



MARITIME Series

MONOGRAPHS

Pierre-Marcel Desjardins

Atlantic Canada's Exports, with a Focus on SMEs and Rural Regions



INSTITUT CANADIEN DE RECHERCHE SUR LE DÉVELOPPEMENT RÉGIONAL
THE CANADIAN INSTITUTE FOR RESEARCH ON REGIONAL DEVELOPMENT

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About the Monograph

In the first chapter, we present a quantitative analysis of Atlantic Canada's export performance over the past decade. The second chapter is a qualitative analysis of Atlantic Canada's export performance, with a special focus on rural areas.¹ And in the third chapter, we present the results of a survey of twenty-six actual and potential exporters from Atlantic Canada's four provinces, as well as the results of consultations with personnel from the Department of Foreign Affairs and International Trade (DFAIT) at the Boston consulate and at the department's headquarters in Ottawa. We conclude with some reflections on the lessons learned.

Following are some of the highlights from the data:

- ▶ Atlantic Canada is increasingly dependent on the U.S. for its exports.
- ▶ Natural resources remain important for Atlantic Canada's export sector.
- ▶ Nontraditional sectors are becoming increasingly important in Atlantic Canada's export performance.
- ▶ The size of firms, as measured by the value of exports, does not seem to be a significant factor in explaining increased market share.
- ▶ Firms with a more complex, or diversified, corporate structure are relatively more successful on international markets.
- ▶ Atlantic Canada's exports grew relatively more on the U.S. Southeast and U.S. Eastern Seaboard markets.
- ▶ Exports from rural Atlantic Canada (i.e. from outside Halifax, St. John's and Saint John) were more successful than exports from urban Atlantic Canada.

1. Note that for this chapter, we have followed Statistics Canada's definition of urban regions, which corresponds to census metropolitan areas (CMAs). All other regions are considered rural. At present, Atlantic Canada's CMAs are Halifax, St. John's, and Saint John. In chapter 3, our definition of urban regions includes municipalities that have a population of more than 10,000.

Our survey of exporting and potentially exporting SMEs as well as our consultations with DFAIT personnel, has provided valuable insights, including:

- ▶ Government support is generally considered very good.
- ▶ Four factors are fundamental to gaining access to capital from financial institutions. These are:
 - The firm's track record.
 - The end use of the funds — e.g., the development of new, uncharted markets is likely to reduce one's prospects.
 - The firm's sector of activity — firms active in nontraditional sectors seem less likely to receive support.
 - The geographical location of the firm — rural regions seem to be considered higher-risk regions.
- ▶ Marketing is considered essential to the success of an exporter. Access to international-marketing expertise, even on an ad hoc basis, is very high on exporting SMEs' wish list.
- ▶ Financing of new endeavours (new-product development, new-market development, development in new sectors) is often challenging.
- ▶ Accessing consultants can sometimes be difficult, especially in rural areas.
- ▶ Trade missions, highly rated by exporters, are generally more valuable to them when they are sector-focused.
- ▶ Training for export is very important. Having access to experts is often invaluable. DFAIT personnel abroad could be part of a strategy to improve the level of the training offered.
- ▶ Developing international markets is a long-term proposition. In this context, governments should develop lasting relationships with exporters and potential exporters.
- ▶ Market intelligence is vital. Most exporters have expressed a need for more pertinent market intelligence.
- ▶ Transportation is generally not seen as an insurmountable obstacle, although cost and reliability can be a significant challenge, especially with respect to air transportation.

- ▶ Geography and culture are important. Markets like New England and some European countries as well as Australia and New Zealand in the Asia-Pacific region may constitute stepping stones for new or developing exporters, who find it easier to operate in countries with a language, culture, etc., that are the same or similar to their own.

About the Author

Pierre-Marcel Desjardins has been a professor of economics at the Université de Moncton since 1990 and an associate researcher at the Canadian Institute for Research on Regional Development since July 2001, a position he previously held from 1990 to 1996. From 1996 to 2001 he held the Chaire des caisses populaires acadiennes in cooperative studies.

Pierre-Marcel received his Ph.D. in economics from the University of Texas at Austin (his thesis was on the regional impact of free trade). He obtained his B.A. and M.A. in economics at the Université de Moncton.

His current research interests include interregional transfers, the development of peripheral regions, and SME exporters in rural areas. He has served as an expert in studies on economic development for the governments of Canada and New Brunswick.

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Several individuals made significant contributions to this study. Now whenever you single out one person for thanks, you run the risk of overlooking someone else. Mindful of this, I would like to acknowledge the following people for their valuable support: Wade Aucoin and Serge Langis from ACOA, who helped identify suitable subjects for interviews and offered excellent comments on the several drafts of this monograph, and Yvan Gervais and Jean-Bosco Sabuhoro from Statistics Canada, who were most helpful with the preparation of chapter 2. I would also like to express my sincere appreciation to all entrepreneurs as well as to personnel from the Department of Foreign Affairs and International Trade (DFAIT) for taking some of their very valuable time to participate in this study.

Finally, I want to express my gratitude to Samuel LeBlanc from the CIRRD, who assisted me by completing some of the interviews with exporters, and to Réjean Ouellette for his valuable assistance with the logistics in preparing and editing this report.

The customary caveat applies here: the views expressed in this document are entirely my responsibility.

Contents

Introduction.....	17
1. Atlantic Canada’s Exports over the Past Decade: A Quantitative Approach	19
Geographical Distribution of Exports, 1992–2001	20
Growth of Exports: Geographical Distribution, 1993–2001	26
Provincial Share of Canadian Exports, 1992–2001	31
Distribution of Exports by Sector, 1992–2001	36
Growth of Exports by Sector, 1992–2001	54
Share of Canadian Exports by Sector, 1992–2001	63
Conclusion	76
2. Atlantic Canada’s Exports over the Past Decade: A Qualitative Approach.....	77
Shift-Share and Export Share.....	77
Size of Firms	79
“Complexity” of Firms.....	80
Destination of Exports	81
Number of Destinations	82
Industry	83
Number of Sectors in Which Firms Export.....	84
Urban vs. Rural.....	85
Firms’ Experience	87
Province of Origin vs. Province of Residence	87
Conclusion	88

3. The Players' Perspective: Results of Meetings with SMEs That Are Exporters and Potential Exporters.....	91
The Survey.....	91
Financing.....	93
Marketing.....	94
Innovation and Research and Development.....	95
Trade Missions.....	96
Government Support.....	98
Transportation.....	100
Networking.....	101
Interprovincial Trade.....	102
Obstacles to Growth and Other Issues.....	102
The View from Abroad: Results of Meetings with Personnel from the DFAIT.....	103
General Conclusion: Lessons Learned.....	105
Appendix.....	109
Figures.....	123
Tables.....	126

Introduction

One of the most important challenges in regional economic development is increasing the economic activity in a given region. In a market economy, production is only one element of the equation leading to economic growth. Goods and services produced need buyers, and buyers can be located inside or outside a region. Consequently, for smaller regions especially, exporting is an imperative. Indeed regional economic theories like, for example, the *export base* theory place a lot of emphasis on the need for a region to sell outside its boundaries. It is a means to grow, to create employment, and to increase the quality of life in a region. Atlantic Canada is no exception to this rule, and international trade is a necessary means to creating a better future for the region's population.

Firms are often faced with a similar situation. With the exception of those that restrict their activities to serving local customers, exporting rapidly becomes a means of increasing size, employment, and profitability and is often synonymous with survival. For some, it is essential to survival from the very beginning. For others, events may trigger such a need: the development of a niche product, the loss of a main client, etc.

The aim of this study is to get a better picture of the reality faced by Atlantic Canadian exporters. In chapter 1, we present a quantitative analysis of Atlantic Canada's export performance over the past decade. This is followed in chapter 2 by a qualitative analysis of Atlantic Canada's export performance, with a special focus on rural and small- and medium-sized enterprises (SMEs). We use the shift-share technique as well as various other variables to analyze data from the export register. In chapter 3, we present the results of a survey of twenty-six actual and potential exporters from Atlantic Canada's four provinces and follow this with a presentation of the results of consultations with personnel from the Department of Foreign Affairs and International Trade at the Boston consulate and at the department's headquarters in Ottawa. Finally, in the Conclusion we summarize the

lessons learned. Based on our results, consultations with observers, and an analysis of pertinent studies, we offer some perspectives on the question.

Atlantic Canada's Exports over the Past Decade: A Quantitative Approach

In this chapter, we analyze data for the period 1992 to 2001, describing the region's recent export performance. Several variables are presented for Canada, Atlantic Canada, Newfoundland and Labrador, Prince Edward Island, Nova Scotia, and New Brunswick.

The source for the data used in this chapter is Industry Canada's Strategis Web site, which contains data for goods exported, but not services exported. A description of the data and methodology can be found at the following Web address: http://strategis.ic.gc.ca/sc_mrkti/tdst/tdo/tdoDefinitions_30.php

For the purpose of our analysis, we decided to focus on five geographical destinations in addition to total exports. These five regions are the United States as a whole, the Northeastern United States,² Western Europe,³ Japan, and Mexico.⁴

A note of caution: the data presented are for the value of exports. In some sectors where the price of exports fluctuates significantly, a characteristic often linked to the production of natural resources, significant changes in the value of exports are not necessarily the result of a proportional shift in the quantities exported. It may be the result, in whole or in part, of significant fluctuations in price.

2. Included are the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, and Vermont.

3. Included are Andorra, Austria, Belgium, Denmark, Faeroe Islands, Finland, France, Germany, Gibraltar, Greece, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, Malta, Monaco, Netherlands, Norway, Portugal, San Marino, Spain, Svalbard Island, Sweden, Switzerland, United Kingdom, and Vatican City State.

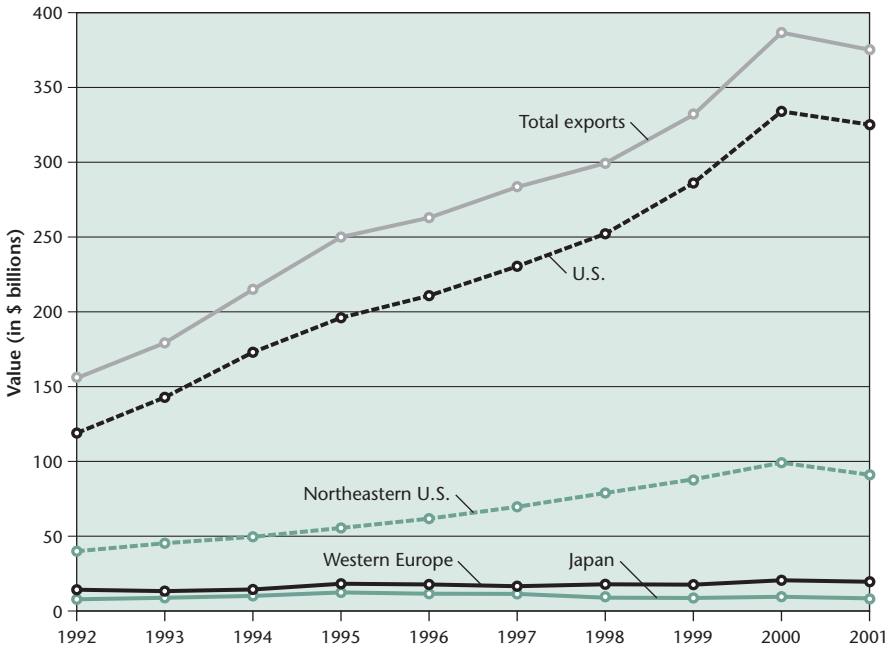
4. In the case of these last two destinations, and specially Mexico, it was impossible to include the values in some figures when quantities were relatively too small or when their variations were too great.

Geographical Distribution of Exports, 1992–2001

Canada

The vast majority of Canadian exports go to the U.S., a trend that has increased during the last decade (see figure 1). In 1992 approximately three quarters of the country's exports were destined to the U.S.; ten years later, that figure was closer to 86 percent. Interestingly, the share of total exports to the Northeastern U.S. remained relatively stable during this period at approximately a quarter of Canada's total exports. This suggests that the increase in the relative importance of the U.S. market was the result of greater exports to regions other than the one closest to Atlantic Canada.

Figure 1
Value of Canadian Exports,
by Selected Destinations, 1992–2001

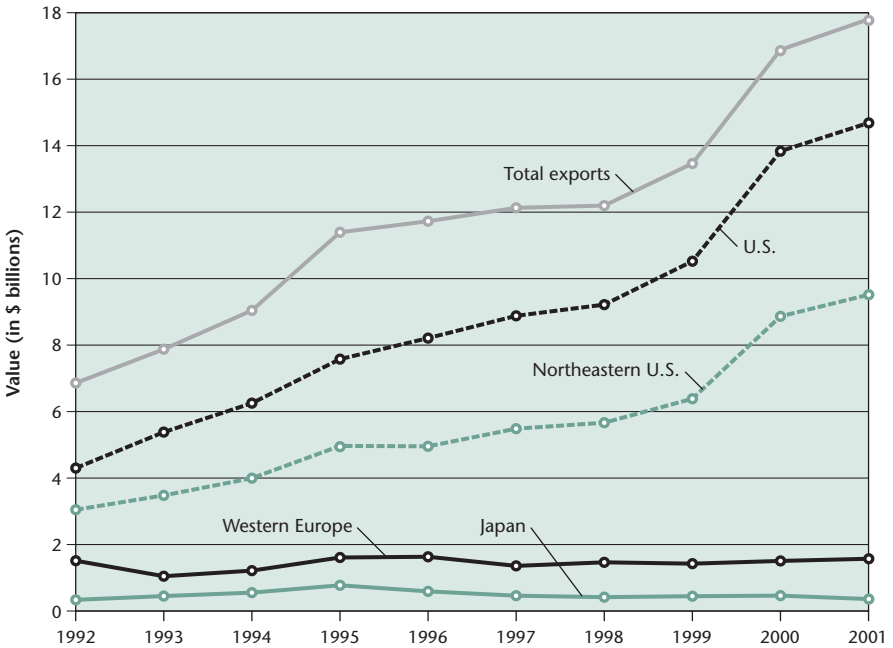


Not surprisingly, given the trend described above, Western Europe's relative share of Canadian exports has decreased over the last decade from nearly 9 percent to approximately 5 percent. A similar trend has been noted for Japan. As for Mexico, its share has remained stable at around 0.5 percent, which is low given the North American Free Trade Agreement (NAFTA).

Atlantic Canada

The U.S. received the vast majority of Atlantic Canada’s exports, just as it did for Canada as a whole (see figure 2). The proportion of exports to the U.S. grew from around 62 percent to over 82 percent from 1992 to 2001 — both levels are lower than for Canada as a whole. In 2001 over half of Atlantic Canada’s exports went to the Northeastern U.S. On the other hand, Western Europe’s share of Atlantic Canada’s exports gradually decreased over the period from over 22 percent to less than 9 percent. A similar trend was observed for Japan, although the trend is not as significant. The same is also true for Mexico.

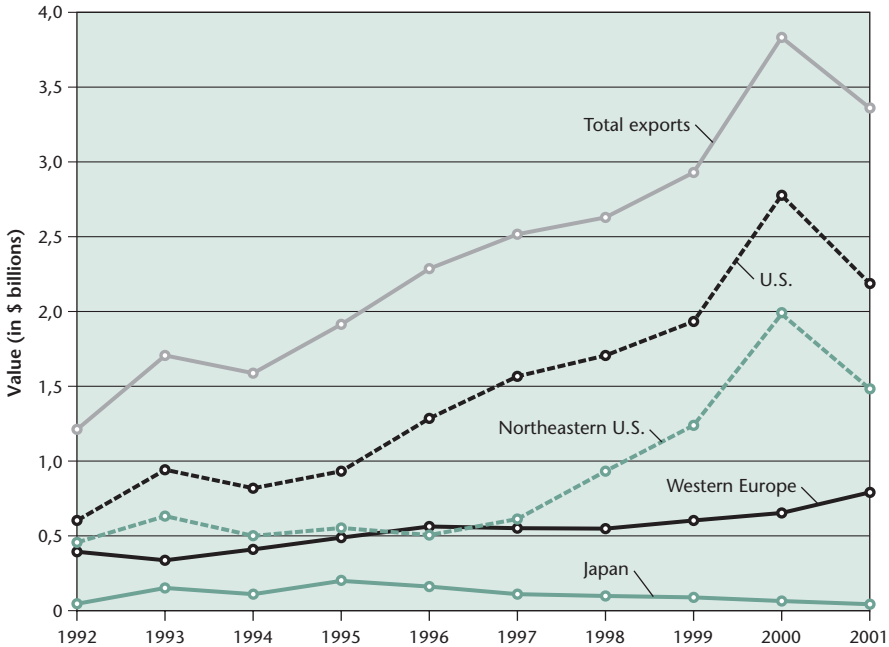
Figure 2
Value of Atlantic Canada Exports,
by Selected Destinations, 1992–2001



Newfoundland and Labrador

The majority of the province's exports go the U.S. (see figure 3), with the trend showing an increase in the relative importance of the U.S. market from around 50 percent a decade ago to between 65 and 70 percent over the past few years. The relative importance of the Northeastern U.S. market has also increased, especially over the past five years, and has become the destination of nearly half of Newfoundland and Labrador's exports. However, we find a significant decline of total exports, exports to the U.S., and exports to the Northeastern U.S. market in 2001.

Figure 3
Value of Newfoundland and Labrador Exports,
by Selected Destinations, 1992–2001

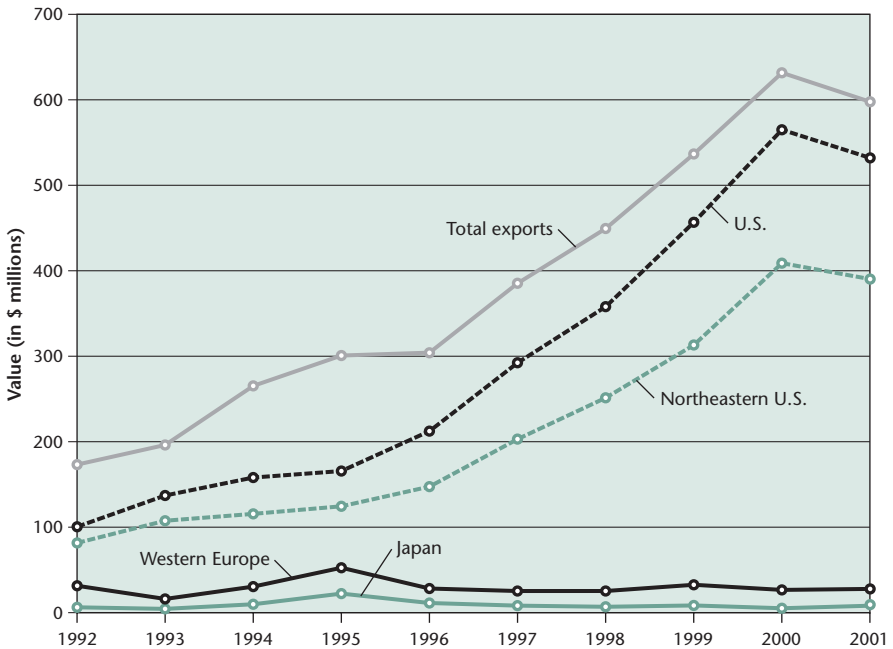


Western Europe remains an important market (around 20 percent), although its share was higher a decade ago. On the other hand, Japan as a destination for Newfoundland and Labrador's exports saw a steady decline in its relative importance to around one percent in 2001. As for Mexico during this period, with the possible exception of 1992 it was not the destination for a significant share of the province's exports.

Prince Edward Island

The trend for Prince Edward Island’s exports follows a similar pattern (see figure 4): the relative shares of the U.S. and the Northeastern U.S. markets increased throughout the last decade (there was a slight trough in 1994–95) with a decline in 2000–01. The U.S. now receives nearly 90 percent of all of the province’s exports, the Northeastern U.S. being the recipient of approximately half. At the same time, Western Europe and Japan saw their relative shares decrease over the period. As for Mexico, it never was, relatively speaking, an important destination for the province’s exports.

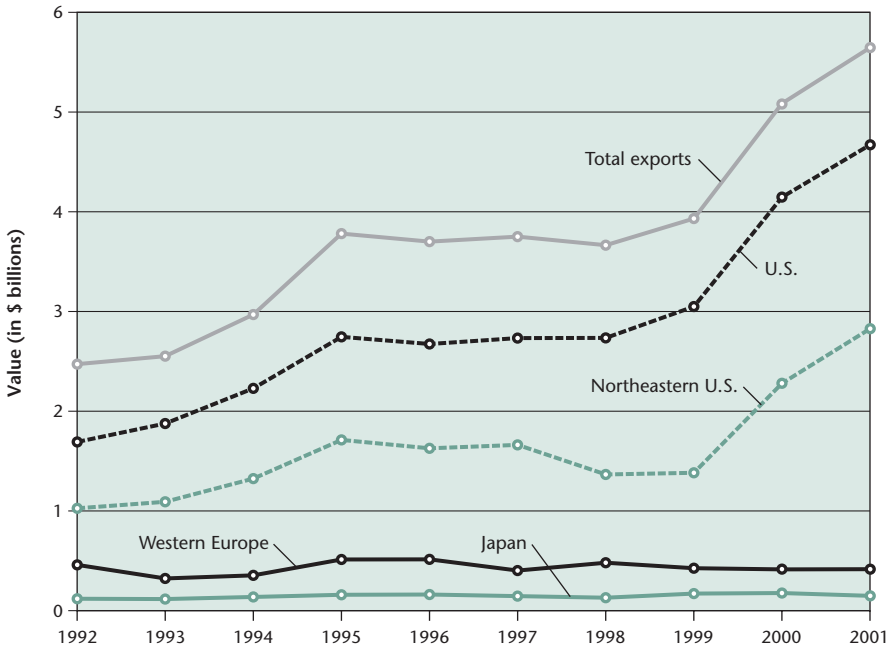
Figure 4
Value of Prince Edward Island Exports,
by Selected Destinations, 1992–2001



Nova Scotia

Though the overall trend in Nova Scotia is much the same as it is in Canada and in the other Atlantic provinces, the order of magnitude is different (see figure 5). The U.S. is the principal market, going from less than 70 percent to over 80 percent during the past decade. And the Northeastern U.S. has also seen its share increase from around 40 percent to 50 percent, although it declined to around 35 percent in the late 1990s.

