

# Information Bulletin

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## **ALBERTA'S INTERNATIONAL MERCHANDISE TRADE: FOCUS ON FREE TRADE AGREEMENT PARTNERS**

*Rolf Mirus  
Nicholas Emter*

*Western Centre for Economic Research  
School of Business, University of Alberta  
Edmonton, Canada T6G 2R6  
[www.business.ualberta.ca/WCER](http://www.business.ualberta.ca/WCER)*



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## Table of Contents

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Executive Summary .....	1
Introduction .....	3
1. Canada, Western Canada and Alberta Total Exports: 1988-2009.....	5
1.2 Canada, Western Canada and Alberta: NAFTA and Non-NAFTA Exports.....	8
1.3 A Note on Western Canada's Imports: Supply Chains in the Making? .....	17
2. Alberta Top Exports.....	21
2.1 Alberta Export Composition: 1993 vs. 2009.....	21
2.2: Alberta's Top 20 Commodity and Manufactured Exports to NAFTA-Partners.....	25
3. Alberta's Exports to Mexico and other FTA-partners.....	28
3.1 Alberta's Exports to Mexico.....	28
3.2 Alberta Exports to Other FTA Partners .....	30
4. Alberta and the US Market.....	32
4.1 Alberta's Relative Position in the US Market.....	32
5. Diversification .....	34
5.1 Are Alberta's Exports Becoming More Diversified? .....	34
Conclusion .....	38



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## Executive Summary

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Data on provincial merchandise exports allow answers to several questions pertaining to the evolution of Alberta's exports relative to those of Canada as a whole and those of other Western provinces. In particular, this report focuses on export markets that are covered by free trade agreements such as the Canada-US Free Trade Agreement (CUSFTA), the North American Free Trade Agreement (NAFTA) and the agreements with Israel, Chile, and Costa Rica. For all these free trade partners, the data series now cover a sufficiently long period to enable an assessment of the effect of better access for Alberta's exporters. The main conclusions of the report are:

- During the period 1988-2009, Alberta's total merchandise exports rose by 434%, while the total of such exports for all of Canada increased by only 151%. Therefore, a significant shift to the West occurred in the source of Canadian exports of goods. Alberta's share in all of Canada's exports grew from under 10% in 1988, to just about 20% in 2009. That development owes much to Alberta's increased exports to the US, especially energy exports. As a result of this export success, Alberta became more susceptible to the US recession of 2009.
- Alberta's exports to the US and Mexico grew by 546% during that same period, much faster than exports to non-NAFTA destinations which increased by 172%. As a group, the four Western provinces expanded exports to non-NAFTA countries by a mere 84%. The implication is that Alberta was also the most successful exporter among the four Western provinces to non-NAFTA markets. As Alberta ships very limited quantities of energy products to non-NAFTA destinations, the implication is that the province became successful at non-energy exports.
- The BRIC countries absorbed 4% of Western Canada's exports in 1990. By 2009 that share had increased to 7%. The BRIC countries, to some extent, acted as a shock absorber during the recession of 2009.
- With a caveat regarding the reliability of data on provincial imports, the report shows that Western Canada has diminished its reliance on NAFTA imports from 64.7% in 1993 to 61.3% in 2009. In Alberta's case, with a stronger reservation about whether or not the data capture provincial imports accurately, the reduction in the share of NAFTA source countries was from 82.7% to 70.5%.
- Due to the US recession, Alberta's exports declined by 36% between 2008 and 2009. Among the key 2009 export products Mineral Fuels

(ranked number 1, -40%) and Organic Chemicals (number 6, -43%) suffered the most. The other top Alberta exports in 2009 also suffered declines: Machinery (number 2, -15%), Plastics (number 3, -26%), Cereals (number 4, -16%), and Oil Seeds and Fruits (number 5, -11%). Still, each of these export product groups, as well as Meat and Wood-Pulp, exceeded \$1 billion in 2009.

- Between pre-NAFTA year 1993 and the end of 2009 Alberta's total exports grew at a simple average growth rate of 12.6% in nominal value, far faster than nominal GDP.
- From NAFTA's inception in 1994 to the end of the recession year 2009 Machinery and Electrical Machinery exports from Alberta have grown by a surprisingly strong 681%, making these essentially manufactured products the second largest export product group after Mineral Fuels. The nature of these exports shows a strong relationship to the energy sector. This suggests the development of a cluster of energy related products that are successful internationally.
- Exports from Alberta to NAFTA-partner Mexico grew by a phenomenal 1145% since 1993, with Machinery, Plastics, and Organic Chemicals exhibiting the highest growth rates.
- Taken as a group, the FTA-partners Israel, Costa Rica, and Chile showed some growth as export destinations for Alberta's products, albeit uneven and from a small base.
- Between 1993 and 2009, Alberta doubled its relative position in the US market for manufactured products, and the province also increased its market share in commodity products. However, Alberta's energy exports to the US experienced a decline in US market share.
- In 2009 China, Japan, Mexico, and S. Korea were major Alberta's export destinations after the US.
- Alberta's exports have become more diversified between 1990 and 2009. Both the number of products exported and the number of markets reached show a steady increase over time. While the method of counting export markets and products is a simple one, it represents a first step of measuring the diversification of Alberta's economy. By relying on exports of Alberta's globally competitive products, this approach allows inferences about the development of a more diversified and hence more stable economy.

Looking back on 20 years of freer trade under the Canada-US Free Trade Agreement (CUSFTA) and the North American Free Trade Agreement (NAFTA), including a serious recent recession, what has been the development of Alberta's exports relative to those of the other Western provinces and Canada as a whole? Which product groups are experiencing success in export markets, and which export markets are showing strong growth or good potential? In particular, how have the free trade agreements that Canada has concluded affected Alberta's exports? And is Alberta's resource-based export sector succeeding in diversifying and extending its geographic reach and its range of products?

These are some of the questions this report will attempt to answer. Many of the answers are provided by the data on merchandise trade compiled by Statistics Canada from customs declarations and organized under the internationally streamlined Harmonized System (HS) into 'chapters' that are capable of reporting at various levels of detail or 'disaggregation'.<sup>1</sup> To answer questions about exports of specific products, 4-digit or higher degrees of disaggregation of the data are consulted.

Merchandise trade data are readily available. Records, particularly import records, have long been kept by governments when customs duties are collected upon entry. Trade in services, on the other hand, while only about one fourth the value of merchandise trade, is a fast growing part of international business relations. Unfortunately, data on services trade are not as readily available, and not at all available at the provincial level. Services are 'intangible' and often cross borders in cyberspace without a customs inspector getting a chance to assess and inspect them. As a consequence, researchers face greater obstacles in studying them, even at the national level. Here the focus is on provincial exports. It therefore necessitates that Alberta's services exports are left out of consideration.

This report will also say very little about imports. The data on imports by province are less reliable than those on exports. This is so because port capacity is concentrated at the East coast and the West coast. Where imported products are ultimately consumed or further

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<sup>1</sup> The first two digits of the HS-classification scheme represent the 'chapter', e.g. HS 02 refers to Meat, HS 27 refers to Mineral Fuels, and HS 44 refers to Wood. Trade can be studied at that level. Further digits delineate more detail, so that e.g. HS 4407 stands for Lumber >6mm in thickness and HS 0201 for Fresh or Chilled Beef.

processed cannot be reliably reported. We see, for instance, that disproportionately large amounts of imports are attributed to B.C., the suspicion being that when the final destination of the products in question cannot be clearly ascertained they are considered to end their trip in B.C.

This report begins with an overview of Alberta's total exports in the context of Western Canada and the country as a whole, then focuses increasingly on the products Alberta exports to the partners with which Canada maintains free trade agreements. In light of the considerable dependence of Alberta on the US market and on energy exports, we are also beginning to explore whether the province is succeeding in diversifying its export markets.



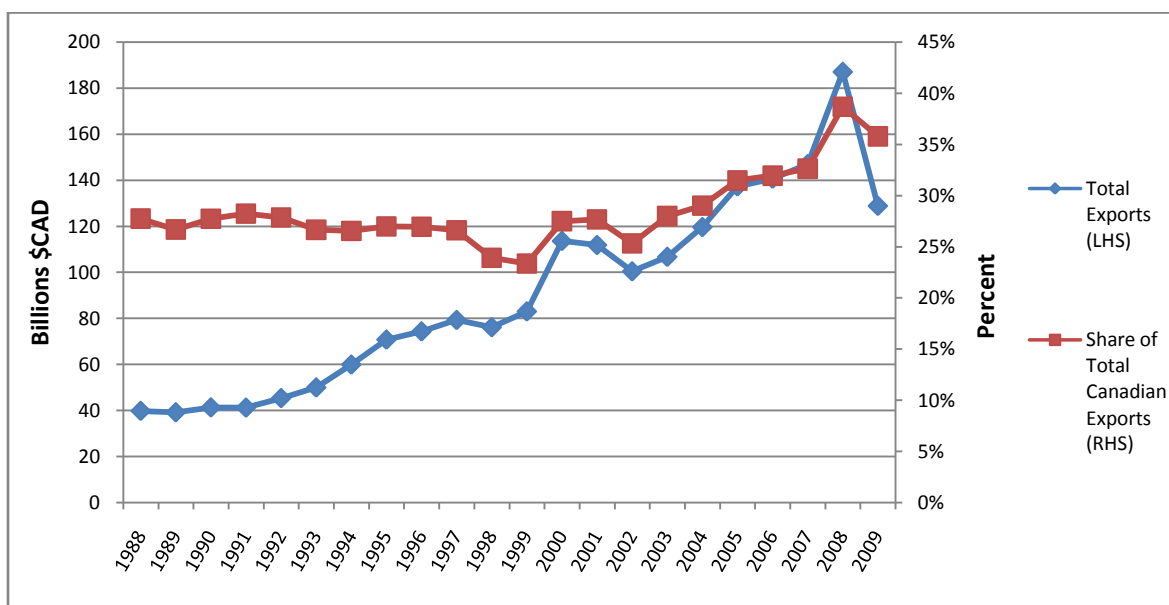
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## 1. Canada, Western Canada and Alberta Total Exports: 1988-2009

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The availability of two decades of data allows us to document the rise of Western Canada as a force in Canada's international trade. From just under 28% of exports in 1988, the share of the four Western provinces in the total climbed to nearly 36% in 2009. This rise occurred largely in the years since 1999 and is in good measure attributable to the rising value of energy and commodity products. Figure 1.1, below, illustrates also the volatility of Western Canada's exports, with steep rises in their value in 2000 and 2007, followed in 2009 by a steep fall. This volatility of the West's trade is also reflected in the spikes of the export shares of the West in 2000 and 2008.

