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NEW PARTNERS FOR CANADA

ALBERTA PERSPECTIVE ON BILATERAL TRADE

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NOTE

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Contents

Contents.....	iii
1. Introduction.....	1
2. Methodology	4
2.1 Data	4
2.2 Alberta's Top 50 Exports	4
2.3 Alberta's Top 50 Exports, Market Details.....	6
2.4. Top 10 Global Importers and Exporters by Product.....	6
2.5. Tariff Analysis by Product.....	8
2.6. Free Trade Agreements in Active Negotiation.....	9
3. Approaches for Establishing Priorities.....	10
3.1. 'Catch-Up' Approach	10
3.2. 'Keep-Up Approach'	11
4. Results and Discussion.....	13
5. Conclusion.....	14
Appendix A: Alberta's Top 50 Exports (\$US Thousands).....	15
Appendix B: Alberta's Top 50 Non-FTA Markets (\$US Thousands)	17
Appendix C: Regional Free-Trade Negotiation Matrix.....	18
Appendix D. Product Tables.....	23
Appendix E. Country Tables.....	75

1. Introduction

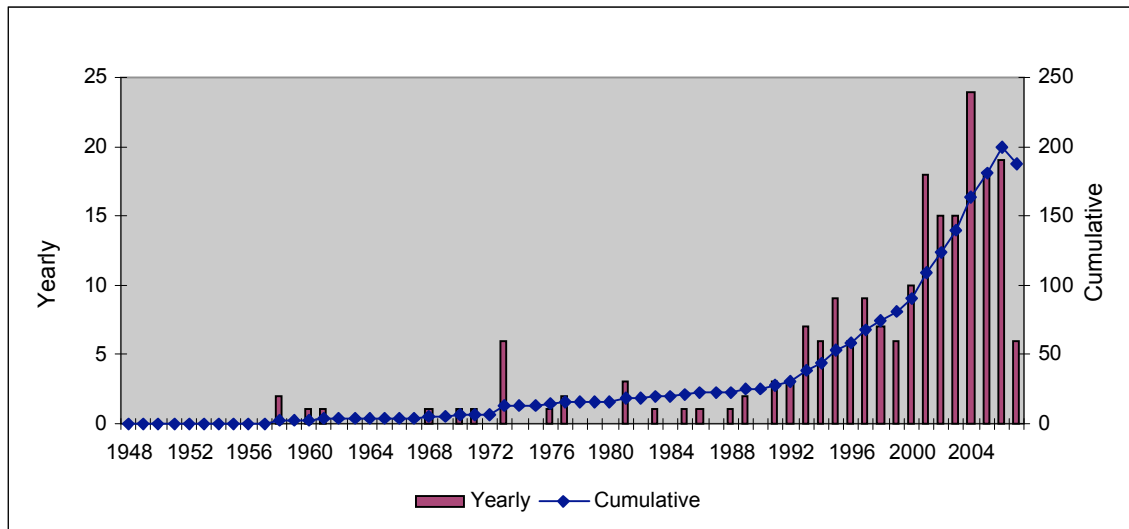
There can be no question that regional and bilateral free trade agreements (FTA) are becoming increasingly important in the global international trade regime. While multilateral trade negotiations under the World Trade Organization (WTO) are inherently difficult because of the need to achieve consensus between all of the now 151 member states of WTO, bilateral FTAs seem quicker to negotiate and offer more flexibility for partner countries. This is not to say that bilateral FTAs are preferable to progress in multilateral trade negotiations. Multilateral trade liberalization has the benefit of bringing down trade barriers globally and dealing with all aspects of trade, including agriculture. The disadvantage of bilateral FTAs is that they create a 'spaghetti bowl'¹ of trade preferences and the necessity of complex 'rules of origin' to determine applicable tariff rates. However, the increasing prevalence of regional and bilateral FTAs is a trend that has become impossible to ignore in determining a country's trade policy. Even Japan, which long argued that the growth in bilateral FTAs threatened the overall global progress in trade liberalization by drawing resources away from the multilateral process of the WTO, reversed its policy and has become an enthusiastic negotiator of FTAs in the Asian region and as far away as Mexico and Chile. The risk for countries left behind in the race to accumulate FTAs is that their export products will be disadvantaged in foreign markets by higher tariffs than are applied to exports from competitors which benefit from FTAs.

According to the WTO², as of July 2007, 380 regional trade agreements (RTAs)—the WTO's preferred term—had been notified by WTO members, with 250 currently in force. Including RTAs force but not yet notified to the WTO, those signed but not yet in force, those under negotiation, and those proposed, the WTO estimates that there may be 400 RTAs globally by 2010. Figure 1, below, shows how this trend has accelerated since the early 1990s.

¹ The term "spaghetti bowl" was coined by Jagdish Bhagwati in "US Trade Policy: The Infatuation with Free Trade Agreements" in Jagdish Bhagwati and Anne O. Krueger, *The Dangerous Drift to Preferential Trade Agreements*, AEI Press, 1995.

² http://www.wto.org/english/tratop_e/region_e/region_e.htm

Figure 1. Regional Trade Agreements Notified to the WTO/CATT, 1948 to 2007



Source: WCER from WTO data available at http://www.wto.org/english/tratop_e/region_e/summary_e.xls

The implications for Canada’s trade policy are profound. Since the implementation of the North American Free Trade Agreement (NAFTA) on January 1, 1994, the United States has signed FTAs with Singapore, Chile, Australia, Bahrain, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, Morocco, Colombia, Peru, Panama, and South Korea.³ Canada’s other NAFTA partner, Mexico, has completed FTAs with 43 countries, more than any other country in the world.⁴ The proliferation of global FTAs presents a growing challenge to Canadian and Alberta exporters, which may increasingly see their exports diverted as current or future potential markets sign FTAs giving a tariff advantage, hence a price advantage, to exports from competitors in other countries. Alberta’s second most important and fastest growing export destination, China, has seven FTAs implemented, three more signed but not yet implemented, three under negotiation, and seven more proposed.⁵ Japan, Alberta’s third most important export destination, has completed FTAs with Singapore, Mexico and Malaysia and is negotiating agreements with Thailand, Indonesia, Vietnam, Brunei, the Philippines, South Korea, Chile, Australia, India, Switzerland, and the countries of the Gulf Cooperation Council (members of the GCC are Saudi Arabia, Kuwait, the United Arab Emirates, Oman, Qatar and Bahrain). This study found that the European Union (taken together, the 27 countries of the EU are Alberta’s fourth most important export destination) was negotiating new free trade agreements with 16 of Alberta’s top competitor countries. Australia, which competes with Alberta in many exports, is negotiating free trade agreements with Japan and China, as well as the Association of South East Asian Nations (ASEAN) and the GCC.

