Economic Relations between Canada and Korea: Past, Present and Future

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Abstract: This paper examines the various economic interactions between Canada and Korea; merchandise trades, transactions in services, foreign direct investment, mobility of human factors, and immigration. While trades remain to be a small share in each country's total international trades, the prospect of some positive structural change such as an increasing alignment of export industries of Canada and Korea is noticed in the context of the two countries' intimate economic integration with the U.S. economies. More impressive economic interactions are found in the areas, which involve people-to-people interactions, such as the demand for and supply of the Canadian educational services. The unique profiles of Korean migration, and the sustained wealth effect of the strongly rebounding Korean economy may combine to fuel a continued upward trend of Korean immigration to Canada.

I wish to gratefully acknowledge the research assistance by Mr. Leo Lui, and helpful comments from my colleague Professor Peter Ibbott. Peter and I are working on some quantitative analysis of the Korean-Canadian migration. Remaining errors are mine.

1. Introduction

The economic interactions between the two countries can be broken down into three categories: flows of goods and services, flows of physical or financial capital, and flows of human capital, actual and potential. The third category includes the migration of workers or permanent immigration for economic reasons.¹ Its scope can be broadened to include some very closely related issues, such as, the migration of apparently limited duration; for instance, travels or flows of tourists, and overseas studies or flows of students across the borderline. This broadened concept of economic interactions can be termed 'people-to-people' economic interactions.

Looking over the past couple decades of economic interactions between Canada and Korea, one is duly impressed with their progress and development. The growth is partly due to globalization trend that has been gripping the world and the two countries in it, and partly due to a couple of auspicious changes which result from conscious efforts at the level of the two countries' policy makers. All in all, one can safely say that the overall growth of the economic interactions between the two countries in particular exceeds the general trends of the growth of each country's economic interactions with the world. Each country has become a major partner to each other in many faceted economic interactions.

This rising importance is all the more prominent in so-called 'people-to-people' interactions between the two countries than in the conventional bilateral trade or foreign investment. Trades have grown fast between Canada and Korea, pushing both countries as an important partner in each other's international trades. However, they remain to be a rather small portion of the entire trade volumes of each country. The same story applies to the flows of capital across the border of the two countries. Of course, we will go to a considerable length and to show that there are some meaningful and positive developments to some aspects in these areas of conventional economic interactions that deserve our academic attention.

The people-to-people economic interactions, including immigration, tourism, and overseas studies, not only represent an important economic interaction for the present time, but seems to herald an even more significant economic integration of the two countries for

¹ We can say that there is virtually no immigration for political reasons between Canada and Korea as there is no refugee from South Korea. There are immigrants for socio-economic reasons who might fall in the category of 'Family Reunion'. Our current focus is not on this group of immigrants in this particular paper. Canada has no choice over this kind of immigration, except for the control of speed of processing the applications, and thus there is no interaction of supply and demand.

the future. A historical review of Canada's major ethnic immigrants reveals the impact of these flows over the ensuing periods.

2. Trades

1) Overview

There are a few things to take note of in the bilateral trade between Canada and Korea. First, from the viewpoint of Canada, Korea's exports and imports have increased steadfastly for the last couple of decades. Now Korea is one of the top 10 trading countries for Canada; as of 2002, Korea ranks eighth in terms of exports and imports. Canada's imports from Korea amounted to 4.9 billion Canadian dollars and its exports to Canadian \$ 2.0 billion. Given the relatively short history of their relationship, the Canada-Korean bilateral trade volume of C\$6.9 billion fares well with the counterparts for Canada's bilateral trade with some countries that have long-standing ties, such as the 'mother country' United Kingdom(C\$14.1 billion), Japan(C\$23.7 billion), and, to some extent, China (C \$ 20.4 billion).²

Particularly, the Korean exports to Canada have registered a substantial increase in the recent year, from C\$ 3.3 billion in 1998 to C\$ 4.9 billion in 2002. This apparently impressive increase in Korean exports to Canada is single-handedly owing to the performance of the Korean automobile exports; Passenger motor vehicle exports from Korea has increased from C\$260 million in 1998 to C\$1,300 million in 2002.

The composition of traded items between the two countries shows a relatively high degree of concentration among a few selected items. The major items of Canadian imports from Korea are automobiles and parts, electrical or electronic machinery(semiconductors, appliances), and nuclear-related machinery. These three items account for nearly 70% of the total Canadian imports from Korea. The Canadian exports are slightly more diversified, but wood and pulps, minerals and oils combine to account for 55% of the total Canadian exports to Korea. Around 80% of the exports and imports are clustered around 10 items respectively.

² It might appear that China has made a great advance in the recent years as a 'new kid on the block'. However, a substantial part of the trading volume of C \$20.4 billions should be attributed to a geographic divergence from the former Hong Kong. In other words, it would be fair to say that a large part of the increase in bilateral trades after the 1997 return of Hong Kong to Chinese sovereignty has been made by the businessmen who used to hold the Hong Kong citizenship but now hold the Chinese or Canadian citizenship. Due to this complicated structural and political change, the true magnitude of economic contributions by the Hong Kong immigrants in Canada is hard to measure.

Canada's Trade with Top 10 Trading Countries

(Unit: billion Canadian dollars)

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	1998	1999	2000	2001	2002
<u>U.S.A.</u>	269.9	308.1	359.3	351.8	345.4
Japan	8.6	8.6	9.3	8.3	8.3
United Kingdom (U.K.)	4.4	4.8	5.7	5.1	4.4
China	2.5	2.7	3.7	4.2	4.1
Germany	2.7	2.4	3.2	2.9	3.0
Mexico	1.5	1.6	2.0	2.8	2.4
France	1.7	1.9	1.9	2.2	2.0
Korea, South	1.8	2.0	2.3	2.0	2.0
Belgium	1.5	1.9	2.1	1.9	1.9
Netherlands	1.9	1.6	1.4	1.6	1.8
SUB-TOTAL	296.5	335.5	391.0	382.7	375.4
OTHERS	21.9	19.9	22.2	21.3	20.9
TOTAL (ALL COUNTRIES)	318.4	355.4	413.2	404.0	396.3