**Fig 1.1: Western Canada Total Exports and National Share, 1988-2009**

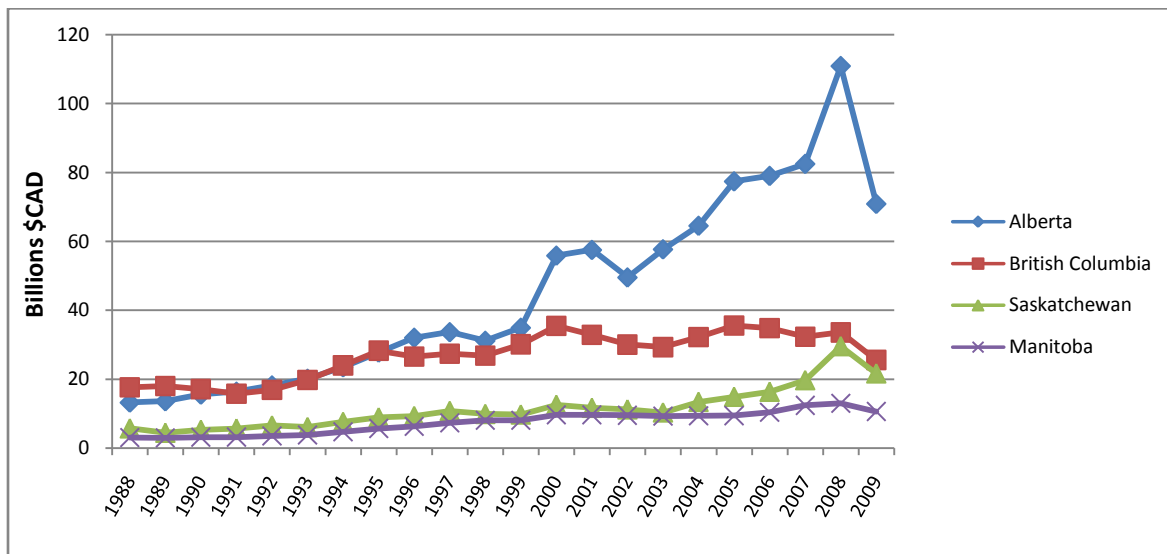


The provincial breakdown shown in Figure 1.2 and Table 1.1, below, make clear that Alberta is responsible for the largest part of the rise of the West's emergence as a force among Canada's exports. Saskatchewan, in particular, and also Manitoba show rising export values, but British Columbia actually experienced a decline in its exports. As all data are in nominal terms, readers can extrapolate that subtracting inflation from the export values would serve to underline B.C.'s shrinking role as an exporter.

The cyclical sensitivity of Western Canada's exports is also reflected in the steep decrease that resulted from the recession in 2009. Alberta experienced a 36% decline in exports and was the most adversely affected province. By contrast, Manitoba's exports dropped only 18%, with Canada as a whole suffering a decline of 26%. Even in that very bad year Alberta accounted for over 55% of the exports of the four Western-most provinces and nearly 20% of Canada's.

The period 1988-2009 saw Alberta's exports rise by 434% while total Canadian exports increased by 151%. There was perhaps not a 'stampede' but a significant shift to the West as regards the source of Canadian products to world markets, even if, as will become apparent shortly, much of Alberta's exports were energy products to the US.

**Fig 1.2: Western Canada Total Exports by Province, 1988-2009**



**Table 1.1: Western Canada and Canada Total Exports, 1988-2009, \$ billion**

<b>Year</b>	<b>Alberta</b>	<b>British Columbia</b>	<b>Saskat- chewan</b>	<b>Manitoba</b>	<b>Western Canada</b>	<b>Canada</b>
<b>1988</b>	13.3	17.7	5.8	3.1	39.8	143.5
<b>1989</b>	13.7	18.0	4.5	3.0	39.2	147.0
<b>1990</b>	15.6	17.2	5.4	3.2	41.3	149.0
<b>1991</b>	16.4	15.9	5.7	3.2	41.2	146.0
<b>1992</b>	18.2	16.9	6.6	3.6	45.4	162.8
<b>1993</b>	20.2	19.8	6.2	3.9	50.0	187.5
<b>1994</b>	23.5	24.0	7.6	4.8	60.0	225.7
<b>1995</b>	27.8	28.3	9.0	5.7	70.8	262.3
<b>1996</b>	32.1	26.6	9.4	6.3	74.4	275.8
<b>1997</b>	33.7	27.4	10.8	7.4	79.3	298.1
<b>1998</b>	31.2	26.9	9.9	8.1	76.2	318.4
<b>1999</b>	35.0	30.2	9.8	8.1	83.1	355.4
<b>2000</b>	55.9	35.5	12.6	9.7	113.7	413.2
<b>2001</b>	57.5	32.9	11.7	9.7	111.9	404.1
<b>2002</b>	49.5	30.1	11.3	9.6	100.5	396.4
<b>2003</b>	57.7	29.3	10.4	9.3	106.8	381.2
<b>2004</b>	64.5	32.3	13.5	9.4	119.7	412.3
<b>2005</b>	77.4	35.6	14.9	9.5	137.4	436.4
<b>2006</b>	79.0	34.9	16.4	10.4	140.7	440.4
<b>2007</b>	82.5	32.3	19.8	12.4	147.0	450.4
<b>2008</b>	110.9	33.6	29.6	13.0	187.1	483.6
<b>2009</b>	70.9	25.6	21.7	10.7	128.9	360.0
<b>Growth 1988-2009</b>	<b>434%</b>	<b>45%</b>	<b>276%</b>	<b>243%</b>	<b>224%</b>	<b>151%</b>
<b>Growth 2008-2009</b>	<b>-36%</b>	<b>-24%</b>	<b>-27%</b>	<b>-18%</b>	<b>-31%</b>	<b>-26%</b>

## **1.2 Canada, Western Canada and Alberta: NAFTA and Non-NAFTA Exports**

The substantial growth of Alberta's exports during the period under review was disproportionately due to gains in the NAFTA markets of Mexico and the US, with a combined growth of 546% to those two countries. The easier access to the US-market that resulted from the CUSFTA and its successor, the NAFTA, which added Mexico as the third 'amigo', provided a major boost to Alberta's energy exports and similarly stimulated the 565% growth of Saskatchewan's exports. And it helped that the US were experiencing a period of sustained expansion fuelled by a consumer boom while the Canadian dollar was weak.

By contrast, exports from Alberta to Non-NAFTA destinations grew by only 172% while all of Western Canada exports to Non-NAFTA countries expanded by a mere 84% during these same 22 years. Exports to NAFTA and Non-NAFTA destinations are shown in Tables 1.2 and 1.3, below.

**Table 1.2: Western Canada NAFTA Exports, 1988-2009, \$ billion**

<b>Year</b>	<b>Alberta</b>	<b>British Columbia</b>	<b>Saskatchewan</b>	<b>Manitoba</b>	<b>Western Canada</b>
<b>1988</b>	9.3	7.7	2.0	1.9	20.9
<b>1989</b>	10.1	7.5	2.2	2.0	21.8
<b>1990</b>	11.8	7.5	2.5	2.0	23.8
<b>1991</b>	12.2	7.2	2.4	2.0	23.8
<b>1992</b>	14.2	8.5	2.9	2.3	28.0
<b>1993</b>	16.5	10.8	3.5	2.7	33.5
<b>1994</b>	18.8	13.2	4.1	3.6	39.8
<b>1995</b>	21.7	14.4	4.5	4.3	44.9
<b>1996</b>	25.8	14.6	5.0	4.7	50.1
<b>1997</b>	27.3	15.4	5.8	5.5	54.0
<b>1998</b>	25.7	17.1	5.7	6.3	54.8
<b>1999</b>	29.6	20.3	5.8	6.7	62.4
<b>2000</b>	49.5	23.7	7.9	8.1	89.2
<b>2001</b>	51.6	23.1	7.1	7.8	89.7
<b>2002</b>	43.9	20.8	7.2	7.9	79.8
<b>2003</b>	52.0	19.6	6.8	7.3	85.7
<b>2004</b>	56.9	21.1	9.4	7.2	94.6
<b>2005</b>	69.2	23.2	10.7	7.3	110.3
<b>2006</b>	70.1	21.5	11.2	7.9	110.8
<b>2007</b>	71.6	19.5	12.4	8.8	112.3
<b>2008</b>	97.8	17.9	19.3	9.2	144.2
<b>2009</b>	60.0	13.1	13.5	7.4	94.0
<b>Growth 1988-2009</b>	546%	70%	565%	291%	350%
<b>Growth 2008-2009</b>	-39%	-27%	-30%	-20%	-35%

