

CHINA PAPERS  
No. 4

CIC

CANADIAN INTERNATIONAL COUNCIL  
CONSEIL INTERNATIONAL DU CANADA



# BENCHMARKING CANADA-CHINA ECONOMIC RELATIONS

**Victor Z. Chen**

January 2010

Canadian International Council  
[www.canadianinternationalcouncil.org](http://www.canadianinternationalcouncil.org)

Conseil international du Canada  
[www.conseilinternationalducanda.org](http://www.conseilinternationalducanda.org)

## ABSTRACT

This paper benchmarks Canada's bilateral economic ties with China and compares them with those of other G7 member countries, plus Australia. It uses a gravity model of economic flows to compare actual import, export and investment levels to those predicted by the model. This shows that, in the period 2003-2006, Canada was under-performing in terms of all bilateral economic flows except its outward foreign direct investment to China. In comparison with other G7 countries and Australia, Canada has under-weighted China as an international partner except in its imports from that country. The predicted values for all bilateral economic variables suggest that China should be Canada's second most important partner in terms of all bilateral economic flows, except for those with the United States.

## RÉSUMÉ

Cette étude propose une analyse comparative des liens économiques bilatéraux entre le Canada et la Chine par rapport à ceux des autres pays du G7 et de l'Australie. À l'aide d'un modèle gravitationnel des flux économiques, on y compare les niveaux réels d'importations, d'exportations et d'investissements aux pronostics du modèle. On établit ainsi que pour la période 2003-2006, le Canada a affiché un rendement inférieur au chapitre de tous les flux économiques bilatéraux, sauf pour ses investissements extérieurs directs en Chine. Par rapport aux autres pays du G7 et à l'Australie, le Canada a ainsi fait une moindre place à la Chine en tant que partenaire international, excepté pour ses importations en provenance de ce pays. Selon les valeurs prévues de toutes les variables économiques bilatérales, la Chine devrait pourtant être le deuxième partenaire du Canada pour ce qui est de l'ensemble des flux économiques bilatéraux, précédée seulement par les États-Unis.

## ABOUT THE AUTHOR

Victor (Zitian) Chen is a PhD Candidate in Strategy at the Segal Graduate School of Business, Simon Fraser University. He wrote this paper as part of his tenure as a Post Graduate Research Fellow at the Asia Pacific Foundation of Canada, 2008-2009. His research interests cover emerging economies, the Asia-Pacific gateway, international investment and migration, as well as public-private partnership, corporate governance and institutional development. His work has been presented at Academy of Management meetings, Academy of International Business meetings, the Canadian Socio-Economic Conference and the Canadian Population Society Conference, among others. He is a recipient of British Columbia Pacific Century Scholarship 2007-2008 and SSHRC 2009-2011 Doctoral Scholarship. Victor holds an MA in Economics from the University of Ottawa and a BA in Finance from Beijing, China.

The opinions expressed in this paper are those of the author and do not necessarily reflect the views of the Canadian International Council, its Senate or its Board of Directors.

If you would like to download a copy of this report please visit [www.canadianinternationalcouncil.org](http://www.canadianinternationalcouncil.org)

If you would like to be added to our mailing list or have questions about our publications please contact: [info@canadianinternationalcouncil.org](mailto:info@canadianinternationalcouncil.org)

ISSN 1921-9865 (Online) ISSN 1921-9881 (Print)

The purpose of this paper is to benchmark Canada-China bilateral economic relations by comparing their 2003-2006 performance with those of 103 major economies, with particular focus on G7 members plus Australia. I utilize the *gravity model* in international economics to predict Canada and other nations' bilateral economic flows with China, and to calculate the extent to which each nation's actual flows deviate from their predicted values. Consequently, I can benchmark and rank Canada-China bilateral economic relations based on the deviations from predicted bilateral economic flows compared to other nations. The gravity model in international economics predicts bilateral economic flows based on the economic size of, and distance between, two partners. The model was first used by Walter Isard in 1954, and has been extensively used to explain and predict bilateral flows of exports, imports and foreign direct investments (FDI).

The gravity model relates bilateral economic flows positively with two partners' economic size, often measured as real gross domestic product (GDP), and distance between them as calculated in formula (1).

$$V_{i,j,t} = \theta \cdot \frac{GDP_{i,t}^{\beta_3} \cdot GDP_{j,t}^{\beta_1}}{Dis_{i,j}^{\beta_2}} \quad (1)$$

Where  $V_{i,j,t}$  denotes predicted bilateral economic flows (exports, imports, inward FDI and outward FDI) between partner  $i$  and partner  $j$  in time period  $t$ ;  $\beta_1$  and  $\beta_3$  suggest positive parameters for the impact of partners' economic sizes on predicted bilateral economic flow;  $\beta_2$  suggests the impact of distance between two partners on bilateral economic flow;  $\theta$  is a constant term, which is neither related to either partner's economic size, nor related to distance between them. All parameters are usually assumed to stay unchanged in the short run.

It is usual to assign value 1 to  $\beta_3$  if country  $i$  is treated as the only polar, as is the case in this paper in which China is treated as the only polar. Namely, I compare bilateral economic flows between Canada and China with those between other countries and China. Consequently, the basic gravity model becomes

$$V_{i,j,t} = \theta \cdot \frac{GDP_{i,t} \cdot GDP_{j,t}^{\beta_1}}{Dis_{i,j}^{\beta_2}}$$

which can be further transformed to

$$\frac{V_{i,j,t}}{GDP_{i,t}} = \theta \cdot \frac{GDP_{j,t}^{\beta_1}}{Dis_{i,j}^{\beta_2}}$$

or a logarithm-logarithm form as

$$\ln\left(\frac{V_{i,j,t}}{GDP_{i,t}}\right) = \ln(\theta) + \beta_1 \cdot \ln(GDP_{j,t}) - \beta_2 \cdot \ln(Dis_{i,j}) \quad (2)$$

Therefore, if I know the values of the constant term parameter and parameters for economic size and distance, I can calculate the predicted value of bilateral economic flows between partner  $i$  and partner  $j$  in time period  $t$ , and thus can calculate the extent to which actual values deviate from what is predicted. By comparing the difference between actual and predicted values of each country's bilateral economic flows with China, I can rank Canada's performance.