³ The agreements with Peru, Colombia, South Korea and Panama have been signed but have not yet been ratified by Congress. For more on US FTAs see www.ustr.gov

⁴ www.economia.gob.mx

⁵ Source: The Asian Development Bank’s Asian Regional Integration Centre <http://aric.adb.org/10.php>

Canada has fallen behind in the international race for FTAs, having signed agreements only with Chile (1996), Israel (1996), and Costa Rica (2001) since the implementation of the NAFTA. More recently the Canadian government has increased its efforts in bilateral agreements, concluding agreements with the European Free Trade Association (EFTA) and Peru, nearing completion of an FTA with South Korea, re-engaging in long stalled negotiations with Singapore, Colombia, the Dominican Republic, and the Central American countries of El Salvador, Honduras, Guatemala and Nicaragua, and beginning negotiations with Jordan and the Caribbean Community (CARICOM). However, many of these FTAs have been guided by political rather than economic considerations.

How does a country determine, or how should a country determine, its priorities in bilateral FTAs? Resources and time are limited and so countries must pick and choose with which other countries to engage in negotiations. Political considerations will always enter into the process but how should *economic* priorities be determined? This paper approaches the question from the perspective of Alberta. It asks with which countries Canada should seek to engage in bilateral FTA negotiations to bring the most benefit to Alberta exporters in terms of reducing the price advantage gained by exporters in competitor countries (leading to diversion of trade away from Alberta exporters) which either already have FTAs or are in the process of negotiating FTAs with key markets for Alberta's principal export products.

It should be noted that while this paper approaches the question strictly from Alberta's perspective, the proposed methodology can easily be adapted to determining trade policy priorities for other provinces or indeed other countries.

2. Methodology

2.1 Data

Certain trade data is essential in order to determine Alberta's FTA. We focused on:

- Alberta's top 50 export products at the HS 6-digit level⁶;
- the top ten actual destinations for each of these products;
- for each of these products, the top ten global importers (potential markets);
- for each of these products, the top ten global exporters (potential competitors);
- for each top ten global importer of these products, a detailed tariff⁷ matrix against all major exporters of that product and against Canada; and
- for the top five global importers of these Alberta export products, a matrix of current free trade negotiations with the top five global exporters these products.

Details of the methodology used are outlined below. All data was collected in US dollars. The base year for global exporters and importers and for applied tariffs is 2005.

2.2 Alberta's Top 50 Exports

Alberta's top 50 export products to all countries was drawn from the *World Trade Atlas* database, administered by Global Trade Information Services (www.gtis.com) using data provided by Statistics Canada. This study used Alberta's average exports from 2002-2005 in order to smooth cyclical changes or the effect of exceptional circumstances (such as BSE) in Alberta's export product mix. As mentioned previously, export data was at the HS 6-digit level.

Certain categories of products were eliminated from consideration for the purposes of this study because they are unlikely to be exported in significant quantities in the near future. The excluded categories were live animals (HS 01), energy (HS 27), and products in HS 97-99, which cover low-value, miscellaneous and non-trade goods. While Alberta exports significant quantities of live cows and, of course petroleum and natural gas, these industries are highly integrated with the US market, which is likely to continue to absorb most of Alberta's full production for the foreseeable future.

It was necessary for practical purposes to limit the number of products considered for this study. It should be noted, therefore, that considering only Alberta's top 50 HS 6-digit export products will tend to underestimate the importance of certain manufactured exports in favour of bulk exported commodities.

⁶ The Harmonized System (HS) is an internationally standardized system for classifying traded products developed and maintained by the World Customs Organization (WCO) (www.mcoomd.org). The HS system assigns code numbers to exported products. These numbers are arranged first into 2-digit "chapters" from 01 to 99, each of which can be subdivided into 4-digit product categories with a greater degree of specificity and then down to 6-digit specific products. Individual countries usually further break the 6-digit level products into 8-10 digit sub-categories for customs purposes, but HS codes are not internationally standardized beyond the 6-digit level. For example, HS 10 is cereals, under which HS 1001 is wheat products, HS 1002 is rye, 1003 is barley, etc. Under HS 1001, HS 100110 is durum wheat (for pasta) and HS 100190 is all other kinds of wheat.

⁷ This study uses *applied* tariffs in 2005 rather than the maximum *bound* tariffs.

For example, while only 15 of the top 50 HS 6-digit products fall under the HS 84 (machinery), HS 85 (electrical and electronic machinery), HS 87 (vehicles), HS 90 (precision instruments) and HS 94 (furniture) categories (accounting for 16% of the value of top 50 product exports), at the HS 2-digit level these categories accounted for 24% of Alberta's exports (excluding live animals and energy). This distortion is because that there are fewer 6-digit HS codes under each 2-digit HS category for commodities than for manufactured products.

Table 2.1, below, outlines the top ten Alberta exports between 2002 and 2005 and their corresponding percentage of the top 50 and all exports. The full table of Alberta's top 50 exports can be found as Appendix A.