Figure 5
Value of Nova Scotia Exports,
by Selected Destinations, 1992–2001



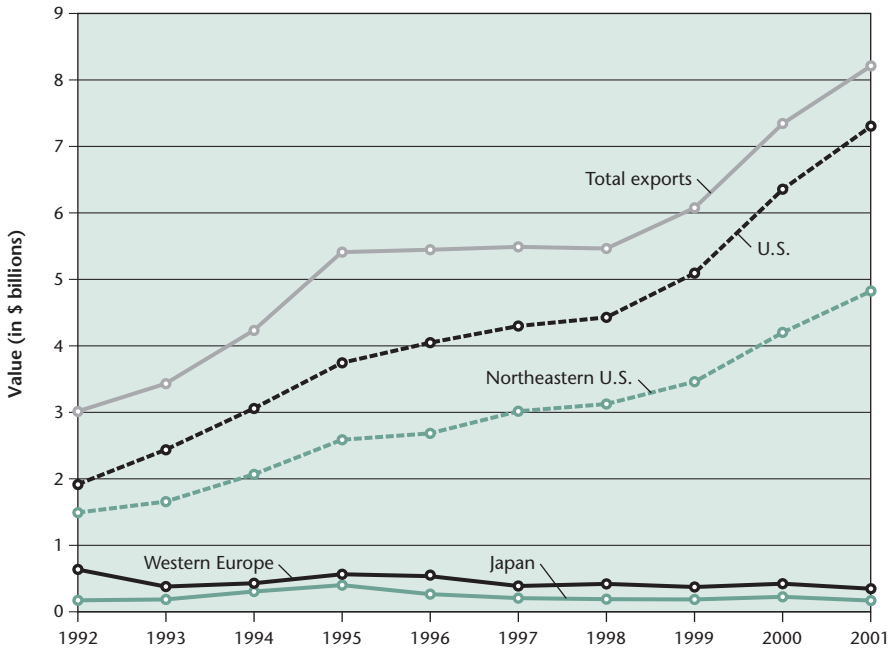
During that period, Western Europe and Japan saw their relative importance decrease. Mexico, however, is slightly more important as an export market for Nova Scotia, relatively speaking, than for the other Atlantic provinces. That being said, it remains a relatively small market.

New Brunswick

For New Brunswick's exports (see figure 6), the relative importance of the U.S. market increased steadily over the past decade to reach nearly 90 percent. The same upward trend was also present in the Northeastern U.S. market, but not to the same extent, suggesting a diversification of markets within the U.S.

As is the case for the other Atlantic provinces, New Brunswick saw both Western Europe and Japan decline in relative importance for the province's exports. Exports to Mexico are not significant, reaching a peak of 0.32 percent in 1994.

Figure 6
Value of New Brunswick Exports,
by Selected Destinations, 1992–2001

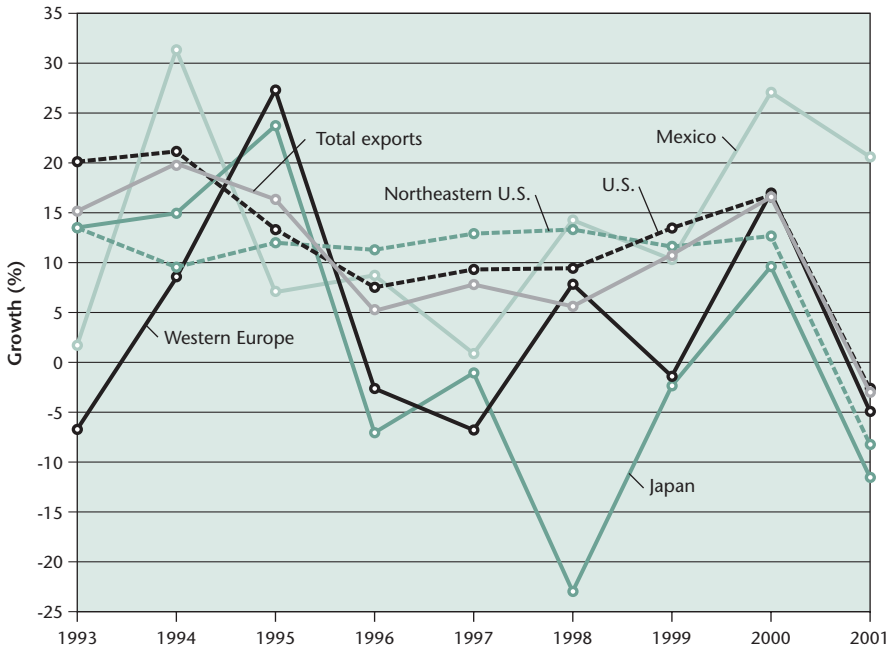


Growth of Exports: Geographical Distribution, 1993–2001⁵

Canada

Growth in total exports was relatively high during the first part of the period 1993–95 and then fell before returning back to double-digit values in 1999 and 2000 (see figure 7). In 2001, for the first time during this period, the total value of exports decreased in Canada. It is noteworthy that the growth of Canadian exports to the U.S. market almost always outperformed the growth of overall exports, thus confirming the trend towards an increase in the importance of the U.S. market to the Canadian economy. Growth of exports to the Northeastern U.S. was lower than to the entire U.S. market from 1993 to 1995; it was higher between 1996 and 1998 and again lower from 1999 to 2001.

Figure 7
Annual Growth of Canadian Exports,
by Selected Destinations, 1993–2001



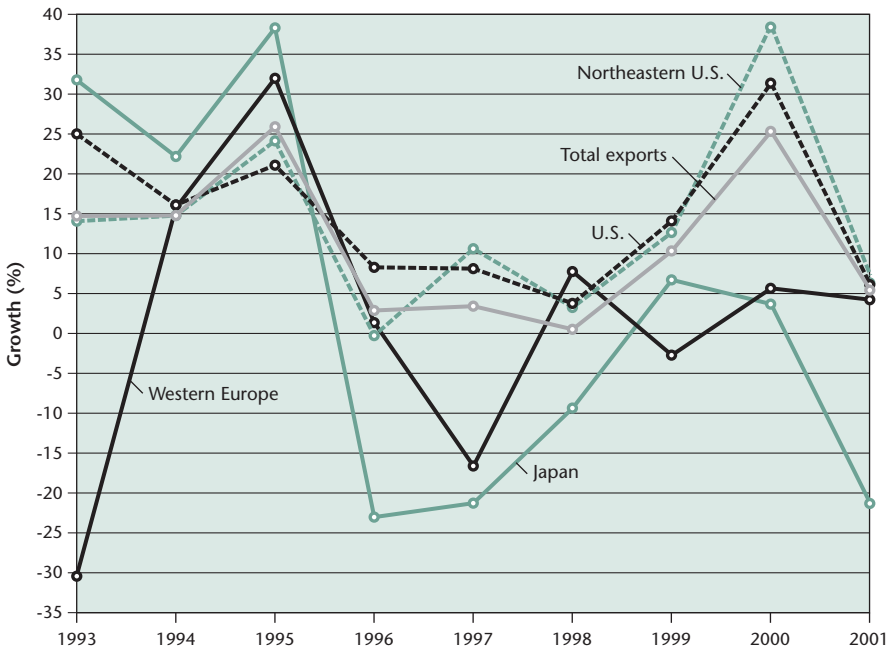
5. Growth in this section is defined as the percentage increase in the value of exports compared to the value for the previous year.

Canada's exports to Western Europe fluctuated during this period: where in some years there was growth in the value of exports, in other years there was a decline. The same can be said of exports to Japan, the difference being that there was a clearer pattern: a positive growth period from 1993 to 1995 was followed by nearly six years of negative growth, 2000 being the exception. This, at least in part, is probably the result of the difficulties faced by the Japanese economy. As for Mexico, Canadian exports grew in every year of the period. Furthermore, of all our export markets, Mexico was the only one that showed positive growth in 2001.

Atlantic Canada

Between 1993 and 2001 (see figure 8), Atlantic Canada experienced two periods of relatively high growth in total exports (1993–95 and 1999–2001) and one of slow growth (1996–98). Most markets followed a similar trend, although some destinations saw more significant growth (e.g., the U.S. and the Northeastern U.S.) than others (e.g., Japan and Western Europe).

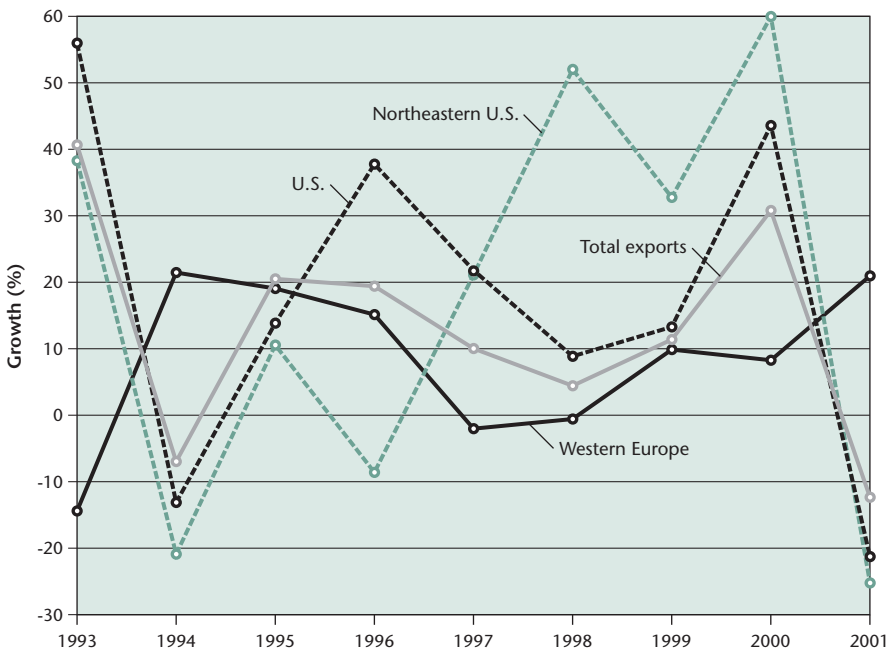
Figure 8
Annual Growth of Atlantic Canada Exports,
by Selected Destinations, 1993–2001



Newfoundland and Labrador

Newfoundland and Labrador's exports fluctuated significantly (see figure 9), usually with small troughs and high peaks. The only years where the value of total exports actually decreased were 1994 and 2001. The overall pattern of exports to the U.S. was similar. What is interesting, though, is that in some years, growth of exports to the U.S. was very significant (e.g., 56 percent in 1993 and 43 percent in 2000). As for exports to the Northeastern U.S., even though the overall trend was similar to the trend for the U.S. as a whole, the order of magnitude was sometimes very different, with peaks of 60 percent in 2000 and 52 percent in 1998.

Figure 9
Annual Growth of Newfoundland and Labrador Exports,
by Selected Destinations, 1993–2001



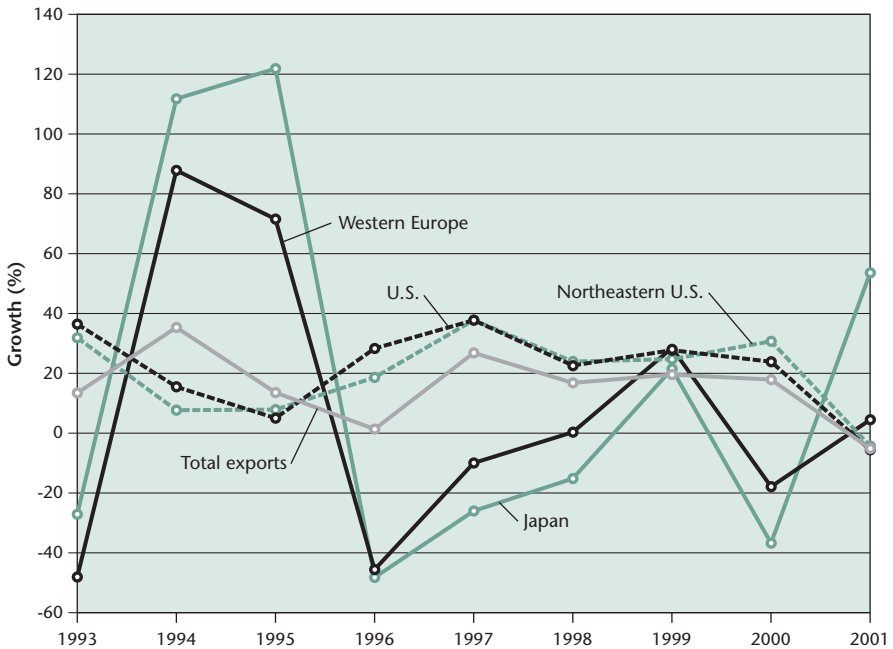
Growth of exports to Western Europe fluctuated throughout this period, ranging from a peak of 21.5 percent in 1994 to a trough of -14.4 percent in 1993. Note that in 2001 Western Europe was the only selected market where Newfoundland and Labrador's exports experienced positive growth. Exports to Japan did fluctuate during this time, but starting in 1996 they only decreased, once again probably the result of the economic difficulty it was facing. Finally, growth of

exports to Mexico was up and down like a roller coaster. This is probably the result of the relatively small value of exports to that country, which means that one large contract in a given year can generate significant fluctuations in the growth rate.

Prince Edward Island

The growth of Prince Edward Island's total exports was, with two exceptions, consistently in the double digits during this period (see figure 10). The exceptions were 1996 (1.1 percent) and 2001 (-5.4 percent). Growth of exports to the U.S. was above 20 percent for all but three years: 1994, 1995, and 2001. Of those three years, only 2001 had a negative growth rate. A similar pattern was experienced for exports to the Northeastern U.S. This is consistent with a trend towards increased dependency on the U.S. market for the province's exports.

Figure 10
Annual Growth of Prince Edward Island Exports,
by Selected Destinations, 1993–2001



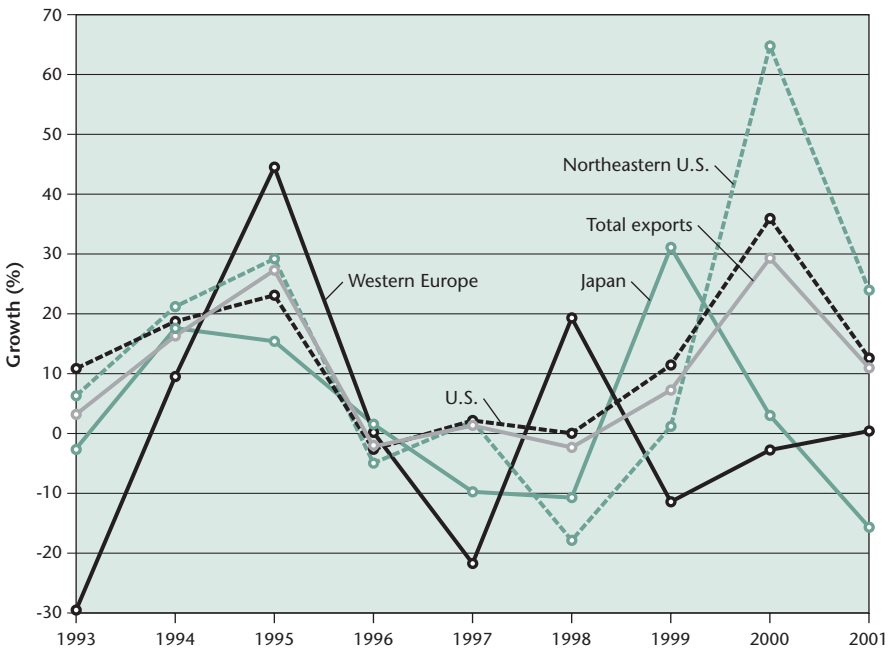
For exports to Western Europe the growth rate fluctuated significantly, from a peak of 87 percent in 1994 to a trough of -48 percent in 1993. Exports to Japan and Mexico also saw significant fluctuations in their growth rate over this period. As mentioned before this is the

result of a relatively low level of exports leading to a situation where one or a few contracts can have a significant impact.

Nova Scotia

Total exports grew at the beginning and at the end of this period (see figure 11), with a trough from 1996 to 1998. There was a similar pattern in exports to the U.S., although the growth rate was generally higher in the case of the U.S. than for most destinations. The trend for the Northeastern U.S. was somewhat different, with a trough from 1996 to 1999, but rapid growth in 2000 and to some extent in 2001.

Figure 11
Annual Growth of Nova Scotia Exports,
by Selected Destinations, 1993–2001

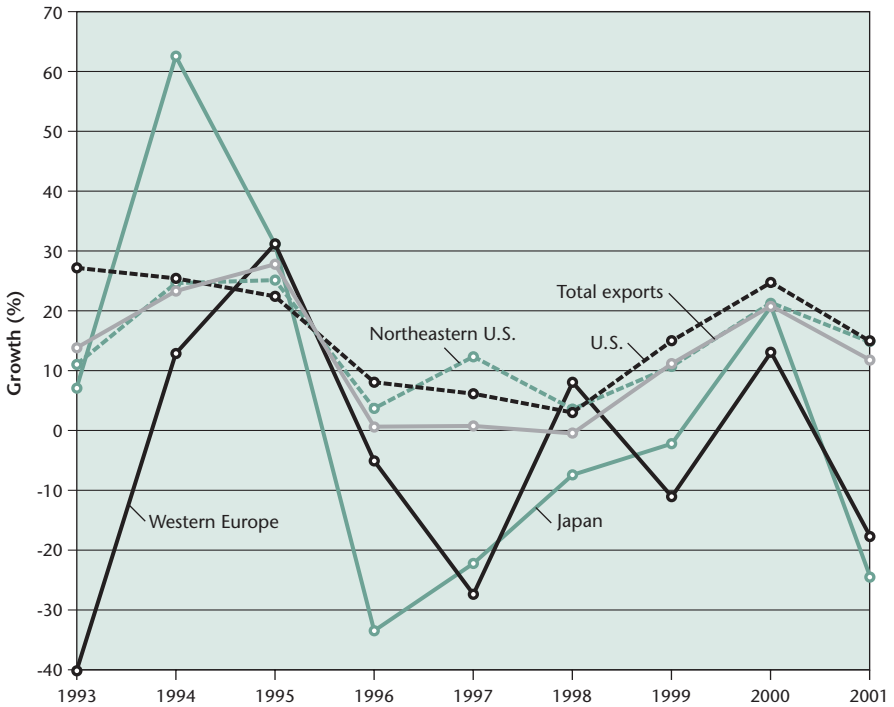


Growth of exports to Western Europe fluctuated throughout the period, with nearly half the years registering negative growth. This was also the case for Mexico and to a lesser extent for Japan, which recorded negative growth for three of the last six years with the exception of 2000. As we found for other provinces, this is probably partly the result of the difficulties faced by the Japanese economy.

New Brunswick

New Brunswick's total exports, exports to the U.S., and exports to the Northeastern U.S. followed very similar trends throughout this period: relatively high growth from 1993 to 1995 and 1999 to 2001, and low growth from 1996 to 1998 (see figure 12). At the same time, exports to other jurisdictions fluctuated significantly during this period, with trends similar to those of other provinces.

Figure 12
Annual Growth of New Brunswick Exports,
by Selected Destinations, 1993–2001



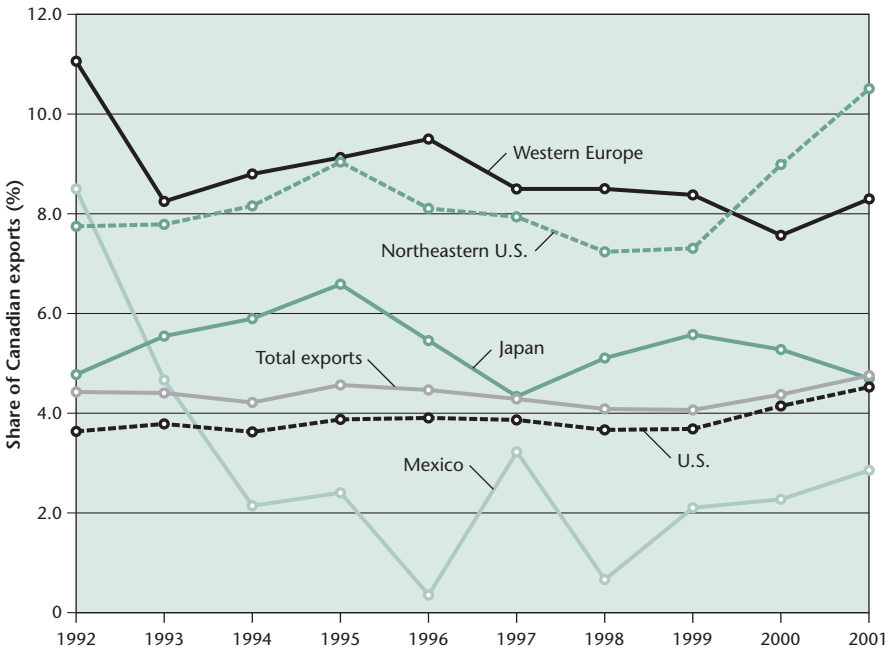
Provincial Share of Canadian Exports, 1992–2001

Atlantic Canada

Atlantic Canada's share of total Canadian exports grew slightly from 1992 to 2001 from 4.4 to 4.8 percent (see figure 13). This rise is the result of an increase in the region's share of Canada's exports to the U.S. and the stability of its share to Japan, which compensated for the loss of share on the European and Mexican markets. The increase

in Atlantic Canada's share of Canadian exports to the Northeastern U.S. market was significant, from 7.8 percent in 1992 to 10.5 percent in 2001.