To get the values for all parameters, my strategy is to regress model (2) using the most recent historical data of a sufficiently large sample. Given that each country's measurement for reporting statistics of bilateral economic relations may differ, and thus may be inconsistent for making a comparison, I have collected all data from a single country's official statistics. As China is the polar for our comparison, I collected data on China's bilateral economic flows, including exports, imports, inward FDI and outward FDI, with all other countries in the world between the years 2003 and 2006 from the National Bureau of Statistics of the People's Republic of China (Stat China). The major reason for picking this time period is that 2003 is the first year and 2006 is the most recent year available when data was publicly released for all of the needed bilateral economic flows. I collected real GDP data (measured as GDP in purchasing power parity (PPP)) from the World Bank and distance measures from Centre D'études Prospectives et D'informations Internationales of France. Distance is measured as a distance index between two partners' most populous cities weighted by each city's population density. To compare Canada with only those above a certain level of economic development, I remove countries with GDP per capita below US\$1,000. I also remove Taiwan and Hong Kong and Macau special administrative regions (SAR), which are outliers in the sample due to their unique cultural and administrative ties with mainland China. Consequently, my sample is a country-year panel, covering 103 countries and four years in total. Table 1 lists the 103 countries.

**Table 1**  
List of 103 Countries in the Sample

Albania	Cyprus	Jordan	Romania
Algeria	Denmark	Kazakhstan	Samoa
Angola	Dominican Republic	Korea Republic	Saudi Arabia
Antigua and Barbuda	Ecuador	Kuwait	Seychelles
Argentina	Egypt	Latvia	Singapore
Armenia	El Salvador	Lebanon	Slovenia
Aruba	Estonia	Libya	South Africa
Australia	Fiji	Lithuania	Spain
Austria	Finland	Luxembourg	Sri Lanka
Azerbaijan	France	Malaysia	Suriname
Bahrain	Gabon	Maldives	Swaziland
Belgium	Georgia	Malta	Sweden
Belize	Germany	Mauritius	Switzerland
Bhutan	Greece	Mexico	Thailand
Bolivia	Grenada	Morocco	Tonga
Bosnia and Herzegovina	Guatemala	Namibia	Trinidad and Tobago
Botswana	Guyana	Netherlands	Tunisia
Brazil	Honduras	New Zealand	Turkey
Brunei	Hungary	Norway	Ukraine
Bulgaria	Iceland	Oman	United Arab Emirates
Canada	Iran	Panama	United Kingdom
Cape Verde	Ireland	Paraguay	United States
Chile	Israel	Peru	Uruguay
Colombia	Italy	Philippines	Vanuatu
Costa Rica	Jamaica	Poland	Venezuela
Croatia	Japan	Portugal	

As there are a sizable number of zero values for  $V_{i,j,t}$ , I adopt a panel Tobit regression model, with left censorship to zero as shown below

$$\ln\left(\frac{V_{i,j,t}}{GDP_{i,t}} + 1\right)^* = \beta_0 + \beta_1 \ln(GDP_{j,t}) + \beta_2 \ln(Dis_{i,j}) + \varepsilon_{j,t} \quad (3)$$

Where  $\ln\left(\frac{V_{i,j,t}}{GDP_{i,t}} + 1\right)^*$  is a latent variable calculated as

$$\ln\left(\frac{V_{i,j,t}}{GDP_{i,t}} + 1\right)^* = \begin{cases} \ln\left(\frac{V_{i,j,t}}{GDP_{i,t}} + 1\right) & \text{if } V_{i,j,t} > 0 \\ \ln(1) = 0 & \text{if } V_{i,j,t} \leq 0 \end{cases}$$

Residual term  $\varepsilon_{j,t}$  suggests that I use a random effect Tobit panel regression. There are two reasons why I do not use fixed effect to control country-specific residuals: First, fixed effect may not work in a non-linear model such as Tobit and second, fixed effect may drop time-invariant variables, such as geographic distance. The regression results are reported in Table 2.

**Table 2**  
Gravity Model Panel Tobit Regression Results

Variable	China's Exports	China's Imports	China's Outward FDI	China's Inward FDI
ln(GDP)	2.04***	2.39***	3.51***	2.44***
ln(DIS)	-0.50***	-0.77**	-0.94	-1.29**
Constant	-6.24***	-8.00***	-18.18**	-4.77
sigma_u	0.91***	1.41***	4.34***	2.79***
sigma_e	0.34***	0.43***	3.37***	1.32***
<b>Statistics</b>				
number of obs.	386	386	386	386
number of groups	103	103	103	103
number of left-censored obs.	8	21	180	76
Chi square	666.20	389.48	60.17	107.11
p-value	0.00	0.00	0.00	0.00

\*p<.1, \*\*p<.05, \*\*\*p<.01

Now based on the estimated values for all parameters, I can calculate predicted bilateral economic flows for each country, and calculate the differences between the predicted and actual values. If a predicted value is larger than the actual level, the country is under-performing what it should be; if a predicted value is smaller than the actual level, the country is over-performing what it is predicted to be. Also, I can compare the extent to which each country's actual values of bilateral economic flows deviates from its predicted values, and rank Canada's performance.

## RANKING CANADA IN G7 PLUS ONE

With particular focus on the world's major industrialized countries, I compare Canada with other G7 members (United States, Japan, Germany, United Kingdom, France and Italy) plus Australia. Table 3 reports average actual values over 2003-2006 of real GDP, China's exports to, China's imports from, China's received FDI from, China's outward FDI to the eight countries and their weighted distances to China. There are numerous good reasons for which I add Australia to the comparison group: First, Australia and Canada are highly similar in their economic dependence on natural resources and international trade; second, both countries share similarities in British colonial history and cultures; third, both countries are among the top recipients of Chinese immigrants and fourth, Canada's average real GDP over 2003-2006 is about 70 percent larger than that of Australia, whereas Canada's weighted distance to China is 25 percent farther than that of Australia.