Table 1. Canada's Exports

Source of data: Statistics Canada

Table 2. Canada's Imports

	1998	1999	2000	2001	2002
<u>U.S.A.</u>	203.6	215.6	229.6	218.3	218.3
China	7.7	9.0	11.3	12.7	16.0
Japan	14.0	15.0	16.6	14.6	15.4
Mexico	7.7	9.5	12.1	12.1	12.7
United Kingdom (U.K.)	6.3	8.1	13.0	11.7	9.7
Germany	6.1	6.9	7.8	8.0	8.3
France	4.9	5.3	4.2	5.5	5.8
Re-Imports (Canada)	4.9	5.5	6.8	7.1	5.4
Korea, South	3.3	3.6	5.2	4.6	4.9
Italy	3.4	3.6	3.7	4.0	4.4
SUB-TOTAL	261.8	282.2	310.2	298.7	301.0
OTHERS	36.6	38.2	46.7	44.4	476.7
TOTAL (ALL COUNTRIES)	298.4	320.4	356.9	343.1	348.7

Source of data: Statistics Canada

A large part of this long-term growth in trading volumes between the two countries is due to the common trends of globalization that have gripped Canada as well as Korea. Throughout the 1990s and early 2000, both the overall Canadian exports and imports have expanded faster than GDP. In Canada, merchandise exports amounted to close to 40% of GDP in 2001, up from 25% in the 1980s.

Canada's largest trading partner by far has been the U.S., and the relative importance has been growing rapidly in recent years particularly due to the 1994 North American Free Trade Agreement. For instance, the shares of Canada-U.S. bilateral trade in Canada's total trades with the world rose from 68% in 1990 to 76% in 2002. Currently nearly 90% of the total Canadian exports go to the U.S.³

The Korean share in Canada's bilateral trade grew fairly fast from 0.1% in the 1970s and reached 1% in the mid 1980s. The share has ever since hovered around 1%, showing a small decline in the recent years. Looking closely, we can see that the share of Canada's exports to Korea in the total Canadian exports has slipped from a 1% level to a 0.5% level since the late 1990s while the share of the Canadian imports from Korea has registered little changes in percentage terms.

Therefore, the afore-mentioned increase in Korea's exports to Canada in the recent years is mainly due to a strong Canadian import growth from the world in general. At the micro-level, there is no denying that th exports from Korean automobile industry to Canada have registered an outstanding growth.

We note that Canada-U.S. trade is mostly intra-industry and intra-firm trade in industrial goods; a large part comprises automotive products. To the extent that the Korean imports to Canada are aligned with the Canada-US trades, Korea is a beneficiary of the NAFTA and the increasing economic integration between U.S. and Canada. The single most important structural change in the Korean trade with Canada in recent years is an increasing alignment of selective Korean and Canadian export industries. In concrete, the observed increase in the outsourcing of the Canadian exports industries to Korean partners provides a kind of 'free ride' the U.S. market for Korean exporters. A similar story can be told of the Canada's benefits from the Korea's relatively high degree of economic integration with China; for instance, the Canadian automobile part industry is greatly

³ Of Canada's remaining trading partners, only the United Kingdom, Japan and China account for export shares above 1%. Although two-way merchandise trade between Canada and Mexico has grown rapidly since the NAFTA, its share in Canada's total trade remains small. Imports sources are more diversified, with the European Union and East Asia each accounting for some 11-14% of Canada's total imports.

interested in exports to China through joint ventures in Korea. This is evident in the rising interests of Canadian foreign direct investment to Korea in the automobile part industry.⁴

We can easily deduct that due to the NAFTA a circuitous trade between Canada and Korea has been increasing. This also explains the widening gap in the Korean and Canadian statistics of exports and imports. This Korean experience contrasts sharply with the case of Japan, whose share in the total Canadian trade has been waned considerably with the NAFTA agreement.

ear	with/to/from U.S.			with	n/to/from Ja	pan	with/	with/to/from China			With/to/from Korea			
	Bilateral	Exports	Imports	bilateral	Exports	Imports	Bilateral	Exports 1	Imports	Bilateral	Exports	Imports		
1968	70.5	67.9	73.3	3.7	4.5	2.9	0.2	0.1	0.3	6 0.1	0.	1 0.1		
1969	69.5	68.6	70.5	3.7	4.1	3.4	0.2	0.1	0.3	6 0.1	0.	1 0.1		
1970	65.1	62.3	68.6	4.4	4.6	4.0	0.2	0.1	0.4	0.1	l 0.	1 0.1		
1975	64.5	63.0	66.0	4.8	6.2	3.4	0.3	0.1	0.5	0. 4	I 0.	2 0.5		
1980	63.9	60.6	67.5	4.8	5.5	3.9	0.7	1.1	0.2	2 0.6	6 0.	5 0.6		
1985	72.2	2 75.2	68.7	5.1	4.7	5.7	0.7	1.0	0.4	1.0	0.	6 1.5		
6	71.() 74.9	66.8	5.6	4.7	6.6	0.7	0.9	0.5	5 1.1	l 0.	8 1.5		
7	69.5	5 72.8	65.9	5.9	5.4	6.3	0.9	1.1	0.6	5 1.2	2 0.	9 1.5		
8	67.3	3 70.4	64.0	6.4	6.1	6.8	1.3	1.8	0.7	1.3	3 0.	8 1.7		
9	67.1	1 70.7	63.4	6.5	6.2	6.9	0.8	0.8	0.9) 1.4	i 1.	1 1.8		
1990	67.7	72.7	62.3	6.1	5.4	6.8	1.0	1.0	1.0) 1.3	3 0.	9 1.6		
1	69.2	2 75.8	62.3	6.1	4.9	7.4	1.1	1.2	1.0) 1.4	i 1.	3 1.4		
2	70.9	77.8	63.5	5.8	4.6	7.1	1.5	1.4	1.6	5 1. 1	0.	9 1.3		
3	73.4	81.3	65.0	5.3	4.6	6.1	1.3	0.9	1.8	3 1.1	0.	9 1.3		
4	74.4	82.5	65.8	4.8	4.3	5.4	1.4	1.0	1.9) 1.1	l 1.	0 1.2		
1995	74.1	80.4	66.7	4.9	4.5	5.4	1.6	1.2	2.1	1.2	2 1.	0 1.4		
6	75.5	82.3	67.4	4.1	3.7	4.5	1.5	1.0	2.1	1.1	l 1.	0 1.2		
7	75.7	83.2	67.5	4.0	3.4	4.6	1.5	0.7	2.3	. 1.0) 1.	0 1.0		
8	76.8	8 84.8	68.2	3.7	2.7	4.7	1.6	0.8	2.6	5 0. 8	B 0.	6 1.1		
9	77.5	86.7	67.3	3.5	2.4	4.7	1.7	0.7	2.8	.0.8	B 0.	6 1.1		
2000	76.5	5 87.0	64.4	3.4	2.2	4.7	1.9	0.9	3.2	2 1.0	0.	6 1.4		
	76.3	8 87.1	63.6	3.1	2.1	4.3	2.3	1.0	3.7	0.9	0.	5 1.3		
	75.7	87.2	62.6	3.2	2.1	4.4	2.7	1.0	4.6	5 0. 9	0.	5 1.4		

