

Information Bulletin

NUMBER 74 • JUNE 2003

THE ALBERTA AND WESTERN CANADA EXPORT EXPERIENCE UNDER THE FREE TRADE AGREEMENTS: 1988-2002

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The Western Centre for Economic Research gratefully acknowledges the support of Alberta International and Intergovernmental Relations.



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www.bus.ualberta.ca/CIBS-WCER

with support from: The George M. Cormie Endowment

National Library of Canada Cataloguing in Publication Data

The Alberta and Western Canada export experience under the free trade agreements / by Xiaozhan Liu.

(Information bulletin ; no. 74)

Includes bibliographical references.

ISBN 1-55195-084-7

1. Export—Alberta. 2. Exports—Canada, Western. 3. Free trade—Alberta. 4. Free trade—Canada, Western. I. University of Alberta. Western Centre for Economic Research. II. Title. III. Series: Information bulletin (University of Alberta. Western Centre for Economic Research) ; no. 74.

HF1769.W48L58 2003-04-17 382'.6'097234 C2003-910626-8

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Contents

Executive Summary	1
Introduction.....	3
1. Western Canada’s Aggregate Export Values, 1988 to 2002	4
1.1 Dollar Value of Merchandise Exports.....	4
1.2 Provincial Index of Export Values.....	6
1.3 Export Performance Per Employee	7
2. Western Canada’s Top 20 Exports and Their Contribution to Export Growth	10
2.1 Western Canada: Top 20 Exports	10
2.2 Alberta: Top 20 Exports	12
2.3 British Columbia: Top 20 Exports.....	13
2.4 Saskatchewan: Top 20 Exports.....	14
2.5 Manitoba: Top 20 Exports.....	15
3. Alberta: Selected 2002 Exports Highlights.....	16
3.1 Energy Exports.....	16
3.2 Electrical Equipment and Machinery Export.....	16
3.3 Meat and Live Animals Exports	18
3.4 Organic Chemicals and Plastics Exports	19
3.5 Wood, Pulp and Paper Products	20
3.6 Cereals and Oilseeds Exports.....	21
4. Exports to Other Free Trade Agreement Countries.....	22
4.1. Exports To Mexico	23
4.2. Exports To Chile.....	26
4.3. Exports To Costa Rica	29
4.4. Exports To Israel	32
Conclusions	35
Appendix	36

Executive Summary

- In 2002, Western Canada as a whole exported \$100 billion worth of goods abroad. In comparison, in 1988, the year before the Canada-U.S. Free Trade Agreement was implemented, Western Canadian exports were worth only \$39 billion.
- In 2002, Alberta exported approximately \$50 billion worth of goods abroad (up from \$13 billion in 1988) while B.C. exported approximately \$30 billion, Saskatchewan \$11 billion, and Manitoba \$9 billion worth of goods.
- Western Canada experienced a 10.3% decline in the dollar value of its total exports in 2002, down from the level reached in 2001. Exports of mineral fuels, forestry products, cereals and electrical equipment all fell in value in 2002.
- Alberta, with a decrease of 13.6%, had the greatest export value decline for all western provinces. The value of exports from British Columbia, Saskatchewan and Manitoba fell by 9.2%, 3.1% and 2.9% respectively.
- Western Canada's exports in 2002 were comprised mainly of natural resources. The energy sector provided almost 38% of the total export value, followed by wood and wood pulp exports, which contributed approximately 15%.
- Machinery and electrical equipment accounted for 4.1% and 3.4% respectively of the total export value in Western Canada.
- Cereals provided 3.5% of the total export value in Western Canada. This is the first time since 1988 that the export value of machinery surpassed that of cereals in Western Canada.
- In Alberta, Saskatchewan and Manitoba, mineral fuel remained the dominant export category in 2002, while British Columbia's exports of forestry products were higher in value than its energy exports.
- As in previous years, the United States remained the major destination of exports from Western Canada. The U.S. market share was 78.8% for Western Canada. Japan, China, and South Korea followed, with market shares of 6.2%, 2.1%, and 1.4% respectively.
- The U.S. market share was 88.3% for Alberta, 68.7% for British Columbia, 81.5% for Manitoba and 61.7% for Saskatchewan. The U.S. market share increased slightly for Manitoba and Saskatchewan (up from 79.7% and 58.9% respectively in 2001), but decreased in Alberta and British Columbia (down from 88.8% and 70.9% respectively in 2001).
- Mexico was the fifth largest export destination for Western Canada, in terms of dollar value, and accounted for 0.9% of total exports.
- Total export values to Mexico decreased by 11.7% for western provinces in 2002, with Alberta, Saskatchewan, Manitoba, and British Columbia showing a decrease of 9.3%, 15.8%, 15.9%, and 3.0%, respectively.
- In 2002, exports from the western provinces to Israel decreased by 25.4%, and exports to Chile dropped by 22.8%.
- Exports from the western provinces to Costa Rica and Singapore increased 3.0% and 2.7% respectively over last year.

Introduction

International trade plays an important role in Canada's economy. More than 40 percent of Canada's gross domestic product can be attributed to trade. The globalization of world economies has been of increasing importance for Canada as a whole as well as for Western Canada's¹ economic development. In 1988, a free trade agreement was formalized between the U.S. and Canada. The Canada-U.S. Free Trade Agreement (FTA) has brought economic growth and higher living standards for people in both countries. Since then, Canada has established several free trade agreements through regional and bilateral negotiations. Now, Canada also has free trade agreements with Mexico (the 1994 North American Free Trade Agreement (NAFTA)), Chile (1997), Israel (1997) and Costa Rica (2002).

This report focuses on exports to these countries from Western Canada as a whole, as well as from each of the provinces in Western Canada. Among the western provinces, special emphasis is given to the export performance of Alberta. The report provides data for the performance of selected product groups among Alberta's exports. Exports from different regions of Canada are discussed in this report as well.

The first section summarizes Western Canadian export performance since the establishment of the Canada-U.S. FTA from three aspects: aggregated export value, rate of growth and per employee performance. The second section looks into the top 20 exports categories for Western Canada and the four western provinces, using the two-digit level of the Harmonized System (HS) of Commodity Coding. Special attention is paid to the U.S. market, and 1988 (the year prior to the implementation of the Canada-U.S. FTA) is used as a benchmark. The third section examines in greater detail six of Alberta's export sectors. In each sector, selected products are reviewed at the 4-digit HS code level. The last section summarizes Western Canadian exports with other trade agreement countries: Mexico, Chile, Israel and Costa Rica.

This report only presents data for the export of goods. Export values for services are not included. All export values are reported in Canadian dollars.

The value of Canadian currency, i.e., the value of the Canadian dollar in terms of the U.S. dollar, is especially important since the exchange rate affects the competitive performance of exports from Western Canada and the value of merchandise exports from Canada to the U.S. The average annual rate of CAN\$/US\$ decreased slightly from 0.65 in 2001 to 0.64 in 2002 (Appendix).

The report uses current (nominal) price terms for the value of merchandise exports. Therefore, the value includes the effect of price changes as well as changes in export volume. Please see the appendix for the energy price changes during last year.

This report, like others in the annual series, uses first-run data provided by Statistics Canada. Some variations in this data is likely to occur over time.

¹ Western Canada, also referred to as "the western provinces" in this report, includes four provinces: British Columbia, Alberta, Saskatchewan and Manitoba.

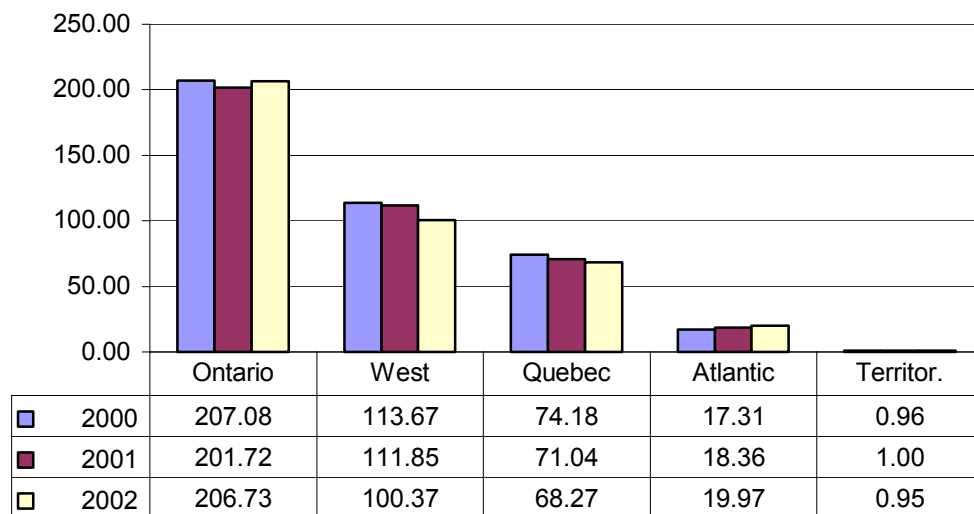
1. Western Canada's Aggregate Export Values, 1988 to 2002

1.1 Dollar Value of Merchandise Exports

Western Canada's aggregate export value was \$100.4 billion in 2002, which accounts for one quarter of the total Canadian export value. Canadian export totals are presented in Figure 1.1A.

The graph shows that the export value of Western Canada as a region surpasses all provinces except Ontario, although this value has been decreasing since 2000. Western Canadian exports declined 10.3% in value in 2002, while the Western Canadian share of total Canadian exports dropped from 27.7% in 2001 to 25.3% in 2002. Ontario and the Atlantic region are the regions that showed increases in export values in 2002. Ontario increased by 2.5%, the Atlantic region increased by 8.7%.

Figure 1.1A. Aggregated Exports by Regions in Canada from 2000-2002 (\$ billions)



The total value of merchandise exports from the western provinces and the aggregate exports from Western Canada are summarized in Table 1.1. Table 1.1 shows that aggregate exports from Western Canada decreased by 10.3% in 2002, to \$100.4 billion from \$111.9 billion in 2001.

The decline in Western Canadian exports from 2001 to 2002 results from a decrease in the export values of all western provinces. Alberta, with a decrease of 13.6%, had the greatest export value decline of all western provinces, from \$57.5 billion in 2001 to \$49.7 in 2002. International shipments from British Columbia, Saskatchewan and Manitoba decreased by 9.2%, 3.1% and 2.9% respectively. Alberta still had the largest export value of the Western Canadian provinces. Its export value accounted for 49.5% of the total export value of Western Canada. British Columbia, Saskatchewan and Manitoba accounted for 29.8%, 11.3%, and 9.4% of the total export value from Western Canada respectively.