**Table 1.3: Western Canada Non-NAFTA Exports, 1988-2009, \$ billion**

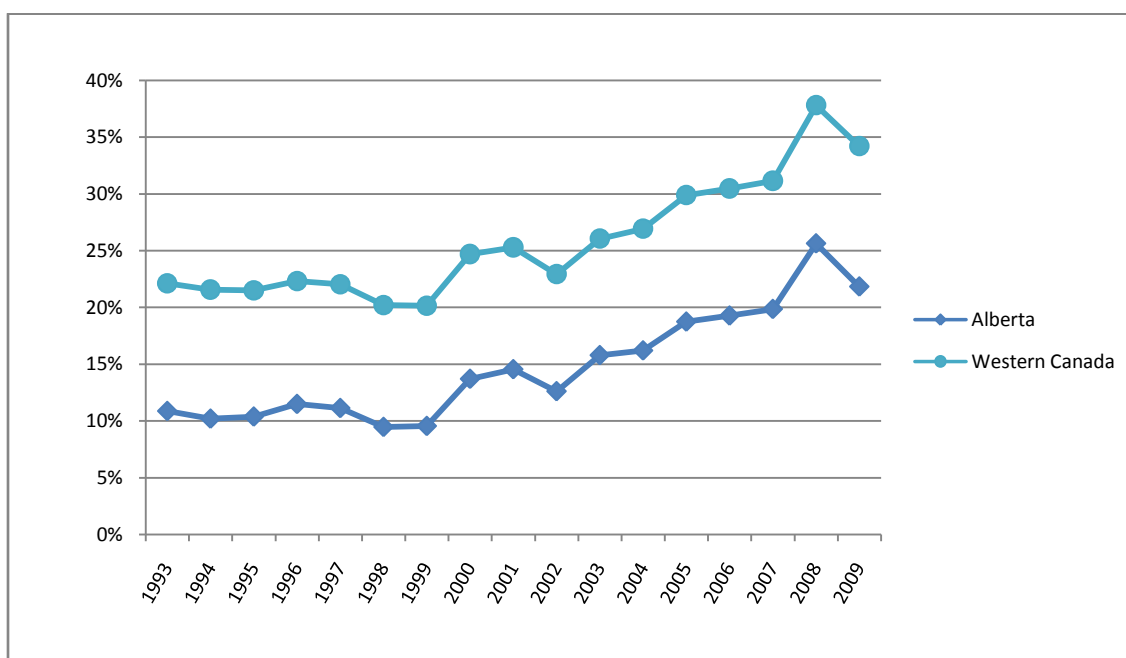
<b>Year</b>	<b>Alberta</b>	<b>British Columbia</b>	<b>Saskatchewan</b>	<b>Manitoba</b>	<b>Western Canada</b>
<b>1988</b>	4.0	10.0	3.8	1.2	19.0
<b>1989</b>	3.5	10.6	2.3	1.1	17.5
<b>1990</b>	3.8	9.7	2.9	1.2	17.6
<b>1991</b>	4.2	8.6	3.4	1.2	17.4
<b>1992</b>	4.0	8.4	3.7	1.3	17.4
<b>1993</b>	3.7	9.1	2.6	1.1	16.5
<b>1994</b>	4.7	10.8	3.5	1.2	20.2
<b>1995</b>	6.1	13.9	4.4	1.4	25.9
<b>1996</b>	6.3	12.0	4.3	1.6	24.3
<b>1997</b>	6.4	12.0	5.1	1.8	25.3
<b>1998</b>	5.5	9.8	4.3	1.9	21.4
<b>1999</b>	5.4	9.9	4.0	1.4	20.6
<b>2000</b>	6.3	11.8	4.7	1.6	24.4
<b>2001</b>	5.9	9.8	4.6	1.9	22.2
<b>2002</b>	5.7	9.3	4.1	1.7	20.7
<b>2003</b>	5.7	9.7	3.6	2.0	21.0
<b>2004</b>	7.6	11.2	4.1	2.2	25.1
<b>2005</b>	8.2	12.4	4.3	2.2	27.0
<b>2006</b>	8.9	13.3	5.2	2.5	29.9
<b>2007</b>	10.9	12.8	7.3	3.7	34.7
<b>2008</b>	13.1	15.7	10.3	3.8	42.9
<b>2009</b>	10.9	12.5	8.2	3.2	34.9
<b>Growth 1988-2009</b>	172%	25%	119%	168%	84%
<b>Growth 2008-2009</b>	-17%	-20%	-21%	-15%	-19%

The NAFTA markets proved to be 'high risk', inasmuch as the 2009 recession extracted a 39% decline in Alberta's exports. On the other hand, Alberta's shipments to Non-NAFTA destinations suffered only to the tune of 17% in that year. Of the four Western provinces, Alberta, with 85% of its exports destined to NAFTA partners in 2009, is by far the most dependent on that market. It is followed by Manitoba (70%), Saskatchewan (62%) and B.C. (51%). See Tables 1.3 and 1.4 and Figures 1.3 and 1.4, below.

**Table 1.4: Western Canada NAFTA Share of Total Exports, 1988-2009**

Year	Alberta	British Columbia	Saskatchewan	Manitoba	Western Canada
1988	70%	43%	35%	61%	52%
1989	74%	42%	49%	65%	56%
1990	76%	44%	46%	63%	57%
1991	74%	46%	42%	62%	58%
1992	78%	50%	44%	64%	62%
1993	82%	54%	57%	71%	67%
1994	80%	55%	54%	75%	66%
1995	78%	51%	51%	75%	63%
1996	80%	55%	54%	74%	67%
1997	81%	56%	53%	75%	68%
1998	82%	64%	57%	77%	72%
1999	85%	67%	59%	82%	75%
2000	89%	67%	63%	83%	79%
2001	90%	70%	61%	80%	80%
2002	89%	69%	64%	82%	79%
2003	90%	67%	66%	78%	80%
2004	88%	65%	70%	77%	79%
2005	89%	65%	71%	77%	80%
2006	89%	62%	68%	76%	79%
2007	87%	60%	63%	70%	76%
2008	88%	53%	65%	71%	77%
2009	85%	51%	62%	70%	73%
<b>Share Growth 1988-2009</b>	21%	18%	77%	14%	39%
<b>Share Growth 2008-2009</b>	-4%	-4%	-5%	-2%	-5%

**Figure 1.3: Western Canada and Alberta Share of Total Canadian Exports to NAFTA Trading Partners, 1993-2009**

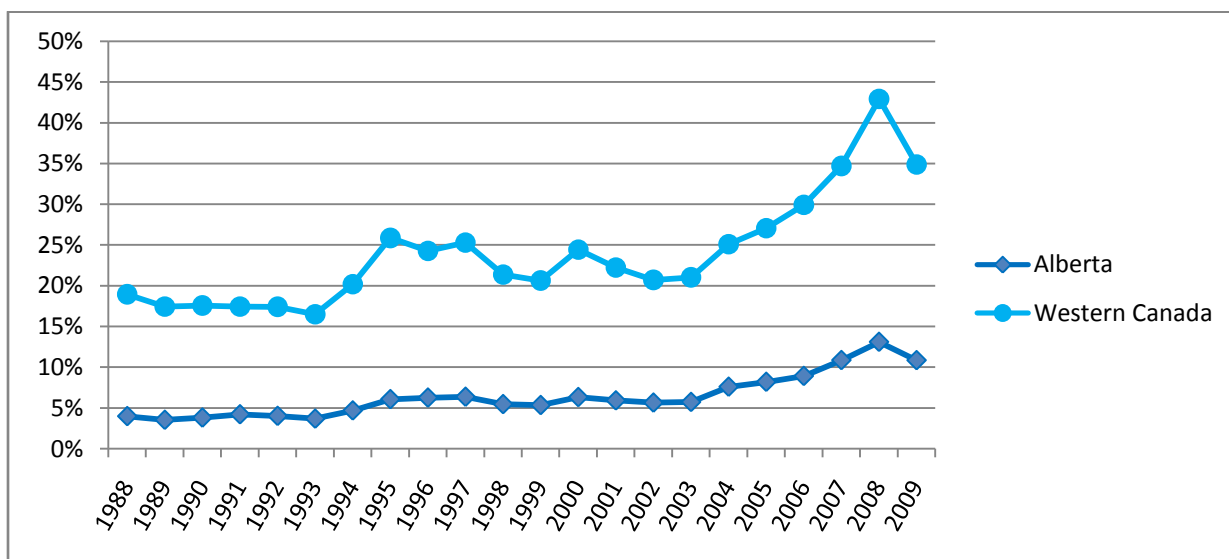




**Table 1.5: Provincial Share of Total Canadian Non-NAFTA Exports, 1988-2009**

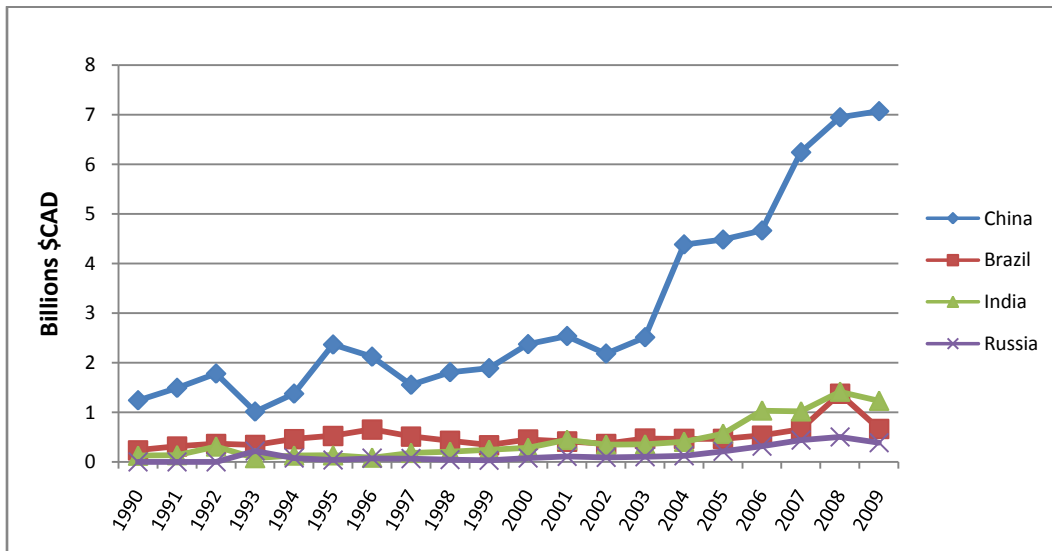
<b>Year</b>	<b>Alberta</b>	<b>British Columbia</b>	<b>Saskatchewan</b>	<b>Manitoba</b>	<b>Western Canada</b>
<b>1988</b>	9.3%	12.3%	4.0%	2.2%	27.8%
<b>1989</b>	9.3%	12.3%	3.1%	2.1%	26.7%
<b>1990</b>	10.5%	11.5%	3.6%	2.2%	27.7%
<b>1991</b>	11.2%	10.9%	3.9%	2.2%	28.3%
<b>1992</b>	11.2%	10.4%	4.1%	2.2%	27.9%
<b>1993</b>	10.8%	10.6%	3.3%	2.1%	26.7%
<b>1994</b>	10.4%	10.7%	3.4%	2.1%	26.6%
<b>1995</b>	10.6%	10.8%	3.4%	2.2%	27.0%
<b>1996</b>	11.6%	9.6%	3.4%	2.3%	27.0%
<b>1997</b>	11.3%	9.2%	3.6%	2.5%	26.6%
<b>1998</b>	9.8%	8.4%	3.1%	2.6%	23.9%
<b>1999</b>	9.8%	8.5%	2.8%	2.3%	23.4%
<b>2000</b>	13.5%	8.6%	3.1%	2.3%	27.5%
<b>2001</b>	14.2%	8.1%	2.9%	2.4%	27.7%
<b>2002</b>	12.5%	7.6%	2.8%	2.4%	25.3%
<b>2003</b>	15.1%	7.7%	2.7%	2.4%	28.0%
<b>2004</b>	15.7%	7.8%	3.3%	2.3%	29.0%
<b>2005</b>	17.7%	8.2%	3.4%	2.2%	31.5%
<b>2006</b>	17.9%	7.9%	3.7%	2.4%	32.0%
<b>2007</b>	18.3%	7.2%	4.4%	2.8%	32.6%
<b>2008</b>	22.9%	6.9%	6.1%	2.7%	38.7%
<b>2009</b>	19.7%	7.1%	6.0%	3.0%	35.8%
<b>Share Growth 1988-2009</b>	<b>113%</b>	<b>-42%</b>	<b>50%</b>	<b>37%</b>	<b>29%</b>
<b>Share Growth 2008-2009</b>	<b>-14%</b>	<b>2%</b>	<b>-1%</b>	<b>10%</b>	<b>-7%</b>