Table 3. Shares of Canada's Trade with SelectedCountries in Canada's Total Trade

Source: constructed from the IMF and Statistics Canada data.

⁴ The total accumulative sum of investment by Canada in Korea amounts to about US \$ 3 billion for the period of 1962 –2002. A half of the total amount was report in year 2001. This investment consists of portfolio investment and FDI. The majority of the new Canadian FDI investment takes place in the industry of automobile part. The source of the data is the Ministry of Commerce, Industry and Energy, Korean Government.

The growing gap between the Canadian and Korean statistics is illustrated in the following figures, which are based on Canadian and Korean statistics respectively. They convey differing stories of bilateral trades between the two countries.



Figure. Canadian Trade with Korea: Canadian View

Sources: IMF, and Statistics Canada Note: The imports from Korea is based upon FOB, or the Country of Origin

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The exports statistics are tabled not on the basis of final destination, and the imports data are collected on the basis of the country of origin. Thus, Canadian imports statistics includes the imports coming directly as well as indirectly from Korea. They are not the same as the Korean exports statistics that capture only the direct exports to Canada. The Korean imports data represent imports of the Canadian products, directly as well as through a third country, from Canada. Therefore, we can reconstruct Canada's total

imports, direct and indirect, of Korean goods and the total Korean imports of Canadian goods as follows:



The trend of the balance of merchandise trades between Canada and Korea is given as follows:



Figure 5. Reconstructed Canadian Trade Balance

We can notice a clear and interesting correlation; the balance of merchandise trade is in favor of Canada when the Canadian economic growth is slow, such as during the period of 1991 to 1996. The trade balance is in favor of Korea when the Canadian economy exhibits a strong growth. It implies that the Canadian demand for Korean goods might be dominated by a strong income effect. It also relates Canada's current deficits with respect to Korea to its fundamental cause, i.e., Canada's strong domestic economic growth, which exceeds the OECD average performances or the U.S. counterpart.

2) Analysis

Naturally our next questions are, "What has caused the fluctuations and changes in trades between Canada and Korea?" and "Can they be fully explained by economic variables?" These are interesting for two reasons: first it sheds light on our better understanding of the causes of changes in the Canadian-Korean bilateral trade. By employing a proper analytical tool of statistical studies, we can test whether and to what extent fact a particular factor affects the trades. It could also dispel any lingering doubt about the fairness of the counterpart in the bilateral trade.

In my earlier paper, for the quarterly data of 1980-99, I adopted the technique of multi-variate regression analysis which basically separates the impact of each determinant while controlling - holding constant- all others. First, a general import demand function was specified and estimated. The variables adopted to explain the changes in the imports were basically the national income of the importing countries, the price level of both countries, the price index of international competitors for the exporting nation, and the foreign exchange rates or the currency exchange rates between the two countries. Other non-economic variables were included to pick up the impact of policy or structural changes. The results remain valid for the extended data period. Here I present the summary of the regression results and their implications:

1) Canadian Imports of Korean Merchandise

The most important determinants for the Canadian imports from Korea turn out to be the Canadian GDP, and the International Competitors' Price Index. On the other hand, the prices of Korean exports themselves and currency exchange rates have virtually no significant impact.⁵ In other words, the own price elasticity is low, and the cross elasticities are very high.

⁵ The results are as follows. For details, refer to Han, J.D., "Long-Term Quantitative Analysis of Korea-Canadian Trades", Canadian Studies Centre, 2001.

Explanatory Variables	Short-run Elasticities	Long-run Elasticities
Korean GDP	0.35% (+)	0.61% (+)
Canadian Commodity Prices	0.60% (-)	1.05% (-)*
International Competitors' Prices	0.74% (+)	1.30% (+)
Value of Canadian Dollars against Korean Won	0.94% (-)	1.65% (-)*

Note: The (partial) adjustment coefficient is 0.58, and is very close to that found for the Korean exports to Canada.

These results bring a set of interesting interpretation of the underlying causes of the somewhat wildly fluctuating Korean exports to Canada:

First, we note that the magnitude of the estimated income elasticity is larger than one: the Canadian demand for Korean outputs is highly income elastic. This suggests that as long as the Canadian economy is growing, its demand for Korean products will grow and the growth rates will exceed that of the Canadian GDP. In the long-run, this is good news as the Canadian economy is expected to continue to grow in a solid manner for the foreseeable future. On the other hand, it also suggests that the Canadian imports of Korean products are highly cyclical; at a downturn of the Canadian business cycles, the demand for Korean products will take a deeper cut than the overall business. In the long-term, the Korean exports to Canada will show a wide swing. This explains a bulk of the apparent instability of the post-1980 Korean exports.

Second, a relatively small magnitude of the estimated price-elasticity seems to contradict the conventional wisdom that the rising costs of Korean export industry are the major cause for the apparently sliding Korean exports in Canada. My interpretation for this apparently paradoxical result is that the rising price index or weighted-average prices of a mixture of disparate outputs may reflect, to a certain extent, the improving qualities of Korean outputs. The increase in export revenues of a higher quality more than offsets the shrinking export revenues of the conventional low quality Korean outputs. This may be evidence that the Korean export industry as a whole has been scoring a success in moving upward along the ladder of qualities and unit prices in the Canadian market.⁶

On the other hand, the relative large magnitude of the estimated cross (price) elasticity implies that the Korean exports are faced with a fierce competition from other countries. This formally confirms the argument that the developing countries, such as China and Vietnam, have been eroding the traditional Korean base in the Canadian market.