Table 2.1: Alberta's Top 10 Exports (Excluding HS 01, 27, 97-99), 2002-2005 Average, US\$ Millions

Rank	HS Code	Description	2002-2005 Average	Share of Top 50	Share of Total Exports
1	020130	Beef, Boneless, Fresh Or Chilled	\$881.8	8.78%	1.83%
2	390190	Ethylene Polymers, In Primary Forms	\$795.7	7.93%	1.65%
3	290531	Ethylene Glycol	\$669.3	6.67%	1.39%
4	100190	Wheat And Meslin	\$488.4	4.87%	1.02%
5	440710	Softwood lumber	\$476.5	4.75%	0.99%
6	390120	Polyethylene, Spec Gravity > 0.94	\$416.4	4.15%	0.87%
7	470321	Chemical Woodpulp, Coniferous	\$385.6	3.84%	0.80%
8	290250	Styrene	\$346.3	3.45%	0.72%
9	470329	Chemical Woodpulp, Nonconiferous	\$321.4	3.20%	0.67%
10	750210	Nickel, Unwrought, Not Alloyed	\$317.8	3.17%	0.66%
Alberta's Top 50 Exports (Excluding HS 01, 27, 97-99)			\$10,039.36		
Alberta's Total Exports (Including HS 01, 27, 97-99)			\$48,108.0		
Share Top 50 Exports			20.9%		

2.3 Alberta's Top 50 Exports, Market Details

The export destinations and values for each of Alberta's top 50 export products were determined, again using the *World Trade Atlas* database. Countries with which Canada already has free trade agreements in effect (the United States, Mexico, Chile, Israel and Costa Rica) were omitted, since these are not relevant to determining future FTA priorities. The member countries of the EU are treated as a single market for the purpose of this study, since any FTA would be between Canada and the EU as a whole. As before, this data is for 2002-2005 average.

Alberta's top 10 non-FTA export destinations (for the top 50 export products) are presented in Table 2.2, below.

Table 2.2. Top 10 Non-FTA Alberta Markets (For Alberta's Top 50 Export Products), 2002-2005 Average, US\$ Millions

Rank	Country	2002-2005 Average Exports	Number of Top 50 Products Exported
1	China	\$ 990,323.8	39
2	Japan	\$ 747,926.5	39
3	European Union (EU 27)	\$ 569,257.4	42
4	South Korea	\$ 287,954.3	38
5	Taiwan	\$ 134,491.4	32
6	Singapore	\$ 72,019.0	29
7	Indonesia	\$ 71,906.6	27
8	Australia	\$ 58,963.7	27
9	Hong Kong	\$ 57,707.0	30
10	Algeria	\$ 42,111.9	12

2.4. Top 10 Global Importers and Exporters by Product

The next stage of data collection consisted of compiling the top ten global importers and exporters for each of Alberta's top 50 export products. These are considered to be the top *potential* markets and competitors for Alberta globally. Alberta may or may not be exporting to these countries at the present time, but an FTA between Canada and a top market for an Alberta export product could result in new trade. At the same time, an FTA created between a top global market for Alberta exports and a top competing producer would make it difficult for Alberta producers to penetrate that market in the future.

Several databases were used to acquire this data. The primary database used was *TradeMap* (www.trademap.org), which is provided by the International Trade Centre (www.intracen.org), a joint technical cooperation agency of the United Nations Conference on Trade and Development (UNCTAD) and the World Trade

Table 2.4: Ethylene Glycol (HS290531) Top Global Exporters in 2005 (\$US Thousands)

Rank	Country	2005	Share
1	Saudi Arabia	\$ 1,325,093	18.5%
	Canada	\$ 987,248	13.8%
2	Taiwan	\$ 538,074	7.5%
3	Singapore	\$ 522,467	7.3%
4	United States of America	\$ 465,617	6.5%
5	Kuwait	\$ 316,942	4.4%
6	Japan	\$ 194,929	2.7%
7	South Korea	\$ 165,698	2.3%
8	Malaysia	\$ 149,185	2.1%
9	Russian Federation	\$ 123,936	1.7%
10	India	\$ 122,636	1.7%
World Exports		\$ 7,144,296	

Note that there are usually small discrepancies between total global exports and total global imports in international trade data.

2.5. Tariff Analysis by Product

The 'catch-up' methodology, outlined below, requires knowing the tariffs applied to competitors as well as to Canada for Alberta's export strengths. Tariff data is from *Market Access Map* (www.macmap.org), a database also operated by the International Trade Centre. For each of Alberta's top 50 export products, tariffs applied in 2005 by each of the top 10 global importers to each of the top 10 global exporters of that product and Canada were gathered.

It is important to note that there is also some data missing for some products from the *Market Access Map*, specifically for Andorra, Gibraltar, and Thailand. For Andorra and Gibraltar, trade values were at the very bottom of some of the importer lists, and therefore were deemed insignificant and ignored. The tariff data for Thailand was, unfortunately, wholly unavailable, even from alternative sources.

Tariffs under 2% were considered insufficient to lead to a competitive disadvantage for Alberta exporters and so were not factored into calculations in either of the two methodologies used in this study.

Table 2.5, below, shows the resulting matrix of tariffs for Ethylene Polymers (HS 390190), Alberta's second most important (non-energy) export product. Importers are ranged along the top of the matrix and exporting countries along the sides. Note, since the European Union is both a large importer and exporter of this product, the intersection with itself lists a 0% tariff.

Table 2.7: Ethylene Polymers (HS 390190) Tariffs in 2005

		Top Importers									
		China	EU 27	Japan	Brazil	Malaysia	South Korea	Colombia	Saudi Arabia	Australia	Taiwan
Top Exporters	Canada	6.5%	5.4%	2.8%	9.2%	0.0%	6.5%	10.0%	5.0%	0.0%	2.5%
	USA	6.5%	5.4%	2.8%	9.2%	0.0%	6.5%	10.0%	5.0%	0.0%	2.5%
	European Union	6.5%	0.0%	2.8%	9.2%	0.0%	6.5%	10.0%	5.0%	5.0%	2.5%
	Japan	6.5%	5.4%	0.0%	9.2%	0.0%	6.5%	10.0%	5.0%	5.0%	2.5%
	Argentina	6.5%	1.5%	0.3%	0.0%	0.0%	6.5%	8.0%	5.0%	5.0%	2.5%
	Singapore	6.5%	5.4%	0.0%	9.2%	0.0%	6.5%	10.0%	5.0%	0.0%	2.5%
	Kuwait	6.5%	1.5%	2.8%	9.2%	0.0%	6.5%	10.0%	0.0%	5.0%	2.5%
	India	6.4%	1.5%	0.3%	9.2%	0.0%	6.5%	10.0%	5.0%	5.0%	2.5%
	China	0.0%	1.5%	0.3%	9.2%	0.0%	6.5%	10.0%	5.0%	5.0%	2.5%
	United Arab Emirates	6.5%	1.5%	2.8%	9.2%	0.0%	6.5%	10.0%	0.0%	5.0%	2.5%
	Hong Kong	6.5%	5.4%	2.8%	9.2%	0.0%	6.5%	10.0%	5.0%	5.0%	2.5%
	Market Size (US\$ Millions)	\$1,850.5	\$428.0	\$229.4	\$187.9	\$88.3	\$ 75.8	\$70.0	\$62.9	\$48.3	\$45.4