Figure 13
Atlantic Canada's Share of Canadian Exports,
by Selected Destinations, 1992–2001

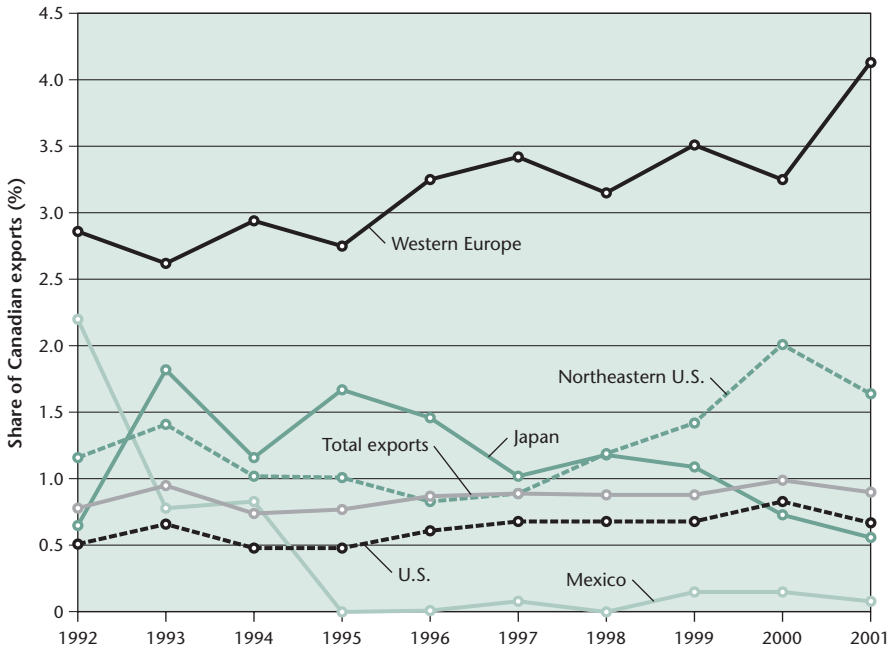


Newfoundland and Labrador

Newfoundland and Labrador's share of total Canadian exports fluctuated between 0.7 and one percent (see figure 14). Of the selected jurisdictions, Western Europe was where the province's share was greatest, growing from below 3 percent in 1992 to over 4 percent in 2001. The pattern for the share of exports to the U.S. was essentially the same as that of total exports, but at a slightly lower level. The share of exports to the Northeastern U.S. declined during the first part of the period but increased during the latter part with the exception of 2001.

The province's share of Canadian exports to Japan decreased over the latter part of the past decade to fall in 2000 and 2001 below the province's share of overall exports. As for Mexico, the share, which was relatively high in 1992, fell to a very low level after 1994.

Figure 14
Newfoundland and Labrador's Share of Canadian Exports,
by Selected Destinations, 1992–2001

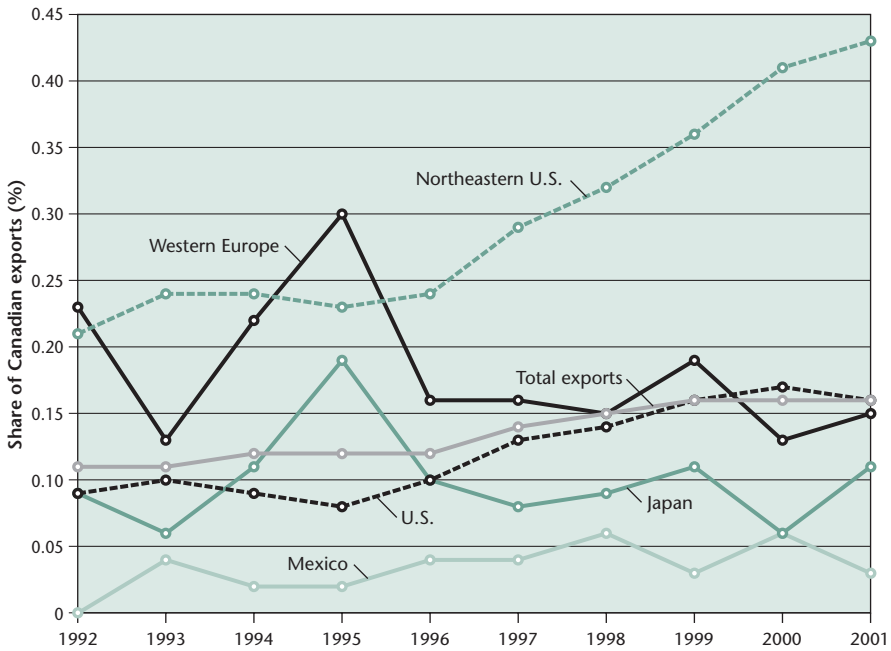


Prince Edward Island

Prince Edward Island's share of total Canadian exports grew by nearly 50 percent during the past ten years from 0.11 to 0.16 percent (see figure 15). The share of Canadian exports to the U.S. also increased and was essentially the same as that of total exports after 1996. The province's share of Canadian exports to the Northeastern U.S. experienced impressive growth over this period, from 0.21 percent in 1993 to 0.43 percent in 2001. On the other hand, after a peak in 1995, the share of exports to Western Europe decreased during the rest of the period.

The province's share of Canadian exports to Japan increased initially, but decreased after 1995. As for exports to Mexico, the share fluctuated, with highs of 0.06 percent in 1998 and 2000.

Figure 15
Prince Edward Island's Share of Canadian Exports,
by Selected Destinations, 1992–2001

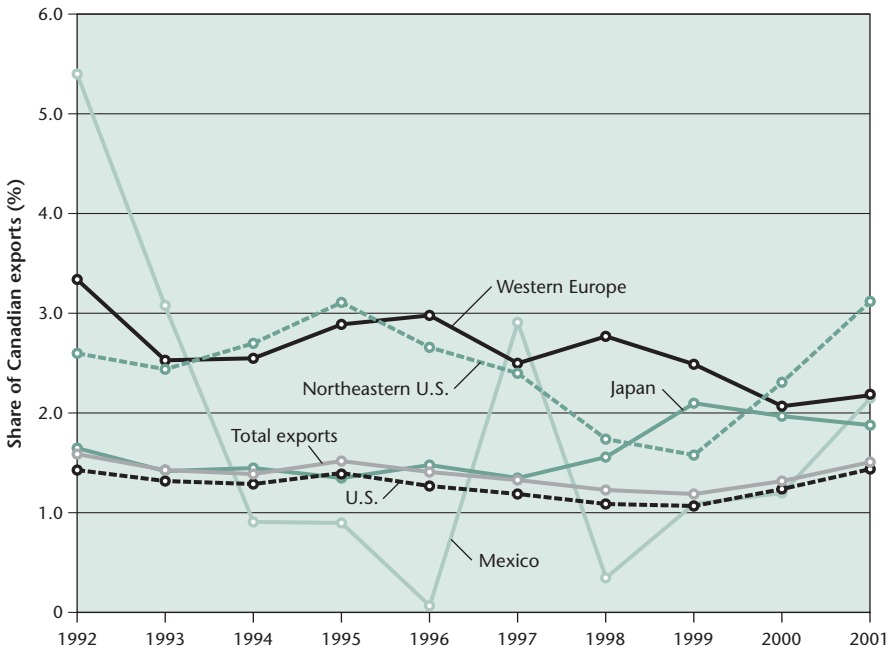


Nova Scotia

In the case of Nova Scotia, its share of total Canadian exports remained relatively stable over this period at between 1.2 and 1.5 percent (see figure 16). The province's share of Canadian exports to the U.S. followed a very similar pattern to that of total exports except at a slightly lower level. The situation for exports to the Northeastern U.S. is different. Although Nova Scotia's share fluctuated, it is now double that of total exports or exports to the U.S.

The province's share of Canadian exports to Western Europe declined steadily during this period but was still above that of total exports. Its share of Canadian exports to Japan, on the other hand, increased during the past decade. Finally, Nova Scotia's share of exports to Mexico experienced wild fluctuations, with peaks in 1992 and 1997.

Figure 16
Nova Scotia's Share of Canadian Exports,
by Selected Destinations, 1992–2001

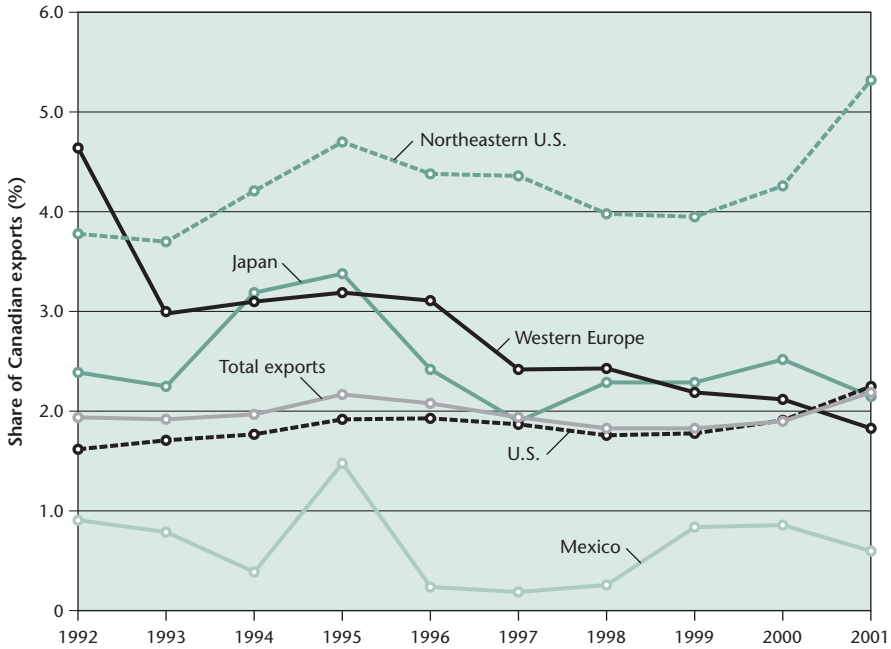


New Brunswick

New Brunswick's share of total Canadian exports increased over the past decade to reach 2.2 percent in 2001 (see figure 17). The province's share of Canadian exports to the U.S. followed a similar pattern but until 2000 was consistently slightly lower than its share of total exports. The situation was different, however, for the Northeastern U.S. New Brunswick's share of Canadian exports to that region was approximately double its share of total exports and exports to the U.S. And it increased even more during the past decade.

Looking at the situation for Western Europe, we see that New Brunswick's share of Canadian exports steadily decreased until in 2001 it was for the first time during this period lower than the share of total exports or exports to the U.S. This situation is similar to the one for Japan. Finally, the province's share of Canadian exports to Mexico was generally below one percent of Canadian exports to that country.

Figure 17
New Brunswick's Share of Canadian Exports,
by Selected Destinations, 1992–2001



■ Distribution of Exports by Sector, 1992–2001

In this section, we adopt a sectoral approach in order to analyze the structure of exports. To do this, we call upon the North American Industrial Classification System (NAICS) used by Statistics Canada (see table 1). Note that because of space constraints we only present results for four years (1992, 1995, 1998, and 2001) in the tables of this section, although in the text we may refer to other years within this ten-year period.

Table 1
NAICS Codes

Code	Sector
111	Crop Production
112	Animal Production
113	Forestry and Logging
114	Fishing, Hunting, and Trapping
115	Support Activities for Agriculture and Forestry
211	Oil and Gas Extraction
212	Mining (except Oil and Gas)
221	Utilities
311	Food Manufacturing
312	Beverage and Tobacco Product Manufacturing
313	Textile Mills
314	Textile Product Mills
315	Clothing Manufacturing
316	Leather and Allied Product Manufacturing
321	Wood Product Manufacturing
322	Paper Manufacturing
323	Printing and Related Support Activities
324	Petroleum and Coal Products Manufacturing
325	Chemical Manufacturing
326	Plastics and Rubber Products Manufacturing
327	Non-Metallic Mineral Product Manufacturing
331	Primary Metal Manufacturing
332	Fabricated Metal Product Manufacturing
333	Machinery Manufacturing
334	Computer and Electronic Product Manufacturing
335	Electrical Equipment, Appliance, and Component Manufacturing
336	Transportation Equipment Manufacturing
337	Furniture and Related Product Manufacturing
339	Miscellaneous Manufacturing

Source: <http://www.statcan.ca/english/Subjects/Standard/naics/1997/naics97-menu.htm>

Canada

Focusing our analysis on the sectors that are quantitatively the most important, we find that the *transportation equipment manufacturing* sector dominates Canada's exports (see table 2). During the past decade, this sector was responsible for between 25 and 30.5 percent of all Canadian exports. The *oil and gas extraction* sector, which for most of the period accounted for approximately 6 to 7 percent of total exports, saw its share rise to around 11 percent in 2000 and 2001. *Paper manufacturing*, which in 1995 hit a peak of over 10 percent of total exports, fell to below 7 percent in 2001.

Throughout this period, the *transportation equipment manufacturing* sector dominated exports to the U.S., usually accounting for around a third of all its exports, although that figure decreased to slightly below 30 percent in 2000 and 2001. Here again, the *oil and gas extraction* sector was second with nearly 13 percent of exports to the U.S. in 2001, the peak year for the period.

The situation is slightly more complex for the Northeastern U.S. market, where there is no clear leader. In that market, the *transportation equipment manufacturing* sector has always been important. In fact, it was second in 2001 (10.2 percent) to the *oil and gas extraction* sector (11.2 percent), a sector whose relative importance has increased significantly since 2000. The *computer and electronic product manufacturing* sector was also important throughout this period, although it slipped to below 9 percent in 2001. Other important sectors on the Northeastern U.S. market were *paper manufacturing* and *primary metal manufacturing*.

On Western European markets, Canada has five principal exporting sectors. Throughout the period, *mining (except oil and gas)*, *paper manufacturing*, and *primary metal manufacturing* always registered double-digit shares (from around 11 percent to over 21 percent), while the *transportation equipment manufacturing* sector saw its share fluctuate, peaking at over 16 percent in 2001. Finally, Western Europe's *computer and electronic product manufacturing* sector had its share increase over the period to 13 percent in 2000 and 10 percent in 2001.

In Japan, Canadian exports are again concentrated in five sectors. Leading the pack during this period were the *wood product manufacturing* and the *mining (except oil and gas)* sectors with shares often above 20 percent. *Food manufacturing*, always an important sector, saw its share increase in the past few years to peak at 19.5 percent in 2001. And finally there were the *crop production* and the *paper manufacturing*

sectors, whose shares throughout the period ranged from around 10 to 16 percent.

Canada's exports to Mexico are, especially of late, concentrated in the *transportation equipment manufacturing* sector (a range of 18.1 to 28.0 percent), the *crop production* sector (a range of 16.6 to 33.8 percent), and the *food manufacturing* sector (a range of 4 to over 16 percent in 2001). In some years, certain sectors had a relatively high share (e.g., *computer and electronic product manufacturing*, *mining [except oil and gas]*, etc.), but their shares fluctuated significantly.

Atlantic Canada

Atlantic Canada's top three export sectors have consistently been *petroleum and coal products manufacturing*, *paper manufacturing*, and *food manufacturing* (see table 3). Throughout this period, they represented approximately half of the region's exports. The same three sectors also top the list of exports to the U.S. with a combined share often surpassing 50 percent. The situation is slightly different for the Northeastern U.S., where the *oil and gas extraction* sector rose to become the third most important category in 2001.

Regarding exports to Western Europe, the leading sectors have been *paper manufacturing*, *mining (except oil and gas)*, and *food manufacturing*. The situation is also different on the Japanese market, where *food manufacturing* and *paper manufacturing* generally represent over 75 percent of the region's exports. Finally, exports to Mexico have tended to vary significantly both in value and in leading sectors.

Newfoundland and Labrador

Newfoundland and Labrador has five principal export sectors (see table 4). They include the *petroleum and coal products manufacturing* sector (a range of 11.8 to 36.8 percent), the *paper manufacturing* sector (a range of 17.1 to 37.0 percent), the *mining (except oil and gas)* sector (a range of 9.4 to 35.5 percent), the *food manufacturing* sector (a range of 13.6 to 25.9 percent), and a recent addition to the leaders, the *oil and gas extraction* sector, which was active on export markets in the last four years of the period in question and peaked at 16.1 percent.

The same five sectors were the principal exporters to the U.S. Here the *petroleum and coal products manufacturing* sector led the pack (e.g., 46.2 percent of exports to the U.S. in 2001). The *mining (except oil and gas)* sector saw its share shrink to below 4 percent in 2001 from a high of nearly 39 percent in 1994.

Table 2
Canada: Top Five Export Sectors,
by Selected Destinations, 1992, 1995, 1998, and 2001

1992		1995		1998		2001		
Code	\$'000	%	Code	\$'000	%	Code	\$'000	%
Total Exports								
336	41,368,622	26.6	336	66,421,378	26.6	336	83,179,932	27.8
322	14,401,571	9.3	322	26,535,869	10.6	334	22,244,251	7.4
211	11,749,882	7.6	334	18,605,489	7.5	322	21,784,812	7.3
331	11,183,300	7.2	331	17,776,873	7.1	333	18,927,973	6.3
334	10,619,770	6.8	211	15,815,850	6.3	331	18,740,251	6.3
Exports to the U.S.								
336	39,164,038	33.0	336	61,650,437	31.5	336	79,403,136	31.5
211	11,463,601	9.7	322	16,948,190	8.7	334	18,330,912	7.3
322	9,697,078	8.2	211	15,494,950	7.9	211	17,706,597	7.0
334	8,558,725	7.2	334	15,066,054	7.7	322	16,097,594	6.4
331	7,459,442	6.3	331	13,108,540	6.7	333	15,828,902	6.3
Exports to the Northeastern U.S.								
336	8,432,424	21.3	334	7,681,986	13.9	336	14,214,467	18.1
334	5,045,944	12.8	322	6,810,298	12.4	334	9,519,986	12.1
322	4,036,265	10.2	331	6,230,341	11.3	331	7,452,037	9.5
						334	8,097,175	8.9
						211	10,160,586	11.2
						336	9,173,136	10.2
						334	8,097,175	8.9

331	3,623,012	9.2	336	4,688,306	8.5	322	6,546,750	8.3	331	7,248,572	8.0
211	2,365,563	6.0	211	3,688,574	6.7	325	4,294,595	5.5	322	7,191,577	7.9
Exports to Western Europe											
212	2,421,738	17.5	322	3,867,665	21.7	331	2,512,220	14.4	336	3,142,752	16.4
322	2,391,870	17.3	331	2,760,270	15.5	322	2,395,263	13.7	212	2,606,075	13.6
331	2,298,627	16.6	212	1,851,112	10.4	212	2,093,704	12.0	322	2,373,245	12.4
336	1,101,837	8.0	336	1,697,844	9.5	336	2,007,491	11.5	331	2,218,122	11.6
334	959,317	6.9	334	1,472,827	8.3	334	1,591,428	9.1	334	1,917,107	10.0
Exports to Japan											
212	1,863,222	25.0	321	2,969,177	24.7	212	1,737,893	20.4	321	1,711,543	21.2
321	1,477,150	19.8	212	2,321,582	19.3	321	1,681,865	19.7	311	1,578,463	19.5
111	968,164	13.0	322	1,943,489	16.2	111	1,252,206	14.7	212	1,226,868	15.2
311	927,206	12.4	311	1,502,965	12.5	311	1,208,676	14.2	111	1,144,716	14.2
322	782,782	10.5	111	1,344,909	11.2	322	1,033,000	12.1	322	776,005	9.6
Exports to Mexico											
336	166,348	20.6	111	298,656	25.8	111	490,298	33.8	336	685,478	28.0
111	133,992	16.6	336	247,540	21.4	336	262,363	18.1	111	531,423	21.7
331	101,343	12.5	333	130,735	11.3	334	129,756	9.0	311	408,038	16.6
334	71,138	8.8	334	101,130	8.7	333	120,309	8.3	334	117,720	5.4
311	67,360	8.3	311	75,610	6.5	311	97,328	6.7	325	112,154	4.6

Source: http://www.strategis.ic.gc.ca/sc_mkt/ttdst/ttdo/ttdo.php#tag

Table 3
Atlantic Canada: Top Five Export Sectors,
by Selected Destinations, 1992, 1995, 1998, and 2001

Code	1992		1995		1998		2001	
	\$'000	%	\$'000	%	\$'000	%	\$'000	%
Total Exports								
322	2,060,599	30.0	3,282,902	28.8	2,784,342	22.8	4,595,283	25.8
311	1,296,416	18.8	1,664,239	14.6	2,084,635	17.1	3,027,178	17.0
324	962,422	14.0	1,657,845	14.5	1,588,896	13.0	2,751,782	15.4
212	626,085	9.1	1,104,418	9.7	1,182,737	9.7	1,430,905	8.0
326	506,393	7.4	779,400	6.8	836,485	6.8	1,220,320	6.8
Exports to the U.S.								
322	1,025,740	23.8	1,774,070	23.4	1,831,064	19.8	4,367,281	29.7
324	848,829	19.7	1,508,523	19.9	1,484,559	16.1	2,110,207	14.4
311	733,035	17.0	760,494	10.0	1,390,133	15.1	1,938,100	13.2
326	475,791	11.0	756,511	10.0	990,175	10.7	1,430,905	9.7
114	288,563	6.7	632,514	8.3	795,181	8.6	1,159,538	7.9
Exports to the Northeastern U.S.								
324	704,595	23.0	1,066,129	21.4	1,173,492	20.6	2,929,208	30.7
322	700,602	22.9	965,112	19.4	1,064,233	18.7	1,547,545	16.2
311	646,726	21.1	653,883	13.1	894,376	15.7	1,281,336	13.4