The combination of the two results as regards the price elasticities seem to suggest that, for the Korean export industry, the success strategy should focus on how fast the Korean export industry can move on along the scale of qualities and how smoothly it can make an intra-industry restructuring. Given the degree of competition and market pressures, there is an ample justification, or need, for the resources spent in Canada by the Korean firms and government on various marketing endeavors.

⁶ Caution should be exercised in applying the above result to the Korean product of a fixed quality over time: the own price elasticity might be higher than our results indicate if we estimate the export function with a break-down of the industry classification or at an individual product level.

Additionally, I have also tested whether the NAFTA or the recent Asian financial crisis has affected the Canadian imports from Korea in any significant manner. We have constructed and included the dummy variables representing the NAFTA and the Asian financial crisis. The test results indicate it was the case for both factors. However, interestingly enough, the Asian Crisis has favorably affected the Canadian imports from Korea. This might be due to the special marketing efforts and export-drives launched by Korean firms and government at the onset of the international liquidity crisis.

2) Canadian Exports to Korea

The Canadian exports to Korea are determined by the Korean GDP, the Canadian (Export) Commodity Price Index, the international competitors' prices, and the currency exchange rates. All these variables are found to be statistically significant.⁷

A low income elasticity and a low own-price elasticity are more less expected of the Canadian exports which mainly consist of primary industry outputs. The Korean import demand for Canadian products responds, to the largest extent, to the currency exchange rate among many possible factors. This means that the Canadian exports to Korea have been buttressed by a weak Canadian dollar for the last couple of years. .⁸

The next most important variable for the Canadian exports to Korea is the cross-price elasticity or the prices of the international competitors who compete with the Canadian exporters. This indicates that the Canadian export industry is faced with a quite high level of competition from its international competitors.

It should be also noted that the Canadian imports from Korea are clustered around a few items, such as automobiles and parts, electrical machinery and parts, and nuclear boiler related products. These three categories account for nearly 70% of Korea's

' The results	are	as	follows:
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Explanatory Variables	Short-run Elasticity	Long-run Elasticity
Canadian GDP	1.23 % (+)	2.93% (+)
Korean Producer's Prices	0.74% (-)*	1.76% (-)*
International Competitors' Prices	2.15 % (+)	5.11 % (+)
Value of Canadian Dollars against Korean Won	0.22% (+)*	0.52% (+)*

Note: * Its t-value is less than 1.99, and thus is statistically insignificant. We cannot reject the null hy. pothesis that they have no impact on the imports.

⁸ The external values of the Canadian currency declined at the same time of the Asian Financial Crisis, and thus eased the impact of the falling external values of the Korean Won.

exports to Canada. The Canadian exports also show a high concentration in terms of product items: woods pulps, and various minerals account for more than 50% of the total Canadian exports to Korea. Clearly, there is a great room for diversification.

	Canadian Imports from South Kore	ea	Canadian Exports to South Korea				
	Merchandise Classification	%	Merchandise Classification	%			
1	Non-rail vehicles and parts	28.0	Wood pulp and other pulp	23.5			
2	Electrical machinery and parts	25.7	Mineral fuels, oils and waxes, etc.	13.2			
3	Boilers, machinery and parts	15.1	Aluminium and aluminium articles	7.6			
4	Iron and steel	3.5	Nickel and nickel articles	6.2			
5	Knitted or crocheted apparel	3.1	Electrical machinery and parts	5.2			
6	Rubber and rubber articles	2.8	Meat and edible meat offal	4.5			
7	Iron and steel articles	2.4	Boilers, machinery and parts	4.4			
8	Woven clothing and apparel	2.2	Fertilisers	4.4			
9	Plastics and plastic articles	2.2	Organic chemicals	4.1			
10	Optical/photographic equipment, etc.	1.5	Ores, slag and ash	3.8			
	Top 10 as % of Total From South Korea	86.6	Top 10 as % of Total To South Korea	76.9			
	S. Korean Imports as % of Cdn Total	1.39	S. Korean Exports as % of Cdn Total	0.53			

Table. Major Items of Trades between Canada and Korea

Source: Asia Pacific Foundation and Industry Canada

3. Foreign Direct Investment

Canada is a net investor with respect to FDI, but a net recipient with respect to other kinds of investment and overall foreign investment. Outward FDI stock grew particularly fast from C \$218.6 billion in 1997 to C \$431.8 billion in 2002, registering the annual growth rate of 15%. The inward FDI totaled Can\$349.9 billion, up 80% from C \$194.2 billion in 1997.⁹

⁹ Most FDI in Canada is concentrated in resource-based activities (mainly energy), services (mostly financial services), transportation equipment, chemical products, textiles, food and beverages, and electrical and electronic products. The United States, the United Kingdom and France are Canada's largest sources of FDI, with 67%, 7.7% and 7.2% of the total, respectively, in 2001, followed by the Netherlands, Japan, Germany, Italy, and Sweden. France has made the largest gains in market share over the past decade, while the United Kingdom, Japan, and Germany

Table. Canadian FDI Abroad

(Unit:Millions of dollars)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
All countries	98,402	109,068	111,691	122,427	146,315	161,237	181,238	218,607	262,909	290,730	353,150	389,6604	431,819
North America	66,068	72,003	74,663	78,530	90,625	98,817	113,030	137,335	166,729	191,330	221,661	239,2312	256,514
Mexico	245	199	451	530	1,073	948	1,933	2,163	2,864	3,325	3,871	3,279	3,344
United States	60,049	63,379	64,502	67,677	77,987	84,562	93,939	110,707	133,267	151,775	177,839	188,791	201,792
South and Central America	2,341	2,441	3,093	4,346	6,032	7,855	9,952	12,603	15,287	17,091	21,422	20,921	15,026
Europe	22,089	25,112	22,874	26,219	33,418	37,158	39,632	47,985	57,230	57,842	83,461	98,1651	120,125
Africa	268	258	301	400	469	635	1,217	1,301	1,385	1,445	2,430	3,418	3,538
Asia/Oceania	7,636	9,253	10,760	12,932	15,785	16,772	17,407	19,383	22,278	23,023	24,176	27,925	36,615
Australia	2,401	2,154	2,565	2,483	2,716	3,080	3,138	2,960	3,739	3,234	3,104	4,529	8,497
Hong Kong	670	632	883	1,532	2,074	2,400	2,708	2,672	3,425	3,616	3,740	2,838	2,810
Japan	917	2,182	2,521	2,845	3,485	2,739	2,676	2,985	3,268	3,853	5,664	7,033	9,203
People's Rep of China	6	25	43	225	257	366	410	419	446	711	565	587	667
Singapore	1,837	1,982	2,119	2,217	2,369	2,342	2,213	2,765	3,014	2,950	3,174	4,492	5,100
South Korea	24	37	51	123	137	146	188	172	542	1,234	760	725	819
% in world	0.02	0.03	0.05	0.10	0.09	0.09	0.10	0.08	0.21	0.42	0.22	0.19	0.19