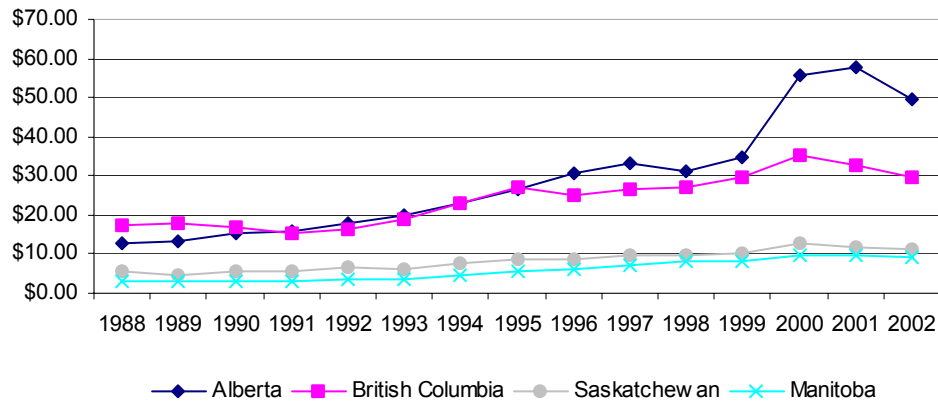
Table 1.1. Western Canada: Value of Exports by Province, 1988-2002 (\$ billions)

	Alberta	British Columbia	Saskatchewan	Manitoba	Western Canada
1988	\$13.01	\$17.42	\$5.76	\$2.91	\$39.10
1989	\$13.49	\$17.80	\$4.49	\$2.93	\$38.71
1990	\$15.19	\$16.65	\$5.40	\$2.97	\$40.21
1991	\$16.03	\$15.30	\$5.69	\$3.08	\$40.10
1992	\$17.88	\$16.36	\$6.59	\$3.43	\$44.26
1993	\$19.69	\$19.00	\$5.98	\$3.44	\$48.10
1994	\$23.01	\$22.81	\$7.44	\$4.73	\$57.99
1995	\$26.54	\$26.93	\$8.78	\$5.44	\$67.69
1996	\$30.78	\$25.20	\$8.91	\$5.99	\$70.87
1997	\$33.33	\$26.57	\$9.80	\$7.01	\$76.71
1998	\$31.19	\$26.89	\$9.94	\$8.14	\$76.16
1999	\$34.87	\$29.74	\$9.96	\$8.04	\$82.61
2000	\$55.88	\$35.48	\$12.60	\$9.70	\$113.67
2001	\$57.54	\$32.89	\$11.73	\$9.69	\$111.85
2002	49.72	\$29.88	\$11.36	\$9.41	\$100.37

The export values of the Western Canadian provinces are presented in Figure 1.1B. The graph shows that the export values of Alberta and British Columbia are much larger than those of Manitoba and Saskatchewan. Alberta's export value is almost five times that of Manitoba and Saskatchewan and 1.7 times that of British Columbia in 2002.

Alberta experienced stronger growth in its export values than British Columbia after 1999, in large measure a result of the collapse of the forest industry in BC and the simultaneous surge in energy prices that greatly benefits Alberta. Saskatchewan's and Manitoba's exports have developed in a very similar way since 1988, with Saskatchewan always exhibiting slightly higher values than Manitoba.

Figure 1.1B. Western Canada: Value of Merchandise Exports in 1988-2002 (\$ billions)

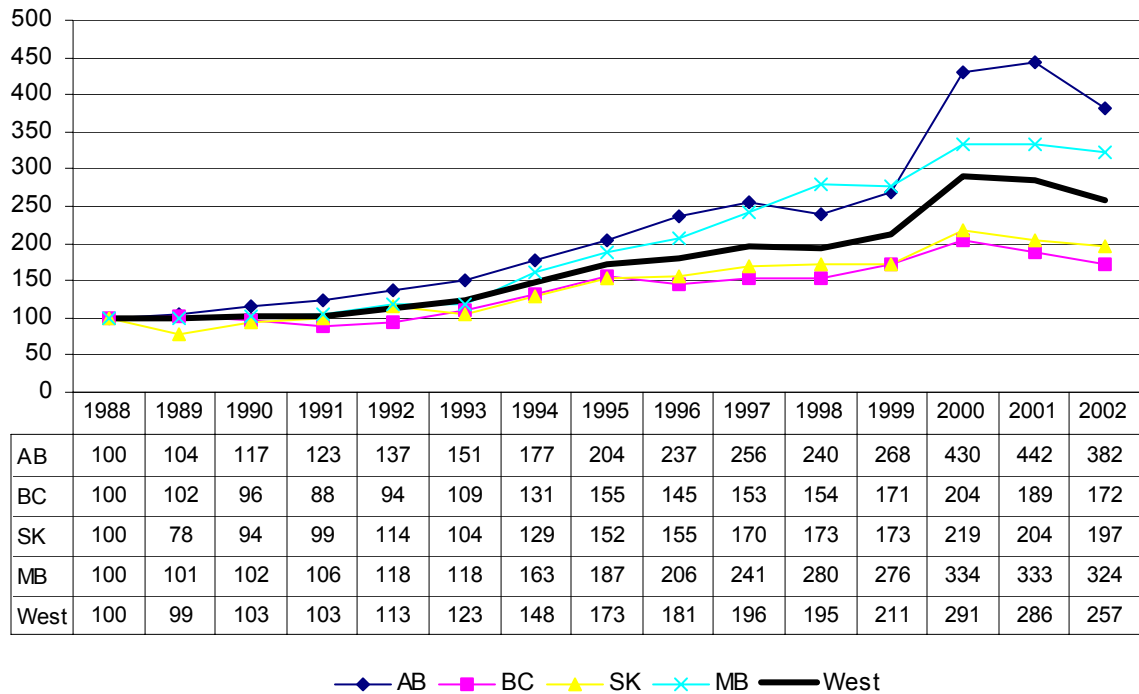


1.2 Provincial Index of Export Values

The trend of provincial export values since 1988 can be converted to an index (1988 = 100) to compare the export growth rate. The provincial indices of export values are shown in figure 1.2. The heavy line is the average growth rate of Western Canada. The export values of Western Canada have grown almost continuously since 1988, but staggered in 1998, then took off in 1999 and have since declined. The growth rates of Alberta and Manitoba are above the average of Western Canada, and the growth rates of British Columbia and Saskatchewan are below the average of Western Canada.

Alberta plays a decisive role in Western Canada's export growth rate due to its large share (49.5%) in the total export value of Western Canada. Alberta's exports have grown continuously in value since 1988 except in 1998 and 2002. In 2000 and 2001, the index of Alberta exports rose to 430 and 442, respectively. In 2002, the index of Alberta exports dropped to 382, closer to that of Manitoba (324 in 2002). The export growth rates of Saskatchewan and British Columbia have decreased continually since 2000, with an index of 172 and 197 in 2002 respectively.

Figure 1.2. Indices of Index of Export Values (1988 = 100), 1988-2002



1.3 Export Performance Per Employee

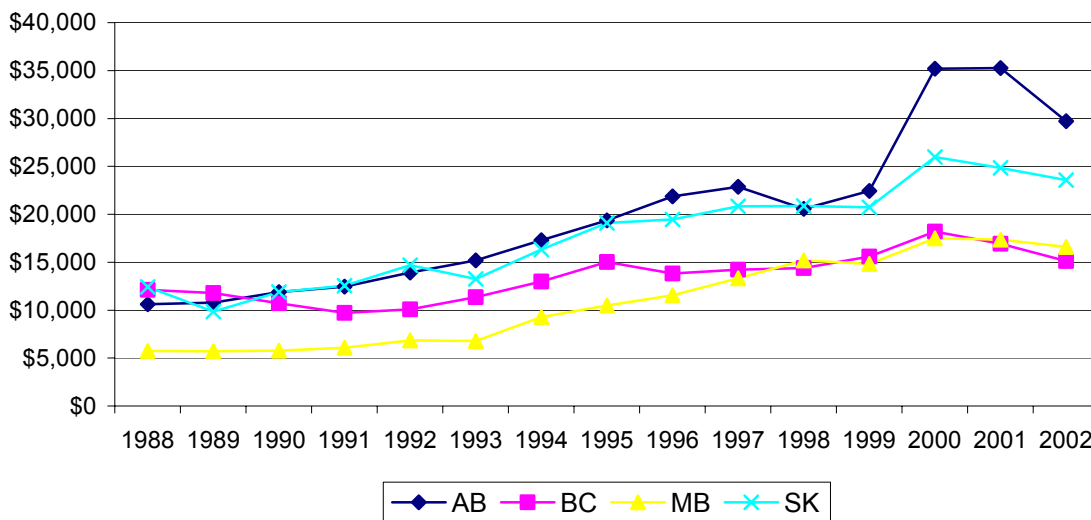
A province's export intensity can be evaluated by the value of exports per employed person. The value of Western Canadian exports per employee from 1988 to 2002 is shown in Table 1.3 and Figure 1.3A. For Western Canada as a whole, this measure of export intensity has doubled since 1988. Alberta's and Manitoba's exports per employed person have almost tripled since 1988 while Saskatchewan's have almost doubled and British Columbia's have increased by less than a third.

In 2002, all western province experienced a decline in their exports per employed person, compared to 2001. Alberta experienced a decline of 15.7%, and British Columbia, Manitoba and Saskatchewan experienced a decline of 10.6%, 4.5% and 5.1%, respectively.

Table 1.3. Export Performance on a per Employee Basis, 1988-2002

	Alberta	British Columbia	Manitoba	Saskatchewan	Western Canada
1988	\$10,633	\$12,136	\$5,732	\$12,427	\$10,771
1989	\$10,780	\$11,797	\$5,704	\$9,846	\$10,378
1990	\$11,881	\$10,708	\$5,765	\$11,886	\$10,574
1991	\$12,452	\$9,729	\$6,077	\$12,550	\$10,497
1992	\$13,924	\$10,097	\$6,830	\$14,693	\$11,481
1993	\$15,207	\$11,337	\$6,792	\$13,265	\$12,245
1994	\$17,280	\$13,005	\$9,284	\$16,327	\$14,316
1995	\$19,382	\$15,025	\$10,482	\$19,112	\$16,350
1996	\$21,855	\$13,837	\$11,550	\$19,475	\$16,851
1997	\$22,862	\$14,216	\$13,337	\$20,851	\$17,747
1998	\$20,582	\$14,378	\$15,195	\$20,869	\$17,319
1999	\$22,449	\$15,600	\$14,815	\$20,746	\$18,429
2000	\$35,184	\$18,203	\$17,496	\$25,979	\$24,837
2001	\$35,255	\$16,933	\$17,369	\$24,831	\$24,290
2002	\$29,705	\$15,141	\$16,596	\$23,568	\$21,373

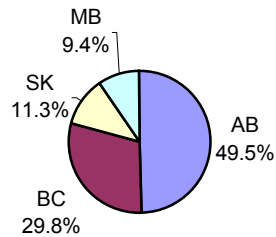
Figure 1.3A. Export Performance on a \$ per Employee Basis, 1988-2002



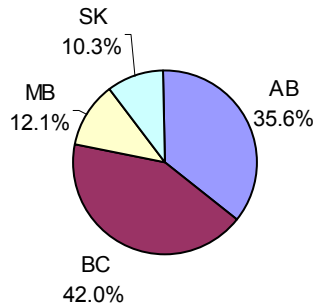
As shown in Figure 1.3B, Alberta accounted for 49.3% of the exports of Western Canada while having only 35.6% of the employees. British Columbia accounted for 30.0% of Western Canadian exports but had 42.0% of regional employees. For Manitoba and Saskatchewan, the percentage contribution to total western exports is similar to their share of regional employees.

Figure 1.3B. Distribution of Western Canadian Exports and Employees by Province (2002)

Share Total Export Value in 2002



Share of Total Employees in 2002



2. Western Canada's Top 20 Exports and Their Contribution to Export Growth

2.1 Western Canada: Top 20 Exports

Energy, forestry, machinery and agriculture products remain Western Canada's dominant export products. Table 2.1A shows the 20 major merchandise export categories in Western Canada, ordered by 2002 export value. The growth in export value from 1988 to 2002, the contribution of each category to total export growth, and the U.S. market shares of the product groups are also provided.

The top twenty export categories produced approximately 88.8% of the value of 2002 exports. Their growth contributed 77.0% of the total growth in the value of Western Canadian exports from 1988 to 2002. In 2002, the energy sector provided 38.3% of total export value, followed by wood and wood pulp exports, which contributed approximately 15%, and machinery, which contributed approximately 4%. Cereals provided 3.5% of the total export value; this is the first time since 1988 that the export value of cereals is less than the export value of machinery in Western Canada.

Combined, the top seven categories accounted for 67% of the value of 2002 exports.