2.6. Free Trade Agreements in Active Negotiation

For the ‘keep up’ methodology outlined below, it is necessary to know which countries are engaged in negotiations that may result in the creation of new FTAs. A matrix was first constructed with all countries appearing as a top five Alberta market for any of its top 50 export products along one axis (excluding existing free trade partners) and all countries appearing as a top five global exporter of any of Alberta’s top 50 export products on the other axis. (Note that this is in contrast to the “catch-up” methodology which used top ten *global* exporters. For the “keep-up” approach, we are interested in future losses of exports to Alberta’s current trading partners). In those cases where the commencement of free trade negotiations had been officially announced (but the negotiations had not been concluded) or where negotiations had been concluded and implementation of the free trade agreement had commenced after June 2005 (and so the tariff differentials would not have been incorporated into the ‘catch up’ methodology), a free trade agreement negotiation was indicated at that intersection on the matrix. For this matrix see Appendix C. Note that the matrix will indicate that there are no free trade negotiations ongoing between countries that already had an FTA implemented prior to June 2005. The source for this data was preferably the foreign affairs or international trade ministry of each country but, in cases where this information was not available from those sources, secondary sources were used, including the Asian Development Bank’s Asian Regional Integration Centre FTA database for Asia, and press reports. In the case of press reports, care was taken that only officially announced commencement of negotiations were counted rather than simply announcements of joint studies or the like, and confirmation from second sources was sought.

3. Approaches for Establishing Priorities

Two separate approaches are used to determine Alberta's priorities for bilateral FTA partners. The 'Catch-Up' approach determines Alberta's priorities relative to the existing 'spaghetti bowl' of FTAs—that is, it tries to determine which countries Canada should sign FTAs with to try to 'catch-up' with competitor countries already benefiting from lowered tariffs as a result of existing FTAs. Though as noted by the WTO, while there are currently 250 regional trade agreements in force, by 2010 it is estimated that there may be 400 agreements worldwide. While the 'catch-up' approach can determine Alberta's trade priorities vis-à-vis the 280 current FTAs, an alternative approach is needed to determine Alberta's priorities in 'keeping-up' with the pace of FTA negotiations worldwide. The second methodology used is thus termed the 'keep-up' approach.

3.1. 'Catch-Up' Approach

The 'catch-up' approach constructs a priority-country list based on an index which takes into account four important factors that give an indication of the potential exports Alberta businesses could gain if they were able to compete on terms as favourable as competitors that have an FTA with the importing country. These four indicators are

1. the differential between the tariff faced by Canada and that faced by its competitor; representing the competitive price disadvantage for Alberta exporters in that market (products where tariffs for Canada were less than 2% were ignored);
2. the overall size of the import market for that product, as a proxy for the opportunities in that country;
3. the size of the competitor's global exports of the product, as a measure of its relative competitive potential,
4. Alberta's global exports of the product in question as an indicator of the importance of the product to Alberta's export economy

For simplicity, these four factors were multiplied, although future studies could consider weighting each factor differently. The resulting measure is then summed across all of Alberta's key export products for each potential new free trade partner to arrive at an aggregate number. The larger the number, the greater are the 'catch-up' opportunities for Alberta from improved market access to that country. For comparison purposes these numbers are indexed with the largest number being assigned the value of 100.

The calculation for the 'catch-up' approach is as follows:

1. Select only cases in which Canada faces a tariff of more than 2.0% and where the Canadian product faces a higher tariff than the competitors.
2. For each such product, and for each exporter, calculate:
3. $[\text{Tariff faced by Canadian} - \text{Tariff faced by competitor}] * \text{AB total exports} * \text{Total Importer Market} * \text{Total Competing Exporters' sales in Importer's Market}$
4. Sum totals for each country across all products.

The final summation provides us with a ranking (but not an actual estimate) of the trade diversion incurred by Alberta's exporters in the various importing countries. Indexing these values provides a measure of the relative importance of obtaining improved market access to each of these priority markets.

To demonstrate this methodology, we will provide an example using the product Beef Cuts, Boneless, Fresh or Chilled (HS 020130) and the European Union as the market.

European Union Total Imports: \$823,394 (\$US Thousands)

Exporter	EU Applied Tariff	Global Exports (\$US Thousands)
Argentina	52.84%	\$ 583,248
Australia	49.81%	\$ 1,628,419
Brazil	56.36%	\$ 627,093

Alberta's total export market size is \$881,771, and Canada faces a tariff of 52.08%. For the lines with Argentina and Brazil the tariff differential (TD) is greater than 0 (the tariffs they face are greater than those for Canada), so these lines are excluded from our calculations. For the EU-Australia line, the calculation is:

$$[52.08\% - 49.81\%] * \$881,771 * \$823,394 * \$1,628,419 = 2.68E+018$$

These steps are repeated, for all products, and for all importer-exporter combinations, and then summed. The sums are then ranked, with the higher value representing a higher priority in terms of undoing existing trade diversion.

3.2. 'Keep-Up Approach'

The pace at which regional and bilateral free trade negotiations are taking place has continued to grow since 2005, the year that the 'catch-up' methodology uses as its base. Another method is needed to determine the future threats to Alberta's exports due to trade diversion effects should an existing market for an Alberta export join a free trade agreement with a country competing as an exporter of that product. Whereas the 'catch-up' methodology tried to simply rank the existing drag on Alberta's exports due to free or preferential trade agreements, the 'keep up' approach attempts to estimate potential future losses of exports if Canada does not keep pace with the proliferation of free trade agreements. As destination countries for Alberta exports sign free trade agreements with competing producers and particularly if the WTO Doha Round is unsuccessful, Alberta will increasingly face a price disadvantages due to the differential between the tariff charged on imports from Canada and that on imports from the competing country which benefits from a free trade agreement.