**Figure 1.4: Western Canada and Alberta Share of Total Canadian Exports to Non-NAFTA Trading Partners, 1988-2009**

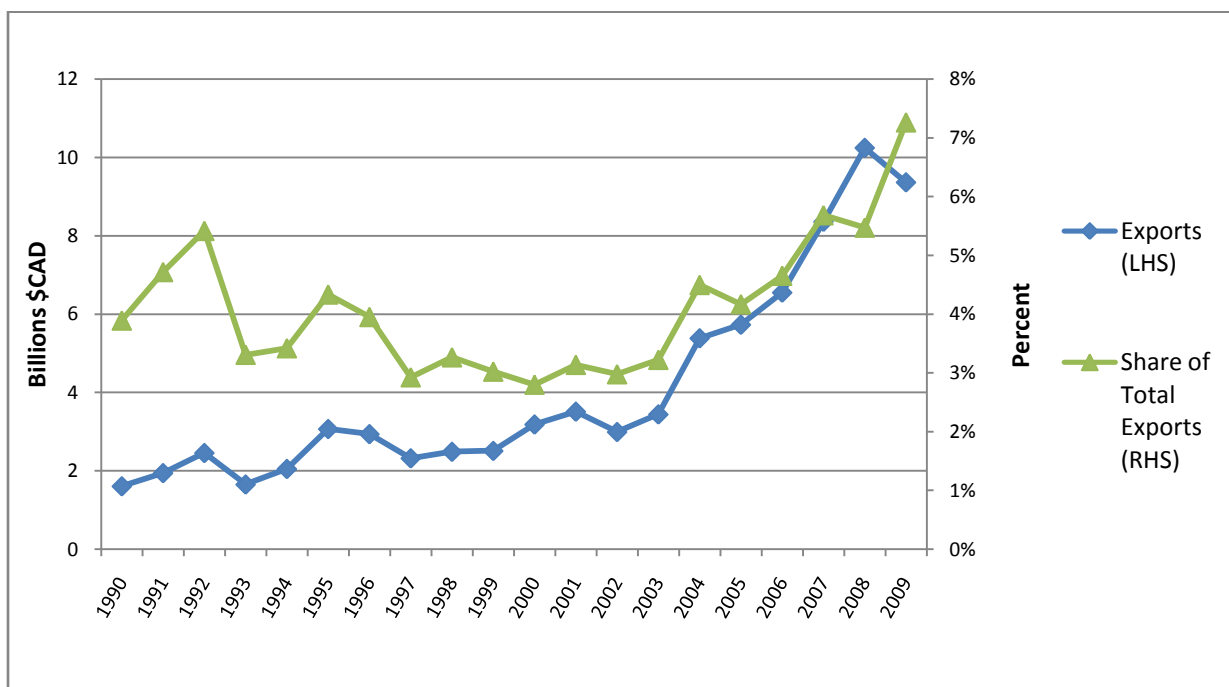


In light of the growing importance of the BRIC countries a closer look at Brazil, Russia, India, and China as destinations for Western Canada's exports may prove instructive. While exports to these nations have increased in both nominal value and share of total exports, as shown in Figures 1.5 and 1.6, below, the trend in exports is almost wholly determined by exports to China, which dwarf exports to the other BRIC countries. Exports to the BRICs from Alberta follow a similar trend, but exports to China but fell roughly 11% from 2008-2009. Saskatchewan was the only other Western province to experience a fall in exports to China over this period, but the decrease was minimal at 1.5%. Such trends are suggestive of these province's heavy dependence on the export of natural resources, and the subsequent volatility in trade such dependence brings. The relatively more diversified provinces of Manitoba and British Columbia experienced growth in exports to China over the period 2008-2009 of 4% and 22%, respectively. Exports to Brazil from all the Western provinces fell in 2009, most significantly in Alberta, which experienced a 60% decline. Nevertheless, while BRIC exports from Western Canada fell in 2009, the BRIC countries together acted as a mild shock absorber in the recession of 2009.