114	280,754	9.2	211	581,016	11.6	321	612,705	10.8	322	1,113,813	11.7
321	142,483	4.6	114	355,734	7.1	114	377,360	6.6	321	780,418	8.2
Exports to Western Europe											
322	644,254	42.1	322	645,418	39.6	212	516,365	34.8	212	403,855	25.4
212	343,060	22.4	212	467,866	28.7	322	458,012	30.9	322	367,954	23.1
311	281,854	18.4	311	199,418	12.2	311	205,797	13.9	311	303,195	19.0
324	77,325	5.0	114	69,177	4.2	114	78,396	5.3	324	225,688	14.2
114	54,839	3.6	336	46,395	2.8	211	41,752	2.8	114	59,440	3.7
Exports to Japan											
311	178,721	50.2	311	487,550	61.5	311	251,247	57.7	311	224,793	59.2
322	122,537	34.4	322	216,121	27.3	322	111,928	25.7	322	73,143	19.3
114	21,638	6.1	212	48,665	6.1	212	38,780	8.9	212	31,521	8.3
212	21,361	6.0	114	36,627	4.6	114	23,001	5.3	114	20,535	5.4
326	8,174	2.3	339	682	0.1	326	3,986	0.9	321	18,478	4.9
Exports to Mexico											
322	24,622	35.8	324	13,288	47.7	331	4,293	44.1	322	34,321	49.0
331	23,586	34.3	331	4,262	35.3	212	2,143	22.0	326	22,290	31.8
212	18,992	27.6	212	1,496	5.4	311	1,910	19.6	311	6,654	9.5
311	551	0.8	311	1,333	4.8	325	931	9.6	212	1,905	2.7
313	314	0.5	322	986	3.5	313	173	1.8	114	1,582	2.3

Source: http://www.strategis.ic.gc.ca/sc_mkt/tdst/tdo/tdo.php#tag

Table 4

**Newfoundland and Labrador: Top Five Export Sectors,
by Selected Destinations, 1992, 1995, 1998, and 2001**

Code	1992		1995		1998		2001	
	\$'000	%	\$'000	%	\$'000	%	\$'000	%
Total Exports								
322	449,109	37.0	591,660	30.9	777,569	29.6	1,237,311	36.8
311	314,182	25.9	569,686	29.7	532,040	20.2	686,811	20.4
324	304,068	25.0	371,976	19.4	506,291	19.2	611,665	18.2
212	114,031	9.4	294,408	15.4	486,265	18.5	500,843	14.9
114	18,020	1.5	27,825	1.4	232,309	8.8	226,335	6.7
Exports to the U.S.								
324	255,351	42.2	293,213	31.4	498,047	29.2	1,011,033	46.2
311	197,313	32.6	269,004	28.8	314,652	18.4	454,530	20.8
322	124,938	20.6	231,508	24.8	299,249	17.5	346,649	15.8
114	16,301	2.7	102,943	11.0	288,590	16.9	226,335	10.3
212	4,267	0.7	26,830	2.9	232,309	13.6	85,724	3.9
Exports to the Northeastern U.S.								
324	198,624	43.3	203,061	36.6	257,406	27.6	823,833	55.5
311	187,755	41.0	144,666	26.1	199,879	21.4	347,253	23.4
322	49,469	10.8	94,340	17.0	158,091	16.9	165,308	11.1

114	15,736	3.4	322	83,097	15.0	212	154,400	16.5	211	94,341	6.4
212	3,804	0.8	114	26,383	4.8	324	140,619	15.0	212	20,999	1.4
Exports to Western Europe											
322	176,552	44.6	212	230,898	47.1	212	336,806	61.2	212	283,900	35.8
212	101,897	25.8	322	160,261	32.7	322	118,379	21.5	324	225,569	28.5
311	72,620	18.4	311	61,412	12.5	311	71,564	13.0	322	156,035	19.7
324	41,468	10.5	332	15,811	3.2	324	8,245	1.5	311	99,604	12.6
333	1,153	0.3	333	10,799	2.2	336	5,726	1.0	333	17,825	2.2
Exports to Japan											
311	31,105	64.1	311	150,460	74.7	311	73,526	73.2	311	24,775	54.7
322	13,168	27.2	212	26,537	13.2	212	22,710	22.6	212	20,093	44.3
212	3,056	6.3	322	23,931	11.9	322	3,381	3.4	114	146	0.3
114	1,042	2.2	114	272	0.1	114	312	0.3	322	116	0.3
334	82	0.2	321	72	0.0	112	271	0.3	312	62	0.1
Exports to Mexico											
322	17,771	100.0	333	43	75.5	333	15	100.0	212	1,866	100.0
			311	14	24.5						

Source: http://www.strategis.ic.gc.ca/sc_mkt/tdst/tdo/tdo.php#tag

On the Northeastern U.S. market, the two leaders over the entire period were the *petroleum and coal products manufacturing* sector (a range of 15.1 to 55.5 percent) and the *food manufacturing* sector (a range of 17.0 to 41.0 percent).

In Western Europe, Newfoundland and Labrador's main exporting sectors were *mining (except oil and gas)*, *paper manufacturing*, *food manufacturing*, and for some years *petroleum and coal products manufacturing*.

In the case of Japan, two sectors (*food manufacturing* and *mining [except oil and gas]*) dominated, while a third, *paper manufacturing*, was relatively important during the first part of the period. Finally, exports to Mexico fluctuated significantly, with a single sector often having a share of 100 percent, probably the effect of very few but relatively important contracts.

Prince Edward Island

Two sectors dominated Prince Edward Island's exports, *food manufacturing* (68.5 percent of all exports in 2001) and *crop production* (see table 5). The latter, however, saw its relative importance decrease significantly from a peak of 29.1 percent in 1992 to a low of 4.8 percent in 2001. We note a similar trend for exports to the U.S., to the Northeastern U.S., and to Western Europe.

In the case of exports to Japan, the *food manufacturing* sector led the way (a range of 36 to 83.4 percent), while the *mining (except oil and gas)* sector reported a share of between 5.0 and 25 percent over the length of the period. Finally, exports to Mexico were dominated by the *chemical manufacturing* sector (a range of 33.8 to 95.2 percent).

Nova Scotia

Nova Scotia's export leaders were the *plastics and rubber products manufacturing* sector (a range of 16.7 to 23.5 percent), the *paper manufacturing* sector (a range of 12.9 to 18.7 percent), the *food manufacturing* sector (a range of 12.9 to 22.2 percent), the *fishing, hunting, and trapping* sector (a range of 9.4 to 12.8 percent), and, with important fluctuations, the *oil and gas extraction* sector (a range of 0 to 21.1 percent) (see table 6).

The pattern was similar for exports to the U.S., although the magnitude was different. The same applied to the Northeastern U.S. market, where the *plastics and rubber products manufacturing* sector had a relatively important share at the beginning of the period but then saw it dwindle to 2.6 percent in 2001.

Exports to Western Europe were mostly concentrated in the *paper manufacturing* and *food manufacturing* sectors and to a lesser extent in the *fishing, hunting, and trapping* sector. In the case of exports to Japan, the *food manufacturing* sector was largely dominant (a range of 68.7 to 80.5 percent), followed by *fishing, hunting, and trapping*. Finally, export shares to Mexico fluctuated from one sector to another, again probably as a result of only a few but significant contracts.

New Brunswick

Four sectors dominate New Brunswick's total exports (see table 7). The *petroleum and coal products manufacturing* sector hit a peak of 39.5 percent of all exports in 2001. For most of the period, the *paper manufacturing* sector was the most important with between 25 percent and 38.1 percent of all exports, although the sector was down to 18.9 percent in 2001. The *food manufacturing* sector maintained a consistent share at between 10.9 percent and 14 percent of all exports. And finally, the *wood product manufacturing* sector went up from the fifth to the third rank between 1992 and 2001, raising from 6.1 to 11.0 percent of total New Brunswick's exports.

The previous trend of total exports also describes the situation with respect to exports to the U.S. and to the Northeastern U.S. In Western Europe, the *paper manufacturing* (a range of 33.1 to 56.5 percent) and *mining (except oil and gas)* (a range of 25.8 to 49.8 percent) sectors led the way in New Brunswick's exports. As for exports to Japan, the two leaders are *paper manufacturing* (a range of 41.9 to 60.8 percent) and *food manufacturing* (a range of 29.8 to 51.7 percent). Finally, in the case of Mexico, although we saw significant fluctuations, three sectors (*mining [except oil and gas]*, *food manufacturing*, and *paper manufacturing*) were usually the leaders.

Table 5
Prince Edward Island: Top Five Export Sectors,
by Selected Destinations, 1992, 1995, 1998, and 2001

Code	1992		1995		1998		2001	
	\$'000	%	\$'000	%	\$'000	%	\$'000	%
Total Exports								
311	89,929	51.8	139,837	46.4	242,619	54.0	409,717	68.5
111	50,528	29.1	88,031	29.2	75,537	16.8	28,397	4.8
114	8,612	5.0	13,084	4.4	18,508	4.1	28,264	4.7
312	8,444	4.9	12,758	4.2	17,387	3.9	22,553	3.8
325	5,134	3.0	12,239	4.1	16,557	3.7	21,485	3.6
Exports to the U.S.								
311	58,180	57.7	73,666	44.4	196,663	54.9	364,847	68.6
111	15,356	15.2	30,690	18.5	40,374	11.3	26,636	5.0
312	8,444	8.4	13,034	7.8	18,338	5.1	22,283	4.2
114	7,840	7.8	11,152	6.7	16,997	4.8	19,598	3.7
325	3,190	3.2	8,761	5.3	14,740	4.1	18,558	3.5
Exports to the Northeastern U.S.								
311	50,965	62.2	68,779	55.1	158,329	62.9	294,718	75.5
111	9,914	12.1	21,861	17.5	22,867	9.1	19,467	5.0
114	7,598	9.3	8,404	6.7	12,903	5.1	19,150	4.9

312	7,329	9.0	112	5,526	4.4	112	12,047	4.8	321	11,194	2.9
325	2,723	3.3	325	4,609	3.7	321	9,770	3.9	325	10,949	2.8
Exports to Western Europe											
311	20,684	65.0	311	30,454	57.6	311	15,975	62.1	311	24,377	86.6
111	7,830	24.6	111	16,180	30.6	111	3,390	13.2	114	1,565	5.6
325	1,464	4.6	322	2,232	4.2	114	1,486	5.8	111	925	3.3
114	755	2.4	114	1,451	2.7	333	1,372	5.3	333	616	2.2
112	750	2.4	325	1,433	2.7	325	1,360	5.3	321	256	0.9
Exports to Japan											
311	5,547	83.4	311	18,765	82.7	311	5,716	78.6	311	5,869	68.9
212	580	8.7	114	2,521	11.1	212	759	10.4	212	1,328	15.6
334	352	5.3	212	1,129	5.0	321	390	5.4	332	456	5.4
315	130	2.0	315	248	1.1	332	390	5.4	321	372	4.4
114	17	0.3	322	11	0.0	114	20	0.3	112	203	2.4
Exports to Mexico											
325	18	70.7	325	245	91.6	325	767	95.2	325	482	57.6
111	7	29.3	311	22	8.4	339	28	3.5	311	352	42.0
						334	10	1.3	326	3	0.4

Source: http://www.strategis.ic.gc.ca/sc_mkt/tdst/tdo/tdo.php#tag

Table 6

**Nova Scotia: Top Five Export Sectors,
by Selected Destinations, 1992, 1995, 1998, and 2001**

Code	1992		1995		1998		2001	
	\$'000	%	\$'000	%	\$'000	%	\$'000	%
Total Exports								
311	549,082	22.2	756,945	20.0	800,463	21.8	1,193,713	21.1
326	497,128	20.1	683,721	18.1	627,619	17.1	942,474	16.7
322	461,877	18.7	652,495	17.2	574,394	15.7	864,464	15.3
114	288,213	11.6	487,972	12.9	411,162	11.2	761,519	13.5
212	164,475	6.6	390,198	10.3	403,673	11.0	529,511	9.4
Exports to the U.S.								
326	467,279	27.6	736,906	26.8	760,908	27.8	1,193,713	25.6
322	307,019	18.1	627,483	22.8	377,256	13.8	896,559	19.2
311	270,315	16.0	295,462	10.8	372,602	13.6	577,791	12.4
114	221,987	13.1	276,208	10.0	311,228	11.4	435,976	9.3
336	142,668	8.4	253,800	9.2	263,123	9.6	433,611	9.3
Exports to the Northeastern U.S.								
322	245,354	23.8	578,767	33.8	314,654	23.0	1,182,407	41.8
311	226,170	22.0	262,104	15.3	282,389	20.6	395,343	14.0
114	215,541	20.9	208,752	12.2	224,067	16.4	347,883	12.3

336	122,234	11.9	322	198,878	11.6	322	165,798	12.1	322	328,767	11.6
326	105,642	10.3	336	156,571	9.1	321	103,488	7.6	321	147,245	5.2
Exports to Western Europe											
311	161,233	34.9	322	223,511	43.3	322	173,019	35.8	311	144,494	34.5
322	104,893	22.7	311	66,035	12.8	311	88,568	18.3	322	95,461	22.8
212	68,978	14.9	114	58,967	11.4	114	61,589	12.7	114	56,088	13.4
114	45,206	9.8	336	42,409	8.2	211	41,752	8.6	334	27,771	6.6
321	25,797	5.6	211	25,011	4.8	326	25,983	5.4	333	22,323	5.3
Exports to Japan											
311	89,049	72.6	311	123,419	76.0	311	101,745	76.4	311	104,234	68.7
114	19,333	15.8	114	33,516	20.6	114	22,594	17.0	114	19,821	13.1
326	8,172	6.7	322	1,994	1.2	326	3,986	3.0	321	18,027	11.9
212	3,219	2.6	212	1,337	0.8	315	987	0.7	326	6,549	4.3
322	1,288	1.0	326	579	0.4	112	750	0.6	212	1,301	0.9
Exports to Mexico											
331	23,586	54.0	331	9,828	94.0	331	4,293	84.6	322	26,011	49.4
212	18,992	43.5	333	199	1.9	311	283	5.6	326	22,287	42.3
313	314	0.7	326	147	1.4	313	173	3.4	114	1,567	3.0
311	288	0.7	114	108	1.0	325	164	3.2	311	1,424	2.7
334	220	0.5	313	81	0.8	114	127	2.5	313	712	1.4

Source: http://www.strategis.ic.gc.ca/sc_mkt/tdst/tdo/tdo.php#tag

Table 7

**New Brunswick: Top Five Export Sectors,
by Selected Destinations, 1992, 1995, 1998, and 2001**

1992		1995		1998		2001		
Code	\$'000	%	Code	\$'000	%	Code	\$'000	%
Total Exports								
322	1,149,522	38.1	322	2,004,481	37.0	322	1,676,165	30.7
324	623,747	20.7	324	1,343,275	24.8	324	1,039,382	19.0
212	346,321	11.5	311	658,060	12.2	321	785,393	14.4
311	343,224	11.4	212	427,644	7.9	311	728,133	13.3
321	183,787	6.1	321	352,300	6.5	212	308,669	5.6
Exports to the U.S.								
322	593,692	31.0	322	1,246,730	33.3	322	1,251,547	28.2
324	567,902	29.6	324	1,194,565	31.9	324	945,414	21.3
311	207,227	10.8	321	333,370	8.9	321	770,731	17.4
321	162,363	8.5	311	330,085	8.8	311	532,277	12.0
221	87,819	4.6	221	115,794	3.1	221	183,863	4.2
Exports to the Northeastern U.S.								
324	485,474	32.5	324	805,919	31.1	322	738,912	23.6
322	405,711	27.1	322	783,786	30.2	324	723,557	23.1
311	181,835	12.2	311	282,011	10.9	321	495,680	15.8
						321	604,994	12.5
						324	2,062,096	42.7
						322	618,811	12.8
						321	882,964	12.1
						311	685,112	9.4
						221	247,043	3.4

321	135,472	9.1	321	247,085	9.5	311	443,104	14.2	311	557,691	11.6
221	87,819	5.9	221	115,794	4.5	221	183,863	5.9	221	247,043	5.1
Exports to Western Europe											
322	362,808	56.5	322	259,414	45.6	212	177,037	41.7	212	119,624	34.0
212	172,185	26.8	212	217,084	38.1	322	166,615	39.2	322	116,458	33.1
324	35,853	5.6	311	42,528	7.3	311	29,689	7.0	311	34,720	9.9
311	27,316	4.3	321	18,088	3.2	321	13,748	3.2	334	27,615	7.8
321	20,393	3.2	333	8,592	1.5	114	12,816	3.0	321	17,470	5.0
Exports to Japan											
322	108,081	60.8	311	194,907	48.0	322	107,999	55.4	311	89,916	51.7
311	53,020	29.8	322	190,185	46.8	311	70,259	36.1	322	72,777	41.9
212	14,506	8.2	212	19,662	4.8	212	14,604	7.5	212	8,799	5.1
114	1,246	0.7	339	626	0.2	339	1,457	0.8	339	1,328	0.8
339	636	0.4	114	319	0.1	111	161	0.1	114	500	0.3
Exports to Mexico											
322	6,851	93.2	324	13,288	77.8	212	2,143	55.8	322	8,310	56.7
311	262	3.6	212	1,496	8.8	311	1,627	42.4	311	4,878	33.3
333	133	1.8	311	1,297	7.6	326	70	1.8	325	978	6.7
111	94	1.3	322	986	5.8				333	372	2.5
334	7	0.1	326	4	0.0				111	58	0.4

Source: http://www.strategis.ic.gc.ca/sc_mkt/tdst/tsto/tdo.php#tag

■ Growth of Exports by Sector, 1992–2001

In this section, in order to minimize the impact of relatively large fluctuations when the value of exports are relatively low, we have opted to assess the growth in a given year not by comparing it to the previous year but by comparing it to the average of the ten-year period. Consequently, if the value of an export sector was zero dollars in a given year, its growth the following year would not be *infinite*, but rather smaller. Furthermore, since growth analysis for smaller export markets is more complicated as a result of the often huge variations, we will restrict our analysis.

Canada

When we analyze the results for 2001 (see table 8), we observe that all sectors experienced growth when compared to the average of the period. Strongest growth was experienced by *utilities* (127.9 percent growth compared to the period's average), *oil and gas extraction* (94.3 percent), *forestry and logging* (74.8 percent), and *petroleum and coal products manufacturing* (71.8 percent). At the other end of the spectrum we find *mining (except oil and gas)* (0.9 percent) and *support activities for agriculture and forestry* (4.2 percent).

Atlantic Canada

For Atlantic Canada (see table 9), five sectors registered negative growth in 2001 compared to the period's average. These included *support activities for agriculture and forestry* (-100.0 percent), *forestry and logging* (-41.1 percent), and *primary metal manufacturing* (-15.1 percent). At the same time, six sectors more than doubled the value of exports compared to the period's average. These were *oil and gas extraction* (150.2 percent), *textile mills* (149.0 percent), *petroleum and coal products manufacturing* (112.2 percent), *fabricated metal product manufacturing* (106.4 percent), *machinery manufacturing* (100.6 percent), and *furniture and related product manufacturing* (100.3 percent).