Table 2.1A. Western Canada's Top 20 Exports (2002), Their Contribution to Export Growth and Percentage of U.S. Exports (\$ millions)

HS Category	Export Value 2002	% of Total 2002	Export Value 1988	Contribution to Total Export Growth (1988-2002)		% US share	
				Growth \$	Share %	2002	1988
27 Mineral fuels, oil	\$38,440	38.30	\$9,810	\$28,630	39.70	96.08	79.60
44 Wood, articles of wood	\$10,705	10.67	\$5,256	\$5,449	7.60	79.02	58.40
47 Wood pulp	\$4,296	4.28	\$3,934	\$362	0.50	29.26	31.70
84 Machinery	\$4,134	4.12	\$961	\$3,173	4.40	74.31	77.10
10 Cereals	\$3,546	3.53	\$4,829	-\$1,283	-1.80	19.85	3.30
85 Electrical machinery	\$3,422	3.41	\$277	\$3,145	4.40	78.35	75.30
48 Paper, paperboard	\$2,929	2.92	\$1,674	\$1,255	1.70	80.18	68.50
31 Fertilizer	\$2,903	2.89	\$1,429	\$1,474	2.00	58.61	55.40
02 Meat	\$2,588	2.58	\$324	\$2,264	3.10	66.44	76.00
39 Plastic	\$2,180	2.17	\$726	\$1,454	2.00	89.80	65.10
87 Vehicles, not railway	\$2,129	2.12	\$515	\$1,614	2.20	92.75	87.30
01 Live animals	\$1,839	1.83	\$448	\$1,391	1.90	99.40	98.70
29 Organic chemicals	\$1,833	1.83	\$1,037	\$796	1.10	71.31	44.30
12 Misc. grain, seed, fruit	\$1,648	1.64	\$995	\$653	0.90	15.55	11.70
94 Furniture and bedding	\$1,325	1.32	\$121	\$1,204	1.70	88.30	81.80
99 Special import provisions	\$1,271	1.27	\$0	\$1,271	1.80	93.79	0.00
03 Fish and sea food	\$1,046	1.04	\$779	\$267	0.40	69.47	27.60
28 Inorganic chemicals	\$974	0.97	\$354	\$620	0.90	60.42	56.70
73 Iron/steel products	\$967	0.96	\$56	\$911	1.30	95.65	72.50
90 Optical and medical instr.	\$952	0.95	\$86	\$866	1.20	79.99	55.70
Total-Top 20	\$89,129	88.80	\$33,611	\$55,518	77.00	-	-
Total-All Exports	\$100,374	100.00	\$39,097	\$72,076	100.00	78.79	51.50

Table 2.1B lists changes in the top 10 Western Canadian export products in the past five years. Over this time period, the top ten export categories accounted for an average of 74.9% of total western export value. The products in the top 10 export categories did not change much, except for meat (HS 02) and plastics (HS 39), which did not rank in the top 10 until 2000 and 2001 respectively. There were two categories which fell out of top 10 over the five year period. These were vehicles (HS 87) and oil seeds (HS 12).

The top two export items are still mineral fuels (HS 27) and articles of wood (HS 44), which account for approximately 50% of total Western Canada export value. The share of cereals (HS 10) has been decreasing gradually since 1998, from 5.7% to 3.5%, and it has dropped from third place to fifth in ranking. The export value of machinery (HS 84) surpassed cereal and it became the fourth largest export category in 2002.

Compared with 2001, the export value of cereal decreased the most, declining by 22.4% in Western Canada as a whole and by 27.8%, 29.3% and 17.0% respectively in the prairie provinces of Alberta, Manitoba and Saskatchewan. Poor crop yields due to the severe dry weather in 2001-02 was the main reason.

Another category that decreased significantly was mineral fuels (HS 27). Specifically, decreases in the export values of petroleum gases (HS 2711) and electrical energy (HS 2716) were the main reasons.

Machinery was the only category among the top 5 exports where the export value increased in 2002. The increase in demand for gas turbines (HS 8411), lifting, loading & unloading machines (HS 8428), agriculture machinery, etc (HS 8432), machinery for temperature changes, etc (HS 8419) and transmission products (HS 8483) was the major contributor.

Table 2.1B. Western Canada's Top Ten Exports and Their Share in Western Canada Export Value 1998-2002

HS Description	% Change	% Share	% Share		% Share		% Share	
	02/01	2002	HS 2001	HS 2000	HS 1999	HS 1998	HS 1998	
27 Mineral fuels, oil	-18.85	38.30	27 42.35	27 39.95	27 29.82	27 28.56	27 28.56	
44 Wood	-0.92	10.67	44 9.66	44 9.93	44 14.59	44 13.19	44 13.19	
47 Wood pulp	-8.35	4.28	47 4.19	85 5.89	47 5.92	10 5.72	10 5.72	
84 Machinery	4.52	4.12	10 4.09	47 5.82	10 4.59	47 5.58	47 5.58	
10 Cereals	-22.40	3.53	85 3.86	10 3.79	85 4.23	84 4.07	84 4.07	
85 Electrical machinery	-20.70	3.41	84 3.54	84 3.13	84 3.62	85 3.68	85 3.68	
48 Paper, paperboard	-8.64	2.92	48 2.87	48 2.78	48 3.58	48 3.56	48 3.56	
31 Fertilizer	9.32	2.89	02 2.44	31 2.59	31 3.21	31 3.23	31 3.23	
02 Meat	-5.25	2.58	31 2.37	02 2.00	87 2.64	12 3.21	12 3.21	
39 Plastic	-1.67	2.17	39 1.98	87 1.87	12 2.28	87 2.54	87 2.54	
-Western Canada-	-10.26	74.87	77.35	77.75	74.48	73.34	73.34	

HS 87: Vehicles except railway or tramway; HS 12: Oil seeds, misc. grain, seed, fruit etc.

2.2 Alberta: Top 20 Exports

Table 2.2 shows Alberta's top 20 export categories, ranked by their 2002 export value, along with their percentage contributions to the 2002 export total. The table also indicates the growth in export value from 1988 to 2002 and the contribution of each category to total export growth. The U.S. market share of the product groups in 2002 and 1988 are also provided.

Compared with other provinces in Western Canada, Alberta's export categories are heavily concentrated in the energy sector. The export value of mineral fuels and oil accounts for more than 62% of Alberta's total 2002 export value and the energy sector's growth contributed 54.0% to total export growth from 1988 to 2002. Second and third ranked categories are electrical equipment and meat products, which account for 4.3% and 3.8% of total export value in 2002 respectively.

The U.S. is the major destination of Alberta's exports. Among the top 20 export categories, approximately 89% of Alberta export products are destined for the U.S. The export value to the U.S. market has increased from \$9 billion in 1988 to \$42.5 billion in 2002 for the top 20 export categories. The U.S. share of Alberta's total exports rose from 69.5% in 1988 to 88.3% in 2002. The U.S. market share has increased in most categories except wood pulp, nickel and inorganic chemicals since 1988.

Table 2.2. Alberta's Top 20 Exports (2002), Their Contribution to Export Growth and Percentage of U.S. Exports (\$ millions)

HS Category	Export Value 2002	% of Total 2002	Export Value 1988	Contribution to Total Export Growth (1988-2002)		% US share	
				Growth \$	Share %	2002	1988
27 Mineral fuels, oil	\$30,904	62.16	\$6,874	\$24,030	54.01	99.13	93.00
85 Electrical machinery	\$2,142	4.31	\$113	\$2,029	4.56	77.60	64.90
02 Meat	\$1,899	3.82	\$159	\$1,740	3.91	70.79	67.90
84 Machinery	\$1,725	3.47	\$172	\$1,553	3.49	60.62	54.60
29 Organic chemicals	\$1,473	2.96	\$892	\$581	1.31	79.69	45.10
39 Plastic	\$1,345	2.71	\$622	\$723	1.63	86.12	61.80
47 Wood pulp	\$1,271	2.56	\$385	\$886	1.99	40.16	94.90
44 Wood	\$1,264	2.54	\$229	\$1,035	2.33	95.23	92.40
10 Cereals	\$936	1.88	\$1,251	-\$315	-0.71	17.22	4.80
01 Live animals	\$740	1.49	\$282	\$458	1.03	99.44	98.40
99 Special import provisions	\$566	1.14	\$0	\$566	1.27	94.94	0.00
87 Vehicles, not railway	\$543	1.09	\$42	\$501	1.13	88.81	70.30
12 Misc. grain, seed, fruit	\$472	0.95	\$296	\$176	0.40	13.39	8.80
94 Furniture and bedding	\$388	0.78	\$33	\$355	0.80	94.54	83.30
90 Optical and medical instr.	\$373	0.75	\$34	\$339	0.76	73.00	40.50
31 Fertilizers	\$343	0.69	\$196	\$147	0.33	98.63	62.20
73 Iron/steel products	\$337	0.68	\$46	\$291	0.65	92.79	29.20
75 Nickel, articles of nickel	\$292	0.59	\$21	\$271	0.61	5.82	43.30
48 Paper, paper board	\$248	0.50	\$8	\$240	0.54	99.76	96.30
28 Inorganic chemicals	\$238	0.48	\$94	\$144	0.32	82.14	89.20
Total—Top 20	\$47,498	95.50	\$11,749	\$35,749	80.35	-	-
Total—All Exports	\$49,720	100.0	\$13,009	\$44,492	100.00	88.25	69.50

2.3 British Columbia: Top 20 Exports

Table 2.3 shows British Columbia's top 20 export categories, ranked by their 2002 export value, along with their percentage contributions to the 2002 export total. The table also includes the growth in export value from 1988 to 2002 and the contribution of each category to total export growth. The U.S. market shares of the product groups in 2002 and 1988 are also provided.

Compared with other provinces in Western Canada, British Columbia's exports are lead by the forestry sector instead of the energy sector. Wood and wood pulp, plus paper and paper board exports, account for approximately 47% of BC's total export value in 2002. Second and third ranking categories are the energy sector, which includes mineral fuels and oil, and machinery. These two sectors account for 11.7% and 4.4% of total export value respectively in 2002.

The U.S. is the major destination for British Columbia's exports and the U.S. share is approximately 67.3% among the top 20 export categories. The U.S. market share has increased from 42.7% in 1988 to 68.7% in 2002. The U.S. market share has increased in most categories except for organic and inorganic chemicals since 1988.

Table 2.3. British Columbia's Top 20 Exports (2002), Their Contribution to Export Growth and Percentage of U.S. Exports (\$ millions)

HS Categories	Export Value 2002	% of Total 2002	Export Value 1988	Contribution to Total Export Growth (1988-2002)		% US Share	
				Value \$	Share %	2002	1988
44 Wood	\$8,940	29.92	\$4,951	\$3,989	32.02	75.61	57.20
27 Mineral fuels, oil	\$3,504	11.73	\$2,096	\$1,408	11.31	64.65	27.30
47 Wood pulp	\$2,738	9.16	\$3,362	-\$624	-5.01	23.44	23.10
48 Paper, paper board	\$2,222	7.44	\$1,538	\$684	5.49	74.01	66.00
84 Machinery	\$1,302	4.36	\$376	\$926	7.44	78.48	74.70
03 Fish and seafood	\$987	3.30	\$570	\$417	3.35	68.42	24.60
85 Electrical machinery	\$939	3.14	\$78	\$861	6.91	75.97	70.00
87 Vehicles, not railway	\$857	2.87	\$264	\$593	4.76	90.12	82.80
76 Aluminum	\$604	2.02	\$594	\$10	0.08	32.74	16.60
26 Ores, slag and ash	\$577	1.93	\$1,035	-\$458	-3.67	7.62	0.90
39 Plastics	\$509	1.70	\$50	\$459	3.69	94.59	75.70
94 Furniture and bedding	\$505	1.69	\$54	\$451	3.62	74.23	71.50
90 Optical & photo equipment	\$470	1.57	\$45	\$425	3.41	84.19	63.20
99 Spec. transactions	\$462	1.55	\$0	\$462	3.71	90.51	0.00
73 Iron and steel products	\$424	1.42	\$105	\$319	2.56	97.09	92.60
29 Organic chemicals	\$324	1.09	\$138	\$186	1.50	31.48	36.80
79 Zinc, articles of zinc	\$321	1.07	\$105	\$216	1.73	78.06	69.70
28 Inorganic chemicals	\$312	1.05	\$45	\$267	2.15	57.85	74.70
49 Books, newspaper	\$265	0.89	\$27	\$238	1.91	97.46	97.10
89 Ships and boats	\$220	0.74	\$3	\$217	1.74	92.42	86.40
Total – Top 20	\$26,483	88.6	\$15,436	\$11,047	88.70	-	-
Total – All Exports	\$29,876	100.00	\$17,419	\$12,457	100.00	68.67	42.70

2.4 Saskatchewan: Top 20 Exports

Table 2.4 shows Saskatchewan's top 20 export categories, ranked by their 2002 export value, along with their percentage contribution to the 2002 export total. The table also indicates the growth in export value from 1988 to 2002 and the contribution of each category to total export growth. The U.S. market share of the product groups in 2002 and 1988 are also provided.