Source: CANSIM and Ministry of Foreign Affairs, Canadian Government

As the end of 2002, the Canadian foreign direct investment in Korea amounts to C\$ 819 million, and Korean FDI in Canada to C\$ 230 million. The Canadian FDI in Korea jumped sharply from C \$ 172 in 1997 to C\$542 in 1998, and to over C\$ 1.2 billions in 1999. The figure stands at around C\$ 0.8 billion for the last three years. This suggests that the Canadian capital has been responsive to the Korean's calls for foreign investment in the wake of the Asian Financial Crisis.¹⁰



Source: constructed from the Statistics Canada data.

have lost market share. The United States is also Canada's main investment destination, for both FDI and other kinds of investment, particularly portfolio investment, accounting for over half of total outward direct investment, followed by the United Kingdom and other EU Members. ¹⁰ Asia Pacific Foundation of Canada, *Information, Analysis, Research and Outreach*, 2003

As suggested earlier, the Canadian FDI in Korea seeks to achieve an increasing alignment of the Korean-Canadian export industries in selected areas. The prospect of this kind of rather long-term partnership in intra-industry is extremely encouraging.¹¹ We can find a historical precedence between Canadian and Japanese automobile party industries in the 1980s. Therefore, the recent trends of the Canadian FDI in Korea represent not only an impressive quantitative growth, but also a significant structural change. They forebode a closer industry cooperation and economic integration for the future.

The total of Canada's FDI in the world amounts to C \$ 432 billions, and thus its investment in Korea account for only 0.2% of Canadian FDI in the world and for about 2% of Canadian FDI in Asia. There is a great room for expansion in this regard, waiting for a breakthrough.¹²

4. International Demands for Education, and Mobility of Students and Teachers

The Canadian educational sector has been making a great effort for globalization through the adoption of vigorous marketing strategies and the institution of foreign student friendly measures. This drive comes from a variety of roots: The trend of globalization hit Canada, which took the form of cultural diversification to other countries than the U.S. and European countries. A the same time, being faced with public funding cuts in general and occasionally a declining student enrollment, many Canadian educational institutions started aiming at the revenues from international students. They have come to realize that the Canadian education system as a whole provides a comparably high quality of services at highly competitive fees.

The success of the Canadian education system as whole in this filed is well demonstrated with the fact that, In the period of six years between 1995 and 2001, the number of foreign students in Canada double; the total number of foreign students in

¹¹ There are about US \$ 27 million worth of FDI negotiations going on between Canadian and Korean firms as of the 1st quarter of 2003. The figures are from the Korean Embassy in Canada. ¹² Refer to the following table:

	1980	1990	1995	2000	2001	2002
US	17,849	60,049	84,562	177,839	188,791	201,792
Europe	5,066	22,089	37,158	83,461	98,165	120,125
Other North America *	2,109	6,019	14,255	43,822	50,440	54,722
Asia **	1,605	7,370	15,214	22,485	26,178	34,589
South and Central America	1,162	2,341	7,855	21,422	20,921	15,026
Other Regions ***	622	534	2,193	4,121	5,165	5,565
Total	28,413	98,402	161,237	353,150	389,660	431,819

C	C anadian I	Foreign	Direct	Investment	in the	World	(C\$	millions)
							· · ·		

Canada increased from 63,000 in 1995 to 133,000 in 2001. As shown in Figure below, two countries have helped the Canadian educational sector achieve a success in globalization; they are Korea and China.



Source: constructed from the Citizenship and Immigration Canada data.

The total number of Korean students in Canada quadrupled in a very short period of 1994-96, changing from the magnitude of 2,400 to 9,000. After the brief setback from the Asian Financial Crisis in 1998, the trend has regained the momentum and pushed the total number to about 20,000 in year 2001. The trend is a way up from the general trend of Korean students bound for overseas studies: During the period of 1995-2001, the number of Korean students bound for Canada quadrupled while the total outbound Korean students increased only by 50%. In this regard, Canada has successfully broadened its clientele among the Korean student population.

Behind the better-than-average performance of the Canadian education institutions lies Canada's success in creating a welcoming environment for international students. It was most evident in the visa exemption for Korean short-term visitors, and the creation of educational information centers or CECs. The visa exemption might have not directly boosted the number of regular Korean visa students. However, a large number of Korean students would test the ground first at somewhat peripheral education institutions, such as private language schools , before they make a choice of a regular educational institution. An easy entry into Canada and the positive images gained of Canadian institutions have helped enlarge the Korean student population in Canada. This is a great lesson; Institutional supports, such as diplomatic agreements between the governments, play a critical role of the catalyst in a situation where the pent-up demand exists.

On the surface, this statistical figure of the total number of Korean students seems to be at the neck and neck with the Chinese counterpart. However, this Korean figure represents only a part of Korean students in Canada.

Many Korean students are coming for short-term ESL courses without a student visa. Some argue that at any given time point the number of Korean students in this category may exceed the number of regular Korean visa students, and estimate combined total number of Korean students in Canada at over 50,000 as of 2003.¹³ Obviously, the visa exemption agreement between Canada and Korea, which came into effect in May, 1994, has provided such a convenient channel for a short-term language and cultural expedition, which by now has become a ritual among many Korean university and college students. Therefore, Korea has become by far the largest source of international demand for Canadian educational services in Canada.

What sets Korea students apart from those from other countries is that a large number of Korean students in Canada are younger ones. As of the end of 2001, 6,500 Korean students attend the secondary school or lower levels, and thus account for about one third of the total Korean students in Canada. This figure accounts for about one quarter of the total foreign students in all the Canadian secondary and pre-secondary schools; one out of every four foreign students in those schools is Korean.