Table 8
Canada: Growth of Exports (%) by Sector in 2001
Compared to the Sectoral Average for 1992 to 2001,
by Selected Destinations

Code	Destinations					
	All	U.S.	North-eastern U.S.	Western Europe	Japan	Mexico
111	12.0	38.9	43.2	-2.9	-3.5	51.8
112	42.3	42.5	75.4	5.8	52.8	-56.2
113	74.8	81.5	-7.6	-39.4	84.2	-
114	24.2	30.4	31.3	-0.6	-26.7	296.7
115	4.2	61.8	-2.2	-29.0	5.4	-52.5
211	94.3	95.9	101.5	-99.8	-100.0	-59.7
212	0.9	2.4	-9.8	15.2	-32.0	2.5
221	127.9	127.9	60.5	-100.0	112.7	-
311	53.2	65.7	59.5	11.8	19.2	221.0
312	13.8	21.8	28.3	-33.3	-28.5	-62.9
313	50.4	59.1	65.1	-19.2	-4.2	-35.8
314	52.5	63.2	58.1	-24.6	-20.1	-53.0
315	57.3	61.1	59.3	10.0	-10.1	-21.2
316	21.2	20.7	20.1	-4.8	-33.6	465.0
321	17.0	28.4	33.2	-30.4	-23.6	180.6
322	16.6	27.0	21.4	-9.8	-32.2	53.8
323	63.5	64.8	56.2	82.9	-26.6	-23.0
324	71.8	73.9	111.8	240.8	-87.0	-96.3
325	41.6	49.8	63.9	25.0	-42.5	75.2
326	54.6	57.3	50.9	17.0	13.9	65.8
327	30.6	31.6	24.8	5.0	-4.9	-34.8
331	13.7	20.3	16.0	-2.6	-29.4	68.9
332	46.0	53.4	65.2	15.6	8.3	89.4
333	46.7	49.0	49.6	56.2	31.8	41.0
334	17.2	18.2	-4.3	24.5	13.0	7.9
335	53.5	58.4	39.3	12.4	30.5	29.4
336	33.4	32.8	-3.9	66.7	69.8	111.7
337	61.7	62.8	68.9	22.2	-8.8	276.9
339	27.1	41.1	28.7	-18.4	-63.3	89.0
All sectors	37.0	43.3	34.3	15.4	-14.0	76.0

Source: http://www.strategis.ic.gc.ca/sc_mrkti/tdst/tdo/tdo.php#tag

Table 9
Atlantic Canada: Growth of Exports (%)
by Sector in 2001 Compared to the Sectoral Average
for 1992 to 2001, by Selected Destinations

Code	Destinations					
	All	U.S.	North-eastern U.S.	Western Europe	Japan	Mexico
111	-1.5	21.8	27.1	-58.5	-77.6	-52.2
112	74.7	76.5	75.4	-94.3	102.3	-100.0
113	-41.1	-34.9	-59.7	-51.4	-71.0	-
114	27.0	37.0	34.0	-9.1	-24.0	306.5
115	-100.0	-100.0	-100.0	-100.0	-100.0	-
211	150.2	158.8	161.1	-100.0	-	-
212	-7.8	-24.1	-50.2	-5.5	-10.9	-63.1
221	58.1	58.1	58.3	-	-100.0	-
311	43.1	61.8	55.9	36.1	-22.8	179.0
312	14.4	15.1	-4.1	-39.0	17.5	-
313	149.0	149.8	94.5	108.1	-52.3	275.0
314	57.2	57.5	-5.7	96.1	-100.0	-100.0
315	47.2	62.1	97.7	-10.0	-34.9	-100.0
316	69.8	17.1	-63.3	326.6	-100.0	-100.0
321	55.4	55.9	60.1	17.7	429.1	367.2
322	13.9	32.0	19.3	-25.8	-45.8	180.4
323	55.0	55.2	21.3	246.8	122.3	-100.0
324	112.2	117.3	133.9	318.1	-100.0	-100.0
325	25.5	35.0	45.4	-36.4	110.1	137.1
326	24.5	25.3	-7.1	-12.5	20.2	252.3
327	38.7	41.9	40.4	13.6	184.2	-100.0
331	-15.1	8.8	-2.7	25.6	-100.0	-100.0
332	106.4	112.2	110.2	-20.2	-3.1	-100.0
333	100.6	101.9	119.4	105.2	-3.0	212.8
334	78.7	49.6	38.0	176.2	1.1	-100.0
335	87.9	102.1	98.5	-18.4	-95.1	189.0
336	0.5	2.5	-34.3	-1.7	97.4	80.8
337	100.3	98.3	102.1	168.6	69.5	-100.0
339	80.1	96.6	71.3	22.0	12.1	-100.0
All sectors	49.1	65.1	68.6	9.5	-24.8	92.6

Source: http://www.strategis.ic.gc.ca/sc_mrkti/tdst/tdo/tdo.php#tag

Newfoundland and Labrador

Analyzing the situation for Newfoundland and Labrador in 2001 (see table 10), we find that although most sectors registered growth when compared to the period's average, nine experienced a decrease. The leaders were *leather and allied product manufacturing* (306.3 percent), *beverage and tobacco product manufacturing* (196.5 percent), *wood product manufacturing* (167.1 percent), and *machinery manufacturing* (166.7 percent). Sectors that decreased the most were *crop production* (-100.0 percent), *forestry and logging* (-100.0 percent), and *utilities* (-100.0 percent).

Prince Edward Island

In Prince Edward Island (see table 11), the leaders in 2001 were *furniture and related product manufacturing* (a growth of 299.2 percent when compared to the period's average), *electrical equipment, appliance, and component manufacturing* (200.6 percent), *non-metallic mineral product manufacturing* (174.6 percent), and *plastics and rubber products manufacturing* (138.7 percent). Six sectors lost ground compared to the average, starting with *oil and gas extraction* (-99.1 percent), *forestry and logging* (-98.5 percent), *beverage and tobacco product manufacturing* (-83.4 percent), and *crop production* (-56.4 percent).

Table 10
Newfoundland and Labrador: Growth of Exports (%)
by Sector in 2001 Compared to the Sectoral Average
for 1992 to 2001, by Selected Destinations

Code	Destinations					
	All	U.S.	North-eastern U.S.	Western Europe	Japan	Mexico
111	-100.0	-100.0	-100.0	-100.0	-	-
112	90.4	93.0	191.5	-	-100.0	-100.0
113	-100.0	-100.0	-100.0	-100.0	-	-
114	-54.2	-51.7	-52.4	-64.5	-64.9	-100.0
115	-	-	-	-	-	-
211	64.2	64.4	-13.5	-100.0	-	-
212	-8.6	-59.4	-82.2	14.8	-3.4	164.5
221	-100.0	-100.0	-100.0	-	-	-
311	53.3	81.0	62.8	44.5	-65.4	-100.0
312	196.5	-27.8	9.4	167.8	-6.7	-
313	-93.1	-100.0	-100.0	-44.5	-100.0	-
314	5.6	14.6	56.8	60.7	-100.0	-
315	50.7	86.8	63.9	-4.8	-100.0	-
316	306.3	9.0	-27.7	477.4	-100.0	-
321	167.1	183.9	293.8	-92.4	11.3	-
322	10.7	36.8	44.2	0.6	-99.2	-100.0
323	4.6	-10.2	-47.5	236.2	-100.0	-
324	95.5	77.0	167.4	383.5	-100.0	-
325	112.4	114.1	16.4	173.1	-100.0	-
326	-30.4	-79.3	-88.0	66.9	-100.0	-
327	-1.6	-11.8	-3.1	32.1	-100.0	-100.0
331	137.3	32.0	30.0	387.0	-100.0	-
332	-71.1	-77.0	227.2	-71.6	5.2	-
333	166.7	129.3	82.2	237.9	620.4	-100.0
334	66.9	69.4	-39.2	94.2	123.6	-
335	-22.4	-24.6	-94.9	55.8	-100.0	-
336	-59.0	-56.2	69.6	-75.6	-100.0	-
337	64.9	32.8	31.9	448.0	-100.0	-
339	121.5	162.6	391.2	73.0	-100.0	-
All sectors	40.1	48.2	66.5	47.9	-58.6	-55.3

Source: http://www.strategis.ic.gc.ca/sc_mrkti/tdst/tdo/tdo.php#tag

Table 11
Prince Edward Island: Growth of Exports (%)
by Sector in 2001 Compared to the Sectoral Average
for 1992 to 2001, by Selected Destinations

Code	Destinations					
	All	U.S.	North-eastern U.S.	Western Europe	Japan	Mexico
111	-56.4	-42.9	-63.7	-80.1	-	-100.0
112	104.5	107.5	116.4	-100.0	488.2	-
113	-98.5	-97.0	-96.9	-100.0	-	-
114	51.3	60.9	82.8	15.5	-89.1	-100.0
115	-	-	-	-	-	-
211	-99.1	-99.1	-99.1	-	-	-
212	1.6	3.0	96.9	-92.1	24.0	-
221	-	-	-	-	-	-
311	89.0	112.0	109.4	14.0	-13.9	355.2
312	-83.4	-84.6	-79.8	-	900.0	-
313	112.5	112.9	-2.8	-	-100.0	-
314	33.0	40.4	-44.1	-100.0	-100.0	-
315	-44.2	-13.2	-48.7	-100.0	-100.0	-100.0
316	-40.2	-95.3	-82.4	717.2	-100.0	-100.0
321	55.1	53.7	103.0	282.2	49.8	-
322	26.8	68.5	42.2	-100.0	-100.0	-
323	24.1	24.0	-29.0	-	-	-
324	96.3	96.3	23.4	-	-	-
325	41.7	57.8	48.9	-89.9	-	18.3
326	138.7	140.2	139.4	-100.0	-96.9	900.0
327	174.6	172.4	180.8	100.4	341.7	-
331	64.8	64.9	20.8	-100.0	-	-
332	71.7	73.7	137.3	111.9	67.9	-
333	45.5	37.2	18.4	-1.1	-100.0	-
334	23.1	45.0	-6.3	-76.1	-96.2	-100.0
335	200.6	189.4	514.1	-66.0	-	-
336	69.3	62.1	0.4	-34.1	366.6	-
337	299.2	322.0	470.0	-90.2	192.2	-
339	66.9	85.2	118.2	11.0	-100.0	-100.0
All sectors	55.6	78.6	81.9	-6.2	-10.1	56.2

Source: http://www.strategis.ic.gc.ca/sc_mrkti/tdst/tdo/tdo.php#tag

Nova Scotia

In 2001 (see table 12), the sectors experiencing the strongest growth when compared to the period's average were *oil and gas extraction* (181.0 percent), *furniture and related product manufacturing* (124.9 percent), *textile mills* (119.4 percent), and *electrical equipment, appliance, and component manufacturing* (115.4 percent). On the losing side we find eight sectors led by *support activities for agriculture and forestry* (-100.0 percent), *utilities* (-100.0 percent), *forestry and logging* (-75.1 percent), *primary metal manufacturing* (-71.4 percent), and *beverage and tobacco product manufacturing* (-49.9 percent).

New Brunswick

Completing our analysis of the growth of exports in 2001 as compared with the period's average (see table 13), we find the following sectors leading the way in New Brunswick: *textile mills* (229.7 percent), *leather and allied product manufacturing* (153.4 percent), *fabricated metal product manufacturing* (150.2 percent), and *computer and electronic product manufacturing* (144.6 percent). By contrast, only four sectors lost ground: *support activities for agriculture and forestry* (-100.0 percent), *clothing manufacturing* (-49.5 percent), *forestry and logging* (-24.8 percent), and *mining (except oil and gas)* (-8.0 percent).

Table 12
Nova Scotia: Growth of Exports (%)
by Sector in 2001 Compared to the Sectoral Average
for 1992 to 2001, by Selected Destinations

Code	Destinations					
	All	U.S.	North-eastern U.S.	Western Europe	Japan	Mexico
111	17.8	15.7	3.6	90.5	-88.4	-100.0
112	61.7	67.0	54.3	-76.3	-100.0	-100.0
113	-75.1	-53.5	-51.7	-87.8	-66.5	-
114	29.6	39.3	35.9	2.0	-21.6	327.4
115	-100.0	-100.0	-100.0	-	-100.0	-
211	181.0	194.0	216.0	-100.0	-	-
212	-4.0	28.2	-4.7	-98.1	-1.2	-100.0
221	-100.0	-100.0	-100.0	-	-100.0	-
311	29.0	33.6	31.1	41.9	-6.4	141.7
312	-49.9	-31.0	-10.9	-87.0	-43.4	-
313	119.4	120.4	151.6	105.8	-52.2	275.0
314	47.5	48.0	-23.5	79.2	-100.0	-100.0
315	106.0	137.3	243.0	7.2	-23.0	-
316	-22.8	-56.0	-77.4	28.5	-100.0	-
321	81.5	83.8	98.6	16.7	488.2	397.5
322	45.1	76.6	55.6	-30.1	-83.3	466.7
323	92.0	92.1	54.2	255.5	312.3	-
324	106.9	137.1	39.3	-92.8	-	-
325	11.7	25.6	12.4	-30.1	113.0	24.0
326	21.8	22.3	-25.8	-16.3	20.5	256.5
327	52.8	60.9	91.6	-46.7	-100.0	-
331	-71.4	-56.9	-90.5	39.9	-100.0	-100.0
332	97.0	88.8	81.9	18.1	-99.9	-100.0
333	105.0	93.3	116.2	117.3	34.0	-100.0
334	58.2	45.7	57.2	102.7	49.4	-100.0
335	115.4	132.8	136.7	-34.1	-100.0	189.0
336	-4.3	-0.7	-37.8	-18.9	4.6	80.8
337	124.9	132.1	96.1	-32.9	255.1	-100.0
339	79.2	94.7	12.4	7.8	-54.7	-100.0
All sectors	50.3	63.5	73.3	-3.3	1.3	132.5

Source: http://www.strategis.ic.gc.ca/sc_mrkti/tdst/tdo/tdo.php#tag

Table 13
New Brunswick: Growth of Exports (%)
by Sector in 2001 Compared to the Sectoral Average
for 1992 to 2001, by Selected Destinations

Code	Destinations					
	All	U.S.	North-eastern U.S.	Western Europe	Japan	Mexico
111	46.8	60.2	68.4	-87.9	-46.7	210.6
112	72.0	73.4	71.5	-94.6	900.0	-
113	-24.8	-30.5	-60.6	210.7	-100.0	-
114	32.3	47.9	45.1	-82.4	-29.8	305.8
115	-100.0	-100.0	-100.0	-100.0	-	-
211	26.6	26.7	-35.2	-	-	-
212	-8.0	19.7	56.0	-26.8	-27.9	-97.2
221	58.3	58.3	58.3	-	-	-
311	33.9	52.3	49.4	13.1	-11.4	184.1
312	25.9	29.0	12.2	-4.7	-29.0	-
313	229.7	227.9	6.4	150.8	-	-
314	79.2	78.2	26.0	304.2	-	-
315	-49.5	-50.4	-46.1	-100.0	110.8	-
316	153.4	155.3	-22.8	-100.0	-	-
321	46.8	47.8	50.0	20.8	-65.6	-100.0
322	2.8	16.4	1.9	-42.9	-39.0	95.7
323	36.4	38.4	5.0	230.1	-10.0	-100.0
324	119.6	133.2	125.9	-99.4	-	-100.0
325	28.7	31.4	49.4	-88.3	-100.0	625.0
326	89.2	95.4	77.8	172.9	-100.0	-100.0
327	33.4	33.6	30.8	-44.4	-100.0	-100.0
331	28.9	34.7	36.2	-25.5	-100.0	-100.0
332	150.2	158.2	125.8	32.1	-88.7	-
333	98.2	126.5	143.5	19.1	45.8	522.0
334	144.6	54.3	8.2	365.7	-100.0	-100.0
335	18.0	18.4	-23.0	-38.8	-77.2	-100.0
336	40.5	1.2	-17.1	299.5	-	-
337	70.6	58.5	105.5	263.4	-25.0	-
339	80.4	97.3	109.8	28.7	22.3	-100.0
All sectors	51.7	71.1	65.6	-22.6	-26.2	62.8

Source: http://www.strategis.ic.gc.ca/sc_mrkti/tdst/tdo/tdo.php#tag

■ Share of Canadian Exports by Sector, 1992-2001

In this section, we concentrate our analysis of given markets on sectors where a province has more than 10 percent of Canadian exports. This value was chosen arbitrarily, the aim being to identify those sectors where the region is an important player.

Atlantic Canada

Atlantic Canada dominates Canada's exports from *fishing, hunting, and trapping* (65.6 percent in 1992 and 70.1 percent in 2001) (see table 14). As well, it has significantly increased its share of *petroleum and coal products manufacturing* from 29.9 percent in 1992 to 46.3 percent in 2001. Other significant sectors include *food manufacturing* and *paper manufacturing*. Two sectors where Atlantic Canada had more than 10 percent of Canadian exports but then fell under 10 percent in 2001 are *utilities* (from 12.2 to 5.8 percent) and *plastics and rubber products manufacturing* (15.4 to 8.6 percent).

The analysis of exports to the U.S. reveals that the numbers are essentially the same as those for total exports. However, the case for the Northeastern U.S. is somewhat different, with Atlantic Canada having a significant share of Canada's exports to that region in several sectors.

In terms of the share of Canadian exports, Atlantic Canada is a major player on the Western European market in *petroleum and coal products manufacturing* (97.2 percent in 2001), *fishing, hunting, and trapping* (74.6 percent in 2001), and *food manufacturing* (43.2 percent in 2001). Nevertheless, the performance of some sectors may help explain the decrease of the relative importance of Western Europe to the region's exports. For example, *forestry and logging's* share dropped from 21.9 to 9.9 percent, *paper manufacturing* went from 26.9 to 15.5 percent, and *plastics and rubber products manufacturing* declined from 19.5 to 8.7 percent.

Table 14
Atlantic Canada: Share of Canadian Exports (%),
by Sector and Selected Destinations, 1992 and 2001

Code	Destinations											
	All		U.S.		Northeastern U.S.		Western Europe		Japan		Mexico	
	1992	2001	1992	2001	1992	2001	1992	2001	1992	2001	1992	2001
111	1.51	1.62	6.34	4.85	12.89	11.98	1.82	0.28	0.00	0.00	0.08	0.01
112	3.50	6.54	3.55	6.89	23.63	39.86	6.71	0.18	0.00	3.41	0.00	0.00
113	2.29	1.37	5.07	1.99	20.75	15.44	21.90	9.88	0.00	0.00	-	-
114	65.62	70.07	68.91	74.67	90.64	93.07	76.43	74.57	42.91	80.93	7.23	100.00
115	0.01	0.00	0.04	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
211	0.42	3.42	0.43	3.43	0.01	12.61	0.00	0.00	-	-	0.00	0.00
212	7.15	9.13	4.01	6.95	2.80	4.29	14.17	15.50	1.15	2.57	32.81	3.24
221	12.25	5.85	12.25	5.85	21.13	18.32	-	-	-	0.00	-	-
311	22.34	17.12	20.68	16.21	33.67	28.31	43.46	43.25	19.28	14.24	0.82	1.63
312	3.74	2.60	4.30	2.66	6.56	2.71	0.30	0.97	0.44	0.63	0.00	0.00
313	1.13	3.87	1.20	4.05	0.82	1.50	0.18	0.75	0.02	1.27	11.97	5.68
314	3.38	4.05	4.43	4.21	5.58	3.31	0.51	1.36	0.12	0.00	2.69	0.00
315	0.27	0.28	0.16	0.27	0.20	0.27	0.26	0.19	1.40	2.16	0.00	0.00
316	0.23	0.93	0.22	0.61	0.17	0.17	0.24	5.34	0.80	0.00	0.00	0.00
321	2.71	6.56	3.10	7.24	8.58	16.61	5.31	7.38	0.02	1.08	0.09	0.40

322	14.31	12.19	10.58	11.10	17.36	15.49	26.94	15.50	15.65	9.43	38.74	34.31
323	0.37	0.51	0.37	0.54	0.50	0.68	0.37	0.33	1.30	2.30	0.00	0.00
324	29.90	46.29	28.76	45.16	49.46	61.59	82.42	97.19	0.00	0.00	0.00	0.00
325	0.74	0.50	0.57	0.47	0.95	1.03	2.63	0.66	0.03	0.15	0.56	1.47
326	15.41	8.61	15.93	8.69	11.32	3.48	19.46	8.71	36.97	23.97	0.00	38.83
327	0.92	1.93	0.91	2.01	1.76	3.39	0.84	1.43	0.25	0.83	0.00	0.00
331	0.46	0.51	0.30	0.58	0.28	0.74	0.22	0.18	0.00	0.00	23.27	0.00
332	1.01	2.27	1.09	2.27	1.59	4.19	0.32	0.97	1.17	0.59	0.00	0.00
333	0.83	1.28	0.77	1.07	1.21	1.78	1.41	2.69	0.57	0.28	0.34	0.28
334	0.55	0.66	0.46	0.42	0.20	0.30	0.92	3.01	0.56	0.26	0.32	0.00
335	0.34	0.78	0.29	0.72	0.39	0.86	0.54	0.70	0.07	0.01	0.39	1.94
336	0.40	0.30	0.38	0.28	1.49	0.95	0.80	1.07	0.06	0.03	0.00	0.00
337	0.86	1.28	0.78	1.22	1.71	2.49	2.16	5.28	0.10	0.68	0.00	0.00
339	1.54	2.28	1.62	2.21	2.23	2.38	1.71	2.81	1.05	4.46	0.00	0.00
All sectors	4.43	4.76	3.64	4.53	7.75	10.51	11.06	8.30	4.78	4.70	8.50	2.86

Source: http://www.strategis.ic.gc.ca/sc_mkt/ttdst/ttdo/ttdo.php#tag

Newfoundland and Labrador

When we analyze total exports for Newfoundland and Labrador (see table 15), we find that only the *petroleum and coal products manufacturing* sector had more than 10 percent of Canadian exports (for 1993 and for 1996 to 2001, with a high of 14.2 percent in 1999). There were similar results for exports to both the U.S. and the Northeastern U.S., although their peak years were not always the same.

Exports to Western Europe are somewhat different. Newfoundland and Labrador's share of exports in the *petroleum and coal products manufacturing* sector has nearly always been significantly above 10 percent (1995 was the exception at 5.6 percent, while 2001 set the high-water mark with 97.1 percent). Two other sectors are also noteworthy: *mining (except oil and gas)* and *food manufacturing*. As for Japan and Mexico, with few exceptions no sectors managed to reach the 10 percent threshold.

Prince Edward Island

In the case of Prince Edward Island (see table 16), with the notable exception of 1993 and exports to Mexico of *leather and allied products*, no sector managed to reach a share of 10 percent of Canadian exports. For example, when we analyze total exports, the sectors with the greatest shares were *food manufacturing* (a high of 2.8 percent) and *fishing, hunting, and trapping* (a high of 2.3 percent).

Nova Scotia

Nova Scotia consistently accounted for over 50 percent of overall Canadian exports in the *fishing, hunting, and trapping* sector (see table 17). In the case of the *plastics and rubber products manufacturing* sector, the province had over 10 percent of Canadian exports for the first six years of the period. By 2001 the percentage had dipped slightly to 8.1 percent.

We find similar trends in the U.S. market. On the Northeastern U.S. market, the *oil and gas extraction* sector was also among the leaders for three years (peaking at 15.7 percent in 1995), as were *food manufacturing* and *plastics and rubber products manufacturing* in 1992.

For Western Europe, the province's *fishing, hunting, and trapping* sector dominated (the low was 63.0 percent of Canadian exports on that market). The *food manufacturing* sector was also important (a range of 10.0 to 24.9 percent). For given years, the *oil and gas extraction*, the *plastics and rubber products manufacturing*, the *forestry and logging*, and the *petroleum and coal products manufacturing* sectors all passed the 10 percent level.

The situation was similar in Japan, with *fishing, hunting, and trapping* leading the way, followed by *plastics and rubber products manufacturing*. As for Mexico, *primary metal manufacturing* was regularly over the 10 percent threshold, although the share fell to 0 percent in 2001. On the other hand, the provincial share of exports in the *fishing, hunting, and trapping* sector went up from 7.2 to 99.0 percent between 1992 and 2001. Similarly, the share of the *plastics and rubber products manufacturing* sector stood at 38.8 percent in 2001, the result of an upward trend in the last years of the period.