**Figure 1.5: Western Canada Export to BRIC Destinations, 1990-2009, \$ billion**



**Figure 1.6: Western Canada Share of Exports to BRICs**

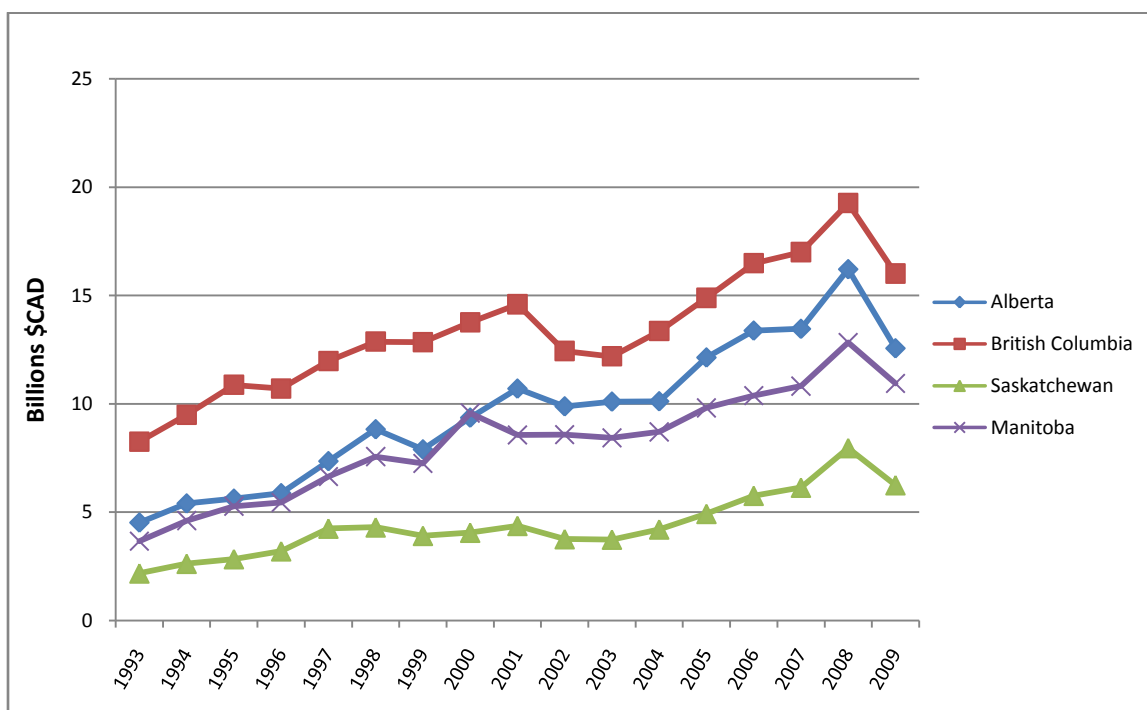


### 1.3 A Note on Western Canada's Imports: Supply Chains in the Making?

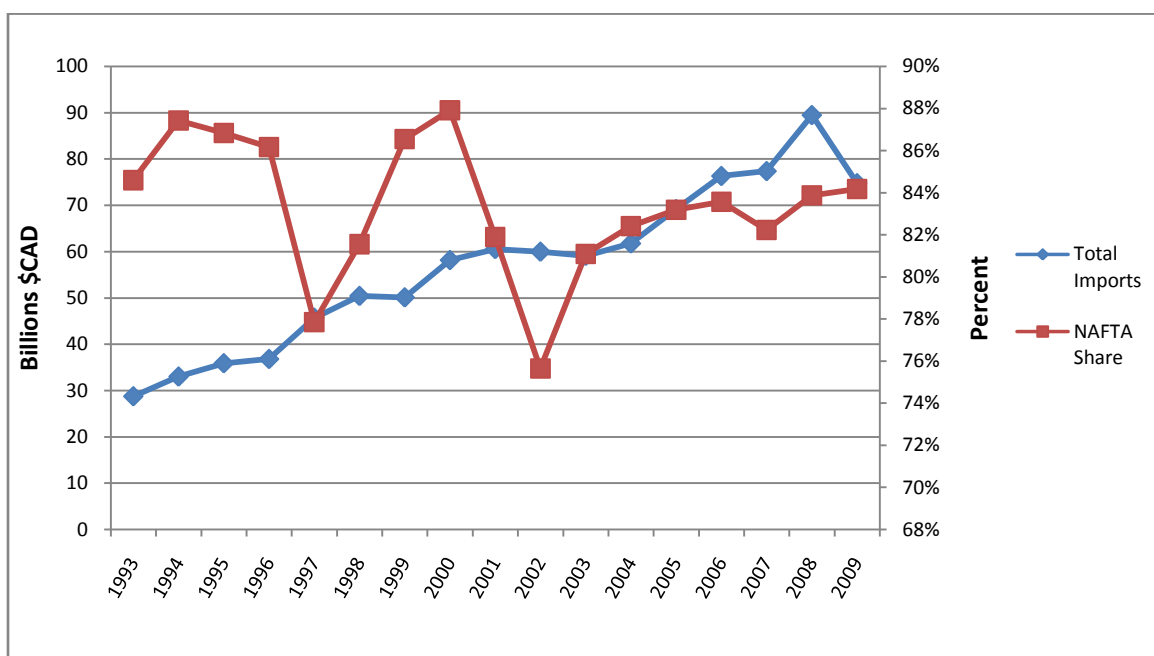
In light of our earlier observations regarding the difficulty of attributing the final destination of imports to a particular province, it is not surprising to see B.C. as the dominant import destination among the four Western provinces (Figure 1.7, below). Aggregating the imports of the four Western-most provinces should lessen the impact of imprecise attribution of imports to any particular province. On that basis, Figure 1.7 and Table 1.7, below, allow us to discern a trend since 2002 of increased reliance by Western Canada on imports from NAFTA partners, which might suggest the development of cross-border supply chains. Over the entire period from 1993 to 2009, the imports of Western provinces from NAFTA-partners, at 146%, have grown faster than those of Canada as a whole, at 73%. This suggests that Western Canada has benefitted substantially and more so than the country as a whole from the enhanced access to inputs and outputs of our NAFTA partners. On the other hand, it can also be observed that Canada, Western Canada, and each of the Western provinces have reduced their overall reliance on NAFTA-imports relative to imports from non-NAFTA sources. In Alberta's case, with the caveat that applies to data on provincial imports, the reliance decreased from 82.7% in 1993 to 70.5% at the end of the observation period (Table 1.7, below). Taken together these observations imply that the country and the Western provinces individually have diminished their dependence on NAFTA-imports. Put differently, they have diversified their sources of supply.

In the absence of a fully articulated model of the economy, it is difficult, however, to determine the causes of this shift and the role the exchange rate may have played in these developments.

**Fig 1.7: Western Canadian NAFTA Imports by Province 1993-2009**



**Fig 1.8: Western Canadian Total Imports and NAFTA Share, 1993-2009**



**Table 1.6: NAFTA Imports, 1993-2009, \$ billion**

<b>Year</b>	<b>Alberta</b>	<b>British Columbia</b>	<b>Saskatchewan</b>	<b>Manitoba</b>	<b>Western Canada</b>	<b>Canada</b>
<b>1993</b>	4.5	8.3	2.2	3.7	18.6	117.6
<b>1994</b>	5.4	9.5	2.6	4.6	22.2	141.9
<b>1995</b>	5.6	10.9	2.8	5.3	24.6	156.0
<b>1996</b>	5.9	10.7	3.2	5.4	25.3	163.0
<b>1997</b>	7.4	12.0	4.3	6.6	30.2	191.4
<b>1998</b>	8.8	12.9	4.3	7.6	33.6	211.3
<b>1999</b>	7.9	12.9	3.9	7.2	31.9	225.1
<b>2000</b>	9.4	13.8	4.1	9.6	36.8	241.7
<b>2001</b>	10.7	14.6	4.4	8.6	38.3	230.4
<b>2002</b>	9.9	12.4	3.8	8.6	34.7	231.2
<b>2003</b>	10.1	12.2	3.7	8.4	34.5	216.0
<b>2004</b>	10.1	13.4	4.2	8.7	36.4	222.4
<b>2005</b>	12.1	14.9	4.9	9.8	41.8	229.7
<b>2006</b>	13.4	16.5	5.8	10.4	46.0	233.9
<b>2007</b>	13.5	17.0	6.1	10.8	47.4	238.1
<b>2008</b>	16.2	19.3	8.0	12.8	56.3	245.2
<b>2009</b>	12.6	16.0	6.3	10.9	45.8	203.4
<b>Growth 1993-2009</b>	<b>178%</b>	<b>94%</b>	<b>186%</b>	<b>199%</b>	<b>146%</b>	<b>73%</b>
<b>Growth 2008-2009</b>	<b>-23%</b>	<b>-17%</b>	<b>-21%</b>	<b>-15%</b>	<b>-19%</b>	<b>-17%</b>

**Table 1.7: Western Canada NAFTA Import Shares, 1993-2009**

<b>Year</b>	<b>Alberta</b>	<b>British Columbia</b>	<b>Saskatchewan</b>	<b>Manitoba</b>	<b>Western Canada</b>	<b>Canada</b>
<b>1993</b>	82.7%	49.8%	90.8%	84.6%	64.7%	69.2%
<b>1994</b>	81.4%	52.2%	90.8%	87.4%	67.1%	70.0%
<b>1995</b>	79.6%	55.5%	89.8%	86.8%	68.6%	69.2%
<b>1996</b>	78.4%	55.2%	88.9%	86.2%	68.6%	70.1%
<b>1997</b>	79.6%	51.3%	92.7%	77.9%	66.2%	70.1%
<b>1998</b>	81.8%	50.0%	93.3%	81.6%	66.6%	70.8%
<b>1999</b>	76.5%	47.3%	92.3%	86.5%	63.7%	70.3%
<b>2000</b>	77.5%	44.7%	92.7%	87.9%	63.2%	67.7%
<b>2001</b>	78.6%	46.1%	90.9%	81.9%	63.2%	67.2%
<b>2002</b>	76.3%	39.5%	90.8%	75.7%	57.8%	66.3%
<b>2003</b>	76.3%	39.0%	90.2%	81.1%	58.4%	64.3%
<b>2004</b>	74.2%	40.6%	90.3%	82.4%	59.0%	62.5%
<b>2005</b>	73.8%	42.2%	88.1%	83.2%	60.4%	60.3%
<b>2006</b>	72.3%	42.4%	89.2%	83.6%	60.3%	58.9%
<b>2007</b>	72.7%	43.9%	88.2%	82.2%	61.3%	58.5%
<b>2008</b>	73.3%	44.8%	88.2%	83.9%	62.9%	56.5%
<b>2009</b>	70.5%	43.7%	86.4%	84.2%	61.3%	55.7%
<b>Share Growth 1993-2009</b>	<b>-15%</b>	<b>-12%</b>	<b>-5%</b>	<b>0%</b>	<b>-5%</b>	<b>-19%</b>
<b>Share Growth 2008-2009</b>	<b>-4%</b>	<b>-2%</b>	<b>-2%</b>	<b>0%</b>	<b>-3%</b>	<b>-1%</b>



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## **2. Alberta Top Exports**

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### **2.1 Alberta Export Composition: 1993 vs. 2009**

The focus of our review now shifts to the types of products Alberta exports. Have there been changes in the composition of our key exports? Which products are the front runners now, and why are others no longer winners? The observation period is narrowed to 1993-2009 because NAFTA started in 1994 and also because the trade data are more comprehensive and consistent for this period.

Little has changed at the top of the top-20 exports at the two-digit level of detail in the HS classification: Alberta's top exports continue to be Mineral Fuels, comprising slightly more than two thirds of total exports in 2009 versus about 64% in 1993. The cyclical vulnerability of these exports is amply illustrated by the 40% drop between 2008 and 2009. When the biggest export suffers a 40% drop in value in one year, the impact on the provincial GDP is obviously serious. Alberta's top exports for 1993 and 2009 are shown in Table 2.1, below.

**Table 2.1: Alberta's Top 20 Exports, \$ million**

HS	Description	1993		2009		Export Growth 1993- 2009	Export Growth 2008- 2009	Contribution to Total Export Growth 1993-2009	NAFTA Share	
		Export Value	Share of Total	Export Value	Share of Total				1993	2009
27	Mineral Fuels	12891.4	63.9%	48134.2	67.9%	273%	-40%	69.5%	94.9%	97.9%
84	Machinery	481.8	2.4%	3763.7	5.3%	681%	-15%	6.5%	35.2%	54.5%
39	Plastics	524.3	2.6%	2807.1	4.0%	435%	-26%	4.5%	80.0%	82.7%
10	Cereals	884.9	4.4%	2324.9	3.3%	163%	-16%	2.8%	17.3%	19.3%
12	Oil Seeds, Fruits	335.9	1.7%	1499.8	2.1%	346%	-11%	2.3%	20.0%	23.4%
29	Organic Chemicals	721.0	3.6%	1474.2	2.1%	104%	-43%	1.5%	54.4%	69.1%
2	Meat	443.8	2.2%	1402.9	2.0%	216%	-6%	1.9%	82.3%	65.2%
47	Woodpulp	412.9	2.0%	1185.8	1.7%	187%	-17%	1.5%	31.4%	49.6%
31	Fertilizers	218.8	1.1%	601.5	0.8%	175%	-27%	0.8%	92.7%	94.8%
15	Fats, Oils, Waxes	82.4	0.4%	587.9	0.8%	614%	1%	1.0%	89.4%	29.4%
75	Nickel and Products	56.8	0.3%	579.9	0.8%	921%	-26%	1.0%	3.2%	0.0%
1	Live Animals	551.8	2.7%	534.7	0.8%	-3%	-15%	0.0%	100.0%	98.4%
73	Iron and Steel Products	77.6	0.4%	505.5	0.7%	552%	-43%	0.8%	59.0%	79.7%
44	Wood	315.2	1.6%	504.0	0.7%	60%	-9%	0.4%	80.5%	89.3%
85	Electrical Machinery	372.7	1.8%	489.3	0.7%	31%	-35%	0.2%	70.9%	50.8%
90	Precision Instruments	136.9	0.7%	473.8	0.7%	246%	-27%	0.7%	38.6%	44.9%
28	Inorganic Chemicals	136.3	0.7%	363.9	0.5%	167%	-53%	0.4%	83.2%	91.6%
25	Salt, Sulfur, Earths, Stone	171.5	0.9%	320.2	0.5%	87%	-84%	0.3%	45.3%	28.4%
11	Milling Products	61.8	0.3%	291.9	0.4%	372%	-4%	0.5%	20.7%	39.6%
20	Preparations of Plants	1.6	0.0%	279.3	0.4%	16937%	10%	0.5%	42.2%	71.1%
<b>Top 20</b>		<b>18879.6</b>	<b>93.6%</b>	<b>68124.4</b>	<b>96.1%</b>	<b>261%</b>	<b>-36.5%</b>	<b>97.1%</b>	<b>82.5%</b>	<b>85.3%</b>
<b>Total Alberta</b>		<b>20168.0</b>	<b>100.0%</b>	<b>70899.7</b>	<b>100.0%</b>	<b>252%</b>	<b>-36.0%</b>	<b>100.0%</b>	<b>81.7%</b>	<b>84.7%</b>