**Table 3**  
2003-2006 Average Values for Model Variables for G7 plus One

Country	GDP(PPP) US\$*	China's Exports US\$	China's Imports US\$	China's Outward FDI, US\$	China's Received FDI, US\$	Distance 1,000 KM
Australia	46.50	0.0995	0.1359	1.0900	0.0552	8.35
Canada	81.00	0.1024	0.0673	0.1808	0.0514	10.43
France	142.75	0.1069	0.0851	0.0561	0.0565	8.74
Germany	196.00	0.2851	0.3081	0.6451	0.1356	8.03
Italy	113.75	0.1088	0.0676	0.0462	0.0317	8.47
Japan	492.50	0.7713	0.9614	0.1983	0.5408	1.97
United Kingdom	161.25	0.1723	0.0509	0.2285	0.0807	8.54
United States	1080.00	1.4594	0.4659	1.5379	0.3516	11.18

\* Millions.

The first way to look at those eight economies' performance is to show their actual values versus predicted values in one diagram for exports, imports, inward FDI and outward FDI respectively. Because the gaps among those eight countries' level of bilateral economic flows are too large to show in one diagram, I show logarithmic values of the ratio of their bilateral economic flows to Chinese real GDP in the current

year, i.e.  $\ln\left(\frac{V_{i,j,t}}{GDP_{i,t}}\right)$  in formula (2). As a logarithm is a monotonous function, it does not change the ranks

of all countries. Figures 1 to 4 show actual log-values versus predicted log-values for China's exports to, China's imports from, China's received inward FDI from and China's outward FDI to each member of the G7 plus Australia.