New Brunswick

In New Brunswick (see table 18), we find the *petroleum and coal products manufacturing* consistently above 10 percent of total Canadian exports (a range of 19.4 to 32.7 percent). As well, *fishing, hunting, and trapping* passed the 10 percent mark for most of the latter part of the period. And finally, the *utilities* sector was up to nearly 12 percent between 1997 and 1999, a plateau it had previously reached in 1992.

On the U.S. market, we find a situation relatively similar to that of overall exports. The situation is different, however, when we analyze exports to the Northeastern U.S. There we find eight sectors (*animal production; forestry and logging; fishing, hunting, and trapping; utilities; food manufacturing; wood product manufacturing; paper manufacturing; and petroleum and coal products manufacturing*) where New Brunswick's share was almost always above 10 percent of Canadian exports. The province's share on Western European, Japanese, and Mexican markets was relatively much smaller; in only a few cases did it reach 10 percent of Canadian exports.

Table 15
Newfoundland and Labrador: Share of Canadian Exports (%),
by Sector and Selected Destinations, 1992 and 2001

Code	Destinations											
	All		U.S.		Northeastern U.S.		Western Europe		Japan		Mexico	
	1992	2001	1992	2001	1992	2001	1992	2001	1992	2001	1992	2001
111	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112	0.05	0.08	0.05	0.08	0.18	0.49	0.00	0.00	0.00	0.00	0.00	0.00
113	0.08	0.00	0.00	0.00	0.00	0.00	2.34	0.00	0.00	0.00	-	-
114	3.22	1.07	3.89	1.25	5.08	1.62	0.11	0.49	2.07	0.57	0.00	0.00
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
211	0.00	0.54	0.00	0.54	0.00	0.93	0.00	0.00	-	-	0.00	0.00
212	1.30	4.94	0.15	2.15	0.23	1.06	4.21	10.89	0.16	1.64	0.00	3.18
221	0.00	0.00	0.00	0.00	0.01	0.00	-	-	-	0.00	0.00	-
311	5.41	4.27	5.57	3.80	9.78	6.35	11.20	14.21	3.35	1.57	0.00	0.00
312	0.02	0.09	0.00	0.00	0.00	0.01	0.00	0.08	0.00	0.27	0.00	0.00
313	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
314	0.02	0.01	0.00	0.00	0.00	0.00	0.19	0.37	0.00	0.00	0.00	0.00
315	0.02	0.01	0.00	0.01	0.00	0.01	0.00	0.03	0.17	0.00	0.00	0.00
316	0.01	0.31	0.01	0.04	0.02	0.03	0.00	4.40	0.00	0.00	0.00	0.00
321	0.02	0.16	0.00	0.19	0.00	0.36	0.07	0.01	0.00	0.00	27.96	0.00

322	3.12	2.46	1.29	1.82	1.23	2.30	7.38	6.57	1.68	0.01	0.00	0.00
323	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.05	0.00	0.00	0.00	0.00
324	9.45	12.46	8.65	10.45	13.94	17.32	44.20	97.14	0.00	0.00	0.00	0.00
325	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00
326	0.02	0.00	0.02	0.00	0.04	0.00	0.04	0.08	0.01	0.00	0.00	0.00
327	0.01	0.06	0.00	0.02	0.00	0.04	0.12	1.25	0.18	0.00	0.00	0.00
331	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.04	0.00	0.00	0.00	0.00
332	0.01	0.02	0.00	0.01	0.00	0.01	0.06	0.16	0.00	0.03	0.00	0.00
333	0.06	0.11	0.03	0.03	0.04	0.02	0.15	0.93	0.00	0.02	0.00	0.00
334	0.01	0.04	0.01	0.03	0.01	0.01	0.04	0.12	0.06	0.02	0.00	0.00
335	0.01	0.04	0.01	0.03	0.01	0.00	0.05	0.25	0.00	0.00	0.00	0.00
336	0.00	0.01	0.00	0.00	0.00	0.00	0.03	0.04	0.00	0.00	0.00	0.00
337	0.01	0.01	0.01	0.00	0.03	0.01	0.00	0.25	0.00	0.00	0.00	0.00
339	0.03	0.03	0.03	0.02	0.06	0.04	0.01	0.09	0.01	0.00	0.00	0.00
All sectors	0.78	0.90	0.51	0.67	1.16	1.64	2.86	4.13	0.65	0.56	2.20	0.08

Source: http://www.strategis.ic.gc.ca/sc_mrkti/tdst/tdo.php#tag

Table 16
Prince Edward Island: Share of Canadian Exports (%),
by Sector and Selected Destinations, 1992 and 2001

Code	Destinations											
	All		U.S.		Northeastern U.S.		Western Europe		Japan		Mexico	
	1992	2001	1992	2001	1992	2001	1992	2001	1992	2001	1992	2001
111	0.74	0.31	1.68	0.67	2.85	0.82	1.63	0.10	0.00	0.00	0.01	0.00
112	0.15	0.74	0.11	0.77	0.60	4.27	2.83	0.00	0.00	1.59	0.00	0.00
113	0.01	0.00	0.00	0.00	0.00	0.02	0.26	0.00	0.00	0.00	-	-
114	1.54	2.27	1.87	2.59	2.45	3.43	1.05	1.96	0.03	0.27	0.00	0.00
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
211	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	0.00	0.00
212	0.01	0.03	0.00	0.05	0.00	0.06	0.00	0.00	0.03	0.11	0.00	0.00
221	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	0.00	-	-
311	1.55	2.55	1.64	3.05	2.65	5.39	3.19	3.48	0.60	0.37	0.00	0.09
312	0.67	0.04	0.78	0.04	1.75	0.10	0.00	0.00	0.00	0.22	0.00	0.00
313	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
314	0.04	0.02	0.05	0.02	0.11	0.02	0.00	0.00	0.12	0.00	0.00	0.00
315	0.08	0.01	0.07	0.01	0.10	0.00	0.01	0.00	1.23	0.00	0.00	0.00
316	0.10	0.02	0.13	0.00	0.05	0.00	0.00	0.38	0.00	0.00	0.00	0.00
321	0.00	0.07	0.00	0.08	0.01	0.24	0.00	0.05	0.00	0.02	0.00	0.00

322	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
323	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
324	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
325	0.07	0.08	0.06	0.09	0.15	0.17	0.25	0.01	0.00	0.00	0.00	0.00	0.00	0.10	0.43				
326	0.02	0.06	0.02	0.07	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01				
327	0.01	0.04	0.01	0.04	0.01	0.06	0.02	0.02	0.02	0.07	0.83	0.00	0.00	0.00	0.00				
331	0.01	0.05	0.02	0.06	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
332	0.00	0.08	0.00	0.08	0.01	0.18	0.00	0.01	0.00	0.00	0.55	0.00	0.00	0.00	0.00				
333	0.02	0.09	0.02	0.09	0.03	0.09	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
334	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00				
335	0.00	0.03	0.00	0.03	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
336	0.00	0.03	0.00	0.03	0.00	0.05	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00				
337	0.00	0.02	0.00	0.02	0.00	0.06	0.00	0.00	0.00	0.02	0.15	0.00	0.00	0.00	0.00				
339	0.06	0.03	0.04	0.03	0.06	0.05	0.12	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00				
All sectors	0.11	0.16	0.09	0.16	0.21	0.43	0.23	0.15	0.09	0.11	0.00	0.00	0.00	0.00	0.03				

Source: http://www.strategis.ic.gc.ca/sc_mrkti/tdst/tdo.php#tag

Table 17
Nova Scotia: Share of Canadian Exports (%),
by Sector and Selected Destinations, 1992 and 2001

Code	Destinations												
	All		U.S.		Northeastern U.S.		Western Europe		Japan		Mexico		
	1992	2001	1992	2001	1992	2001	1992	2001	1992	2001	1992	2001	
111	0.28	0.28	1.90	0.83	3.70	1.44	0.17	0.17	0.17	0.00	0.00	0.00	0.00
112	0.28	0.39	0.30	0.41	2.06	1.97	0.07	0.05	0.00	0.00	0.00	0.00	0.00
113	0.51	0.16	0.06	0.21	0.33	3.09	12.86	1.96	0.00	0.00	-	-	-
114	51.49	55.98	53.01	57.65	69.58	70.85	63.01	70.37	38.34	78.11	7.23	99.02	0.00
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
211	0.41	2.86	0.43	2.87	0.00	11.64	0.00	0.00	-	-	0.00	0.00	0.00
212	1.88	1.06	1.75	2.63	1.23	1.56	2.85	0.01	0.17	0.11	32.81	0.00	0.00
221	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	0.00	-	-	-
311	9.46	4.74	7.63	3.63	11.78	6.36	24.86	20.61	9.60	6.60	0.43	0.35	0.00
312	0.18	0.04	0.18	0.02	0.31	0.05	0.14	0.09	0.44	0.07	0.00	0.00	0.00
313	1.03	2.48	1.08	2.58	0.71	1.18	0.18	0.67	0.00	1.27	11.97	5.68	0.00
314	3.05	2.58	4.01	2.68	4.42	1.69	0.31	0.68	0.00	0.00	2.69	0.00	0.00
315	0.14	0.23	0.06	0.22	0.05	0.23	0.22	0.16	0.00	1.94	0.00	0.00	0.00
316	0.08	0.21	0.04	0.12	0.06	0.07	0.24	0.55	0.80	0.00	0.00	0.00	0.00
321	0.49	1.48	0.24	1.46	0.41	3.13	2.93	4.05	0.01	1.05	0.09	0.40	0.00

322	3.21	3.48	3.17	3.04	6.08	4.57	4.39	4.02	0.16	0.03	0.00	26.00
323	0.20	0.23	0.18	0.24	0.23	0.30	0.34	0.21	0.37	1.75	0.00	0.00
324	1.07	1.12	0.87	1.14	1.44	0.91	0.00	0.04	0.00	0.00	0.00	0.00
325	0.38	0.15	0.21	0.08	0.21	0.08	2.35	0.63	0.03	0.15	0.47	0.17
326	15.13	8.08	15.65	8.15	10.60	2.29	19.37	8.14	36.96	23.97	0.00	38.83
327	0.19	0.59	0.12	0.62	0.18	0.69	0.54	0.13	0.00	0.00	0.00	0.00
331	0.30	0.08	0.10	0.07	0.11	0.02	0.10	0.09	0.00	0.00	23.27	0.00
332	0.72	1.02	0.76	0.94	0.61	1.34	0.21	0.62	1.17	0.00	0.00	0.00
333	0.40	0.57	0.39	0.41	0.64	0.72	0.48	1.17	0.56	0.20	0.03	0.00
334	0.49	0.40	0.41	0.26	0.17	0.23	0.86	1.45	0.13	0.24	0.31	0.00
335	0.24	0.65	0.20	0.61	0.23	0.75	0.25	0.34	0.02	0.00	0.39	1.94
336	0.38	0.24	0.36	0.23	1.45	0.78	0.76	0.67	0.06	0.01	0.00	0.00
337	0.65	0.74	0.57	0.73	1.25	1.50	1.91	0.43	0.08	0.35	0.00	0.00
339	0.68	0.89	0.79	0.87	1.42	0.65	0.35	0.88	0.28	0.22	0.00	0.00
All sectors	1.59	1.51	1.43	1.44	2.60	3.12	3.34	2.18	1.65	1.88	5.40	2.15

Source: http://www.strategis.ic.gc.ca/sc_mktti/tdst/tdo/tdo.php#tag

Table 18

**New Brunswick: Share of Canadian Exports (%),
by Sector and Selected Destinations, 1992 and 2001**

Code	Destinations												
	All		U.S.		Northeastern U.S.		Western Europe		Japan		Mexico		
	1992	2001	1992	2001	1992	2001	1992	2001	1992	2001	1992	2001	
111	0.49	1.03	2.75	3.36	6.33	9.71	0.02	0.01	0.00	0.00	0.00	0.07	0.01
112	3.01	5.32	3.09	5.63	20.79	32.13	3.81	0.13	0.00	1.82	0.00	0.00	0.00
113	1.69	1.21	5.01	1.77	20.42	12.33	6.44	7.92	0.00	0.00	0.00	—	—
114	9.38	10.74	10.13	13.18	13.52	17.16	12.27	1.75	2.47	1.97	0.00	0.00	0.98
115	0.01	0.00	0.04	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
211	0.00	0.03	0.00	0.03	0.01	0.05	0.00	0.00	—	—	0.00	0.00	0.00
212	3.96	3.10	2.10	2.13	1.33	1.62	7.11	4.59	0.78	0.72	0.00	0.00	0.07
221	12.25	5.85	12.25	5.85	21.12	18.32	—	—	—	0.00	—	—	—
311	5.92	5.56	5.85	5.73	9.47	10.20	4.21	4.95	5.72	5.70	0.39	1.20	—
312	2.87	2.43	3.33	2.60	4.49	2.55	0.16	0.79	0.00	0.07	0.00	0.00	0.00
313	0.09	1.38	0.12	1.46	0.11	0.32	0.00	0.09	0.00	0.00	0.00	0.00	0.00
314	0.27	1.45	0.37	1.51	1.05	1.60	0.00	0.31	0.00	0.00	0.00	0.00	0.00
315	0.03	0.03	0.03	0.03	0.05	0.03	0.03	0.00	0.00	0.21	0.00	0.00	0.00
316	0.04	0.38	0.04	0.45	0.03	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
321	2.19	4.85	2.85	5.52	8.16	12.88	2.31	3.28	0.01	0.00	0.00	0.00	0.00

322	7.98	6.24	6.12	6.23	10.05	8.60	15.17	4.91	13.81	0.38	10.78	8.31
323	0.16	0.27	0.18	0.29	0.26	0.38	0.03	0.07	0.93	0.55	0.00	0.00
324	19.38	32.70	19.24	33.56	34.08	43.36	38.22	0.01	0.00	0.00	0.00	0.00
325	0.28	0.27	0.29	0.30	0.58	0.77	0.02	0.00	0.00	0.00	0.00	0.87
326	0.24	0.46	0.25	0.48	0.68	1.06	0.05	0.50	0.00	0.00	0.00	0.00
327	0.71	1.24	0.78	1.33	1.57	2.61	0.16	0.04	0.00	0.00	0.00	0.00
331	0.14	0.37	0.17	0.44	0.15	0.68	0.11	0.05	0.00	0.00	0.00	0.00
332	0.28	1.15	0.33	1.25	0.97	2.65	0.06	0.18	0.00	0.01	0.00	0.00
333	0.34	0.50	0.32	0.53	0.50	0.95	0.78	0.55	0.01	0.06	0.31	0.28
334	0.03	0.22	0.04	0.11	0.02	0.06	0.03	1.44	0.12	0.00	0.01	0.00
335	0.09	0.07	0.08	0.06	0.14	0.05	0.24	0.10	0.06	0.01	0.00	0.00
336	0.01	0.03	0.01	0.02	0.04	0.11	0.01	0.35	0.00	0.00	0.00	0.00
337	0.20	0.51	0.20	0.46	0.43	0.92	0.24	4.60	0.00	0.18	0.00	0.00
339	0.78	1.33	0.75	1.29	0.69	1.64	1.22	1.80	0.74	4.23	0.00	0.00
All sectors	1.94	2.19	1.62	2.25	3.78	5.32	4.64	1.83	2.39	2.15	0.91	0.60

Source: http://www.strategis.ic.gc.ca/sc_mktti/tdst/tdo/tdo.php#tag

■ Conclusion

In this chapter, we analyzed Atlantic Canada's recent trade performance. Highlights of our results include:

- ▶ Atlantic Canada's exports are increasingly going to the U.S., which now accounts for 82 percent of the region's exports compared to 62 percent in 1992.
- ▶ Atlantic Canada's share of total Canadian exports grew from 4.4 percent in 1992 to 4.8 percent in 2001.
- ▶ The region's share of Canadian exports on the Northeastern U.S. market grew from 7.8 percent in 1992 to 10.5 percent in 2001.
- ▶ A significant portion of Atlantic Canada's exports are closely linked to the region's natural resources: the region's top-three export sectors are *petroleum and coal products manufacturing*, *paper manufacturing*, and *food manufacturing*.
- ▶ Nontraditional sectors are becoming increasingly responsible for Atlantic Canada's export growth.

Atlantic Canada's Exports over the Past Decade: A Qualitative Approach

■ Shift-Share and Export Share

In this chapter, we present a qualitative analysis of recent trends in Canada's and the provinces' international trade, paying particular attention to Atlantic Canada. Using microdata from Statistics Canada's export register, we employ the shift-share technique to analyze more specifically the trends pertaining to the provinces' export share. This means that our focus is on a comparative analysis between provinces rather than on an analysis of general trends. By way of illustration, we might say that instead of focusing on the growing pie (i.e., that exports are increasing in value), we look at how the pie is divided (i.e., the variable share of overall exports).

The shift-share technique we use is an approach favoured in regional economics to break down the growth of a variable into its various explanatory factors. For example, we could explain the growth of regional employment as growth based on the initial structure of the economy, growth based on national trends, and growth based on strictly local factors.⁶

In the context of our study, the choice of the shift-share technique allows us to break down the source of the variation in export share into an industry effect (the variation is explained by the industrial structure of a province's economy when compared to the performance of an industry nationally) and a regional effect (the variation is not explained by the industrial structure and is thus assumed to be the result of regional factors).⁷ This means that when we find a positive effect for a given variable, its share of total Canadian exports is growing. In the case of a negative effect, it reflects a decreasing share of total Canadian exports.

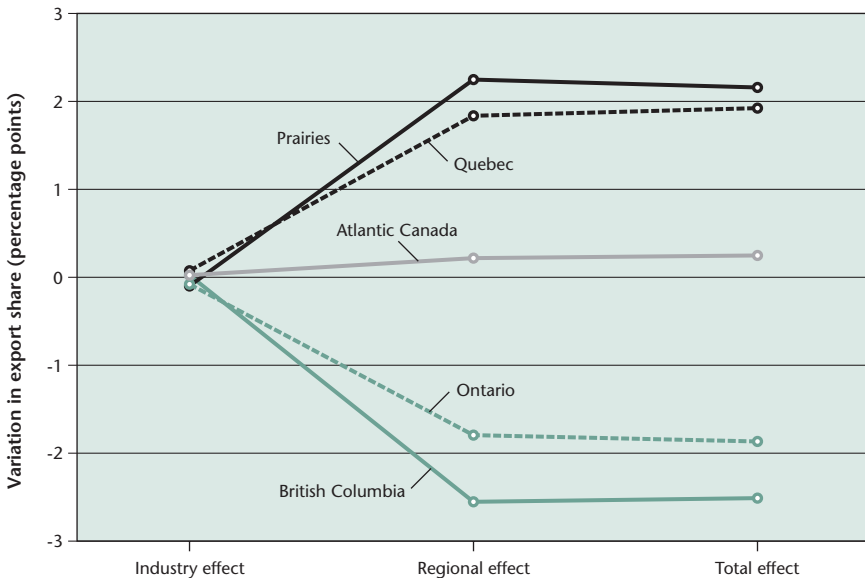
6. See, for example, Mario Polèse, *Économie urbaine et régionale : logique spatiale des mutations économiques* (Paris: Economica, 1994), 352.

7. Note that although we only present the total effect in the figures included in the text, the values for the industry and for regional effects are presented in the tables found in the Appendix.

The period covered by the data is 1993 to 2000. For the purpose of our analysis, we averaged the results for 1993, 1994, and 1995 and for 1998, 1999, and 2000. We then compared the situation at the beginning of the period (1993–95) with the situation at the end (1998–2000), thereby excluding any erratic results. For reasons of confidentiality the four Atlantic provinces (Newfoundland and Labrador, Prince Edward Island, Nova Scotia, and New Brunswick) were grouped together, as were the three Prairie provinces (Manitoba, Saskatchewan, and Alberta).

We found, as shown in figure 18, that Atlantic Canada gained 0.2561 points in total exports (i.e., its share of total Canadian exports increased by 0.256 percentage points). This gain was primarily the result of a regional effect (0.2224 points), the overall industry effect being only 0.0337 points. By comparison, market share was gained in Quebec and the Prairies and lost in Ontario and British Columbia.

Figure 18
Variation in Export Share from Industry Effect, Regional Effect, and Total Effect, by Canadian Regions, 1993–95 and 1998–2000

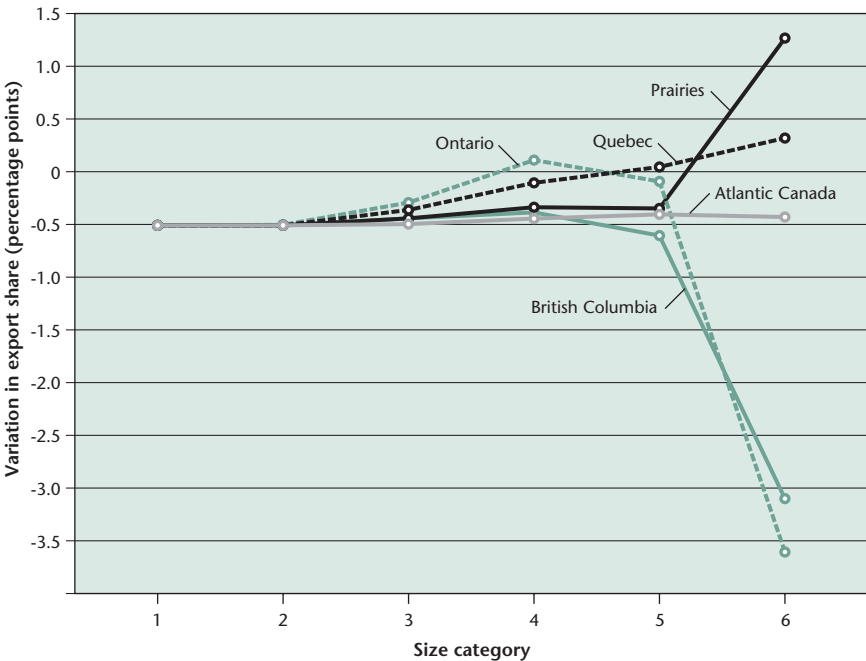


We will now analyze nine variables to help us better understand the source of the variation in export share over the period.