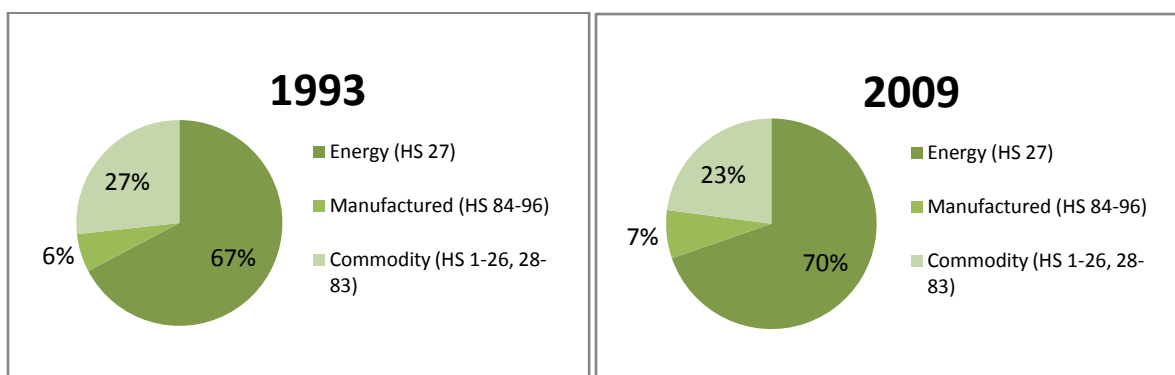
Cereals, Grains, Live Animals, and Plastics were the next largest export revenue earners in 1993. This ranking has changed as by 2009 machinery exports had become the number two export product, and Mineral Products Salt, Sulfur and Stone had pushed grains into sixth position among the leading exports. In contrast to Live Animals, exports of Meat Products had recovered from the effects of BSE-related border closures by 2009 to again assume a position among the top ten. Woodpulp continues to be a leading export product, with a 1.7% share of Alberta's exports. Table 2.1 provides further details. It is noteworthy that Machinery, Plastics, Nickel Products, Iron and Steel Products, and Fats and Oils have shown the highest growth rates among the major export products of the province. A degree of processing and manufacturing is common to these products and this suggests growing diversification of Alberta's export sector.

Overall, 2009 exports of the province were 3.5 times the 1993 level which represents a 12.6% (simple) average annual growth rate. Seen in this light the drop in total exports of 36% in 2008-2009 is a reminder of the harsh impact of the recession.

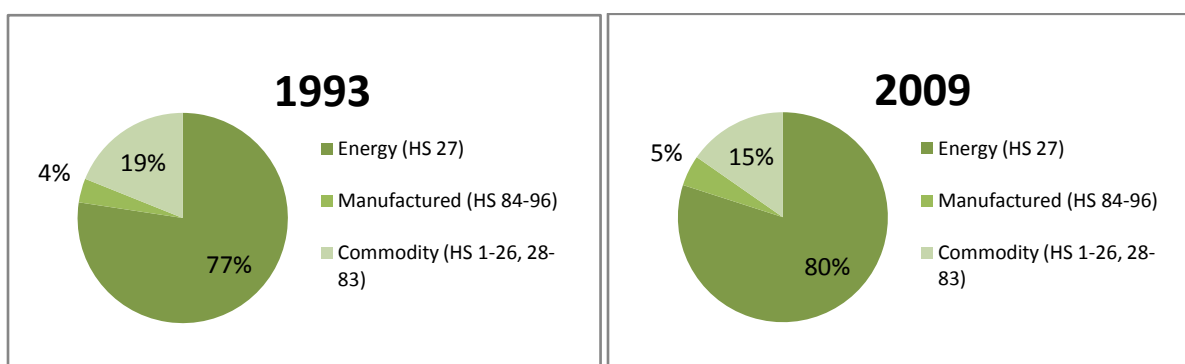
Furthermore, while Alberta's exports to NAFTA fell by 39%, non-NAFTA exports declined by 'only' 17%. The increased integration within North America showed its downside. While for many years Canada's privileged access and the strong performance of the US economy (and also that of Mexico) contributed to faster growth of Alberta's exports to NAFTA-markets, the 2009 decrease in exports was dampened in its overall impact by the smaller contraction in sales to non-NAFTA destinations.

Dividing Alberta's global exports into three product groups, we see energy exports growing slightly in importance (67% to 70%), similarly manufacturing products (6% to 7%), while commodity products fell (27% to 23%) during the period considered. The volatility of commodity product prices and their sensitivity to cyclical swings imply that the observed change in product group shares between 1993 and 2009 may not herald a trend. Figures 2.1 – 2.3, below, combined show that energy products are primarily destined to NAFTA partners. In fact, the existing pipeline systems send Alberta energy product almost exclusively to the US, while commodity exports are primarily destined to non-NAFTA countries.

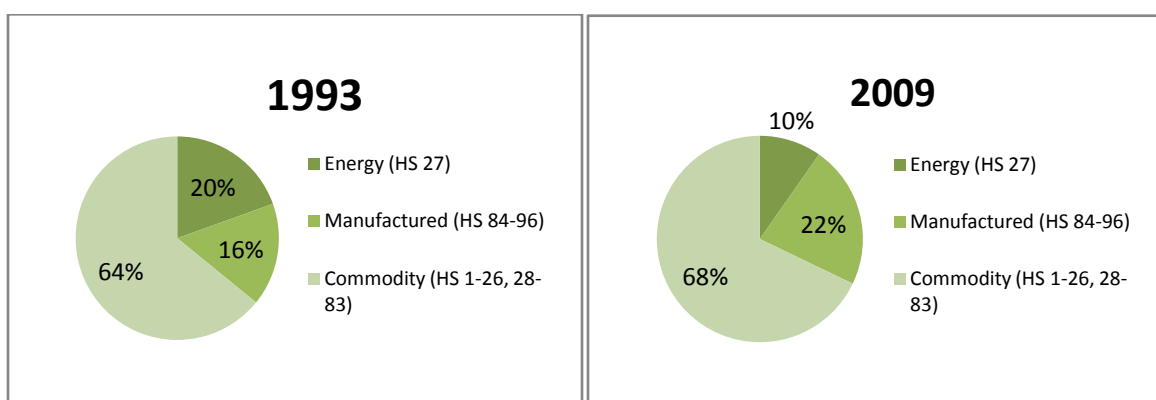
**Fig 2.1: Alberta World Export Composition, 1993 and 2009**



**Fig. 2.2 Alberta's NAFTA Export Composition**



**Fig. 2.3: Alberta's Non-NAFTA Export Composition**



## **2.2: Alberta's Top 20 Commodity and Manufactured Exports to NAFTA-Partners**

It is easier to get an idea of the types of non-energy products among the province's exports to NAFTA countries if focus is at the four digit level of detail. Therefore Table 2.2, below, shows the importance of Polyethylene, Beef, Fertilizer, and Woodpulp among commodity exports, and Table 2.3, below, highlights the emergence of Machinery Parts, various types of Pumps, Special Machinery, Gas Turbines, Engines and Motors, and Taps and Valves for Pipes as key exports to NAFTA destinations. As such Table 2.3, below, shows the emerging North American integration of the energy sector, with Canadian expertise in pipeline construction and maintenance as well as in specialized pumps being reflected in export success.

**Table 2.2: Alberta's Top 20 Commodity NAFTA Exports, 1993-2009, \$ million**

Rank	HS	Description	1993	1998	2003	2008	2009	Growth 1993-2009	Growth 2008- 2009
1	3901	Polyethylene	361.5	359.1	1446.4	2933.9	2104.4	482.2%	-28.3%
2	0201	Beef Fresh/Chilled	238.7	779.5	936.3	828.3	755.2	216.4%	-8.8%
3	3102	Nitrogeneuos Fertilizers	199.4	388.8	287.4	746.9	548.9	175.3%	-26.5%
4	4703	Chemical Woodpulp, Soda or Sulphate	72.3	501.1	425.1	705.7	538.2	644.4%	-23.7%
5	0102	Bovines	528.7	696.8	196.3	558.1	480.7	-9.1%	-13.9%
6	2905	Acyclic Alcohols	95.7	164.7	233.3	399.2	390.2	307.8%	-2.3%
7	1001	Wheat	72.2	153.1	58.6	434.9	351.1	386.3%	-19.3%
8	2901	Acyclic Hydrocarbons	0.3	77.6	207.4	555.7	330.4	108521.8%	-40.5%
9	2814	Ammonia	82.2	148.5	199.4	662.7	306.4	272.7%	-53.8%
10	1205	Rape of Colza Seeds	39.2	127.9	74.6	519.5	281.4	617.0%	-45.8%
11	4407	Lumber (>6mm thick)	89.3	601.1	515.3	315.5	245.6	174.9%	-22.2%
12	2902	Cyclic Hydrocarbons	0.9	124.8	427.3	536.0	212.2	24455.6%	-60.4%
13	2004	Frozen Vegetables	0.2	4.1	114.6	136.6	164.4	70847.1%	20.4%
14	7305	Iron/Steel Tubes and Pipes	0.3	0.7	8.9	251.9	146.1	54151.6%	-42.0%
15	2306	Residuals From Vegetable Fat Extraction	26.2	97.2	125.3	143.8	143.2	446.4%	-0.4%
Total Top 20 Commodity NAFTA Exports			1807.1	4224.7	5256.1	9728.7	6998.4	287.3%	-28.1%
Total Commodity NAFTA Exports			3649.0	7279.6	8877.6	14351.3	10093.2	176.6%	-29.7%
Total NAFTA Exports			16483.0	25720.6	51977.4	97762.7	60048.0	264.3%	-38.6%