Figure 1  
China's Exports to G7 plus One

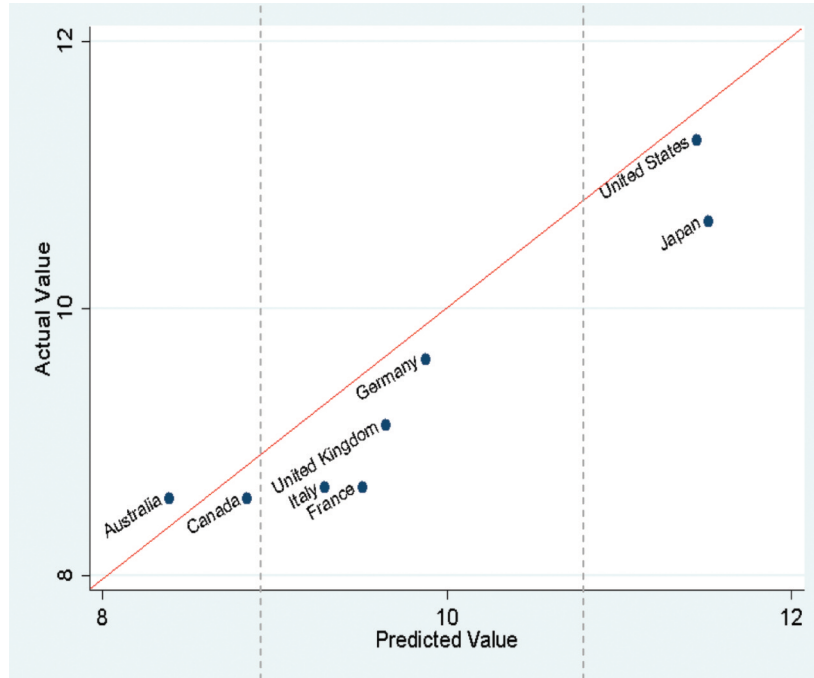


Figure 2  
China's Imports to G7 plus One

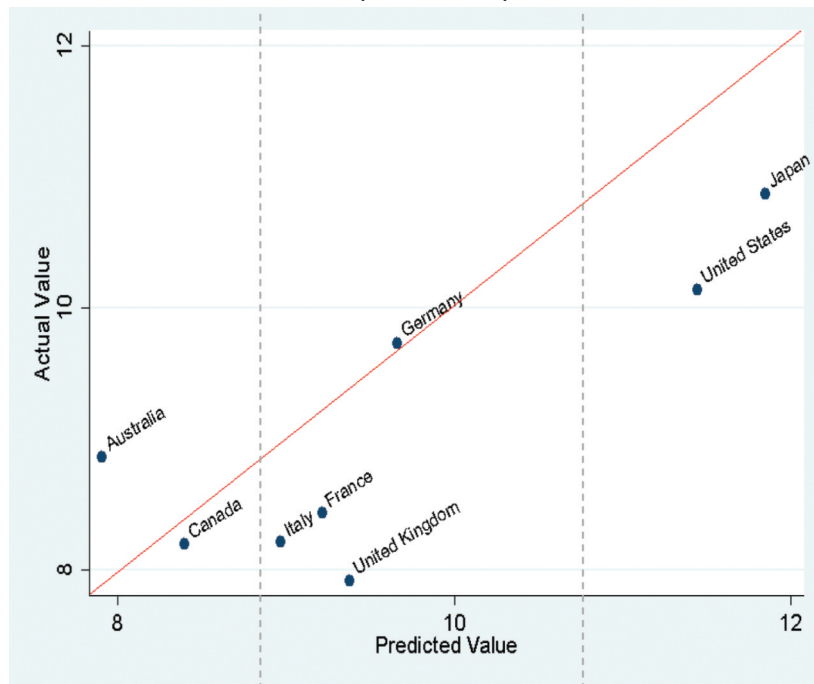


Figure 3  
China's Received FDI from G7 plus One

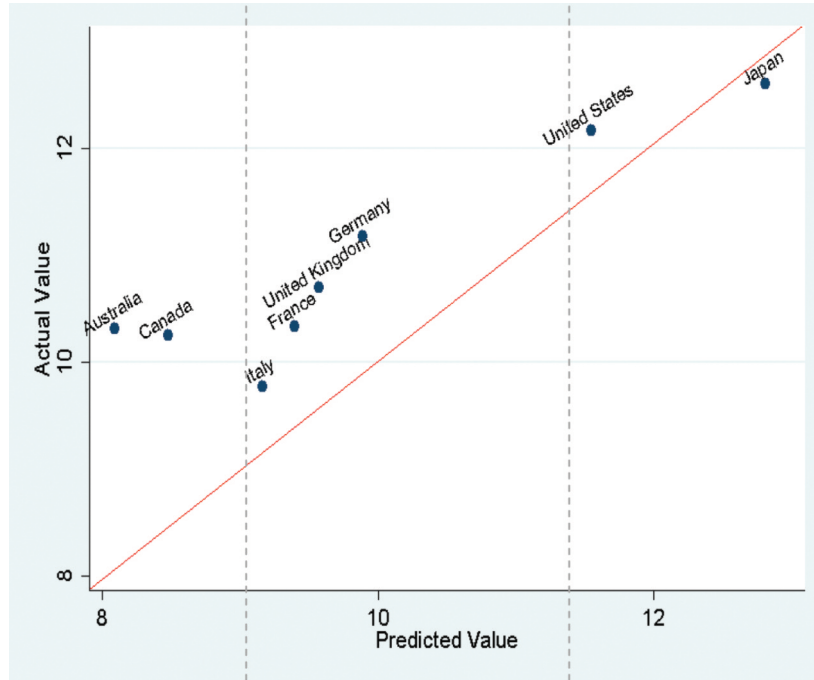
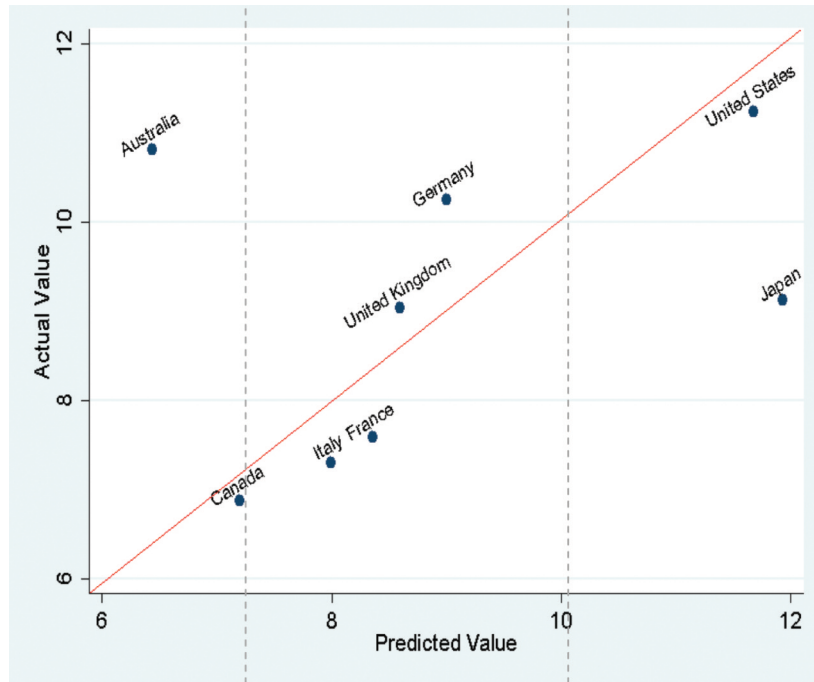


Figure 4  
China's Outward FDI to G7 plus One





The red diagonal line in each diagram is a 45 degree radium line, showing equivalence between actual and predicted values if any points fall on it. If a point falls below the red line, the country was under-performing; if a point falls above the red line, the country was over-performing. The vertical distance between a point and the red line shows the extent to which a country's actual value deviates from its predicted level.

By studying the four diagrams in depth, I found that the eight countries can be classified into three tiers: (1) United States and Japan, which were by far leading the other countries in predicted values due to their considerably larger economic sizes; (2) European industrialized states (Germany, United Kingdom, France and Italy), whose predicted values laid in the middle of the diagrams and (3) Canada and Australia, which fell behind all others in predicted values due to their relatively smaller economic sizes. I use gray dotted lines to show those three classifications in each diagram.

Given the small sizes of economies and their distances to China, Canada and Australia are predicted to be ranked as the bottom two countries among the G7 plus One. However, actual levels of some of Australia's measures passed the second and even first tiers. For example, Australia is the only country that was over-performing in terms of imports from China, and one of the only two countries that were over-performing in terms of exports to China (the other one is Germany). In addition, though Australia is predicted to receive the lowest amount of Chinese outward FDI, its actual value outperformed all others as shown in Figure 4. Conversely, Canada was under-performing in terms of all bilateral economic flows except its outward FDI to China (or China's received FDI from Canada). However, it should be noted that most Canadian investors in China were in fact Chinese by ethnicity. Namely, they were return immigrants from Canada to China (the same is true for Australia).

## UNDERSTANDING THE GEOGRAPHIC ECONOMY OF CANADA VERSUS AUSTRALIA

From an economic geography perspective, the reason Australia out-performed Canada may not be too surprising. Figure 5 shows the gravity relations among the eight countries and China on the world map with some extension to the right. It shows clearly that Australia's distance to China and other parts of Asia is less compared to its distance to Europe and North America, which positions Australia within a broad definition of Asia-Pacific. Conversely, Canada is pulled by gravity from two major bilateral economic partners, United States and Europe, other than China; those two partners may have a larger gravity effect than China on Canada due to their closer distances in geography, history and culture.