■ Size of Firms

How does size explain variations in export share during the period in question? Using the value of exports to measure the size of firms, we found that overall (see figure 19) the bigger the firm, the better it explains the variations in market share. In the case of Atlantic Canada, all size categories except the two smallest (less than \$30,000 and between \$30,000 and \$99,999 in average annual export sales) contributed positively to the region’s export share. Furthermore, in the less-than-\$30,000 category, the region’s “negative contribution” was the smallest in Canada. We thus conclude that Atlantic Canada’s export performance over the period was not greatly influenced by the size of the firms when compared to other regions of the country where there was a more important correlation between size and variation of export share.

Figure 19
Variation in Export Share (Total Effect) Based on Size of Firms, by Canadian Regions, 1993–95 and 1998–2000



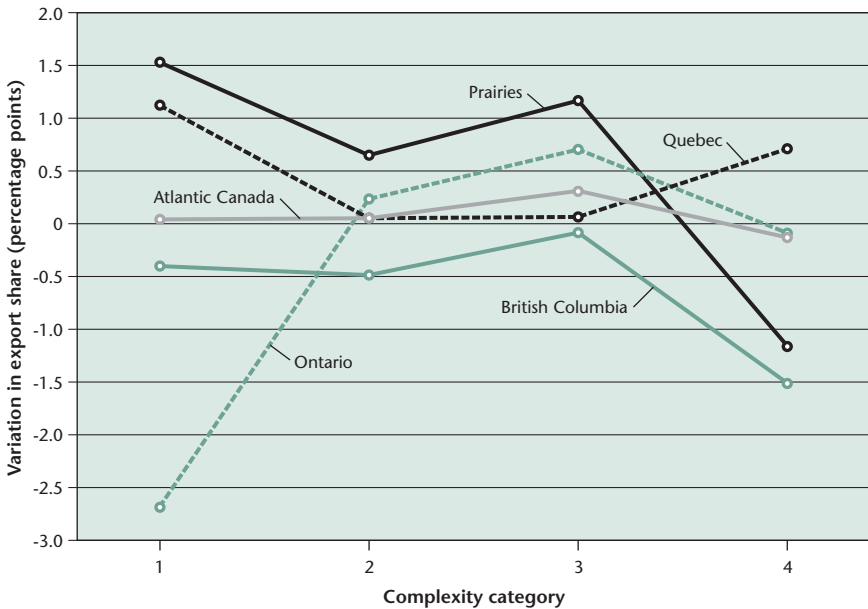
“Complexity” of Firms

Let us now examine how the firms’ corporate structure influences Atlantic Canada’s export share. To do so, we divided all firms into four categories:

1. Very complex firms: Establishments within an enterprise that has many establishments in many locations, in more than one province, and in more than one activity.
2. Complex but specialized firms: Establishments within an enterprise that has many establishments in many locations and in more than one province, but in one activity only.
3. Other complex firms: Mostly establishments within an enterprise that has many establishments in many locations, but in only one province and in one activity. It also includes other cases not covered by 1 and 2, such as an enterprise with many activities but in only one province.
4. Singles: Single establishments.

In figure 20 we can see that overall in Atlantic Canada the three most diversified categories (categories 1, 2, and 3) contributed posi-

Figure 20
Variation in Export Share (Total Effect) Based on “Complexity” of Firms, by Canadian Regions, 1993–95 and 1998–2000

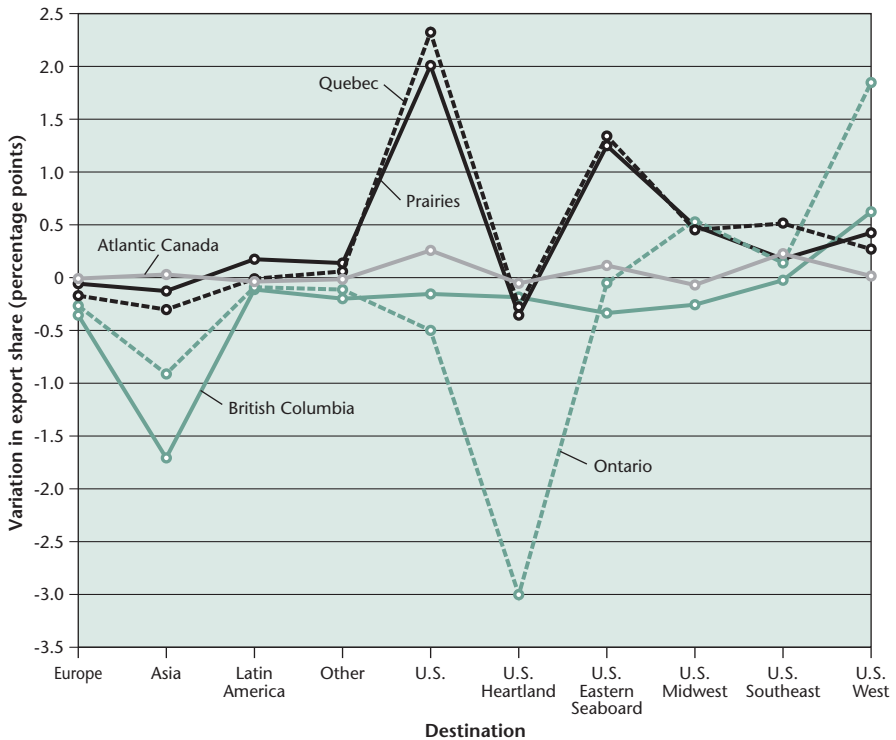


tively to the region's export share. We also find that there seems to be a correlation between firms with a diverse structure and their export performance: only Quebec had a positive contribution from firms with the least diversified corporate structure. It is noteworthy that with respect to the regional effect, Atlantic Canada exporters from the four categories saw their export share increase. Notwithstanding this last result, we find that in general, firms with simple structures could benefit from various forms of strategic partnerships in order to increase their success on international markets.

■ Destination of Exports

What impact did the destination of exports have on the region's export share? In figure 21, we see that the impact varied greatly from one export market to the next. Overall, we have the confirmation of a trend towards the "continentalization" of Canada's economy. For

Figure 21
Variation in Export Share (Total Effect) Based on Destination,
by Canadian Regions, 1993–95 and 1998–2000



example, the share of exports to Europe decreased for Canada's five regions. And in the case of the Asian market, only in Atlantic Canada did it have a positive impact. As for Latin America, it was only for the Prairies that the export share increased. Interestingly, we can observe important regional variances in the U.S. For example, while the U.S. West had a positive impact on all Canadian regions, the corresponding impact of the U.S. Heartland was negative. This reflects an important shift where, relatively speaking, the locus of the U.S. economy is moving towards the south and the west of the country. Although the relative decline is affecting the U.S. Heartland more than the U.S. Eastern Seaboard, there is no doubt that the economic centre of the U.S. is shifting away from Atlantic Canada.

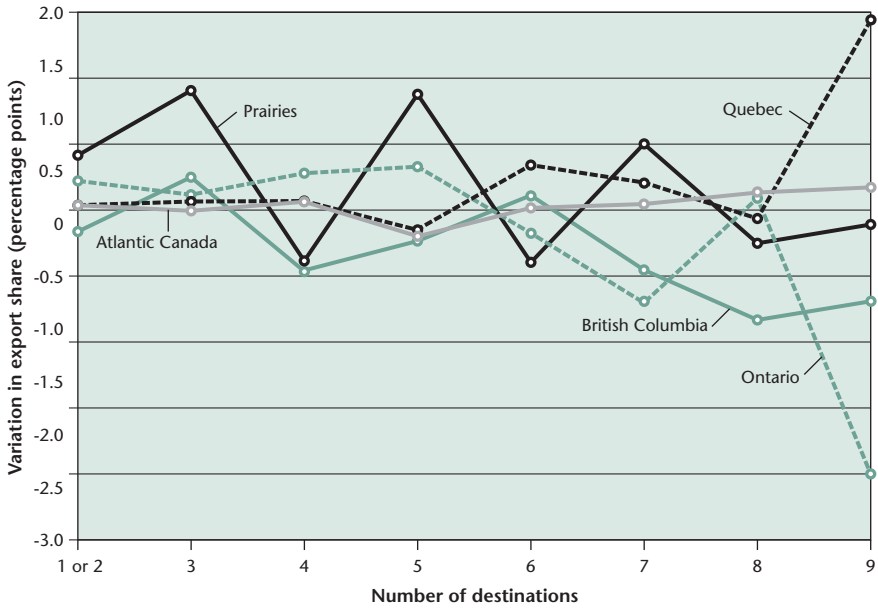
In fact, looking more specifically at Atlantic Canada's performance, we find that exports to the U.S. were the biggest reason for its increase in export share. However, while markets in the U.S. Southeast and the U.S. Eastern Seaboard were strong contributors to Atlantic Canada's performance, those in the U.S. Heartland and the U.S. Midwest had the opposite effect. From these results we can conclude that although the locus of the U.S. economy is shifting away from Atlantic Canada, our immediate neighbours along the Eastern Seaboard and farther away in the U.S. Southeast represent very important export markets, both actual and potential. Furthermore, even if the diversification of markets is theoretically always a good thing, building upon one's strengths would indicate that the regions should seriously consider targeting the U.S. Southeast and the U.S. Eastern Seaboard markets, which are where Atlantic Canada has been relatively successful of late.

■ Number of Destinations

Keeping the same destinations used in the previous section (and in figure 21), let us now analyze the impact on the variation in export share of the number of destinations to which firms export. In figure 22 we see that overall, there is no general pattern with respect to the impact on the variation in export share. In the case of Atlantic Canada the biggest contribution to the increase in export share came from firms exporting to eight or nine of the destinations, that is, firms most diversified with respect to destination. Although this result may at first glance appear self-evident, the data for all Canadian regions present a picture where for firms exporting to eight or nine destinations, the impact on various export share was, on average, negative. Consequently, our overall results for this variable did not allow us to arrive at any policy inferences.

Figure 22

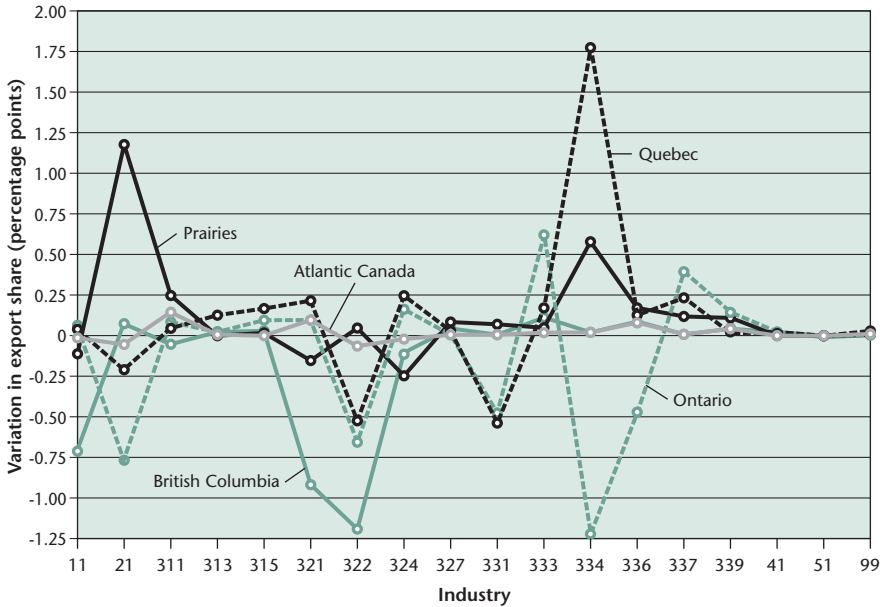
Variation in Export Share (Total Effect) Based on the Number of Destinations, by Canadian Regions, 1993–95 and 1998–2000



Industry

Turning now to the impact of the various industrial sectors (see figure 23), we find that overall, eight sectors generally saw their share of total exports increase: 21 — *mining and oil and gas extraction* (including 221 — *utilities*); 321 — *wood product manufacturing*; 322 — *paper manufacturing*; 331 — *primary metal manufacturing* (including 332 — *fabricated metal product manufacturing*); 333 — *machinery manufacturing*; 334 — *computer and electronic product manufacturing* (including 335 — *electrical equipment, appliance, and component manufacturing*); 336 — *transportation equipment manufacturing*; and 337 — *furniture and related product manufacturing*. Let us keep in mind that export share is measured in total value and that fluctuations are therefore often the result of price variations just as much as, if not more than, quantity variations. Energy-related sectors exemplify this.

Figure 23
Variation in Export Share (Total Effect) Based on Industry, by Canadian Regions, 1993–95 and 1998–2000



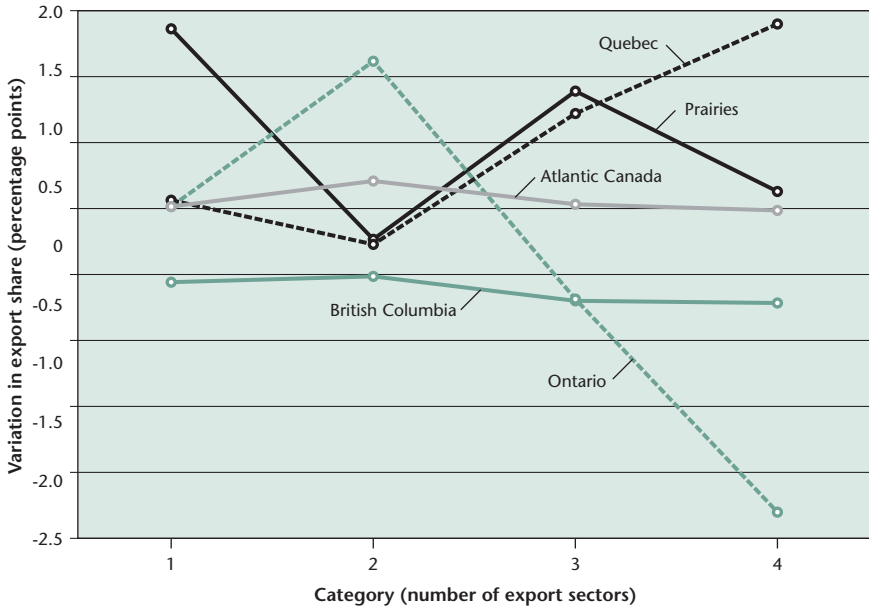
For Atlantic Canada, three sectors made significant contributions to the region’s export share. In decreasing order of importance these are 311 — *food manufacturing* (including 312 — *beverage and tobacco product manufacturing*); 321 — *wood product manufacturing*; and 336 — *transportation equipment manufacturing*. At the other end of the spectrum are two sectors that had the biggest negative effects on the region’s variation in its export share: 322 — *paper manufacturing*; and 21 — *mining and oil and gas extraction* (including 221 — *utilities*). A final note — in all cases but two, the regional effect was positive.

Number of Sectors in Which Firms Export

In order to analyze the impact of another form of diversification, the number of sectors in which firms export, we created four categories (see figure 24):

- Category 1: Products in 1-industry groupings
- Category 2: Products in 2- to 5-industry groupings
- Category 3: Products in 6- to 15-industry groupings
- Category 4: Products in more than 15-industry groupings

Figure 24
Variation in Export Share (Total Effect)
Based on the Number of Sectors in Which Firms Export,
by Canadian Regions, 1993–95 and 1998–2000



Interestingly, the only category where Atlantic Canada’s total effect was negative was category 4, the most diversified. This is a case where the negative-industry effect was greater than the positive-regional effect. The largest positive impact is found in category 2 with products in groupings of two to five industries.

The absence of an overall clear pattern did not allow us to arrive at more precise conclusions.

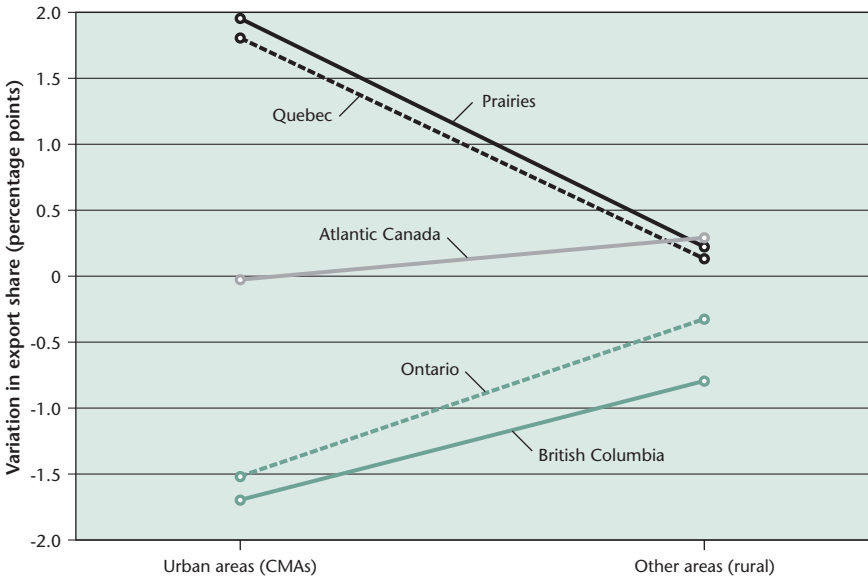
■ Urban vs. Rural

In this section, we concentrate on the relative performance of rural and urban regions — an urban region is defined as a census metropolitan area (CMA). In Atlantic Canada, we have three CMAs: Halifax, St. John’s, and Saint John. All other regions are considered rural.⁸ Concentrating on these urban-rural differences (see figure 25),

8. Note that this definition is only used for this chapter. In the next chapter, we define urban regions as municipalities with a population of over 10,000.

we find that overall, the impact, positive or negative, was larger in urban than in rural regions. In fact, Atlantic Canada is the only region where the impact of the rural regions was greater than the impact of the urban regions. Furthermore, Atlantic Canada is the only region where the direction of the impact varied between the two: positive in rural regions and negative in urban regions. In the case of Quebec and the Prairies, it was positive for both; in the case of Ontario and British Columbia, it was negative for both.

Figure 25
Variation in Export Share (Total Effect)
for Urban (CMA) and Rural Firms,
by Canadian Regions, 1993–95 and 1998–2000



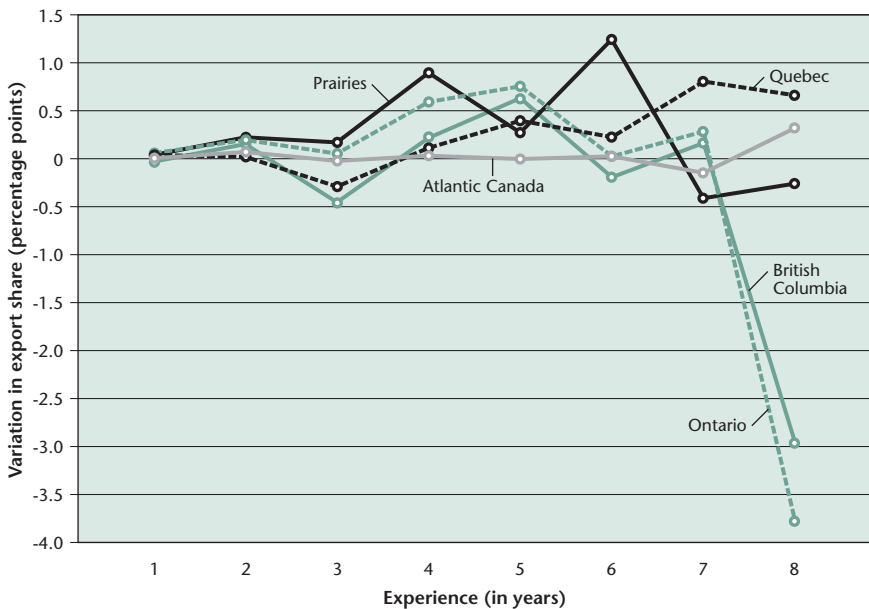
Regarding Atlantic Canada, we found that the regional effect was positive for both urban and rural regions. At the same time, the industry effect was positive for rural regions while it was negative for urban regions. Nevertheless, we should point out that these results may have as much to do with the lower rate of urbanization in Atlantic Canada when compared with other regions of the country as they do with the better performance of the region’s rural firms. That being said, while new-economy activities tend to concentrate in urban regions and should clearly be supported, the results allow us to state that promoting the development of rural exporters can also generate important dividends for the region.

Firms' Experience

The data allow us to analyze the impact of a firm's experience based on the number of years (during the period 1993–2000) that it was an active exporter (see figure 26). We find that overall, there is a clear pattern showing that the more experienced the firm, the greater its impact on export share. In Atlantic Canada's case, the largest positive impact was on firms that had exported for eight years, while the largest negative impact was on firms that had exported for seven years.

