUNTRIES					
	Increase employment of foreign workers of Asian countries so as to promote the development of foreign workers in Canada. For example, Japan has characteristics of a developed country in terms of its economy and rapid economic development, while also having the lower labor force price of a developing country. This evidences itself in a lower salary level of foreign workers.					
5.	ARRANGING SKILLS AND ABILITY COURSES FOR FOREIGN STUDENTS					
	Foreign students come from different countries and they do not know enough about the culture and economy of Canada. Skills and ability courses should be arranged to introduce information about and to teach, basic skills in order to make foreign students suit the foreign workers market needs after they have graduated.					
6.	IMPROVING THE SALARY LEVEL OF FOR	REIGN WORKERS				
	Once foreign students are employed in Canada, they became foreign workers. Because they have a high relative cost, based somewhat upon their education and training,, they will likely seek higher salaries that less well educated foreign workers. To keep these highly qualified foreign workers, the government should encourage firms to improve the salary level of these workers, and to take into consideration of the ameliorating public environment in which foreign workers work and live.					
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