The energy sector, fertilizer and cereals are the three largest export categories in Saskatchewan. The three categories account for 63.2% of Saskatchewan's total export value in 2002. Energy exports make up 24.3% of the total value, while fertilizer, the second largest export category, accounts for 21.5% of the total value. Cereal, which accounts for 14.4% of the total value, plays a very important role in Saskatchewan's exports. It was the largest export category in 1988. In 2002, cereal export values were less than that of 1988 by almost \$900 million. The export of cereals dropped 17% in value from 2001 to 2002, primarily due to harsh weather conditions.

Among the top five export categories, mineral fuels and oils, live animals and fertilizer are mainly exported to the U.S. Almost all mineral fuels and oils, live animals and more than half of fertilizers were exported to the U.S. in 2002. The destinations of grain exports, however, are quite diversified. The U.S. share of cereals exports is less than 20%; this is also the case for oilseeds..

Table 2.4. Saskatchewan's Top 20 Exports (2002), Their Contribution to Export Growth and Percentage of U.S. Exports (\$ millions)

HS Categories	Export Value 2002	% of Total 2002	Export Value 1988	Contribution to Total Export Growth (1988-2002)		% US Share	
				Value \$	Share %	2002	1988
27 Mineral fuels, oils	\$2,764	24.32	\$729	\$2,035	36.31	99.90	100.00
31 Fertilizer	\$2,439	21.46	\$1,169	\$1,270	22.66	50.97	53.00
10 Cereals	\$1,978	17.40	\$2,877	-\$899	-16.05	19.28	2.30
12 Oilseeds, misc. grains	\$721	6.34	\$337	\$384	6.85	12.77	6.40
01 Live animals	\$426	3.75	\$45	\$381	6.80	98.38	98.50
07 Vegetables	\$367	3.23	\$15	\$352	6.28	4.16	14.60
84 Machinery	\$335	2.95	\$53	\$282	5.03	92.94	90.20
28 Inorganic Chemicals	\$301	2.65	\$78	\$223	3.98	34.40	92.00
47 Wood pulp	\$283	2.49	\$176	\$107	1.90	35.33	54.30
48 Paper, paperboard	\$187	1.65	\$19	\$168	3.00	100.00	99.40
44 Wood	\$162	1.43	\$24	\$138	2.47	99.67	99.10
15 Fats and oils	\$150	1.32	\$12	\$138	2.47	85.22	27.40
85 Electrical Equip.	\$144	1.26	\$22	\$122	2.17	83.79	93.30
02 Meat	\$136	1.20	\$57	\$79	1.41	86.19	93.30
11 Milling industry prod.	\$135	1.19	\$10	\$125	2.23	56.96	41.50
73 Articles of iron/steel	\$126	1.11	\$6	\$120	2.14	98.75	94.71
99 Spec. Transactions	\$125	1.10	\$0	\$125	2.23	98.56	0.00
87 Vehicles, not railway	\$114	1.00	\$12	\$102	1.82	98.47	98.70
72 Iron and steel	\$101	0.88	\$59	\$42	0.74	99.31	99.58
38 Misc. chemical prod.	\$81	0.71	\$11	\$70	1.25	98.73	95.60
Total – Top 20	\$11,073	97.40	\$5,764	\$5,309	94.70	-	-
Total – All Exports	\$11,363	100.00	\$5,760	\$5,603	100.00	61.70	33.80

2.5 Manitoba: Top 20 Exports

Table 2.5 shows the top 20 export categories for Manitoba, their contribution to export growth and their U.S. market shares in 1988 and 2002. The product groups are ranked according to their 2002 export value.

Compared to other western provinces, Manitoba's economy shows more diversification, as indicated by the distribution of total export values. The first five categories accounted for 40.5% of the total export value in 2002 and contributed 36.8% to export growth since 1988. Although energy is ranked first among the export categories, the first five categories include a variety of sectors, such as manufacturing and agricultural production. Of these, energy has contributed the most to total export growth since 1988, while grain has seen its export value decline.

Manitoba has experienced an increase in U.S. market share from 58.1% in 1988 to 81.5% in 2002.

Table 2.5. Manitoba's Top 20 Exports (2002), Their Contribution to Export Growth and Percentage of U.S. Exports (\$ millions)

HS Categories	Export Value 2002	% of Total 2002	Export Value 1988	Contribution to Total Export Growth (1988-2002)		% US Share	
				Value \$	Share %	2002	1988
	27 Mineral fuels, oils	\$1,268	13.47	\$111	\$1,157	17.79	99.99
84 Machinery	\$773	8.21	\$359	\$414	6.36	89.79	88.40
87 Vehicles, not railway	\$616	6.54	\$196	\$420	6.46	98.81	96.10
10 Cereals	\$616	6.54	\$666	-\$50	-0.77	25.62	3.80
01 Live animals	\$543	5.76	\$93	\$450	6.91	100.00	99.80
02 Meat	\$481	5.11	\$73	\$408	6.27	45.63	86.70
94 Furniture, bedding	\$416	4.42	\$33	\$383	5.89	99.39	98.10
12 Oil seeds, misc. grains	\$410	4.35	\$238	\$172	2.64	23.72	21.20
74 Copper, articles thereof	\$391	4.15	\$5	\$386	5.93	99.97	91.70
44 Wood	\$340	3.61	\$52	\$288	4.42	98.75	9.20
75 Nickel, articles thereof	\$329	3.49	\$38	\$291	4.47	13.93	83.60
39 Plastics	\$282	2.99	\$51	\$231	3.55	97.93	93.00
88 Aircraft, spacecraft	\$279	2.97	\$89	\$190	2.93	95.71	96.70
48 Paper, paperboard	\$271	2.88	\$109	\$162	2.49	99.18	96.10
85 Electrical equipment	\$198	2.10	\$63	\$135	2.07	93.90	94.30
49 Books, newspaper	\$188	2.00	\$21	\$167	2.57	83.25	43.20
20 Preserved food	\$162	1.72	\$12	\$150	2.30	99.71	25.70
07 Vegetables	\$150	1.60	\$53	\$97	1.50	44.96	9.30
15 Fats and oils	\$141	1.50	\$81	\$60	0.92	99.02	57.10
28 Inorganic chemicals	\$123	1.31	\$17	\$106	1.63	88.61	53.32
Total – Top 20	\$7,976	84.70	\$2,397	\$5,579	85.80	-	-
Total – All Exports	\$9,415	100.00	\$2,909	\$6,506	100.00	81.50	58.10

3. Alberta: Selected 2002 Exports Highlights

In the following section, Alberta's top ten export categories are reexamined in greater detail. The categories are grouped into six sectors and in each sector, selected products at the 4-digit-HS code level are presented and their export values in 2001 and 2002 are compared.

3.1 Energy Exports

Table 3.1 shows more details of Alberta's dominant export sector, the energy sector, which accounted for 62.2% of the province's total export value in 2002. Natural gas, crude oil, refined oil and coal are the four largest export categories in the energy sector, and accounted for 99.5% of the total export value in this sector. The value of exports from the energy sector decreased by 16.3% in 2002. The decrease was mainly due to a decline in the value of natural gas exports by 24.4%, but also to a decline in refined oil exports by 30.5% and in coal exports by 29.9%. The export value of crude oil increased by 0.3%.

The U.S. market is the major destination for Alberta's energy exports, receiving 99.1% of international shipments. All the natural gas and crude oil exports and most of Alberta's refined oil exports were sent to the U.S. in 2002. The U.S. demand for Alberta's energy products affects the province's energy exports greatly. Coal is the exception in that the U.S. accounts for only 9.3% of Alberta export value. The rest is mainly exported to Asia (Japan, Korea, etc.).

Table 3.1. Exports of Energy: Selected Categories, 2001 and 2002 (\$ millions)

HS Description	Export Value		% Share		% Change 02/01	% US Share
	2001	2002	2001	2002		
27 Mineral Fuels						
2711 Natural gas	\$23,132.39	\$17,488.55	62.66	56.59	-24.40	100.00
2709 Crude oil	\$12,629.38	\$12,666.30	34.21	40.99	0.29	100.00
2710 Oil, (not crude)	\$468.69	\$325.88	1.27	1.06	-30.47	94.50
2701 Coal	\$392.38	\$275.20	1.06	0.89	-29.86	9.29
Total of the above	\$36,622.84	\$30,755.93	99.20	99.52	-16.02	99.13
27 Total Mineral Fuel Exports	\$36,917.04	\$30,904.00	64.16	62.16	-16.29	99.13

3.2 Electrical Equipment and Machinery Export

Table 3.2 examines the changes in export value of electrical equipment and machinery from 2001 to 2002. These two product groups have exhibited very high rates of export growth since 1988 and are now ranked as the second (4.3%) and fourth (3.5%) largest product groups among Alberta's exports, when using the two digit HS categories.

Exports of electrical equipment declined in value by 26.2% in 2002, following a decline of 37.9% in 2001, although this sector had previously grown by 34% in 1999 and 118% in 2000. The decline is mainly caused by the decrease in exports of telephone sets by 17.3%, transmission equipment for radio and TV by 34.8% and a 81.3% lower export value for cable and wire when compared to 2001.

The rapid decrease of transmission equipment exports for radio/TV and telephone sets had a big influence on electrical machinery exports. The export values of telephone sets and transmission equipment reached historical highs of \$2,127.0 million and \$1,834.8 million respectively in 2000. The export values of these two categories in 2002 were one half or less of their 2000 export values. The increases in exports of electronic circuits by 176.8%, of radio navigation aids by 16.9% and of electrical apparatus by 21.8% could not offset the decrease of telephone sets, transmission equipment and cable & wire.