Figure 5  
Gravity Relations among China and G7 plus One



## UNDERSTANDING THE DIVERSIFIABILITY OF CANADA'S INTERNATIONAL ECONOMY

The conventional gravity model uses distance between two countries' capital cities, or an index of distances between two countries' most populous cities weighted by their population density. In either case, Canada's gravity centre is located in the country's southeast territory as labelled in Figure 5. However, major British Columbian ports such as Prince Rupert and Vancouver have the shortest distance to major Chinese ports such as Tianjin and Shanghai, which positions Canada as a major Asia-Pacific player in nature. Imagine if Vancouver posits itself as one of Canada's gravity centres: the distance between Canada and China may be shortened by as much as 18 percent or from 10,430 km to 8,570 km to China's Tianjin port, which has been officially positioned as China's new major Asia-Pacific gateway. Note that this adjusted distance is very close to that between Australia and China, i.e., 8,340 km. A 70 percent larger economy suggests that, *ceteris paribus*, Canada may have much greater gravity on China compared to Australia. The adjusted distance between Canada and China becomes even shorter than that between major US ports or European ports and China: for example, it is 10,100 km between Tianjin and Los Angeles, and 8,600 km on average from major European cities to Chongqing, China's closest offshore port to Europe. Although Canada's economic size is smaller compared to other G7 members, its unique economic structure, such as high concentration on natural resources and high technology, has very strong competitiveness in attracting businesses from China, the world's largest factory eager to satisfy its huge appetite for resources and technology.

The strong competitiveness to win China's businesses does not mean that Canada should be less North American or less Atlantic oriented, but rather suggests that Canada should take advantage of its greater diversifiability in building its international economy. One may look at how the gravity model predicts the distribution of Canada's international economic flows with other G7 countries and China based on their economic sizes and their distances to Canada. To calculate that, I first list data for all regions' average real GDP over the period 2003-2006 and their distances to Canada in Table 4. Real GDP data are retrieved from the World Bank's World Development Indicator Database;<sup>1</sup> weighted distance data are retrieved from Centre D'études Prospectives et D'informations Internationales of France's Weighted Distances Database.<sup>2</sup> Based on the estimated parameters for gravity models, I calculate and report predicted values for all bilateral economic flows between Canada and each of the other G7 countries and China.

Table 4  
Economic Sizes and Distance to Canada for G7 Countries and China

Distance**	GDP (PPP)	Weighted
	US\$*	1,000 km
China	5.13	8.57
France	1.84	6.45
Germany	2.51	6.54
Italy	1.63	7.27
Japan	3.83	7.57
United Kingdom	1.87	5.85
United States	12.18	2.08

\* Trillions, \*\* Canada's distances to China and Japan are adjusted to distances from Vancouver to Tianjin and Tokyo respectively.

<sup>1</sup> "World Development Indicators 2009," The World Bank, <http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:21725423~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html> (accessed December 14, 2009).

<sup>2</sup> "Distances," CEPII, <http://www.cepii.fr/anglaisgraph/bdd/distances.htm> (accessed December 14, 2009).

Now I calculate the distribution of Canada's predicted bilateral economic flows with each of those countries based on the estimated parameters in Table 2, and then report and compare results with their actual values in Table 5. Data for actual levels of Canada's exports and imports are retrieved from Trade Data Online of Industry Canada;<sup>3</sup> data for actual levels of Canada's inward and outward FDI are retrieved from CANSIM of Statistics Canada.<sup>4</sup> Results show that Canada has under-weighted China as an international partner except in its imports from China. Notably, the current actual level of two-way FDI between the two countries is much below the predicted values. The predicted values for all bilateral economic variables suggest that China should be Canada's second most important partner in terms of all bilateral economic flows, following the United States. Derived from Table 5, China's share should be 122 percent higher than its current level in terms of Canada's total exports, 353 percent higher in terms of Canada's received FDI and 918 percent higher in terms of Canada's outward FDI. It is very interesting to find that the under-weighting of China is due to over emphasis on Europe and Japan, because the actual values are still under their predicted counterparts for bilateral economic flows with the United States, given the country's huge economic size and close distance to Canada. However, if we take into consideration the increasing disparity of economic growth between China and the United States, particularly after the financial crisis, Canada could have been over-weighted by the United States as well.

**Table 5**  
Predicted and Actual Distributions for Bilateral Economic Flows between  
Canada and other G7 Countries and China

Country	Exports (%)		Imports (%)		Inward FDI (%)		Outward FDI (%)	
	Actual	Predicted	Actual	Predicted	Actual	Predicted	Actual	Predicted
China	1.76	3.90	9.58	7.08	0.41	1.87	0.12	1.24
France	0.66	0.42	1.82	1.01	5.00	0.22	8.72	0.04
Germany	0.84	0.87	3.51	1.89	2.93	0.46	2.61	0.13
Italy	0.48	0.29	1.65	0.74	0.48	0.14	0.37	0.03
Japan	2.32	2.14	5.09	4.16	2.43	1.08	3.29	0.50
United Kingdom	2.14	0.47	3.56	1.10	17.30	0.26	9.16	0.05
United States	91.80	91.91	74.78	84.02	71.45	95.97	75.73	98.01

## CONCLUSION

Using Gravity Model analysis, compared to other G7 countries and Australia in particular, Canada has been far behind the 'gold rush' among developed countries in taking advantage of the opportunities in the Middle Kingdom, the world's most dynamic and growing market. The comparison between Canada and Australia is most interesting. With a much larger economic size and slightly closer adjusted distance to China (if using Vancouver as the gravity centre) compared to Australia, plus that both countries are similar in natural resource endowment, attraction of Chinese immigrants, and culture, Canada is predicted to perform much better in terms of bilateral economic relations with China. However, the actual case is that Australia performs way above Canada, and most of other G7 members, which have much larger economic sizes.

<sup>3</sup> "Trade Data Online," Industry Canada, <http://www.ic.gc.ca/eic/site/tdo-dcd.nsf/eng/Home> (accessed December 14, 2009).