For simplicity, the 'keep up' approach estimates the maximum potential loss to Alberta's exports if key markets complete free trade agreements currently under negotiation. We assume that when a major global competitor for Alberta export products signs an FTA with a key destination country for Alberta exports, the Alberta exporters will lose this market once the FTA is implemented – unless Canada

also gains privileged access to that market. Cases where the tariff for Canada is less than 2% were excluded on the assumption that the price difference would be too small to matter. For each country (i) that appeared as a 'top five' destination for Alberta's top 50 export products the 'keep-up' approach sums the total Alberta sales (x) to that market if a 'top ten' global competitor (y) is currently engaged in FTA negotiations with that country (y=0 otherwise). The priority list of countries is ranked in order of the maximum contingent loss of exports for Alberta as a result of free trade agreements between markets and top international competitors.

The 'keep-up' approach uses the FTA negotiations matrix outlined below (see Appendix X)

Summarized, the decision process for the 'keep-up' approach is as follows:

For each country that is a top five non-FTA Alberta market for any of Alberta's top 50 export products⁹:

1. Compile a list of all of Alberta's top 50 export products that are exported to that country,
2. For each product compile a list of any of the top 10 global exporters of that product that are currently negotiating an FTA with the destination country (or which has completed an FTA but that was implemented after June 2005),
3. Where the tariff for that product in that market is greater than 2% for Canada, assume that Alberta would eventually lose all of its exports of that product in that market to the competitor benefiting from a price advantage due to lowered tariffs,
4. Sum the total of such losses for all of the products being exported to each country,
5. Rank the countries by the total contingent loss of Alberta's exports.

⁹ Note that this is in contrast to the "catch-up" approach which used top ten *global* exporters.

4. Results and Discussion

Table 4.1, below, shows the ranking of competitors using the two approaches. It is important to recall that the numbers that appear in the table do not necessarily indicate actual trade diversion. The calculations were not done with the intention of deriving point estimates of actual or potential trade diversion, but are instead primarily relative, and as such the ranking is more significant than the estimated value of trade diversion. For the 'keep-up' approach the calculations make the extreme assumption that all exports would be lost if Canada were not to follow with an FTA. For the 'catch-up' approach the multiplication of the four factors means that a meaningful interpretation other than a ranking of market opportunities is not feasible.

Table 4.1

'Catch-up' Methodology			'Keep-up' Methodology		
Rank	Country	Index (Max=100)	Rank	Country	Max. Alberta Trade Lost (US\$, thousands)
1	China	100	1	China	\$719,526
2	European Union	43.20	2	Japan	\$234,154
3	Republic of Korea	9.19	3	Republic of Korea	\$147,748
4	United Arab Emirates	6.11	4	European Union	\$108,716
5	Brazil	2.27	5	Indonesia	\$30,041
6	Russian Federation	1.52	6	United Arab Emirates	\$21,157
7	Japan	1.31	7	Brazil	\$10,908
8	Turkey	.98	8	Australia	\$6,804
9	Algeria	.88	9	Malaysia	\$3,632
10	Malaysia	.78	10	Saudi Arabia	\$2,429
11	Morocco	.75	11	Egypt	\$2,232
12	Taiwan	.34	12	India	\$2,189
13	Egypt	.28	13	Kuwait	\$101
14	Australia	.11	14	Qatar	\$66
15	Switzerland	.09	15	Switzerland	\$65

It is no surprise that China appears at the top of both lists. In 2005, China was Alberta's top non-FTA market for its top 50 export products. From the perspective of the 'keep-up' methodology, China's importance is increased because it is in FTA negotiations with 16 Alberta competitors, including Australia and New Zealand. Should China complete all of the FTAs that it is currently negotiating, Alberta stands to lose as much as \$720 million in yearly exports to that growing market. Japan ranks lower on the 'catch-up' list than on the 'keep-up' list because, until recently, it had

preferred to focus on the multilateral trade liberalization process and has only in the last years begun to aggressively pursue bilateral FTAs. Failure on Canada's part to enter into negotiations with Japan towards an FTA, as competitor Australia has managed, could result in a maximum loss of Alberta's exports to this county of \$234 million per year (based on 2005 export values).

The European Union, on the other hand, ranks more highly under the 'catch-up' approach because of its large network of existing FTAs and relatively smaller number of current negotiations with Alberta competitors. This can be seen as trade which Alberta is already foregoing into the EU market. For Alberta exporters to penetrate this market after being disadvantaged for so many years by cheaper exports from competitors that have benefitted from lower tariffs would be difficult. Unlike the 'keep-up' methodology results, which tracks future trade *losses*, the 'catch-up' methodology shows the potential for newly created export opportunities.

Of all of the countries with which Canada is currently negotiating FTAs, only South Korea shows up as a priority for Alberta, at number three on both lists. This demonstrates the importance to Alberta's exporters of securing a successful conclusion for these negotiations. Though the negotiations have gone more slowly than expected, in part due to pressure from the auto manufacturing industry in Canada, the results of this study demonstrate that Alberta exporters stand to gain a great deal if a deal can be reached but also stand to lose a great deal (up to \$148 million per year) if the negotiations fail. The United States, a major competitor for many of Alberta's exports, has signed a free trade agreement with South Korea, though this has not yet been ratified by Congress. This presents an opportunity for Canada to complete its FTA before its exporters are displaced by US competitors benefitting from the price advantage of lower tariffs.

5. Conclusion

Canada can no longer afford to ignore the global trend towards increased bilateral free trade agreements. This paper has proposed two new methodologies for determining a country's or jurisdiction's priorities in choosing partners for an FTA. Though in this case they have been applied to the case of Alberta, they would be adaptable to determining the trade policy priorities of other jurisdictions for which comprehensive export data was available.