Table 3.2. Exports of Electrical Equipment and Machinery: Selected Categories, 2001 and 2002 (\$ millions)

HS	Description	Export Value		% Share		% Change
		2001	2002	2001	2002	02/01
85	Electrical Machinery					
8517	Telephone sets	\$874.06	\$723.13	30.12	33.77	-17.27
8525	Transmission equipment radio/TV	\$1,108.37	\$722.61	38.20	33.74	-34.80
8529	Antennae for radio/TV	\$355.74	\$291.52	12.26	13.61	-18.05
8542	Electronic circuits	\$15.92	\$44.06	0.55	2.06	176.82
8504	Adaptor, power supplies	\$40.31	\$39.98	1.39	1.87	-0.83
8537	Boards and panels	\$47.11	\$38.10	1.62	1.78	-19.12
8526	Radio navigation aids	\$30.53	\$35.68	1.05	1.67	16.88
8544	Cable and wire	\$189.05	\$35.45	6.52	1.66	-81.25
8536	Electrical apparatus	\$25.44	\$30.98	0.88	1.45	21.75
8524	Records, tapes etc.	\$33.78	\$30.54	1.16	1.43	-9.59
	Total of the above	\$2720.30	\$1992.06	93.74	93.02	-25.10
85	Total Electrical Machinery Exports	\$2901.84	\$2141.59	5.04	4.31	-26.20
84	Machinery					
8431	Parts for lifting, moving machinery	\$331.14	\$323.67	19.5	18.77	-2.25
8411	Gas turbines	\$184.54	\$186.31	10.87	10.80	0.96
8412	Engines and motors	\$159.47	\$136.88	9.39	7.94	-14.16
8479	Special mach., appliances	\$160.14	\$121.24	9.43	7.03	-24.29
8481	Taps, valves for pipes	\$103.68	\$118.96	6.11	6.90	14.74
8414	Air or vacuum pumps	\$116.41	\$113.15	6.85	6.56	-2.79
8419	Electric dryers and distillers	\$70.78	\$99.78	4.17	5.79	40.98
8413	Pumps and liquid elevators	\$134.30	\$97.62	7.91	5.66	-27.31
8430	Moving or grading machinery	\$57.27	\$95.10	3.37	5.51	66.06
8471	Computers and components	\$48.55	\$61.21	2.86	3.55	26.08
8421	Centrifuge; filters	\$35.22	\$54.06	2.07	3.14	53.50
8428	Other lifting machine	\$21.33	\$37.07	1.26	2.15	73.85
	Total of the above	\$1,422.81	\$1,445.06	83.78	83.79	1.30
84	Total Machinery Exports	\$1,698.33	\$1,724.60	2.95	3.47	1.55

The export value of machinery has increased almost continually since 1995 (when it was \$559.4 million in value) to become the fourth largest export category in Alberta, with an export value of \$1,724.6 million in 2002. The export value in 2002 increased by 1.6% compared with that of 2001. The declines in parts for lifting & moving machinery by 2.3%, engines and motors by 14.2% and special machinery & appliances by 24.3% were offset by the increases in gas turbines (1.0%), taps & valves for pipes (14.8%), electrical dryers and distillers (41.0%), moving or grading machines (66.1%), computer and components (26.1%), centrifuges and filters (53.5%) and other lifting machines (73.9%).

3.3 Meat and Live Animals Exports

Table 3.3 examines the exports of meat and live animals in 2001 and 2002. The total export values of meat and live animals in 2002 were \$1,898.9 million and \$740.4 million respectively, which accounted for 3.8% and 1.5% of Alberta's total export value.

Meat exports decreased by 5.6% in 2002 due to the decrease of almost all the major items under this category. The only exception was frozen meat of bovine animals (HS 0202), which increased 1.8% in export value compared with 2001.

The 14.2% decrease in the value of live animals in 2002 was mainly due to the decline in the export value of cattle and swine. Although the export value of other live animals such as horses, sheep and goats increased rapidly, their contribution to total exports was relatively minor and so did not counteract the overall decline.

Table 3.3. Exports of Meat and Live Animals: Selected Categories, 2001 and 2002 (\$ millions)

HS	Description	Export Value)		% Share		% Change
		2001	2002	2001	2002	02/01
02	Meat					
0201	Meat of bovine animals	\$1,447.46	\$1,393.13	71.96	73.36	-3.80
0203	Meat of swine (pork)	\$210.05	\$178.72	10.44	9.41	-14.90
0206	Edible offal, bovine, swine, sheep, etc	\$154.38	\$134.95	7.67	7.11	-12.60
0202	Meat of bovine animals (frozen)	\$128.30	\$130.59	6.38	6.88	1.80
0205	Meat of horses, asses, mules	\$65.45	\$51.64	3.25	2.72	-21.10
	Total of the above	\$2,005.64	\$1,889.03	99.70	99.48	-5.80
02	Total Meat Exports	\$2,011.59	\$1,898.86	3.50	3.76	-5.60
01	Live Animals					
0102	Bovine	\$712.69	\$636.73	82.58	85.99	-10.66
0103	Swine	\$123.67	\$75.73	14.33	10.23	-38.77
0101	Horses, asses, mules	\$17.06	\$17.17	1.98	2.32	0.64
0104	Sheep and goats	\$2.59	\$5.53	0.30	0.75	113.49
	Total of the above	\$856.01	\$735.16	99.20	99.30	-14.00
01	Total Live Animals Exports	\$863.04	\$740.44	1.49	1.49	-14.20

3.4 Organic Chemicals and Plastics Exports

Organic chemicals and plastics exports were the fifth and sixth largest export categories in Alberta during 2002. The export value of Organic chemicals was \$1,472.8 million and accounted for 3.0% of Alberta total export value; the export value of plastics was \$1,344.8 million and accounted for 2.7% of Alberta's total export value.

Compared with 2001, the export value of organic chemicals decreased by 12.9% in 2002, mainly due to the decrease in the value of acyclic alcohol & halogen by 19.9% and ethers & ether-various alcohols by 33.0%.

Plastic exports decreased by 8.6% in value due to a decline in most items in this category. The export value of ethylene decreased by 6.6%, vinyl chloride by 43.9%, tube, pipe, hoses, etc. by 27.5% and articles of plastic by 11.5%. The only categories showing an increase were plates, sheet & film and boxes, bags & closures, which increased by 5.5% and 2.6% respectively.

Table 3.4. Exports of Organic Chemicals and Plastic Exports: Selected Categories, 2001 and 2002 (\$ millions)

HS	Description	Export Value		% Share		% Change
		2001	2002	2001	2002	02/01
29	Organic Chemicals					
2902	Cyclic hydrocarbons	\$464.66	\$511.21	27.49	34.71	10.02
2905	Acyclic alcohol, halogen	\$533.56	\$427.22	31.57	29.01	-19.93
2909	Ethers, ether-various alcohols	\$569.74	\$381.99	33.71	25.94	-32.95
2901	Acyclic hydrocarbons	\$49.49	\$106.78	2.93	7.25	115.76
2903	Halogenated hydrocarbons	\$7.62	\$12.92	0.45	0.88	69.54
2933	Nit Hetero-Atoms only	\$12.64	\$7.81	0.75	0.53	-38.20
2921	Amine-Function compounds	\$0.46	\$6.90	0.03	0.47	1,390.83
2936	Provitamins and vitamins	\$0.55	\$4.84	0.03	0.33	787.64
	Total of the above	\$1,638.72	\$1,459.67	96.95	99.11	-10.59
29	Total Organic Chemicals Exports	\$1,690.35	\$1,472.76	2.94	2.96	-12.87
39	Plastics					
3901	Ethylene, primary form	\$1,149.17	\$1,072.85	78.14	79.78	-6.64
3904	Vinyl Chloride, etc.	\$93.52	\$52.45	6.36	3.9	-43.92
3920	Plates, sheet, film, etc.	\$37.36	\$39.40	2.54	2.93	5.47
3917	Tube, pipe, hoses, etc.	\$50.99	\$36.94	3.47	2.75	-27.54
3923	Boxes, bags, closures, etc.	\$35.93	\$36.85	2.44	2.74	2.55
3926	Articles of plastics	\$31.80	\$28.16	2.16	2.09	-11.45
	Total of the above	\$1,398.76	\$1,266.65	95.12	94.19	-8.98
39	Total Plastic Exports	\$1,470.57	\$1,344.75	2.56	2.71	-8.56

3.5 Wood, Pulp and Paper Products

Table 3.5 shows the export data for wood pulp, wood and paper products for 2001 and 2002, which accounted for 2.6%, 2.5% and 0.5% of 2002 provincial export value respectively.

Total wood pulp exports decreased by 3.3% from their export value in 2001, due mainly to the 7.7% decline in the value of chemical wood pulp (HS 4703). Chemical wood pulp was the largest export item in wood pulp exports, accounting for 76.4% of total wood pulp export value in 2002. The increase in the value of semi-chemical wood pulp (HS 4705) by 12.3% compensated for part of the decrease in wood pulp export value.

Wood export values increased 0.5% in 2002. The increase in the export value of wood was due to an increase in exports of particle board & similar board of wood (HS 4410) by 13.0% and plywood and veneer (HS 4412) by 30.3% in 2002, and occurred despite the decline in the export value of sawn wood (HS 4407) by 4.8%, fiberboard (HS 4411) by 19.5% and builders' joinery & carpentry (HS 4418) by 3.7%.

Paper and paperboard shipments showed an increase of 13.2% over their export value in 2001.

Table 3.5. Exports of Wood, Pulp and Paper: Selected Categories, 2001 and 2002 (\$ millions)

HS Description	Export Value		% Share		% Change
	2001	2002	2001	2002	02/01
47 Wood Pulp					
4703 Chemical wood pulp	\$1,051.25	\$970.48	79.95	76.35	-7.68
4705 Semi-chemical wood pulp	\$254.62	\$285.96	19.36	22.50	12.31
Total of the above	\$1,305.87	\$1,256.44	99.31	98.84	-3.76
47 Total Wood Pulp Exports	\$1,314.88	\$1,271.13	2.29	2.56	-3.33
44 Wood					
4407 Wood sawn or chipped length	\$698.90	\$665.18	55.60	52.64	-4.83
4410 Particle board & similar board of wood	\$347.87	\$393.21	27.68	31.12	13.03
4411 Fibreboard of wood	\$56.90	\$45.82	4.53	3.63	-19.48
4418 Builders' joinery & carpentry of wood	\$44.59	\$42.93	3.55	3.40	-3.72
4412 Plywood, veneer, etc.	\$30.24	\$39.39	2.41	3.12	30.27
Total of the above	\$1,178.51	\$1,186.52	93.77	93.91	0.64
44 Wood Exports	\$1,256.94	\$1,263.57	2.19	2.54	0.53
48 Paper, paperboard					
48 Total Paper & Paperboard Exports		\$248.11	0.50	0.50	-13.18

3.6 Cereals and Oilseeds Exports

Table 3.6 summarizes the export values of selected categories of cereals and seeds and grain. The export values were \$936.4 million for cereals and \$471.9 million for seeds and grain in 2002, accounting for 1.9% and 1.0% of total Alberta export value respectively.

Cereals export decreased by 27.8% in 2002. Most items under this category declined in value last year. Wheat and meslin decreased by 25.6%, barley decreased by 50.4% and oats decreased by 17.2%. The decrease was a result of poor yields and reduced harvest acreage, caused primarily by a combination of a cool and dry spring, persistent dryness, heat in July, insect infestations and early frosts.

The export value for seeds and grain decreased by 23.9%, overall. The export value of canola seeds decreased by 28.6%, forage products decreased by 9.6%, sowing seeds decreased by 18.5%, and fruits and nuts decreased by 29.6% compared with 2001.

Table 3.6. Exports of Cereals and Oilseeds: Selected Categories, 2001 and 2002 (\$ millions)

HS	Description	Export Value		% Share		% Change
		2001	2002	2001	2002	02/01
10	Cereals					
1001	Wheat and meslin	\$1,136.25	\$844.95	87.66	90.23	-25.64
1003	Barley	\$123.85	\$61.39	9.56	6.56	-50.43
1004	Oats	\$30.61	\$25.34	2.36	2.71	-17.20
	Total of the above	\$1,290.70	\$931.68	99.58	99.50	-27.70
10	Total Cereal Exports	\$1,296.21	\$936.40	2.25	1.88	-27.76
12	Oilseeds, misc. grain, etc.					
1205	Rape or canola seeds	\$440.94	\$314.85	71.07	66.72	-28.6
1214	Forage products	\$120.49	\$108.96	19.42	23.09	-9.57
1209	Sowing seeds	\$37.79	\$30.78	6.09	6.52	-18.54
1207	Fruits and nuts	\$11.94	\$8.40	1.93	1.78	-29.62
	Total of the above	\$611.16	\$463.00	98.50	98.11	-24.24
12	Total Oilseed, etc. Exports	\$620.46	\$471.90	1.08	0.95	-23.94

4. Exports to Other Free Trade Agreement Countries

Canada currently has Free Trade Agreements (FTAs) in place with the following countries: Chile, Costa Rica, Israel, the United States (the Canada-US Free Trade Agreement), and the United States and Mexico (the North American Free Trade Agreement (NAFTA)). Since we have discussed trade with the U.S. in each of the previous sections, the following section will concentrate on exports to the other countries that have free trade agreements with Canada: Mexico, Chile, Costa Rica and Israel. With the exception of Israel, the countries are located in North or South America.