This age profile sharply contrasts with the major contender's case; for instance, the most of Chinese students, 15,000 out of the total of 20,000, are attending the university or other post-secondary institutions in Canada.

The long-term implications of this distinctive feature deserve research attention. For one thing, the duration of the studies by these young Korean students in Canada might be longer than that of mature students. There is a higher likelihood that these students will be culturally assimilated into a Canadian society. It in turn leads to a permanent migration of the students themselves, the accompanying patrons and eventually the entire family. The multiplier effect or ramification of this type of foreign students seems to be much larger compared with other age levels of foreign students.

¹³ In fact, according to the National Institute for International Education Development, a Korean government agency has put the number of Korean students bound for Canada, which apparently include the student with and without visas, at 54,000 for 1999 against the backdrop of the total outbound Korean students of 154,000. This figure compared with 43,000 Korean students bound for U.S. and 13,000 for Japan.

The migration of the young students is more closely associated with the migration of the family. It is not surprising that in Canada two origin countries have been the case: the U.S., and Hong Kong. Currently the U.S. is the second largest source country of the young foreign students in Canada, which, needless to say, reflects the extremely close economic integration between the U.S. and Canada. Most of the 4,200 young American attending Canadian secondary and lower level schools are dependent of the American workers; this means that they do not pay the high tuitions charged of foreign students. In contrast, most of the 6,500 Korean young students are paying the international student fees, which range from \$9,000 to \$11,000 for an academic year.

The two flows, of the dependents and the principals, do not have to be contemporary. In fact, this distinct feature of the age compositions of Korean students in Canada can find a recent historical precedence in the migration from Hong Kong throughout the 1970s to 80s. At the 1990-1991 peak of inflows of Hong Kong students to Canada, about a third of 14,000 Hong Kong students in Canada were attending the secondary schools or less.

The flow of the dependents preceded the flow of the principals. For the Hong Kong residents who were determined to migrate out of Hong Kong by a certain deadline such as the 1997 return of sovereignty to China, the younger family members played the role of cultural *'reconnaissance'*, if not a 'Guinea Pig', dispatched to Canada for the entire family who were to follow them.

A recent survey in Korea shows that the single most important motivation for a possible immigration is a better education for children.¹⁴ It is difficult to clarify the direction of causality; whether migration of children as foreign students calls for migration of the entire family, or vice versa. It is clear that education of the younger family members and migration of the mature family members are closely correlated.

We can safely predict that given the composition of ages, the recent surge of the Korean young students in Canada may forebode a big surge in Korean immigrants to Canada.

On the other hand, the Canadian production factor, particularly the human capital, has been flowing in an increasing speed and volume of streams to Korea. It is because

¹⁴ The results of the Korea Gallup survey of September 20, 2003 with 1,042 show that one out of every three Korean adults is willing to consider immigration. Particularly, those in their twenties, thirties, and forties have a higher desire for immigration. The most popular destination is Canada; Canada is listed as the best desired destination for 27% of those who are willing to consider immigration. Their main motivation of migration is for a better education and opportunity for their children.

those Korean who cannot come to Canada have brought the Canadians for teaching. As of the end of 2002, over 7,000 Canadians are granted working visa for the employment at language training institutions in Korea. This number exceeds the number of U.S. citizens in similar positions, which stands at 6,000. It is extraordinary that every one of three native language teachers in Korea came from Canada.¹⁵

What prediction can we make for the flow of Koreans and Canadians in the area of education? That infamous recent 'TV home shopping episode' reveals a tip of the iceberg of the enormous pent-up demand by Koreans for Canadian immigration. Given the close correlation between early overseas education and immigration, the demand for Canadian educational services by Koreans will continue to grow with the limit to be set only by nonmarket forces.¹⁶ These non-market interferences may eventually be removed, which will lead to waves after waves of Korean youngsters flowing to Canadian educational institutions. They will bring out reciprocal rippling movement by Canadians as ESL teachers.

The supply side depends on the demographic and socio-political situations in Canada. For instance, the Canadian universities and colleges experienced a rapid expansion in the 1970s and 80s in response to the growing student population. Subsequently, the 1990s witnessed that the Canadian universities and colleges were pressed to look for international students and to fill up the room, financial and physical, which was created by the quirky Canadian demographic down turns along the age pyramid and was aggravated by cuts in government's public fund for education. This led to a more aggressive recruiting effort on the part of universities and colleges, and eventually to an increased number of international students in the Canadian university and colleges.

Lately, the pendulum has been moving in the opposite direction, but not for long. Ontario universities and colleges just have been struggling to meet the overwhelming domestic demand; a swelling high student population and the abolition of the last secondary school grade(Grade 13) combined to create the so-called 'double cohort' in which university applications have doubled. The boom is in. However, the eyes of farsighted administrators are already on the horizon where the boom time is eventually over and the educational institutions needs students to fill the facilities.

This kind of supply-side shock is a real possibility of the near future for the Canadian secondary and lower level education system, given the unique age composition of the Canadian population, and the fluid situations of public funding for education. The

¹⁵ The statistics is from the Ministry of Education and Human Resources Development, Korean government. ¹⁶ The Korean government has been inconsistent in its policy towards the early overseas education.

Canadian demographic twists and turns further accentuated by public policy shocks may flip and flop the supply side of those levels of education at any time point.¹⁷

5. Tourism Sector and Other Services

Upon the sign of the agreement of visa exemption for short-term visits between Canada and Korea, the number of Korean tourists doubled in a year: from 49,000 in 1993 to 101,000 in 1994. For the next two years before Korea was hard hit with the Asian Financial Crisis, the total number of Korean tourists showed another 70% increase. About 157,000 Korean visited Canada in 2001. This precipitous increase is unprecedented, and carves up the importance of reducing the legal barrier to international mobility of human factors. The Korean tourists accounted for about 1.4% of the total number of the non-U.S. citizen tourists in 1993, and the figure rose to 3.7% in 2001.