Appendix A: Alberta's Top 50 Exports (\$US Thousands)

Alberta's Top 50 Exports (Excluding HS 01, 27, 97-99) 2002-2005 Average

Rank	HS Code	Description	2002	2003	2004	2005	2002-2005 Average
1	020130	Beef, boneless, fresh or chilled	\$755.7	\$634.5	\$1,088.2	\$1,048.7	\$881.8
2	390190	Ethylene polymers	\$368.8	\$616.9	\$955.8	\$1,241.6	\$795.7
3	290531	Ethylene glycol	\$368.0	\$463.0	\$862.4	\$983.6	\$669.3
4	100190	Wheat and meslin	\$386.5	\$364.0	\$640.5	\$562.7	\$488.4
5	440710	Softwood lumber	\$419.4	\$417.5	\$564.2	\$504.8	\$476.5
6	390120	Polyethylene, s.g. > 0.94	\$133.6	\$315.2	\$500.5	\$716.3	\$416.4
7	470321	Chemical woodpulp, coniferous	\$348.4	\$358.3	\$403.6	\$432.2	\$385.6
8	290250	Styrene	\$322.4	\$302.5	\$349.1	\$411.4	\$346.3
9	470329	Chemical woodpulp, non-coniferous	\$268.1	\$294.7	\$333.4	\$389.4	\$321.4
10	750210	Nickel, unwrought, unalloyed	\$163.3	\$276.9	\$401.3	\$429.6	\$317.8
11	441021	Oriented standboard, unworked	\$167.9	\$224.8	\$454.0	\$396.2	\$310.7
12	120510	Canola seeds, low erucic acid	\$249.5	\$238.0	\$340.6	\$402.8	\$307.7
13	852990	Parts for radio transmission/reception equipment	\$180.3	\$209.8	\$282.8	\$287.0	\$240.0
14	852520	Radio transmission/reception equipment	\$435.1	\$200.3	\$145.0	\$165.9	\$236.6
15	310210	Urea	\$173.6	\$158.2	\$214.9	\$304.7	\$212.9
16	250300	Sulphur	\$94.1	\$135.7	\$196.3	\$360.8	\$196.7
17	470500	Semi-chemical woodpulp	\$182.1	\$198.3	\$212.3	\$168.0	\$190.2
18	441029	Oriented strandboard, other	\$78.6	\$192.5	\$264.2	\$217.5	\$188.2
19	281410	Anhydrous ammonia	\$90.6	\$143.1	\$192.6	\$293.3	\$179.9
20	390110	Polyethylene, s.g. < 0.94	\$114.2	\$141.9	\$172.2	\$243.6	\$168.0
21	843143	Parts for boring/sinking machinery	\$161.2	\$139.2	\$158.9	\$207.2	\$166.6
22	851790	Telephone equipment parts	\$169.6	\$148.9	\$129.7	\$132.3	\$145.1
23	100110	Durum wheat	\$110.3	\$171.1	\$161.0	\$125.3	\$141.9
24	200410	Potatoes, frozen prepared	\$103.3	\$98.7	\$170.6	\$163.7	\$134.1
25	290110	Acyclic hydrocarbons, saturated	\$20.9	\$133.4	\$148.2	\$212.4	\$128.7
26	841121	Turbo-propellers < 1,100 kw	\$96.3	\$70.0	\$125.2	\$186.8	\$119.6
27	020329	Pork, frozen	\$55.9	\$110.8	\$116.6	\$171.3	\$113.6
28	810520	Cobalt, unwrought/mattes	\$51.5	\$76.5	\$181.7	\$129.6	\$109.8
29	480100	Newsprint, in rolls or sheets	\$106.6	\$82.2	\$100.7	\$102.0	\$97.9
30	851730	Telephone switching apparatus	\$166.7	\$99.1	\$52.7	\$47.1	\$91.4
31	390130	Ethylene -vinyl acetate copolymers	\$67.8	\$82.7	\$88.9	\$108.0	\$86.9
32	230641	Canola oilcake, low erucic acid	\$46.4	\$90.5	\$113.7	\$93.4	\$86.0
33	020319	Pork, fresh or chilled, other	\$43.4	\$46.2	\$105.2	\$142.5	\$84.3
34	901580	Surveying/geophysical instruments	\$65.1	\$53.0	\$90.2	\$126.1	\$83.6
35	151411	Canola oil, low erucic acid, crude	\$10.8	\$5.7	\$157.6	\$156.6	\$82.7
36	870423	Motor vehicles for transport of goods	\$116.2	\$86.9	\$49.1	\$70.6	\$80.7
37	290511	Methanol	\$42.2	\$77.1	\$96.1	\$105.0	\$80.1
38	110710	Malt, not roasted	\$75.8	\$76.7	\$81.3	\$77.9	\$77.9
39	848180	Taps/ cocks/valves	\$52.5	\$65.1	\$78.3	\$101.4	\$74.3

Rank	HS Code	Description	2002	2003	2004	2005	2002-2005 Average
40	550200	Artificial filament tow	\$90.4	\$83.7	\$83.7	\$37.1	\$73.7
41	851719	Telephone sets	\$84.0	\$96.1	\$52.8	\$49.2	\$70.5
42	841480	Air pumps/compressors/fans	\$54.3	\$62.0	\$82.9	\$83.0	\$70.5
43	100300	Barley	\$44.0	\$47.6	\$94.3	\$93.3	\$69.8
44	121490	Animal fodder	\$61.6	\$53.0	\$74.6	\$80.2	\$67.4
45	841290	Misc. engine and motor parts	\$55.2	\$69.1	\$63.8	\$81.2	\$67.3
46	940330	Office furniture, wood	\$87.8	\$85.6	\$58.7	\$36.5	\$67.1
47	410150	Whole cow hides, untanned, preserved	\$53.7	\$60.7	\$52.2	\$90.5	\$64.3
48	847989	Misc. machinery	\$46.0	\$48.7	\$76.4	\$67.4	\$59.6
49	843049	Boring/sinking machinery, not self-propelled	\$51.4	\$41.4	\$33.6	\$108.8	\$58.8
50	290129	Acyclic hydrocarbons, unsaturated	\$46.5	\$16.9	\$54.7	\$101.3	\$54.8
Alberta's Top 50 Exports (Excluding HS 01, 27, 97-99)			\$7,537.63	\$8,264.63	\$11,507.49	\$12,847.68	\$10,039.36
Share of Global Exports			23.9%	20.1%	22.0%	19.1%	20.9%
Alberta's Total Global Exports			\$31,568.5	\$41,119.3	\$52,363.0	\$67,381.2	\$48,108.0

Appendix B: Alberta's Top 50 Non-FTA Markets (\$US Thousands)