Table 4.0 summarizes the export values of Western Canada to these four countries, the share of Western Canadian relative to total Canadian exports to these countries, and their rank among Western Canadian export destinations from 2000 to 2002.

Mexico was the most important trading partner among these four countries, both in terms of export value and rank. In 2002, Mexico ranked fifth amongst Western Canadian export destinations with an export value of \$903.5 billion. Western Canada accounted for more than one third of the total export value from Canada to Mexico. Western Canada also has a significant share of exports from Canada to Chile and to Costa Rica. Almost half of the value of Canadian exports to Chile and 39% of the value of Canadian exports value to Costa Rica were from Western Canada in 2002. Chile and Costa Rica rank 26th and 56th respectively amongst Western Canada's export destinations. The value of exports from Western Canada to Israel (\$25.5 million) was almost the same as the value of exports to Costa Rica, but the Western Canadian share of total Canadian exports was less than 10% in 2002.

Agricultural products have been the most important export products from Western Canada to Mexico, Chile and Costa Rica in the past few years. However, exports from Western Canada have all deteriorated because of the poor harvests due to the harsh weather conditions in Western Canada in 2001/02. Western Canadian cereal exports to Mexico, Chile and Costa Rica all declined in 2002.

Western Canadian exports to Israel, which consists mainly of manufactured products, have been decreasing both in value and market share.

Exports to Mexico, Chile, Costa Rica and Israel will be examined below.

Table 4.0. Western Provinces: Rank, Export value and Share 2000-2002 (\$ millions)

Country	2000			2001			2002		
	Rank	Value	West/Canada	Rank	Value	West/Canada	Rank	Value	West/Canada
Mexico	8	\$775.09	38.10%	5	\$1,022.94	37.14%	5	\$903.48	37.73%
Chile	25	\$235.19	52.92%	26	\$180.34	48.86%	26	\$139.24	49.85%
Costa Rica	46	\$48.47	55.94%	59	\$28.80	45.81%	56	\$29.75	39.16%
Israel	50	\$41.43	12.77%	54	\$34.22	9.74%	60	\$25.52	6.62%
Total		\$1,100.18	38.07%		\$1,266.30	35.80%		\$1,097.99	35.02%

4.1. Exports To Mexico

The North American Free Trade Agreement (NAFTA) took effect in January 1994. The average of export values for the three years before the establishment of NAFTA (1991 - 1993) is used as a benchmark for comparison with current trade data. Figure 4.1A summarizes total Canadian exports to Mexico in dollar terms from 1991 to 2002. Exports to Mexico have more than doubled since 1994, the first year of the NAFTA. The export value in 2002 was lower than that of 2001, but still triple the value of the 1991-1993 average.

Figure 4.1A. Canadian Exports to Mexico, 1991-2002 (\$ millions)

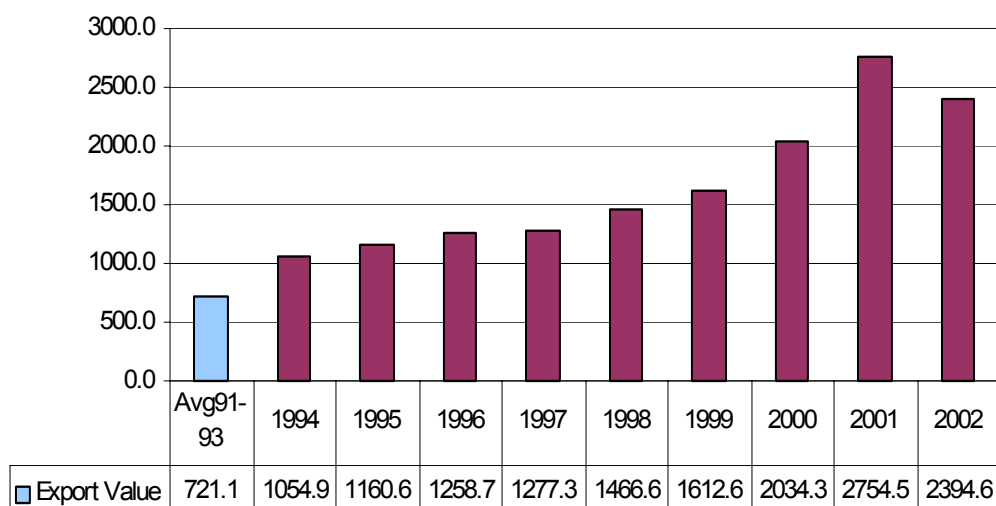


Table 4.1A and Figure 4.1B summarize the value, scope and distribution of recent Western Canadian exports to Mexico. Table 4.1 uses 1993, the year before the establishment of the NAFTA, as a benchmark for comparison of current export values. Mexico's share of total Western Canadian exports as well as the percentage growth in exports between 1993 and 2002 are also provided. All four western provinces have experienced an increase in export trade with Mexico between 1993 and 2002. The increase in exports to Mexico since the establishment of NAFTA has been particularly large for Alberta which experienced 367.1% growth, and Manitoba, which experienced 205.4% growth. Saskatchewan and British Columbia increased their trade with Mexico in the same period by only 98.3% and 73.5%, respectively. In aggregate value terms, trade between Western Canada and Mexico has increased 205.2%.

For Western Canada as a whole, exports to Mexico do not exceed 1% of the value of total global exports. Mexico's proportion of total Alberta exports has increased the most, from 0.4% in 1993 to 0.9% in 2002. The rest of the western provinces also saw the proportion of their exports sold to Mexico increase, but at a much slower rate. Alberta is the largest exporter to Mexico of the western provinces, accounting for 48% of Western Canada's export value to Mexico in 2002 (Figure 4.1B).

Table 4.1A. Export Value by Western Province, Percentage Share of Total Provincial Exports for 1993 and 2000-2002, and Export Growth

Province	Export Value (\$ millions)				Share of Global Exports (%)				% Growth
	1993	2000	2001	2002	1993	2000	2001	2002	02/93
AB	\$94	\$355.77	\$484.06	\$439.06	0.42	0.64	0.84	0.88	367.09
SK	\$113	\$230.74	\$265.98	\$224.07	1.89	1.83	2.27	1.97	98.29
MB	\$52	\$129.51	\$188.80	\$158.81	1.51	1.34	1.95	1.69	205.41
BC	\$47	\$59.07	\$84.09	\$81.54	0.24	0.17	0.26	0.27	73.49
West	\$296	\$775.09	\$1,022.94	\$903.55	0.61	0.77	0.92	0.90	205.23

Figure 4.1B. Western Canada: Provincial Distribution of Exports to Mexico, 2002

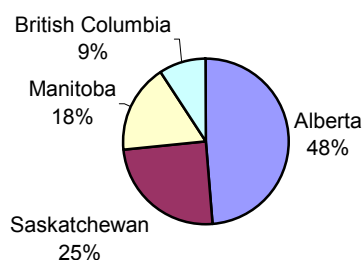


Table 4.1B highlights the top five exports to Mexico from Alberta and from Western Canada.

Exports from Alberta dominated Western Canadian exports. Alberta's exports to Mexico are mainly agricultural products. Meat has played a particularly dominant role. With an export value of \$204.8 million in 2002, meat exports from Alberta to Mexico were about 46.6% of the total provincial export value. Cereals and other agriculture products followed.

The decrease in agriculture production in western provinces in 2002 obviously influenced the trade with Mexico. In total, the export of agriculture products to Mexico from Western Canada decreased, ranging from 10% to 30% depending on the product. The export value in Western Canada in 2002 decreased by 11.68% compared with 2001.

Table 4.1B. Alberta and Western Canada: Top 5 Exports (2 Digit HS Code) to Mexico, 2000-2002
(\$ millions)

HS Description	Export Value			Share of Total Exports to Mexico (%)			% Change
	2000	2001	2002	2000	2001	2002	02/01
Alberta	\$355.77	\$484.06	\$439.06	100.00	100.00	100.00	-9.3
02 Meat	\$128.46	\$226.16	\$204.80	36.11	46.72	46.64	-9.45
12 Misc. grain, seed, fruit	\$76.84	\$84.25	\$59.93	21.6	17.40	13.65	-28.86
10 Cereals	\$65.57	\$77.72	\$59.29	18.43	16.06	13.5	-23.72
04 Dairy, eggs, honey, etc	\$5.06	\$9.59	\$9.37	1.42	1.98	2.14	-2.22
07 Vegetables	\$0.30	\$2.83	\$4.73	0.09	0.58	1.08	67.28
Western Canada	\$775.09	\$1,022.94	\$903.48	100.00	100.00	100.00	-11.68
02 Meat	\$145.59	\$254.83	\$227.55	18.78	24.91	25.19	-10.71
10 Cereals	\$202.02	\$256.65	\$209.38	26.06	25.09	23.18	-18.42
12 Misc. grain, seed, fruit	\$228.74	\$252.74	\$187.26	29.51	24.71	20.73	-25.91
47 Wood pulp	\$30.91	\$24.84	\$38.78	3.99	2.43	4.29	56.13
84 Machinery	\$7.50	\$24.71	\$31.22	0.97	2.42	3.46	26.34

4.2. Exports To Chile

A free trade agreement between Canada and Chile was signed in 1996 and implemented in 1997. The average value of exports in the three years prior to the establishment of the free trade agreement is used as a benchmark for comparison with current trade data. Figure 4.2A summarizes the export values for Canada for average 1994-96 and 1999-2001. Exports from Canada to Chile have not increased dramatically since the establishment of the trade agreement. On the contrary, 2001 and 2002 export values fell below the 1994-1996 average. In 2002 exports were worth only \$279.3 million, almost \$100 million dollars less than in 2001.

Figure 4.2A. Canadian Exports to Chile, 1994-2002 (\$ millions)

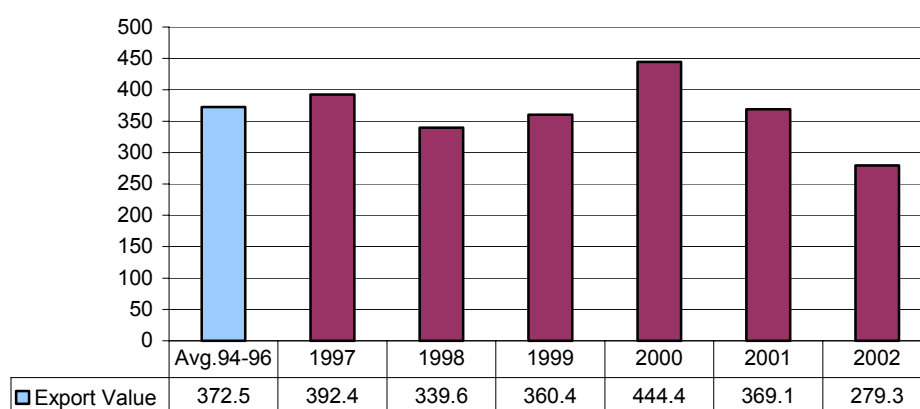


Table 4.2A lists the value of exports from Western Canada to Chile, and the percentage contribution that these exports make to Western Canada's total global exports. Western Canada as a whole experienced a reduction in its export value to Chile in 2002 by approximately 44%. Manitoba experienced the greatest decline. Its export value was only \$3.5 million in 2002, compared with \$25.2 million in 1996. Total exports to Chile from Manitoba in 2002 decreased by 86.0%, followed by Saskatchewan and Alberta at 47.2% and 47.1% respectively, and by British Columbia at 19.7%. Chile's share of Western Canada's total export value decreased from 0.35% in 1996 to 0.15% in 2002.