<sup>4</sup> "CANSIM," Statistics Canada, [http://cansim2.statcan.ca/cgi-win/CNSMCGI.PGM?LANG=Eng&Dir-Rep=CII/&CNSM-Fi=CII/CII\\_1-eng.htm](http://cansim2.statcan.ca/cgi-win/CNSMCGI.PGM?LANG=Eng&Dir-Rep=CII/&CNSM-Fi=CII/CII_1-eng.htm) (accessed December 14, 2009).

In terms of policy, the results have many important implications. First, it is disproved that 'cold' political relation can maintain a 'hot' economic relation –simply comparing between Australia and Canada. Second, from a gravity model's perspective, Canada is the most diversifiable international player among all major industrializations in the world map, indicating that Canada should be able to win more China's business without being less North American and Atlantic. Related to that, Canada should carry out effective policies to position its major Western cities such as Vancouver to play larger role in attracting business from China.

## APPENDIX

## Summary Statistics

**TABLE A1**  
Canada's Exports to Top 10 Countries\*

	Unit: C\$ Billion									
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
United States	269.91 (84.76%)	308.08 (86.68%)	359.29 (86.95%)	351.75 (87.05%)	345.37 (87.13%)	326.70 (85.73%)	348.14 (84.44%)	365.80 (83.85%)	359.25 (81.60%)	355.95 (79.04%)
United Kingdom	4.41 (1.39%)	4.83 (1.36%)	5.75 (1.39%)	5.06 (1.25%)	4.43 (1.12%)	6.09 (1.60%)	7.74 (1.88%)	8.25 (1.89%)	10.13 (2.30%)	12.80 (2.84%)
China	2.50 (0.78%)	2.66 (0.75%)	3.70 (0.89%)	4.26 (1.06%)	4.13 (1.04%)	4.81 (1.26%)	6.77 (1.64%)	7.10 (1.63%)	7.66 (1.74%)	9.29 (2.06%)
Japan	8.64 (2.71%)	8.57 (2.41%)	9.28 (2.25%)	8.34 (2.06%)	8.36 (2.11%)	8.19 (2.15%)	8.56 (2.08%)	9.17 (2.10%)	9.42 (2.14%)	9.22 (2.05%)
Mexico	1.47 (0.46%)	1.61 (0.45%)	2.03 (0.49%)	2.75 (0.68%)	2.42 (0.61%)	2.21 (0.58%)	3.10 (0.75%)	3.37 (0.77%)	4.37 (0.99%)	4.96 (1.10%)
Netherlands	1.87 (0.59%)	1.56 (0.44%)	1.43 (0.35%)	1.56 (0.39%)	1.77 (0.45%)	1.62 (0.43%)	1.93 (0.47%)	2.19 (0.50%)	3.06 (0.70%)	4.04 (0.90%)
Germany	2.71 (0.85%)	2.42 (0.68%)	3.15 (0.76%)	2.93 (0.73%)	2.96 (0.75%)	2.91 (0.76%)	2.68 (0.65%)	3.24 (0.74%)	3.95 (0.90%)	3.88 (0.86%)
Norway	0.86 (0.27%)	0.74 (0.21%)	0.85 (0.20%)	0.98 (0.24%)	0.98 (0.25%)	0.98 (0.26%)	1.55 (0.38%)	1.55 (0.36%)	1.89 (0.43%)	3.68 (0.82%)
France	1.69 (0.53%)	1.89 (0.53%)	1.90 (0.46%)	2.17 (0.54%)	2.00 (0.51%)	2.19 (0.57%)	2.38 (0.58%)	2.54 (0.58%)	2.88 (0.65%)	3.13 (0.69%)
South Korea	1.82 (0.57%)	1.99 (0.56%)	2.34 (0.57%)	2.02 (0.50%)	2.02 (0.51%)	2.00 (0.52%)	2.27 (0.55%)	2.82 (0.65%)	3.27 (0.74%)	3.01 (0.67%)
Sub-Total	295.88	334.34	389.72	381.83	374.43	357.71	385.13	406.03	405.89	409.97
Others	22.57	21.08	23.49	22.26	21.95	23.36	27.16	30.22	34.37	40.40
Total (All Countries)	318.44	355.42	413.21	404.09	396.38	381.07	412.29	436.26	440.27	450.37

\* Percentages of total exports are in brackets (author's calculation).

Source: "Trade Data Online," Industry Canada, <http://www.ic.gc.ca/eic/site/tdo-dcd.nsf/eng/Home> (accessed December 14, 2009).