### 2.3: Alberta's Top 20 Manufactured NAFTA Exports, \$million

Rank	HS	Description	1993	1998	2003	2008	2009	Growth 1993-2009	Growth 2008- 2009
1	8431	Parts for Machinery	28.0	158.8	138.2	658.1	540.6	1832.3%	-17.9%
2	8414	Air and Vacuum Pumps	6.2	52.7	54.2	147.5	215.2	3382.0%	45.8%
3	8413	Pumps and Liquid Elevators	11.6	58.9	97.1	256.4	190.2	1541.0%	-25.8%
4	8479	Special Machinery Appliances	4.0	35.2	63.7	212.2	154.7	3741.9%	-27.1%
5	8430	Machinery for Moving, Grading, Excavating	2.2	38.1	37.7	239.7	152.4	6902.2%	-36.4%
6	8411	Gas Turbines/Jet Propellers	6.4	21.4	81.8	168.8	151.9	2281.0%	-10.0%
7	8412	Engines and Motors	18.1	47.1	96.0	196.6	140.6	674.9%	-28.5%
8	8481	Taps and Valves for Pipes	10.5	47.2	95.8	163.0	119.3	1036.9%	-26.8%
9	9403	Furniture (other than medical)	58.3	268.0	242.0	155.1	93.0	59.5%	-40.0%
10	8421	Centrifuges	4.9	15.7	18.6	136.3	76.5	1449.2%	-43.9%
11	9015	Surveying Instruments	3.6	48.2	60.1	135.6	55.8	1443.5%	-58.8%
12	8428	Lifting, Handling, Loading Machinery	1.8	14.0	26.4	87.9	44.1	2298.8%	-49.8%
13	8419	Non-Domestic Dryers	9.2	25.7	50.6	58.6	36.9	301.6%	-37.1%
14	9027	Instruments for Physical/Chemical Analysis	6.0	17.5	43.1	71.1	36.6	508.8%	-48.5%
15	8537	Boards and Panels for Fuses/Circuit Breakers	0.6	26.8	23.7	46.0	33.9	5436.6%	-26.2%
16	8483	Transmission Shafts and Cranks	1.1	7.5	23.7	42.8	32.8	2929.1%	-23.3%
17	8425	Pulleys, Hoists, Winches, and Jacks	4.0	4.7	2.8	40.8	26.2	555.3%	-35.7%
18	9026	Instruments for Measuring Liquids/Gases	2.6	13.2	25.1	33.9	26.1	920.7%	-23.2%
19	8471	Computers and Peripherals	15.9	30.3	45.4	38.8	21.9	38.3%	-43.4%
20	8417	Industrial/Laboratory Furnaces and Ovens	0.0	0.2	1.1	8.6	8.1	205697.7%	-6.0%
<b>Total Top 20 Manufactured NAFTA Exports</b>			195.0	931.0	1227.1	2897.9	2156.9	1006.2%	-25.6%
<b>Total Manufactured NAFTA Exports</b>			599.9	2776.9	3010.8	3872.6	2829.7	371.7%	-26.9%
<b>Total NAFTA Exports</b>			16483.0	25720.6	51977.4	97762.7	60048.0	264.3%	-38.6%

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### **3. Alberta's Exports to Mexico and other FTA-partners**

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#### **3.1 Alberta's Exports to Mexico**

Since Alberta's exports to Mexico were included in NAFTA exports above, the data obscured the phenomenal growth of that market for the province's exporters. Table 3.1, below, shows the total exports to Mexico since inception of the NAFTA. In the 16 years of the NAFTA's existence, exports grew more than 11-fold and fell a mere 4% in 2009. Mexico has become a billion dollar market for Alberta, and while its growth has been somewhat uneven, there is definitely a positive trend over the entire horizon considered here.

The composition of Alberta's exports to Mexico, as shown in Table 3.2, below, brings no surprises. Alberta's strengths are reflected again: Machinery, Oil Seeds, Meat, Plastics, and Cereals head the list in terms of export value, each accounting for over \$100 million in 2009.



**Table 3.1: Alberta Exports to Mexico, 1993-2009, \$ million**

Year	Export Value
1993	85.4
1994	146.4
1995	176.9
1996	212.5
1997	224.3
1998	288.9
1999	250.1
2000	355.8
2001	484.1
2002	457.8
2003	383.1
2004	707.5
2005	547.0
2006	631.0
2007	771.5
2008	1112.3
2009	1063.3
<b>Growth 1990-2009</b>	<b>1145%</b>
<b>Growth 2008-2009</b>	<b>-4%</b>

**Table 3.2: Alberta's Top 10 Exports to Mexico, \$ million**

Rank	HS	Description	1993 Value	1998	2003	2008	2009 Value	Growth 2008-2009
1	84	Machinery	1.0	7.4	49.2	199.8	326.4	63.3%
2	12	Oil Seeds, Oleaginous Fruits	22.3	80.5	62.4	316.0	180.2	-43.0%
3	2	Meat	4.7	10.7	115.0	157.8	142.9	-9.4%
4	39	Plastics	0.1	8.1	19.6	110.2	117.2	6.3%
5	10	Cereal	23.4	56.5	48.6	85.6	102.9	20.2%
6	29	Organic Chemicals	0.0	0.0	23.4	36.1	37.4	3.4%
7	85	Electrical Machinery	6.2	78.5	11.5	25.4	23.2	-8.9%
8	87	Motor Vehicles	0.6	0.0	1.3	6.5	21.3	228.5%
9	47	Woodpulp	4.7	9.3	15.7	34.3	15.5	-54.9%
10	90	Precision Instruments	1.5	6.9	2.6	5.4	13.1	142.6%

### 3.2 Alberta Exports to Other FTA Partners

For a number of years Canada has also been a partner in three other free trade agreements, with Chile, Israel, and Costa Rica. Table 3.3 summarizes the export values for Alberta to these markets. Chile is the most important of the three, though in 2009 of only about a tenth of the value of Mexico's market. Chile exports have moved in fits and starts and in 2009 were back at the same nominal value as in 2000. Israel and Costa Rica similarly are a highly variable export destination for Alberta, with each being only one tenth or less the magnitude of Chile. Israel in 2009 was slightly less of a market than in 1993, while Costa Rica showed strong growth on balance, but mostly because in the base year, 1993, there were only very minimal exports. In 2009 this group of three free trade partners exhibited a 44% decline of Alberta's exports over the corresponding 2008 levels. The distance and size of these trade partners are such that no major impulses for Alberta's exports should be expected. On the other hand, the existence of trade agreements also suggests that foreign direct investment and technology transfer are facilitated between the partners, that trust and political relationships have been established, and that Alberta-based businesses can count on intangible benefits as a result.

Canada has continued to negotiate free trade agreements, so that in future developments of trade with new partners in Panama, Peru, the European Free Trade Area (EFTA), Jordan and Colombia will also be of special interest. As well, negotiations are under way with the European

Union (EU), S. Korea, Singapore, India, Ukraine, Dominican Republic, and Caribbean and Andean states.

**Table 3.3: Alberta Exports to Other FTA Partners, 1993-2009, \$ million**

Year	Chile	Israel	Costa Rica
1993	16.9	14.0	0.2
1994	44.2	16.2	4.0
1995	43.6	15.4	4.2
1996	72.2	12.4	7.2
1997	55.5	17.4	12.1
1998	32.7	27.9	7.7
1999	77.0	17.0	8.6
2000	115.8	14.5	11.2
2001	61.8	12.7	1.4
2002	38.4	5.7	1.3
2003	25.0	6.7	5.1
2004	43.3	34.5	7.7
2005	64.2	30.2	9.4
2006	64.4	29.0	7.8
2007	81.4	34.6	9.7
2008	150.4	84.4	12.6
2009	115.9	12.8	9.0
<b>Growth 1993-2009</b>	<b>584%</b>	<b>-8%</b>	<b>3942%</b>
<b>Growth 2008-2009</b>	<b>-23%</b>	<b>-85%</b>	<b>-29%</b>

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## 4. Alberta and the US Market

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### 4.1 Alberta's Relative Position in the US Market

One of the questions often posed is whether or not privileged access to the US market under the CUSFTA and NAFTA has enabled Alberta exporters to maintain or improve their relative position against the growing competition from emerging market countries and others that provide similar products. To answer this question we determined the market shares for Alberta's and Western Canada's top 25 exports (two-digit HS-level). Alberta's and Western Canada's exports that are among the top 25 products the US imports are summed in the numerator of our market share measure. The denominator is the sum of total US imports of three product categories, namely energy, manufactured products, and commodity products in 2009 value terms. The top 25 imports constituted 85.2% of all US imports, while the top 25 exports for Alberta, British Columbia, Saskatchewan, and Manitoba made up 98%, 88%, 99%, and 91%, respectively, of total provincial exports in 2009.

On that basis, Tables 4.1 and 4.2, below, summarize the results for Alberta and Western Canada, respectively. A comparison of 1993 with the last non-recession year, 2008, shows an interesting result. Alberta's energy exports, while much larger in 2008, constituted a smaller share of total US energy imports than in 1993. By contrast, the market shares in the US of Alberta's manufactured and commodity products (as defined here) have increased from 1993 levels. Given the relatively homogeneous nature of energy products and the fact that energy products cross the border with little difficulty, this is a very encouraging finding: Alberta's processed and manufactured products have made inroads in the US market, i.e. are competing successfully against other countries. Just possibly we observe here the effects of having gained preferential access under the CUSFTA and NAFTA.

As regards all of Western Canada, the results are somewhat less positive. Table 4.2, below, shows that in a similar comparison of 1993 with non-recession 2008 commodity products fare less well. While manufactured products gained market share, commodity-type products lost market share. This result is due to lower lumber exports from B.C. and related to the well-known softwood lumber troubles. While not shown in an additional table, it was ascertained that excluding wood exports from Western Canada, the market share of Western commodity products in the US actually increased from 2.02% to 2.27% between 1993 and 2009.