Rank	Country	2002-2005 Average	Product Count
1	China	\$990,323.79	39
2	Japan	\$747,926.51	39
3	European Union (EU 27)	\$569,257.43	42
4	Republic of Korea	\$287,954.30	38
5	Taiwan, Province of China	\$134,491.44	32
6	Singapore	\$72,019.01	29
7	Indonesia	\$71,906.64	27
8	Australia	\$58,963.73	27
9	Hong Kong (SARC)	\$57,706.99	30
10	Algeria	\$42,111.95	12
11	Brazil	\$40,933.45	23
12	Venezuela	\$39,130.17	20
13	Philippines	\$35,001.28	26
14	United Arab Emirates	\$31,699.91	22
15	Malaysia	\$30,841.53	24
16	Cuba	\$28,162.02	25
17	Colombia	\$26,264.09	21
18	Thailand	\$22,462.96	28
19	Morocco	\$22,309.62	10
20	South Africa	\$21,116.39	22
21	Ecuador	\$20,051.17	18
22	Yemen	\$19,954.20	12
23	Switzerland	\$19,275.44	19
24	Saudi Arabia	\$19,057.09	19
25	Russian Federation	\$17,795.95	23
26	Pakistan	\$16,392.08	15
27	Peru	\$16,271.58	17
28	Iran (Islamic Republic of)	\$16,004.49	12
29	Guatemala	\$13,730.53	20
30	New Zealand	\$13,555.94	20
31	Nigeria	\$11,565.01	14
32	Sudan	\$11,457.49	8
33	India	\$11,299.47	22
34	Sri Lanka	\$10,163.57	3
35	Viet Nam	\$10,077.03	22
36	Jamaica	\$9,953.83	16
37	Ghana	\$8,878.76	7
38	Tunisia	\$8,639.75	13
39	Norway	\$8,628.88	13
40	Bangladesh	\$8,489.30	12
41	Libya	\$7,725.32	12
42	Kazakhstan	\$7,507.03	12
43	Egypt	\$4,887.70	14
44	Kuwait	\$4,679.73	16
45	Democratic People's Republic of Korea	\$4,670.22	8
46	Turkey	\$4,579.09	16
47	Oman	\$4,107.98	13
48	Trinidad & Tobago	\$2,913.39	18
49	Argentina	\$2,762.99	17
50	Cameroon	\$2,713.43	5

Appendix C: Regional Free-Trade Negotiation Matrix

		Top 5 Alberta Markets								
		Algeria	Argentina	Australia	Bangladesh	Brazil	China	Cuba	EU 27	Guatemala
Top 5 Global Exporters	Argentina	0	0	0	0	0	0	0	1	0
	Australia	0	0	0	0	0	1	0	0	0
	Brazil	0	0	0	0	0	0	0	1	0
	Chile	0	0	1	0	0	1	0	0	0
	China	0	0	1	0	0	0	0	0	0
	Cuba	0	0	0	0	0	0	0	0	0
	Egypt	0	0	0	0	0	0	0	1	0
	Equatorial Guinea	0	0	0	0	0	0	0	0	0
	European Union (EU 27)	1	1	0	0	1	0	0	0	1
	Hong Kong (SARC)	0	0	0	0	0	0	0	0	0
	India	0	0	0	1	0	0	0	1	0
	Indonesia	0	0	1	0	0	1	0	1	0
	Israel	0	1	0	0	1	0	0	0	0
	Japan	0	0	1	0	0	0	0	0	0
	Kuwait	0	0	1	0	0	1	0	1	0
	Malaysia	0	0	1	0	0	1	0	1	0
	Mexico	0	0	0	0	0	0	0	0	0
	New Zealand	0	0	0	0	0	1	0	0	0
	Norway	0	0	0	0	0	0	0	0	0
	Paraguay	0	0	0	0	0	0	0	1	0
	Qatar	0	0	1	0	0	1	0	1	0
	Republic of Korea	0	0	0	0	0	0	0	1	0
	Russian Federation	0	0	0	0	0	0	0	0	0
	Saudi Arabia	0	0	1	0	0	1	0	1	0
	Singapore	0	0	1	0	0	1	0	1	0
	South Africa	0	1	0	0	1	1	0	0	0
	Switzerland	0	0	0	0	0	0	0	0	0
	Taiwan, Province of China	0	0	0	0	0	0	0	0	1
	Thailand	0	0	1	0	0	1	0	1	0
	Trinidad and Tobago	0	0	0	0	0	0	1	0	0
Ukraine	0	0	0	0	0	0	0	1	0	
United Arab Emirates	0	0	1	0	0	1	0	1	0	
United States of America	0	0	0	0	0	0	0	0	1	
Uruguay	0	0	0	0	0	0	0	1	0	

Top 5 Alberta Markets

	Hong Kong	Iceland	India	Indonesia	Iran	Japan	Kazakhstan	Kuwait
Argentina	0	0	0	0	0	0	0	0
Australia	0	0	0	1	0	1	0	1
Brazil	0	0	0	0	0	0	0	0
Chile	0	0	0	0	0	1	0	0
China	0	1	0	1	0	0	0	1
Cuba	0	0	0	0	0	0	0	0
Egypt	0	1	0	0	0	0	0	0
Equatorial Guinea	0	0	0	0	0	0	0	0
European Union (EU 27)	0	0	1	1	0	0	0	1
Hong Kong (SARC)	0	0	0	0	0	0	0	0
India	0	0	0	1	0	1	0	1
Indonesia	0	0	1	0	0	1	0	0
Israel	0	0	0	0	0	0	0	0
Japan	0	0	1	1	0	0	0	1
Kuwait	0	1	1	0	0	1	0	0
Malaysia	0	0	1	0	0	1	0	0
Mexico	0	0	0	0	0	1	0	0
New Zealand	0	0	0	1	0	0	0	1
Norway	0	0	0	0	0	0	0	1
Paraguay	0	0	0	0	0	0	0	0
Qatar	0	1	1	0	0	1	0	0
Republic of Korea	0	1	1	1	0	1	0	0
Russian Federation	0	0	0	0	0	0	0	0
Saudi Arabia	0	1	1	0	0	1	0	0
Singapore	0	0	1	0	0	0	0	1
South Africa	0	1	0	0	0	0	0	1
Switzerland	0	0	0	0	0	1	0	1
Taiwan, Province of China	0	0	0	0	0	0	0	0
Thailand	0	1	1	0	0	1	0	0
Trinidad and Tobago	0	0	0	0	0	0	0	0
Ukraine	0	0	0	0	0	0	0	0
United Arab Emirates	0	1	1	0	0	1	0	0
United States of America	0	0	0	0	0	0	0	0
Uruguay	0	0	0	0	0	0	0	0