Table 4.2A. Export Value by Western Province, Percentage Share of Total Provincial Exports for 1996 and 2000-2002, and Export Growth

Province	Export Value (\$ millions)				Share of Global Exports (%)				% Change 02/96
	1996	2000	2001	2002	1996	2000	2001	2002	
BC	\$65.57	\$51.76	\$51.14	\$52.68	0.25	0.15	0.16	0.18	-19.66
SK	\$84.93	\$58.28	\$61.58	\$44.84	0.91	0.46	0.53	0.4	-47.20
AB	\$72.23	\$115.88	\$61.83	\$38.18	0.25	0.21	0.11	0.08	-47.14
MB	\$25.23	\$9.27	\$5.79	\$3.54	0.40	0.1	0.06	0.04	-85.99
West	\$247.96	\$235.19	\$180.34	\$139.24	0.35	0.21	0.16	0.14	-43.85

Exports to Chile from the western provinces were divided almost evenly between British Columbia (38%), Saskatchewan (32%) and Alberta (27%) in 2002. Alberta's share has decreased the most, from more than 50% in 2000 to the current level of 27%.

Figure 4.2B. Western Canada: Provincial Distribution of Exports to Chile, 2002

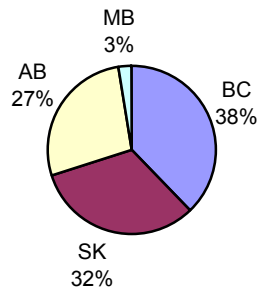


Table 4.2B presents the top five export categories to Chile from Alberta and Western Canada.

Exports from Alberta decreased 38.3% in value compared with 2001. Top export products are spread among cereals (wheat), mineral products (sulphur and coal) and machinery. The value decrease in cereal, mineral fuel and electrical machinery exports was such that that the solid increase in sulphur and machinery exports could not compensate. The decrease in electrical machinery and mineral fuel exports was due to a decline in exports of electrical apparatus for line telephony and bituminous coal. The increase in sulphur and machinery shipments to Chile was due to an increase in exports of crude sulphur and parts of machinery used in the heat treatment of materials.

Exports to Chile from Western Canada as whole were mainly based on agricultural products, with cereal being the major commodity.

Table 4.2B. Alberta and Western Canada: Top Five Exports (2 digit HS Code) to Chile, 2000-2002
(\$ millions)

HS Description	Export Value			Share of Total Exports to Chile (%)			% Change
	2000	2001	2002	2000	2001	2002	02/01
Alberta	\$115.88	\$61.83	\$38.18	100.00	100.00	100.00	-38.25
10 Cereals	\$17.22	\$11.28	\$7.59	14.86	18.25	19.88	-32.73
25 Sulphur, earth, stone, etc.	\$2.85	\$0.02	\$7.32	2.46	0.04	19.18	30268.1
27 Mineral fuel	\$25.04	\$21.82	\$6.20	21.61	35.3	16.25	-71.57
84 Machinery	\$4.25	\$2.81	\$5.51	3.66	4.54	14.43	96.25
85 Electrical machinery	\$49.04	\$10.94	\$4.08	42.32	17.7	10.68	-62.76
Western Canada	\$235.19	\$180.34	\$139.24	100.00	100.00	100.00	-22.79
10 Cereals	\$58.37	\$52.35	\$41.62	24.82	29.03	29.89	-20.5
07 Vegetables	\$8.94	\$6.40	\$7.32	3.8	3.55	5.26	14.5
11 Milling; Malt; Starch	\$0.06	\$6.07	\$1.99	0.03	3.37	1.43	-67.28
02 Meat	\$0.82	\$1.61	\$0.66	0.35	0.9	0.47	-59.15
05 Other of animal origin	\$0.45	\$0.17	\$0.23	0.19	0.1	0.17	33.07

4.3. Exports To Costa Rica

A free trade agreement was signed between Canada and Costa Rica in April 2001 and came into force in November 2002. Figure 4.3A and Table 4.3A illustrate the trade developments of Canada and the western provinces where Costa Rica is concerned. Figure 4.3A shows the value of exports from different regions of Canada to Costa Rica from 2000 to 2002 and Table 4.3A indicates Costa Rica's share of total Western Canadian exports and the export growth in Western Canada from 1999 to 2002.

The total export value from Canada to Costa Rica was \$75.96 million in 2002. Costa Rica accounts for 0.02% of Canada's total export value, and was ranked 61 for Canada and 56 for Western Canada by export value as a destination country in 2002. Between 2001 and 2002, exports to Costa Rica from the western provinces increased by 3.3%, from the Atlantic provinces by 16.1%, from Ontario by 20.2%, and from Quebec by 186.9%. In 2002, Western Canada accounted for 39.2% of the exports to Costa Rica.

Figure 4.3A. Value of Provincial Exports to Costa Rica, 2000-2002 (\$ millions)

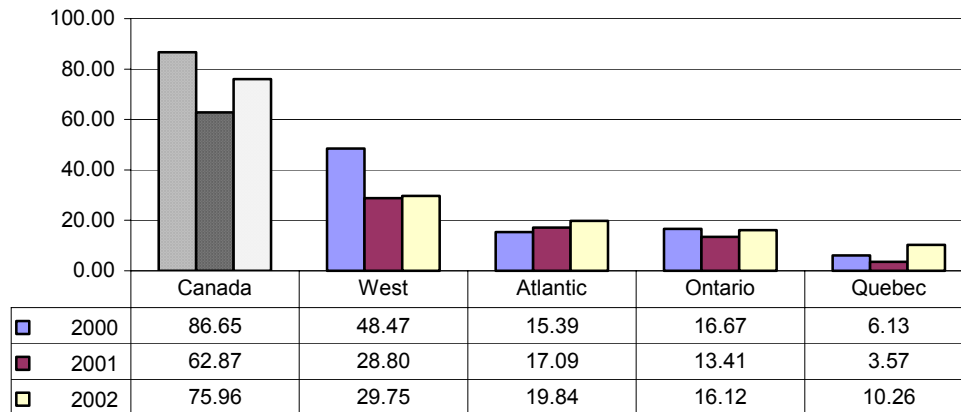


Table 4.3A. Export Value by Western Province, Percentage Share of Total Provincial Exports for 1999 and 2000-2002, and Export Growth

Province	Export Value (\$ millions)				Share of Global Exports (%)				% Change 02/01
	1999	2000	2001	2002	1999	2000	2001	2002	
SK	\$12.20	\$20.06	\$15.76	\$15.46	0.13	0.16	0.13	0.14	-1.91
BC	\$4.25	\$12.45	\$9.16	\$12.77	0.01	0.03	0.03	0.04	39.34
AB	\$1.96	\$11.21	\$1.43	\$1.12	0.03	0.02	0.003	0.003	-21.71
MB	\$8.62	\$4.76	\$2.44	\$0.41	0.02	0.05	0.03	0.00	-83.40
West	\$27.03	\$48.47	\$28.80	\$29.75	0.03	0.04	0.03	0.03	3.32

Among western provinces, Saskatchewan had the largest share of exports to Costa Rica (52%), followed by British Columbia (43%). All provinces except British Columbia experienced a decrease in export value from 2001 to 2002. Exports to Costa Rica from Saskatchewan dropped by 1.9%, from Alberta by 21.7%, and from Manitoba by 83.4%. Exports to Costa Rica from British Columbia increased by 39.3%. The increase from British Columbia compensated for all the decreases from other western provinces and resulted in an increase in the balance of export value of 3.3% from 2001 to 2002.

Figure 4.3B. Western Canada: Distribution of Provincial Exports to Costa Rica, 2002 (\$ millions)

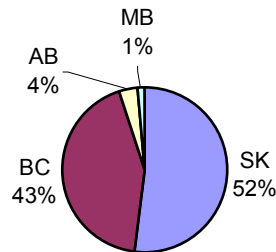


Table 4.3B presents the top five exports from Alberta and Western Canada to Costa Rica. Cereal exports, which used to be the largest export category from Alberta and Western Canada to Costa Rica fell out of the top 5 in 2002 due to decreased production in Alberta and Western Canada. Plastics, electrical machinery and some specialized items were the major export categories from Alberta to Costa Rica in 2002. Fertilizer and paper board were the major export categories from Western Canada to Costa Rica, accounting for 49.3% and 32.3% of the export share respectively.

Exports to Costa Rica are still minor when Western Canada's entire export economy is considered. The export value from Alberta to Costa Rica was only \$1.12 million, which was less than 0.01% of the province's total exports. The export value from the whole of Western Canada was \$29.75 million, which was less than 0.03% of Western Canada's total export value. However, with the establishment of the trade agreement, the export value could increase more easily in future years.

Table 4.3B. Alberta and Western Canada: Top Five Exports (2 digit HS Code)to Costa Rica, 2000-2002

HS	Description	Export Value (\$ millions)			Share of Total Exports to Costa Rica (%)			% Change
		2000	2001	2002	2000	2001	2002	
	Alberta	\$11.21	\$1.43	\$1.12	100.00	100.00	100.00	-21.71
39	Plastic	\$2.23	\$0.07	\$0.40	19.93	4.67	36.11	505.61
85	Electrical machinery	\$0.69	\$0.27	\$0.27	6.15	19.20	24.22	-1.24
99	Special import provisions	\$0.06	\$0.29	\$0.20	0.57	20.38	17.84	-31.47
98	Special classification provisions	\$0.03	\$0.00	\$0.10	0.22	0.00	8.49	0
20	Preserved food	\$0.05	\$0.01	\$0.03	0.45	0.91	2.71	133.83
	Western Canada	\$48.47	\$28.80	\$29.75	100.00	100.00	100.00	3.32
31	Fertilizers	\$8.58	\$13.21	\$14.65	17.7	45.89	49.25	10.88
48	Paper and paperboard	\$10.95	\$8.03	\$9.60	22.59	27.9	32.28	19.55
08	Edible fruits and nuts	\$0.33	\$0.19	\$0.81	0.67	0.65	2.73	333.42
07	Vegetables	\$0.39	\$0.13	\$0.75	0.80	0.47	2.53	460.71
84	Machinery	\$0.04	\$0.31	\$0.55	0.07	1.08	1.86	78.49

4.4. Exports To Israel

A free trade agreement was signed between Canada and Israel in 1996, and then implemented in January 1997. Figure 4.4A and Table 4.4A show the value of exports from Canada and the western provinces to Israel and the growth in export value in 2002 and since 1996, the year before the free trade agreement came into affect. Figure 4.4A shows that Canadian exports to Israel have increased continually since the trade agreement came into effect in 1997. The export value from Canada to Israel increased to \$385.7 million in 2002, accounting for 0.1% of Canada's total exports.

Western Canada has experienced a decline in the value of its exports to Israel since 1996, however, and exports fell again in 2002. Between 2001 and 2002, Alberta exports dropped in value by 55.0% and British Columbia exports by 18.3%. These two provinces play such a significant role in the Western Canadian export total (making up 76% of the value of Western Canadian exports in 2002) that total exports from the western provinces to Israel declined by 25.4% in 2002, despite the export growth seen in Saskatchewan (38.0%) and Manitoba (15.6%).