**Table 4.1: Alberta's Share of U.S. Import Market, 1993, 2008 and 2009**

<b>Category</b>	<b>1993</b>	<b>2008</b>	<b>2009</b>
<b>Energy</b>	17.01%	15.29%	15.26%
<b>Manufactured Goods</b>	0.16%	0.41%	0.32%
<b>Commodities</b>	0.74%	1.37%	1.04%

**Table 4.2 Western Canada's Share of U.S. Import Market, 1993, 2008 and 2009**

<b>Category</b>	<b>1993</b>	<b>2008</b>	<b>2009</b>
<b>Energy</b>	20.21%	18.51%	18.73%
<b>Manufactured Goods</b>	0.74%	0.94%	0.88%
<b>Commodities</b>	4.95%	3.08%	2.69%

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## 5. Diversification

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### 5.1 Are Alberta's Exports Becoming More Diversified?

In this final section, an attempt is made to examine evidence with respect to the diversification of Alberta's economy. A growing and diversifying economy is the goal of policy makers. Free trade agreements are concluded to provide access to each other's specialized and class-leading products (and skills). Successful growth, therefore, implies producing more export revenue from more markets and from more differentiated products.

The preliminary analysis undertaken here focuses on products that, with high degree of probability, belong to the manufacturing sector, i.e. HS-chapters 84 and 85, covering Machinery and Electrical Machinery exports. We had earlier referred to the significant growth in such exports, especially Machinery, as evidence of specialized expertise, probably related to developments in the energy sector. It is logical to ask whether the range of products successfully exported has increased. Then we address the question whether the number of markets to which these exports are shipped has expanded. To provide answers to these questions a screen was set, namely products at the four-digit level of detail that are shipped in amounts of at least \$1 million and \$10 million in constant purchasing power. To that end an export price deflator had to be constructed.<sup>2</sup> It is used to deflate nominal values into real terms.

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<sup>2</sup> In order to compare the real value of Alberta exports over time, it was necessary to remove the price effects, which, during inflationary periods, result in nominal export values that suggest a higher growth volume of trade than is actually the case. To this end, the nominal value of exports had to be deflated using an appropriate metric of price fluctuations. Here, four Canadian total commodity export price indexes were linked to create a single index that covered the period in question. Linking was required because Statistics Canada every five years updates the bundle of exports used to create the index. A conversion factor, equal to the new index value divided by the old index value for a given year, was used to deflate the old index and create a uniform price metric. This process was repeated to obtain a single index spanning the period. The resulting index was used to deflate the nominal value of exports. Inasmuch as national exports were relied upon, Alberta's exports have been deflated by an 'inappropriate' bundle. Thus, the results have to be reviewed with that caveat.

The four national indexes used are:

- (i) v175433 Canada; Price index (Index, 1986=100); Balance of payments basis; Paasche current weighted; Total, export commodity classes.
- (ii) v641751 Canada; Balance of payments basis; Price index (Index, 1992=100) basis; Paasche current weighted; Total, export commodity classes.
- (iii) v2000961 Canada; Balance of payments; Price index basis (Index, 1997=100); Paasche current weighted; Exports, total of all merchandise.
- (iv) v41596334 Canada; Balance of payments basis; Price index (index, 2002=100); Paasche current weighted; Exports, total of all merchandise.

Table 5.1, below, shows the results: the number of products at the HS-84-four-digit level of which Alberta exported at least \$ 1 million is found to have risen fairly consistently, and the number of such products which are exported in value greater than \$ 10 million has risen consistently between 1993 and 2009.

HS-85 at the four digit level covers a smaller total, but the results are similar in trend. At the very least, there are strong indications that Alberta's machinery and electrical machinery exports are not only growing, they are also covering a wider range of products. Alberta's exports of manufacturing products within HS-84 and HS-85 appear to have become more diverse. These results, however, could be affected by the occasional deletion of an HS category and its replacement by several new ones.

**TABLE 5.1: Number of 4-digit HS 84 and 85 Manufactured Exports from Alberta, 1990 to 2009**

HS 84	1990	1993	1998	2003	2008	2009
Greater than \$1 million	31	29	37	45	50	42
Greater than \$10 million	9	14	17	21	21	25
HS 85	1990	1993	1998	2003	2008	2009
Greater than \$1 million	17	19	29	31	29	28
Greater than \$10 million	5	4	14	14	15	11

Table 5.2, below, provides insight to our second question, are Alberta's exporters reaching a greater number of markets? Again, there is clear evidence that for HS-84 this is the case and for HS-85 there is, on balance, an upward trend. Alberta's major (in terms of value) exporters of manufactured products are indeed reaching significantly more markets in 2009 than in 1993. Taken together Tables 5.1 and 5.2 represent new evidence of the progress that Alberta's exporting sector has made since the major free trade agreements became effective in 1989 and 1995.

**TABLE 5.2: Number of Alberta Trading Partners to Which HS 84 and 85 Manufactured Exports Exceed the Following Thresholds, 1990 to 2009**

HS 84	1990	1993	1998	2003	2008	2009
Greater than \$1 million	21	35	49	63	79	79
Greater than \$10 million	5	11	16	25	37	40
HS 85	1990	1993	1998	2003	2008	2009
Greater than \$1 million	13	29	28	50	49	46
Greater than \$10 million	3	2	2	10	10	8

As a final check regarding the previous finding the number of trading partners was determined to which total exports exceeded a certain threshold in constant dollar terms. The findings are shown in Table 5.3, below.

**TABLE 5.3 Number of Alberta Trading Partners to Which Total Exports Exceed the Following, 1990 to 2009**

Total Exports	1990	1993	1998	2003	2008	2009
Greater than \$100 million	9	10	14	15	28	26
Greater than \$10 million	42	42	53	56	69	70
Greater than \$1 million	81	90	99	101	124	113

Again, while the recession year 2009 pours a dose of cold water over the results, it can be said that export market diversification has occurred during the roughly 20 years under study here. Alberta's exporters have developed a significant number of new markets. It is quite likely that the inception of the major North American free trade agreements in 1989 and 1995 has made a significant contribution to the development of the skills necessary to enter and succeed in a range of new markets.

Finally, we return to the question of the impact of the North American free trade agreements on Alberta's exports. Table 5.4 delivers two insights. First, until 2008 exports to the US grew faster than exports



to other destinations, with the result that 87.2% were destined for the US by that year. We see here the positive impact of the NAFTA. Second, the recession of 2009 leads to a decline of the US share of Alberta's exports which fell to 83.2%. The high dependency on that market also made Alberta exports more susceptible to a downturn of the US economy. Mexico's share among Alberta's export destinations diminished to 2008 before turning up marginally in 2009. China gained in relative importance in the recession year 2009. Japan showed consistent growth as a destination for Alberta's exports in 2008 and 2009 over the 1993 baseline and is the only country apart from the US to have increased its importance as an export destination for Alberta by 2008.

**TABLE 5.4: Alberta's Top Ten Export Destinations by Share and Value of Total Exports, 1993, 2008 and 2009, \$ billion**

Country	1993		2008		2009		Growth 1993-2008		Growth 2008-2009	
	Value	Share	Value	Share	Value	Share	Value	Share	Value	Share
United States	16.40	81.3%	96.65	87.2%	58.98	83.2%	489.4%	7.2%	-39%	-5%
China	1.18	5.9%	3.10	2.8%	2.77	3.9%	162.8%	-52.2%	-11%	40%
Japan	0.32	1.6%	2.04	1.8%	1.64	2.3%	538.8%	16.2%	-20%	26%
Mexico	0.29	1.4%	1.11	1.0%	1.06	1.5%	284.0%	-30.2%	-4%	49%
Korea, South	0.15	0.7%	0.53	0.5%	0.54	0.8%	254.4%	-35.5%	2%	60%
Netherlands	0.15	0.7%	0.49	0.4%	0.31	0.4%	236.6%	-38.8%	-38%	-3%
Australia	0.12	0.6%	0.45	0.4%	0.27	0.4%	268.7%	-32.9%	-39%	-5%
Russia	0.11	0.6%	0.36	0.3%	0.26	0.4%	216.0%	-42.5%	-28%	12%
Singapore	0.11	0.5%	0.33	0.3%	0.24	0.3%	208.2%	-43.9%	-27%	15%
Saudi Arabia	0.09	0.4%	0.27	0.2%	0.21	0.3%	212.3%	-43.2%	-20%	25%
Totals	18.91	93.8%	105.33	95.0%	66.29	93.5%	457.0%	1.3%	-37%	-2%

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## Conclusion

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The free trade agreements with the US and Mexico resulted in accelerated growth for Alberta's export industries. Better access to the US and Mexico is a likely cause of the much higher growth of exports to the NAFTA-partners than to non-NAFTA destinations. The observed increase in the market share of Alberta's manufacturers and commodity producers in the US is consistent with freer North American trade. This finding holds even after inclusion in the observation period the 2009 recession 09 which saw Alberta's exports to NAFTA-partners decline by almost 39% (Table 2.2).

The high growth rates of the BRIC countries helped dampen the impact of the US recession on Alberta's exports. Taken together, the free trade agreements with Israel, Chile, and Costa Rica show less dramatic and uneven growth as export markets for Alberta. The objectives of these agreements were likely not only trade promotion but also investment protection, e.g. of Canadian mining ventures in Chile.

The findings of this report imply that, notwithstanding the high growth rates of the BRIC countries and the resulting need to improve trade (and investment) relations with them, the US and Mexico are, and will remain for the foreseeable future, Alberta's key export markets. These markets must not be neglected. Obviously, freer trade globally would be the best spur for Alberta's exporters. But in the absence of success in the WTO's Doha Round, Canada's policy to pursue new bilateral partnerships with South Korea, Columbia, the EU, and others will help maintain, re-establish, or improve market access for Alberta's exporters. These are welcome developments.

This report also presents preliminary evidence that Alberta's exports have become more diversified. While this diversification into more markets with more products seems related to the notoriously cyclical energy sector, the evolution of ancillary manufactured exports documented here is indicative of new skills and higher value-added products that have become globally competitive, quite possibly after initial success in NAFTA markets. These represent the unforeseen dynamic benefits of improved market access and suggest that diversification can occur over time as a slow process. In addition, explicit subsidies are not necessary when new markets become accessible.