Top 5 Global Exporters

Top 5 Alberta Markets

	Lebanon	Libya	Macau	Malaysia	Morocco	New Zealand	Norway	Pakistan
Argentina	0	0	0	0	0	0	0	0
Australia	0	0		1	0	0	0	0
Brazil	0	0	0	0	0	0	0	0
Chile	0	0	0	1	0	0	0	0
China	0	0	0	1	0	1	0	1
Cuba	0	0	0	0	0	0	0	0
Egypt	0	0	0	0	0	0	1	1
Equatorial Guinea	0	0	0	0	0	0	0	0
European Union (EU 27)	1	0	0	1	1	0	0	0
Hong Kong (SARC)	0	0	0	0	0	0	0	0
India	0	0	0	1	0	0	0	0
Indonesia	0	0	0	0	0	1	0	1
Israel	0	0	0	0	0	0	0	0
Japan	0	0	0	1		0	0	0
Kuwait	0	0	0	0	0	1	1	0
Malaysia	0	0	0	0	0	1	0	1
Mexico	0	0	0	0	0	0	0	0
New Zealand	0	0	0	1	0	0	0	0
Norway	1	0	0	0	0	0	0	0
Paraguay	0	0	0	0	0	0	0	0
Qatar	0	0	0	0	0	1	1	0
Republic of Korea	0	0	0	1	0	0	1	0
Russian Federation	0	0	0	0	0	0	0	1
Saudi Arabia	0	0	0	0	0	1	1	0
Singapore	0	0	0	0	0	1	0	1
South Africa	0	0	0	0	0	0	1	0
Switzerland	1	0	0	0	0	0	0	0
Taiwan, Province of China	0	0	0	0	0	0	0	0
Thailand	0	0	0	0	0	1	1	1
Trinidad and Tobago	0	0	0	0	0	0	0	0
Ukraine	0	0	0	0	0	0	0	0
United Arab Emirates	0	0	0	0	0	1	1	0
United States of America	0	0	0	1	1	0	0	0
Uruguay	0	0	0	0	0	0	0	0

Top 5 Global Exporters

Top 5 Alberta Markets

	Philippines	Republic of Korea	Russian Federation	Saudi Arabia	Singapore	South Africa	Switzerland
Argentina	0		0	0	0	1	0
Australia	1	0	0	1	1	0	0
Brazil	0	0	0	0	0	1	0
Chile	0	0	0	0	0	0	0
China	1	0	0	1	1	1	0
Cuba	0	0	0	0	0	0	0
Egypt	0	0	1	0	1	0	1
Equatorial Guinea	0	0	0	0	0	0	0
European Union (EU 27)	1	1	0	1	1	0	0
Hong Kong (SARC)	0	0	0	0	0	0	0
India	1	1	0	1	1	0	0
Indonesia	0	1	0	0	0	0	0
Israel	0	0	0	0	0	0	0
Japan	1	1	0	1	1	0	1
Kuwait	0	0	0	0	1	1	1
Malaysia	0	1	0	0	0	0	0
Mexico	0	0	0	0	1	0	0
New Zealand	1	0	0	1	1	0	0
Norway	0	1	0	1	0	1	0
Paraguay	0	0	0	0	0	0	0
Qatar	0	0	0	0	1	1	1
Republic of Korea	1	0	0	0	1	0	1
Russian Federation	0	0	0	0	0	0	0
Saudi Arabia	0	0	0	0	1	0	1
Singapore	0	1	0	1	0	0	0
South Africa	0	0	0	0	0	0	1
Switzerland	0	1	0	1	0	1	0
Taiwan, Province of China	0	0	0	0	0	0	0
Thailand	0	0	0	0	0	0	1
Trinidad and Tobago	0	0	0	0	0	0	0
Ukraine	0	0	0	0	1	0	0
United Arab Emirates	0	0	0	0	1	1	1
United States of America	0	1	0	0	1	1	0
Uruguay	0	0	0	0	0	1	0

Top 5 Global Exporters

Top 5 Alberta Markets

	Taiwan	Thailand	Trinidad & Tobago	United Arab Emirates	Venezuela	Yemen
Argentina	0	0	0	0	1	0
Australia	0	1	0	1	0	0
Brazil	0	0	0	0	1	0
Chile	0	1	0	0	0	0
China	0	1	0	1	0	0
Cuba	0	0	1	0	0	0
Egypt	0	0	0	0	0	0
Equatorial Guinea	0	0	0	0	0	0
European Union (EU 27)	0	1	0	1	0	0
Hong Kong (SARC)	0	0	0	0	0	0
India	0	1	0	1	0	0
Indonesia	0	0	0	0	0	0
Israel	0	0	0	0	0	0
Japan	0	1	0	1	0	0
Kuwait	0	0	0	0	0	1
Malaysia	0	0	0	0	0	0
Mexico	0	0	0	0	0	0
New Zealand	0	1	0	1	0	0
Norway	0	1	0	1	0	0
Paraguay	0	0	0	0	1	0
Qatar	0	0	0	0	0	1
Republic of Korea	0	1	0	0	0	0
Russian Federation	0	0	0	0	0	0
Saudi Arabia	0	0	0	0	0	1
Singapore	0	0	0	1	0	0
South Africa	0	0	0	1	0	0
Switzerland	0	1	0	1	0	0
Taiwan, Province of China	0	0	0	0	0	0
Thailand	0	0	0	0	0	0
Trinidad and Tobago	0	0	0	0	0	0
Ukraine	0	0	0	0	0	0
United Arab Emirates	0	0	0	0	0	1
United States of America	0	1	0	1	0	0
Uruguay	0	0	0	0	1	0

Top 5 Global Exporters

Appendix D. Product Tables