**TABLE A2**  
Canada's Imports from Top 10 Importing Countries\*

	Unit: C\$ Billion									
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
United States	203.58 (68.23%)	215.57 (67.28%)	229.66 (64.33%)	218.29 (63.62%)	218.50 (62.61%)	203.82 (60.64%)	208.99 (58.72%)	215.20 (56.50%)	217.64 (54.87%)	220.56 (54.21%)
China	7.65 (2.56%)	8.95 (2.79%)	11.29 (3.16%)	12.72 (3.71%)	16.00 (4.59%)	18.58 (5.53%)	24.10 (6.77%)	29.51 (7.75%)	34.49 (8.70%)	38.30 (9.41%)
Mexico	7.68 (2.57%)	9.54 (2.98%)	12.06 (3.38%)	12.12 (3.53%)	12.74 (3.65%)	12.19 (3.63%)	13.44 (3.78%)	14.60 (3.83%)	16.01 (4.04%)	17.18 (4.22%)
Japan	14.01 (4.70%)	15.04 (4.69%)	16.61 (4.65%)	14.64 (4.27%)	15.43 (4.42%)	13.82 (4.11%)	13.51 (3.80%)	14.80 (3.89%)	15.33 (3.86%)	15.46 (3.80%)
Germany	6.08 (2.04%)	6.95 (2.17%)	7.77 (2.18%)	8.00 (2.33%)	8.29 (2.38%)	8.65 (2.57%)	9.43 (2.65%)	10.27 (2.70%)	11.13 (2.81%)	11.53 (2.83%)
United Kingdom	6.31 (2.12%)	8.11 (2.53%)	13.03 (3.65%)	11.72 (3.42%)	9.74 (2.79%)	9.22 (2.74%)	9.66 (2.71%)	10.42 (2.74%)	10.86 (2.74%)	11.46 (2.82%)
Korea, South	3.31 (1.11%)	3.57 (1.11%)	5.28 (1.48%)	4.60 (1.34%)	4.86 (1.39%)	5.11 (1.52%)	5.83 (1.64%)	5.38 (1.41%)	5.76 (1.45%)	5.36 (1.32%)
Norway	2.53 (0.85%)	2.55 (0.80%)	4.37 (1.22%)	3.50 (1.02%)	3.93 (1.13%)	4.31 (1.28%)	4.96 (1.39%)	6.06 (1.59%)	5.44 (1.37%)	5.36 (1.32%)
France	4.88 (1.64%)	5.32 (1.66%)	4.16 (1.17%)	5.51 (1.61%)	5.86 (1.68%)	5.07 (1.51%)	5.34 (1.50%)	4.99 (1.31%)	5.19 (1.31%)	5.09 (1.25%)
Algeria	0.54 (0.18%)	0.65 (0.20%)	1.25 (0.35%)	1.15 (0.33%)	1.72 (0.49%)	2.40 (0.71%)	3.11 (0.87%)	4.17 (1.10%)	4.95 (1.25%)	5.07 (1.25%)
Sub-Totals	256.58	276.25	305.48	292.26	297.08	283.18	298.35	315.40	326.80	335.38
Others	41.80	44.16	51.51	50.85	51.87	52.96	57.53	65.46	69.84	71.50
Total (All Countries)	298.39	320.41	356.99	343.11	348.96	336.14	355.89	380.86	396.65	406.89

\* Percentages of total imports are in brackets (author's calculation).

Source: "Trade Data Online," Industry Canada, <http://www.ic.gc.ca/eic/site/tdo-dcd.nsf/eng/Home> (accessed December 14, 2009).

**TABLE A3**  
Canada's Outward FDI to Selected Asian Countries

	Unit: C\$ Billion									
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Australia	3.74	3.23	3.10	5.57	8.61	8.14	8.18	7.98	6.94	8.89
Hong Kong SAR	3.43	3.62	3.74	3.02	2.64	3.04	3.09	3.36	4.99	4.52
Japan	3.27	3.85	5.61	7.03	9.71	8.44	8.37	6.43	3.99	3.57
Singapore	3.01	2.95	3.17	4.49	4.23	3.70	3.58	3.53	3.57	3.35
Indonesia	2.03	2.12	2.41	2.52	4.19	3.44	3.24	2.61	2.24	2.08
China	0.45	0.71	0.57	0.70	0.72	0.84	1.08	1.13	1.57	1.80
Thailand	0.59	0.64	0.98	1.11	0.92	0.53	0.61	0.80	0.83	0.93
Malaysia	0.24	0.22	0.51	0.64	0.72	0.44	0.56	0.49	0.76	0.77
New Zealand	1.88	1.53	0.61	0.38	0.21	0.23	0.48	0.42	0.36	0.65
Philippines	0.39	0.27	0.39	0.41	0.15	0.12	0.12	0.11	0.36	0.39
South Korea	0.54	1.23	0.76	0.73	0.75	0.70	1.36	0.35	0.41	0.21
India	0.17	0.25	0.13	0.15	0.22	0.20	0.21	0.31	0.50	0.21
Asia/Oceania	22.28	23.02	24.01	28.62	35.74	33.18	33.70	30.47	30.46	32.48
Total (All Countries)	262.91	290.73	356.51	399.25	435.49	412.22	448.55	455.21	529.97	514.54

Source: "Canada's International Investment Position," Statistics Canada, <http://www40.statcan.ca/01/cst01/econ08-eng.htm> (accessed December 14, 2009).

**TABLE A4**  
Canada's Inward FDI from Selected Asian Countries

	Unit: C\$ Million									
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Hong Kong	2957	2296	3374	3931	4135	4689	5316	6174	*	*
Japan	8393	8270	8041	7864	9305	9892	9939	10495	12944	13410
Australia	1135	1504	1711	1941	1541	1758	2225	2312	2654	3302
South Korea	142	168	232	269	274	336	353	397	842	950
China	226	214	192	219	196	216	113	928	*	616
India	*	18	*	29	31	59	92	146	222	446
Singapore	195	176	146	131	77	47	45	28	118	340
Malaysia	133	71	118	120	119	119	118	140	168	151
Taiwan	107	115	97	104	108	111	115	111	91	114
New Zealand	*	1516	101	99	99	48	43	47	54	62
Thailand	*	*	1	1	3	2	1	1	4	13
Indonesia	*	*	*	*	*	*	*	*	*	10
Philippines	*	2	2	1	1	1	1	3	2	7
Asia/Oceania	14758	14405	14401	15390	16545	17872	18954	21358	27740	32712
Total (All Countries)	219389	252563	319116	340429	356819	373685	379450	395238	437801	500851

\* Suppressed to meet the confidentiality requirements of the Statistics Act.

Source: "Canada's International Investment Position," Statistics Canada, <http://www40.statcan.ca/101/cst01/econ08-eng.htm> (accessed December 14, 2009).

## BIBLIOGRAPHY

- "Canada's International Investment Position." Statistics Canada. <http://www40.statcan.ca/101/cst01/econ08-eng.htm> (accessed December 14, 2009).
- "CANSIM." Statistics Canada. [http://cansim2.statcan.ca/cgi-win/CNSMCGI.PGM?LANG=Eng&DirRep=CII&CNSM-Fi=CII/CII\\_1-eng.htm](http://cansim2.statcan.ca/cgi-win/CNSMCGI.PGM?LANG=Eng&DirRep=CII&CNSM-Fi=CII/CII_1-eng.htm) (accessed December 14, 2009).
- "Distances." CEPII. <http://www.cepii.fr/anglaisgraph/bdd/distances.htm> (accessed December 14, 2009).
- "Trade Data Online." Industry Canada. <http://www.ic.gc.ca/eic/site/tdo-dcd.nsf/eng/Home> (accessed December 14, 2009).
- "World Development Indicators 2009." The World Bank. <http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:21725423~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html> (accessed December 14, 2009).