Source: constructed from the Statistics Canada and CASIM data

Tourist visits last for a short-term period of time, but they frequently repeat themselves and extend into a longer period of stays through migration. The tourists tend to revisit the host country. Student tourists may come back to Canada for studies. The

¹⁷ When boom is over, it creates "Bust". As the Echo generation (born from 1980 to 1995) moves onto each clung of ladder of education system, and the next generation is smaller in number, there will be fewer students in classroom, leaving idle capacities, first in the elementary schools, then in the secondary schools, and finally in the university.¹⁷ At different times in the next two decades, each level of Canadian education institutions will be faced with the options of either to scale down or to compete for students. If they opt for the second, we will witness a lot more aggressive recruitment efforts aimed at foreign students. Refer to D. Foot, *Boom, Bust and Echo*.

average duration of foreign students' stay in Canada is about 2 years¹⁸. Sometimes, tourist visits lead to permanent migration of human capital. Prospective immigrants wish to look around Canada and try to get the feel for their future adaptation in the newly adopted country. The international travels by tourists are an important leading indicator for the future economic interaction involving migration of labor and human capital.

Canada's net receipt from Korea in the tourism sector grew, by leaps and bounds, from C 10 million in 1993 to C 108 million in 1995, and C 251 million in 2001. ¹⁹

6. Immigration

During the period of 1951-1970, a cumulative sum of 3,000 Koreans immigrated to Canada. In ten yeas of period during the 1970s, 12,600 Koreans moved to Canada in total, and the 1980s witness a mild increase in its number to 14,000. However, in the 1990s the ten-year cumulative sum of Korean new immigrants in Canada jumped to about 40,000. The annual inflow figures rapidly grew and doubled from 3,100 in 1996 to 7,200 in 1999. The number reached the peak at 9,600 in 2001.

This impressive and unswerving growth of Korean immigration to Canada contrasts with the situation surrounding the Korean immigration to the traditionally favorite destination, i.e., the U.S. The annual flows of Korean new immigrants to U.S. first declined sharply at the turning point of the onset of the Asian Financial Crisis and continued to be depressed for the most of the second half of the 1990s. The figure hit the bottom of the trend line in 1999 at 12,800, and then slowly recovered to the initial level in 2001. In other words, the Korean immigration demand for the U.S. destination appears to be closely related to the up and downs of the Korean economy over this entire course of time period.

¹⁸ The average duration of study by foreign students in Canada is 1.91 years and 1.79 years for males and females. "Foreign Students in Canada 1980-2001", report by the Citizenship and Immigration Canada, January 2003.

¹⁹ Canada's total net receipt from Korea in all service transactions was a surplus of C \$435 million in 2001, which fared extremely well with the 1993 figure of C\$28 million.



Source: constructed from the US Census and Statistics Canada data; by courtesy of Dr. P. Ibbott.

It also suggests that the Koreans have substituted Canada for the U.S. as the former has become more affordable than the second. A soaring employment turned out a large number of potential immigrants in the Korean society during the Asian Financial Crisis. Being faced with choices of immigration countries, many factors worked in favor of Canada for the following reasons: First, Koreans started recognizing many attractive socio-political features of the Canadian society. It was about the time when the U.N. ranked Canada at the top in terms of the human development index. Second, the visa exemption for tourists provided Koreans for a change to verify information in person or to try a new life on an experimentation basis. Third, the Asian Financial Crisis brought a sudden decline in the external value of Korean currency against the U.S. dollars. This led to a decline of the U.S. dollar values of the Korean prospective immigrants' properties and savings.

However, by coincidence, the Canadian dollars weakened considerably against the U.S. dollars during this period. The Koreans realized that the immigration to Canada, along with the conversion of their Won-dominated assets into the Canadian dollar, secured them a larger amount of resources for rooting down in the new country than what they would get from the immigration to the U.S. along with the Won-U.S. dollar conversion. Clearly, this has facilitated the substitution of the Korean immigration demand from the U.S. to Canada. We have found a close correlation to the external value of Canadian dollars and the number of Korean immigrants to Canada.

While the Canadian dollar has gained the external value in a drastic way for the last twelve months, the Korean demand for Canadian immigration seems to be undeterred.

It may be largely due to the recent inflation of the property values in Korea. In other words, the positive wealth effect has more than offset the negative price effect coming from the unfavorable changes in exchange rates. This means that as long as the real estate values are sustained in Korea, there will be a steady stream of immigration to Canada.²⁰

There is a huge pent-up demand for immigration among Koreans.²¹ The total immigrant flows from Korea to Canada are mainly demand-driven for two factors: First, Canada is expected to basically maintain the open door policy. Basically, it is the case of the Canadian immigration policy of the recent years with some variations.

Second, the wealth effect for the Canadian Korean immigration demand seems to be high. A remarkable feature of the recent Korean immigrants to Canada is that over 60% to 70% of them fall under the category of skilled workers. Business immigration accounts for about 25% to 20%, and the family reunion cases for less than 10% of the total Korean immigrants. The first two groups can be broadly categorized as 'economic immigrants'. The dominance of the two groups in the total Korean immigrants is more prominent than that found in the Japanese, Chinese, and Hong Kong cases, which all have traditionally a high proportion of business and skilled-worker immigrants, the two groups of immigrants account for about 50% of the Japanese immigrants, and 55% of the Hong Kong residents. The Korean figure is comparable to the Taiwanese case, where 85% of the Taiwanese immigrants to Canada are in the categories of business immigration and skilled-worker immigration.

These immigrants are the end result of accumulation of human capital and wealth. The sustained economic growth in Korea will continue to lead to wealth creation and human capital accumulation, and will in turn fuel the immigration demand in the categories of entrepreneurs and skilled workers. T

This contrasts with the conventional concept of immigrants who bring little resources of immediate use with themselves. This implies that these new Korean immigrants are quite different from those who have preceded them in migration to Canada.

²⁰ What determines the Korean demand for immigration to Canada is beyond the scope of this paper. Han and Ibbott have been working on the model to develop the Korean demand function for immigration to Canada and to the U.S. in the framework of simultaneous equation estimation.

²¹ There are two recent survey results reported. According to the Korea Gallup Co, which conducted a survey of 1042 Koreans on September 20, 2003, one out of every three Korean adults is willing to consider immigration. Particularly, those in their twenties, thirties, and forties have a higher desire for immigration. The most popular destination is Canada; Canada is listed as the best desired destination for 27% of those who are willing to consider immigration. Their main motivation of migration is for a better education and opportunity for their children. The second result is from

Their infusion may bring an interesting socio-economic dynamic to the Korean-Canadian society, and the existing relationship between Canada and Korea.