Figure 4.4A. Canadian Exports to Israel, 1994-2002 (\$ millions)

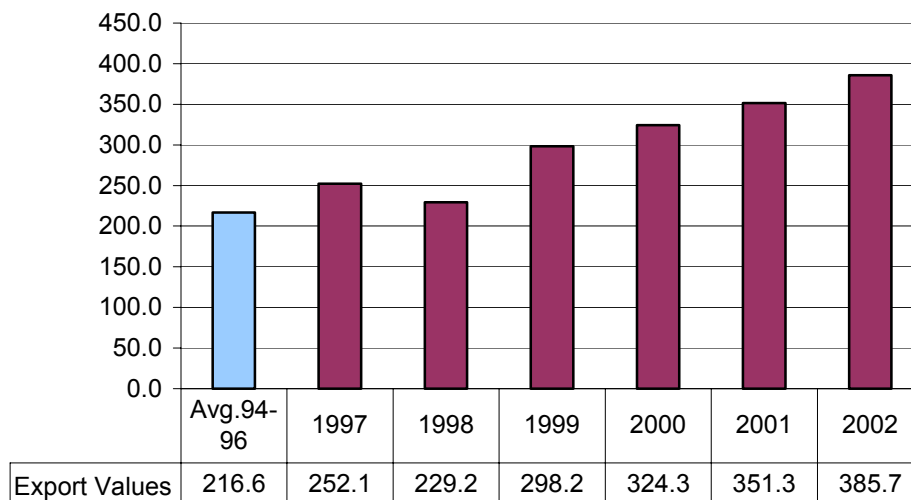


Table 4.4A. Export Value by Western Province, Percentage Share of Total Provincial Exports for 1996 and 2000-2002, and Export Growth

Province	Export Value (\$ millions)				Share of Global Exports (%)				% Change
	1996	2000	2001	2002	1996	2000	2001	2002	02/96
BC	\$18.72	\$19.33	\$16.63	\$13.59	0.07	0.05	0.05	0.05	-27.40
AB	\$12.38	\$14.54	\$12.69	\$5.71	0.04	0.03	0.02	0.01	-53.88
MB	\$1.91	\$3.02	\$2.47	\$3.40	0.03	0.03	0.03	0.04	78.01
SK	\$1.91	\$4.44	\$2.44	\$2.82	0.02	0.04	0.02	0.02	47.64
West	\$43.34	\$41.32	\$34.22	\$25.52	0.06	0.04	0.03	0.03	-41.12

Figure 4.4B. Western Canada: Distribution of Provincial Exports to Israel, 2002 (\$ millions)

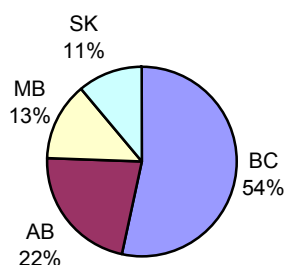


Table 4.4B highlights the top five exports to Israel from Alberta and Western Canada in 2000-2002.

For Alberta, one significant change in the composition of the top five export groups to Israel was that the export of sulfur (HS 25) decreased to almost zero from 2000 to 2002. Non-railway vehicles (HS 87) became one of the top five export categories. The sharp decline of sulfur exports dragged down Alberta's export value by 55.0% despite the strong increase in machinery, plastics and non-railway vehicle shipments. The top three export categories in Alberta were similar to those of Western Canada. Paper and paperboard (HS 48) exports dropped out of the top five lists in Western Canada as did sulfur. Precision equipment (HS 90) and pharmaceutical products (HS 30) jumped into the top five.

Table 4.4B. Alberta and Western Canada: Top Five Exports to Israel (2 Digit HS Code) in 2000-2002
(\$ millions)

HS Description	Export Value (\$ millions)			Share of Total Exports to Israel (%)			% Change
	2000	2001	2002	2000	2001	2002	02/01
Alberta	\$14.54	\$12.69	\$5.71	100.00	100.00	100.00	-54.99
84 Machinery	\$0.52	\$1.07	\$1.80	3.59	8.4	31.51	68.78
85 Electrical machinery	\$1.04	\$2.57	\$1.17	7.13	20.28	20.45	-54.62
07 Vegetables	\$0.47	\$0.88	\$0.87	3.24	6.94	15.3	-0.84
39 Plastics	\$0.44	\$0.41	\$0.50	3.04	3.24	8.75	21.46
87 Vehicles, not railway	\$0.00	\$0.00	\$0.39	0.00	0.00	6.87	0
Western Canada	\$41.32	\$34.22	\$25.52	100.00	100.00	100.00	-25.43
84 Machinery	\$3.81	\$5.99	\$10.06	9.22	17.51	39.44	67.95
07 Vegetables	\$3.21	\$4.74	\$4.30	7.76	13.85	16.87	-9.19
85 Electrical machinery	\$4.89	\$4.96	\$3.12	11.83	14.48	12.21	-37.14
90 Precision equipment	\$0.69	\$0.49	\$2.58	1.68	1.45	10.12	421.98
30 Pharmaceutical products	\$0.75	\$0.02	\$1.12	1.83	0.05	4.39	5961.51

Conclusions

- Exports have been growing in value and importance since the establishment of free trade agreements with various regions and countries.
- Compared with export values in 2001, export values from Western Canada and Canada declined in 2002. In Western Canada, the impact was fairly widely distributed amongst the region's top commodities and top export markets.
- The United States remains the largest market for Canada as a whole and for all western provinces and has been the major driving force behind Canada's increased international trade. The Canada-US Free Trade Agreement (FTA) of 1989 and its successor, the Canada-US-Mexico North American Free Trade Agreement (NAFTA) of 1994, have assisted in opening the US market.
- Western Canada provides approximately 23% of total Canadian exports to the US. There was a decline in Western Canadian exports to the US in 2002.
- Alberta accounts for more than half of the export value from western provinces to the U.S. The U.S. continues to be Alberta's dominant export market, and received 88.3% of total Alberta exports, measured by dollar value, in 2002.
- Exports from Western Canada to the other four countries (Mexico, Chile, Costa Rica and Israel) that have free trade agreements with Canada are growing at different speeds. Together, exports to these countries make up around 1% of Western Canada's total export value.
- Exports to Mexico have experienced considerable growth since the establishment of the NAFTA.
- Exports from the western provinces to Chile and Israel have declined in value since 1996, the year prior to the implementation of the free trade agreements with both of these countries. So far, the establishment of these agreements appears not to have influenced Western Canada's international trade appreciably.

Appendix

Figure 1. Energy Products: Current Prices Unadjusted in Canadian Dollars (Quarterly)

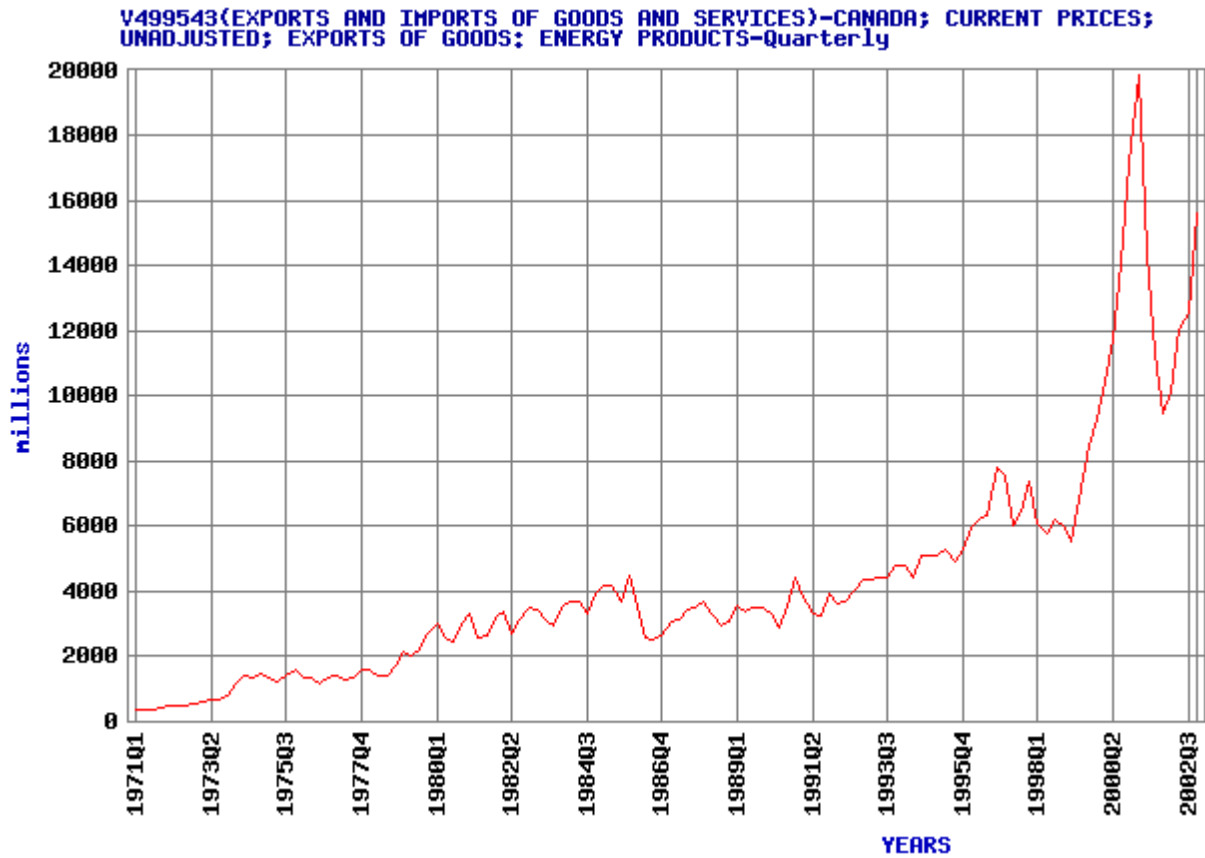
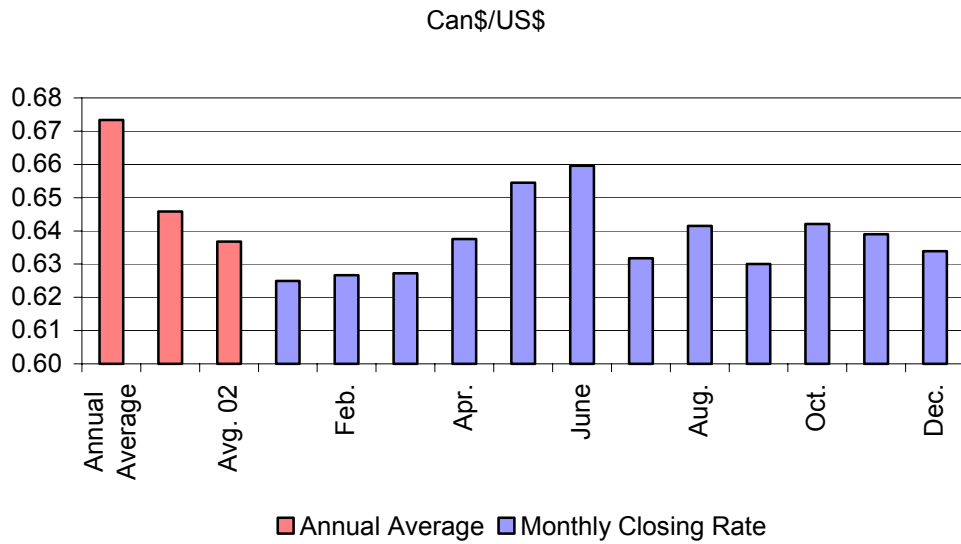


Figure 2. CAN\$/U.S.\$ Annual Averages (00-03) and Monthly Closing Rates in 2002



Source: Bank of Canada: Rates & Statistics