## THE CIC CANADA-CHINA RELATIONS PROJECT

Bilateral relations between the governments of Canada and the People's Republic of China are a matter of strategic interest to Canada. Recent changes in the frequency of high-level visits, the effective style and content of bilateral communications and perspectives held about each country by various sectors of each other's society all suggest that the Canada-China relationship has changed significantly in recent years. Yet China remains vitally important to Canada for a variety of reasons and in a variety of sectors. Political and diplomatic cooperation on issues of direct bilateral concern and also on issues of global import remains critically important. Commercial and trade ties linking Canada with the world's third largest and fastest growing economy are of obvious importance. Cultural and civil society ties, including immigration patterns and the ancillary effects they generate, are also important. In these and other matters, the Canada-China relationship will likely grow in importance in the years to come. While the diversity of links between Canada and China militates in favour of giving due attention to a multiplicity of commercial, academic and civil society links, bilateral cooperation at the federal/central government level remains important.

In keeping with CIC objectives to advance research and dialogue on international affairs issues of importance and interest to Canadians, the CIC Canada-China Relations Project has focused on supporting research and analysis toward building a policy framework for Canada's relationship with China. The project's activities have been developed along three thematic areas that reflect issues of common concern: a) Chinese domestic institutional and normative contexts for engagement; b) Economic relations; c) Collaboration on global issues such as environment, health and security.

- a) Domestic Context for Engagement: The Canada-China relationship can be most effective when it is grounded on complementarity of interests, which in turn requires mutual understanding of domestic normative and institutional conditions in both countries. Canadian initiatives with China, ranging from WTO compliance and business regulation to human rights, can be effective only if they are designed and implemented in light of China's domestic conditions, ranging from popular norms to governmental structures and policy priorities. Similarly, China's success in nurturing productive relationships with Canada will require appreciation of Canadian domestic conditions. The papers for this thematic area were commissioned and directed by Professor Jeremy Paltiel of Carleton University.
- b) Economic Relations: Economic relations between Canada and China are critically important. Economic relations include bilateral trade and investment relations, and also extend to local effects of economic conditions and behaviour. In the trade area, Canada's strengths match up extremely well with China's needs. In trade and investment relations, efforts to promote normative and institutional accommodation in China for Canadian business objectives are consistent with Chinese development policies and also serve important Canadian interests in the areas of good governance. As well, national economic behavior by the two countries in response to changing economic conditions at the global, regional and local level have important effects on the Canada-China relationship. The papers for this thematic area were commissioned and directed by Yuen Pau Woo, President of the Asia Pacific Foundation of Canada.
- c) Collaboration on Global Issues: The importance of China's responsible participation in systems for addressing global policy concerns in areas such as environment, health and security cannot be overstated. Yet China's participation in the global community can be distorted by its responses to apprehension and competition from other global actors, particularly the United States, the European Union and Japan. Canada has a significant role to play in supporting China's responsible participation, not only through direct bilateral programming but also through our capacity to deploy good offices, legitimation and other soft power resources both bilaterally and globally. The papers for this thematic area were commissioned and directed by Professor Brian Job of the University of British Columbia.

The papers here presented in connection with the CIC Canada-China Relations Project offer informed, non-partisan recommendations for a variety of stakeholders in Canada, including the government and private and public sector institutions and individuals, with a view toward furthering the development of healthy long-term relations between Canada and China. While historical and current conditions may result in disagreement as to how best to manage the Canada-China relationship, China's importance to the world requires our attention. We hope that the papers presented here can further the process of understanding and effective engagement that will strengthen the foundation for productive relations for the long-term interests of both countries.

**Dr. Pitman B. Potter**

*Chair*

*CIC China Working Group*

The Canadian International Council (CIC) is a non-partisan, nationwide council established to strengthen Canada's role in international affairs. With local branches nationwide, the CIC seeks to advance research, discussion and debate on international issues by supporting a Canadian foreign policy network that crosses academic disciplines, policy areas and economic sectors.

The CIC features a privately funded fellowship program and a network of issue-specific Working Groups. The goal of the CIC Working Groups is to identify major issues and challenges in their respective areas of study and to suggest and outline the best possible solutions to Canada's strategic foreign policy position on those issues. The CIC aims to generate rigorous foreign policy research and advice.

## CIC BOARD OF DIRECTORS

### Chair

Jim Balsillie, Co-CEO, Research In Motion

### Co-vice Chairs

Bill Graham, Chancellor of Trinity College and Chair, Atlantic Council of Canada

John MacNaughton, Chair of the Board, Business Development Bank of Canada

### Directors

Scott Burk, President, Wealhouse Capital Management

André Desmarais, President and Co-CEO, Power Corporation of Canada

Brian Flemming, Member, Halifax Branch, Canadian International Council

Edward Goldenberg, Partner, Bennett Jones LLP

Jennifer Jeffs, President, CIC

Tom Jenkins, Executive Chairman and CSO, Open Text

Pierre Marc Johnson, Senior Counsel, Heenan Blaikie LLP

Don Macnamara, Past President, Victoria Branch, Canadian International Council

Indira Samarasekera, President, University of Alberta

Janice Stein, Director, Munk Centre for International Studies

Jodi White, Distinguished Senior Fellow, Norman Patterson School of International Affairs and Arthur Kroeger College of Public Affairs, Carleton University

45 Willcocks Street, Box 210  
Toronto Ontario M5S 1C7  
TEL: 416-977-9000, 1-800-668-2442  
FAX: 416-946-7319