Source: constructed from the Citizenship and Immigration Canada, *Immigration Statistics, by courtesy of Dr. P. Ibbott.*

The relationship between trade and immigration has been gaining quite substantial empirical supports. It is an extension of a new branch of international trade theory, or the so-called "Gravity Theory and Border Effect". ²² In a nutshell, according to this theory, immigrants help reducing the barriers to international trades between their home and host countries.

Wagner, Head, and Ries estimated immigrant effects for Canada using crossprovince variation in international trade and immigration patterns. They noticed the relationship between immigration and trade, on the basis of the proposition that immigrants use their connections and superior "market intelligence" to exploit trade opportunities. They found that the average new immigrant expands exports to his/her native country by C\$312 and expands imports by C\$944.²³

Baker and Bejamin extend the above study for Canada to the international context by including the immigration trade substitution effect across the U.S.-Canada border. Their results reinforce the earlier findings and show a significantly larger elasticity of

²² Deardorff, A.V., "Determinants of Bilateral Trade: Does Gravity Work in a Neoclassical World?" <u>NBER Working Papers</u> 5377, National Bureau of Economic Research, Inc, 1995.

This paper compares the Hechscher-Ohlin model with the Gravity Theory. They explores the case where two countries produce distinct goods, Here trade tends to the standard gravity equation with trade declining in distance, with departures from it that depend on relative transport costs. Conclusions are, first, that even a simple gravity equation can be derived from standard trade theories, and second, that because the gravity equation characterizes many models, its use to test any of them is suspect.

²³ Wagner, D, Head, K., and Reis, J., "Immigration and the Trade of Provinces", *Scottish Journal of Political Economy*, vol 49(5), November 2002, pages 507-525

trades and FDI with respect to immigration for the case of the Asia Pacific Rim countries.²⁴

This is particularly the case for the immigrants from the Southeastern China, including Hong Kong. However, an increase in Parkistanese and Indian immigrants has had hardly any impact on trades between their newly adopted country, Canada, and their countries of birth. Globerman has noticed the distinctive feature that the majority of the Southeastern Chinese immigrants of the 1970s to the early 1990s were entrepreneurial immigrants under the category of business immigration. ²⁵

This finding can be applied to the Korean case; given the fact that a large portion of recent Korean immigrants falls in the category of business immigrants, the tradeinducing multiplier effect of Korean immigration will be substantial.

Hutchinson uses the Gravity Theory of international trades and identifies language distance between the two trading countries as a deterrent to bilateral international trades.²⁶ Girma and Yu have found that in the U.K, the immigrants from the former British colonies or the Commonwealth areas are not export-enhancing but import-substituting while the immigrants from the non-Commonwealth areas are highly export- and import-enhancing. They explain that the difference between the two groups lies in the fact that the immigrants from the Commonwealth areas do not bring any `new information' about their home countries to the U.K., and do not reduce any existing 'distance' between the two trading countries.²⁷

Perhaps the cultural distance is probably a more comprehensive deterrent. It implies that the more distant the two cultures of the trading partners, the more impediments to the international trades, and thus the more roles to play by the immigrants between the two countries. Language and cultural difference between Korea and Canada is substantial, and thus the distance provides the ample room where the Korean immigrants in Canada can play in promotion of bilateral trades.

7. Conclusion

The economic interactions between Canada and Korea have risen to a prominence in the recent years. It was mainly due to the common trends of globalization in the two

²⁴ Baker, M., and Bejamin, D., "Asia Pacific Immigration and the Canadian Economy", *The Asia Pacific Region in the Global Economy: A Canadian Perspective*, University of Calgary Press, 1996, pp. 303-356.

²⁵ Globerman, S., "Globalization and Immigration", mimeo.

²⁶ Hutchinson, W., and Dunlevy, J.A., "The Pro-Trade Effect of Immigration on American Exports during the Classical Liberal Period", Vanderbilt University, mimeo, September 2001.

²⁷ Girma, S., and Yu, Z., "The Link Between Immigration and Trade: Evidence from the U.K.", Research Paper 2000/23, Centre for Research on Globalisation and Labour Market, University of Nottingham.

countries. However, the growth is characterized with remarkable features, which reflect the combination of some fortuitous and some hard-earned matches of opportunities between the two countries. These unique features have brought positive dynamics to the present, and imply structural changes in their relationship for the future.

Although the bilateral trade between the two countries remain a relative small portion of their total international trades, we have to take notice of the structural change that have initiated an increasing degree of alignment of the selective Canadian and Korean export industries through outsourcing and FDI. These are still in their early stage and need nurturing and mutual cooperation at the level of both government and business sectors, separately and jointly.

The results of the long-term quantitative analysis of the Canada-Korean trades show that the substantial part of fluctuations of the Canadian imports from Korea can be explained by the Canadian business cycles. As the Canadian economy is expected to outperform the most industrialized countries, it is good news for Korean export industries.

The human factor mobility has increased drastically between Canada and Korea, whose full socio-economic impacts are to unfold in the future. Korea has become the largest source of demand for the Canadian educational services, produced in the Canadian institutions and in the Korean institutions. Korean demand for the Canadian educational services lead to 7,000 jobs for Canadians at the present time, and thus contributes to a significant reduction in the unemployment rate among the Canadian workers of younger ages. The age profile of the Korean students in Korea is extremely interesting; the relatively large share of younger Korean students may herald a larger scale of migration of human capital for the future.

The post-Asian Financial Crisis era witnessed a surge of Korean immigrants to Canada, and a substantial degree of demand switch from the U.S. destination among the Korean immigrants. This seems to have been facilitated by a number of favorable factors, such as visa exemptions for short-term visitors and tourists, a falling external value of the Canadian currency, and the other socio-political factors. Most of the Korean recent immigrants fall in the categories of 'economic immigrants' with a considerable amount of accumulated tangible and human capital. A strong recovery of the Korean economy and the sustained economic growth will continue to fuel the immigration demand. As a result, the Korean society will go through dynamic changes, which provide opportunities as well as challenges. Across the Pacific Ocean, with the infusion of these new immigrants, the Canadian society in general and the Korean Canadian society in particular will be immune to the dynamic challenges in socio-economic aspects, neither.

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