Figure 26

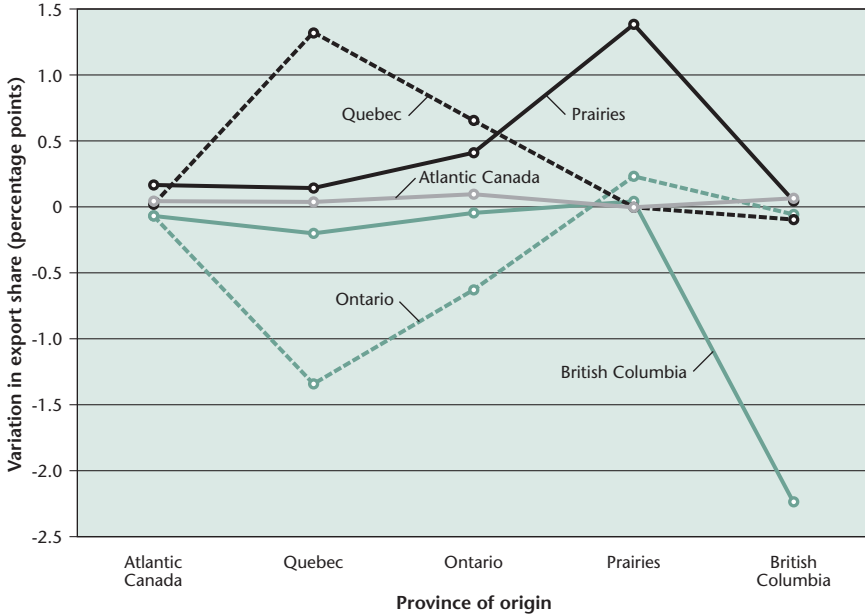
Variation in Export Share (Total Effect) Based on Firms' Experience, by Canadian Regions, 1993–95 and 1998–2000



Province of Origin vs. Province of Residence

Finally, if we examine the impact of the province from which the product was exported as opposed to the province where the exporter is resident — the variable used in all previous analyses in this chapter, — we find that for Atlantic Canada, the impact of the products produced in the region on various export-share variations was minimal when compared with cases in other regions of the country (see figure 27). This is in part a reflection of the relatively small size of the region's economy. Concentrating on Atlantic Canada as a province of residence, we found that in all cases the total effect was positive.

Figure 27
Variation in Export Share (Total Effect)
Based on Export Products' Province of Origin
vs. Exporters' Province of Residence,
by Canadian Regions, 1993–95 and 1998–2000



Conclusion

In chapter 2, we used special data to further analyze Atlantic Canada's recent trade performance, concentrating on variations in export share. Following are highlights of our results:

- ▶ Atlantic Canada's share of total Canadian exports grew during the period in question.
- ▶ The firms' size does not seem to be an important factor in explaining the growth of export share.
- ▶ Atlantic Canada has been successful on markets in the U.S. Southeast and U.S. Eastern Seaboard even while the locus of Canadian exports to the U.S. was moving towards the south-west.

- ▶ The number of export markets does not seem to be an important factor in explaining success.
- ▶ In Atlantic Canada, the sectors most responsible for the gain in export share were *food manufacturing* (including *beverage and tobacco product manufacturing*), *wood product manufacturing*, and *transportation equipment manufacturing*.
- ▶ The number of sectors in which products are exported does not seem to be an important factor in explaining an increased export share.
- ▶ Atlantic Canada's rural exporters (defined as located outside of CMAs) performed better than Atlantic Canada's urban exporters (the CMAs of Halifax, St. John's, and Saint John).

The Players' Perspective: Results of Meetings with SMEs That Are Exporters and Potential Exporters

■ The Survey

In order to get a better picture of the challenges faced by SMEs in the field of international trade (both existing and potential exporters), we conducted interviews with personnel from twenty-six firms located in various regions of Atlantic Canada.⁹ We did most of the interviews in person; a few were done by telephone.

Atlantic Canada Opportunities Agency (ACOA) personnel in the four provinces were contacted for a list of potential SMEs for this study. Most of the firms included in the survey were taken from this list, while a few were contacted directly by the author. The firms were from the four Atlantic provinces (six from Newfoundland and Labrador, three from Prince Edward Island, seven from Nova Scotia, and ten from New Brunswick).

One of the aims of our study was to analyze the different realities facing exporting SMEs in rural and urban settings (our sample contained fourteen urban and twelve rural SMEs). It should be noted here that there are various degrees of urbanization and ruralization. For example, in the definition that we use in this chapter, which is different from the one used in the previous chapter, firms in Bathurst (New Brunswick) or Sydney (Nova Scotia) are considered urban firms along with firms in St. John's, Halifax, Montreal, Toronto, or Vancouver. However, they face very different challenges from those in larger urban centres.

Regarding the sectoral distribution of our sample, as presented in table 19, nine broad economic sectors were included. Firms in the study also vary significantly in size, with most having less than one hundred employees.

9. The interviews were conducted mostly in March 2002 by the author and by Samuel LeBlanc, a researcher at the Canadian Institute for Research on Regional Development.

Table 19
Characteristics of the Firms Surveyed

Provincial distribution of firms	
Newfoundland and Labrador	6
Prince Edward Island	3
Nova Scotia	7
New Brunswick	10
Total firms	26
Urban-rural distribution of firms	
Urban	14
Rural	12
Sectoral distribution of firms	
Food manufacturing	4
Wood product manufacturing	6
Chemical manufacturing	4
Plastics and rubber products manufacturing	3
Non-metallic mineral product manufacturing	1
Machinery manufacturing	1
Computer and electronic product manufacturing	3
Miscellaneous manufacturing	1
Information technology	3
Distribution by size of firms, based on employment	
1 to 5 employees	0
6 to 25 employees	12
26 to 100 employees	7
101 to 200 employees	3
More than 201 employees	4
International trade as a percentage of total sales	
0% (potential exporters)	4
1% to 20%	9
21% to 40%	5
41% to 60%	1
61% to 80%	3
81% to 100%	4

Finally, dependence on international trade varies greatly. In our sample, four firms could be considered potential exporters. Some of them have exported in the past and wish to do so again. Meanwhile, others have never exported but have a strategy for expanding on international markets. Half of the firms make less than 20 percent of their sales on international markets, while four of them depend on international markets for more than 80 percent of their sales.

In conclusion, it should be noted that while we are confident that our survey gives an accurate picture of the situation, care should be taken in drawing too-specific conclusions since the sample is not statistically representative of exporters for the various categories.

■ Financing

At first glance, the issue of financing looks like a tale of two realities. On the one hand, established exporters were nearly unanimous in stating that at their stage of development, financing for their firms was not a serious problem. On the other hand, potential and new exporters were equally agreed that financing was a very serious problem indeed.

For example, one exporter that we interviewed who was relatively new to the field of international trade reported that even with signed contracts in the U.S. and the support of the Export Development Corporation (EDC) guaranteeing 90 percent of the value of the contracts, banks were still unwilling to finance the endeavour. In contrast, more established firms clearly stated that guarantees from the EDC make accessing capital relatively easy.

From our analysis we discovered that exporting SMEs face four significant obstacles when seeking funding from private-sector financial institutions. The first obstacle could be described as the absence of a track record: it seems that most new firms face major hurdles. The second obstacle is the location of the firm. Compared to firms located in larger urban centres, those in rural regions have more trouble arranging financing. The same can be said of firms in urban regions either facing challenging economic conditions or situated far from large markets. The third obstacle is linked to the nature of the firm's activity. Firms active in what might be called new sectors of activity argued that many financial institutions completely failed to understand the nature of their businesses. They were often left to feel that they never had a chance of financing their operations using this conventional approach. Similarly, even firms in more traditional

economic sectors but located outside the geographical area where their sector is concentrated in Canada felt that they were not taken seriously by financial institutions. For example, if a widget sector is concentrated around Toronto, a company producing widgets in Prince Edward Island or Newfoundland and Labrador would essentially be written off by financial institutions. This leads to a consideration of the merits of the cluster approach to creating a critical mass of companies in a similar line of business, an arrangement that judging by their actions some financial institutions look upon with favour. Finally, even established firms with a proven track record often felt abandoned by financial institutions when they ventured into uncharted territory, whether it was developing new markets or developing new products.

To conclude, we noted that most firms contacted had received some financial support from government that wasn't necessarily directly linked to export promotion, and they considered it essential to their growth.

■ Marketing

Marketing is viewed as fundamental to the success of firms in general and to their success on international markets in particular. For SMEs, marketing can prove very difficult, especially given their small number of employees. Government support to hire someone to take charge of a firm's marketing is appreciated, but it is considered by many as not always being the most efficient strategy. For example, the people hired often lack any experience in international trade, and the learning curve can be very steep. It was suggested that having access, even periodically, to a government resource person with broad international marketing experience would be much more valuable to exporting SMEs. And we might add that the combination of both these initiatives could very well produce the best results, and with effects that are both short-term (through the external resource person) and long-term (through the training of an internal resource person in marketing).

Financing marketing activities can also be very expensive. A two-week mission to Asia, for example, has to be profitable to offset the high cost. Financial support for trade shows is also deemed insufficient as it is usually limited to only the first participation, and success generally requires a long-term commitment.

Another component of marketing that is proving very costly for firms, both in new and traditional sectors, involves the marketing of new products. For example, in a traditional sector like *food manufacturing*, firms are put to great expense in purchasing shelf space in supermarkets or distributing free samples to potential clients at trade shows or other venues. In new sectors of the economy, like *information technology*, similar approaches are necessary. A firm often needs to provide software to potential clients free of charge for extended periods. This strategy must also be accompanied by service from support staff throughout the trial period. In both these examples, the rewards may be significant (job creation, sales growth, etc.), but the initial financing can prove a huge, if not insurmountable, obstacle without financial support, especially for smaller firms.

Private-public marketing initiatives are considered extremely useful. Not only do they make it possible to share the risk; they are also often sector-based and offer a much bigger bang for the buck than if firms were to go alone. The only reservation is that these initiatives should cover the entire relevant region (i.e., the whole region under the responsibility of a given department) rather than be restricted to a small region.

Finally, one innovative marketing strategy that has some merit is to bring potential international clients to visit the region. This could reap several benefits. It could allow the fostering of personal relationships, which are always important. And it could also help the region's exporters dispel the perception one often encounters in international business circles that local firms are not well equipped to compete successfully on world markets.

■ Innovation and Research and Development

Innovation and research and development (R & D) are not restricted to exporters. Nevertheless, they are of fundamental importance to them. Furthermore, the pressure to innovate is not uniform among exporting SMEs. In some sectors or niche markets it may not be necessary to modify products or launch new ones for several years. In other sectors or niche markets rapid innovation is synonymous with success, the status quo with failure. For example, in the information technology sector a firm must have an R & D program to foster a feeling of security among potential and existing clients.

Gaining access to R & D and innovation intelligence is not generally regarded as an important obstacle, although the size of the obstacle seems to be greater for rural than urban firms, especially young, rural SMEs. For example, consultants in urban areas are sometimes reluctant to travel long distances to meet only one client. For other firms, hiring consultants can be a trial-and-error process: they might have to hire several consultants before finding the one who can really help their business. A variant of this problem is what has been described as "quality control of R & D." Some firms, occasionally after an unhappy experience, prefer linking up to established R & D centres with an expertise in their field of activity instead of trying to develop R & D centres closer to home. Nevertheless, local R & D support seems to have generated positive results. Example of these are R & D centres linked to local universities or community colleges.

Firms do recognize that it is not always necessary to do their own R & D. Adopting someone else's innovative ideas can be just as valuable as doing one's own R & D. The development of networks can help at this level either by making possible the creation of joint ventures or by simply obtaining information from R & D institutions active in a firm's field of activity but located outside its region.

It was also noted that fundamental R & D, although often useful, is not always essential. Applied R & D aimed at solving specific problems often generates more significant benefits for SMEs.

Finally, R & D and innovation are only one aspect of doing business. Excelling at them is indeed crucial. That being said, they are not a sufficient condition for success. Commercializing the fruits of R & D and innovation is also crucial, and this later stage of the business process can often prove to be more difficult than the initial one. In other words, commercializing a good product can be a bigger challenge than developing it. This is something that is not well understood by many, and the failure to understand it can prove fatal for SMEs.

■ Trade Missions

Trade missions were an interesting topic of discussion in our study. Although several exporters had had bad experiences with trade missions, most supported and even praised them, including some of those with the bad experiences. What became clear in the discussions is that not every trade mission is right for everyone, nor should it be.

Trade missions can have different focuses. For example, Team Canada, which includes the prime minister, the provincial premiers, and hundred of exporters, is at one end of the spectrum. At the other end, we can have a mission focused on a niche sector with a dozen or less firms. The more general missions seem to be better suited for potential exporters who need to get a comprehensive picture of international trade. The well-established exporters, however, given their level of involvement in international trade, found such missions to be of little use. It was even mentioned by some that the most important aspect of participating in the broad Team Canada trade missions is the contacts they make with the federal and provincial politicians, many of whom are more accessible on these missions than they are at home. On the other hand, established exporters generally consider the missions that focus on their sector of economic activity well worthwhile. One exception to this rule is the firms with a very exclusive niche, who prefer to work independently.

A worthy variant to the more traditional missions are those linked with university interns working with a company. In this case, university students, in the context of their program of study, work with exporters or potential exporters to prepare for a mission. At the end of the exercise, they (students and exporters) go off together on the mission.

Criticism of trade missions centred on timing, the use of consultants for matchmaking, and the limited financial support. With respect to timing, firms in the fisheries, for example, complained that the missions were often in late spring, a busy time of the year for them. Another problem concerned some bad experiences linked to the use of consultants to initiate matchmaking opportunities with potential business partners, arrangements that failed to deliver useful leads. And finally, there were those who deplored the fact that financial support to participate in trade missions was limited in time and that just when their participation had reached the point of being the most effective, the financial support was withdrawn.

In conclusion, one should not expect trade missions to reap instantaneous results, especially for potential exporters. For example, one of the exporters that we visited first participated in a trade mission in 1988 and began exporting in 1994. Today, he is a successful exporter and attributes some of his success to that 1988 trade mission.

■ Government Support

The exporters we consulted were generally pleased with the government support they received.¹⁰ In fact, most said that they would not be at their present level of activity without prior government support, which was often unrelated to international trade but had an impact on it. The Industrial Research Assistance Program (IRAP) is one example of such support, as are support for education and training and financial support for the expansion of facilities. Examples of support directly targeting exports are assistance from the Department of Foreign Affairs and International Trade (DFAIT) for market assessment, training programs for exporters, and support for marketing initiatives.

With respect to training, we met exporters who were extremely satisfied with some of the courses pertaining to various aspects of international trade, while arguing that other courses had been a complete waste of time. Critical to the success of these programs seem to be the qualifications of the people conducting them. If the target audience is potential exporters, the presentation can be general in nature. On the other hand, when dealing with established exporters who want to improve their level of knowledge in very precise aspects of exporting (e.g., export financing, market intelligence on a given market, etc.), the resource people must truly be experts in their field.

Financing, which we analyzed in a previous section, was regularly brought up when discussing government support. In most cases, it was not a question of a lack of support for a given program but rather that new programs should be created or that existing programs should be modified to make them more flexible in order to meet the needs of exporters. Another criticism was that support was too scattered, that you might get a bit here and a bit there, but by the end of the day the money received was hardly enough to really make a difference.

As we indicated in the section on financing, newer firms often face more serious challenges. Consequently, several points deal with questions that although not unique to these firms are more pertinent to their needs. For example, it was suggested that working capital be provided to finance a start-up inventory to help with exports. Other recommendations might include R & D support, financial support for investments to improve productivity, etc.

10. Note that our comments in this section are general in nature and, unless specified, do not target a government department or even a particular level of government.

As mentioned earlier, some exporters face relatively high start-up costs on some international markets. Such costs are often related to the so-called rules of the game, which require that these exporters initially give away their products or services in order to make inroads into a particular market. It is a practice that can be very costly for firms, especially smaller ones with limited financial resources. This situation can arise both in new sectors (*information technology*, for example) and in more traditional sectors (such as a fish plant that wants to develop value-added products for supermarket consumption). The firms that were affected felt that government support was poorly suited to meet their needs.

Joint-marketing initiatives were appreciated. As we indicated in an earlier section, without government support exporting SMEs often lack the resources either to hire someone who can dedicate his time to marketing or to get involved in important marketing campaigns on international markets. Consequently, government support at this level is appreciated. An improvement to the existing marketing support would be to provide access to international marketing experts.

Several recommendations were made on how to improve the level and efficiency of government support. First, there was a feeling that although good programs exist, accessing them can often be difficult. In one case, frustration arose when a change in personnel led to a situation where what used to be accepted no longer was.

Other new initiatives that were suggested included the creation of a program to help bring potential international clients to the region. Exporters felt that this would be an excellent opportunity to showcase their company and possibly dispel any existing or potential biases against the region.

There were some who alleged that the region's firms often had limited access to national programs. One example that was cited concerned international development contracts financed by the Canadian International Development Agency (CIDA). There is a strong perception among some exporters that CIDA has a structural bias in favour of central Canada and against regions like Atlantic Canada. One concrete example was presented where a contract stipulated that the goods involved had to be shipped out of the port of Montreal, thereby placing Atlantic Canadian firms at a distinct disadvantage. Another example is the National Defence regional procurement requirement, where firms in different regions of the country are given a share of procurement contracts. This often takes the form of joint ventures

with foreign firms, thus the link with international trade. Here again there is a feeling that there exists an inherent bias against the region. Consequently, greater promotion of the region's interests by departments like ACOA would be most welcomed by exporting SMEs.

Another form of support that is completely independent of finances falls into a category that might be called "creating the proper environment." This could include actions as diverse as promoting exporters at home by raising the level of visibility in their own communities to providing them with assistance abroad. For example, there is a feeling that some form of endorsement by governments would help exporters on international markets where their size and origin may put them at a disadvantage.

The length of government support was also discussed. Since it takes time to make a mark in international trade, firms have to commit to a long-term effort if they hope to succeed. And yet many government programs are structured for the short term and often run out at a crucial time for firms trying to secure a position on international markets. A desire was thus expressed for the establishment of long-term relationships.

■ Transportation

For exporters, the issue of transportation is fundamental. The means may vary (road, sea, rail, air, Internet, etc.), but all exporters rely on some form of transportation to get their product or service to market. Furthermore, many of them also rely on transportation to access key inputs.

We initially thought that transportation would be a key impediment to international trade. Surprisingly, most exporters, relatively speaking, did not agree, probably because they recognize that being some distance from international markets will necessarily affect transportation costs. In other words, geography is a fact of life that must be accepted. That being said, some problems were reported.

In the field of ground transportation, the region's rural firms sometimes consider themselves at a disadvantage compared to their counterparts in the cities. If a firm is off the beaten track, which is usually routed through the larger urban centres, there are additional costs to access transportation networks. But the issue goes beyond costs. For many, reliability is also paramount to their success on export markets. In more remote regions, if there isn't the volume to maintain viable

transportation links, they become unreliable (varying seasonally, for example) and may even be discontinued. This lack of reliability constitutes an obstacle. Some have developed their own truck fleet to minimize these problems.

Air transportation is also an important obstacle for what are viewed as the poor service and the exorbitant prices. Ironically, the development of the new information-based economy does not seem to have reduced the need for face-to-face meetings. In fact, the opposite is the case. Exporters in the more traditional economic sectors also make frequent use of air transportation. In this respect, they consider that Atlantic Canada is at a disadvantage in comparison with other regions.

Another topic of discussion was the elimination of rail subsidies and the resulting higher costs. Although this may not adversely affect international trade, it was pointed out that from Atlantic Canada it is usually cheaper to transport goods to Europe than to Western Canada.

■ Networking

Networking is an important part of doing business, and international trade is no exception. In fact, networking may be even more important abroad than at home.

During our meetings with exporters, we encountered various forms of networking. They varied from linking up with Canadian embassies and consulates to establishing a company in a foreign country. Many companies also work with various representatives abroad, whether they are wholesalers, distributors, agents, or brokers. Joint ventures are another possibility, but many consider their firm too small to be of interest to a partner in a potential joint venture.

Trade shows are also considered to be excellent opportunities to expand a company's networks abroad. The company may be a participant in a show that focuses on its sector of economic activity, or its representatives may attend a show to meet potential clients.

Among the other networking initiatives to increase exports, we should mention a firm contacting clients in Canada who can export its product to international markets as part of a broader selection of products. Although one could argue that this does not make the firm an exporter, it nonetheless produces a finished product for international markets.

Another initiative involves the exporter's participation in technical seminars organized by a sport association in another country, an arrangement that usually generates sales for the exporter.

■ **Interprovincial Trade**

One hypothesis that we wanted to test was whether experience in interprovincial trade might be a stepping stone to international trade. The results were split. Some said it was helpful; others said it was of no use, that selling in other provinces was essentially the same as selling within one's own province, while selling in other countries was altogether different.

■ **Obstacles to Growth and Other Issues**

Market intelligence was often mentioned as an obstacle to export growth. For some, the difficulty is primarily at the initial stage when a firm becomes an exporter. Others would like to receive more precise information about international markets other than those in which they are presently active. This could take the form of lists of potential partners, information about new products, etc.

Assembling a skilled group of employees has been mentioned as occasionally presenting a challenge. Although they appreciated the support provided by governments, exporters sometimes have difficulty finding qualified and quality-conscious personnel. Contractual personnel in the form of consultants, as we mentioned earlier, sometimes presented a problem as well. Finding the right consultant can be difficult, especially in rural areas.

With a few exceptions, regulations are not so much an obstacle to export as they are a nuisance because of the amount of paperwork they involve. Among the more onerous exceptions are transportation constraints and keeping track of inputs (e.g., the chemicals used in the paint applied to a product).

■ **The View from Abroad: Results of Meetings with Personnel from the DFAIT**

To gain a more complete picture of the challenges faced by exporters, we consulted DFAIT personnel at the Boston consulate and at DFAIT's headquarters in Ottawa. The principal objective of these meetings was to get the other side of the story — the story from the people on the ground. Interestingly, most of the comments we heard were very similar to the ones made by exporters.

Doing one's homework is fundamental to success. Exporters have to provide themselves with the necessary resources and be willing and able to make a long-term commitment to their businesses. Such careful preparation and resolve are essential, as international trade is too complex a process to be improvised. In a small business, the owner/president is frequently a jack of all trades. For a time, he or she may be able to meet the heavy demands of international trade, but maintaining such a hectic pace indefinitely is probably impossible.

The need for a long-term commitment also has an impact on financing, as generating significant revenues often takes time. Important investments are often required after the initial period but before the venture becomes profitable. For example, the exporter may have to establish a permanent presence in the form of an office and personnel.

Preparation is thus considered fundamental. DFAIT personnel, in cooperation with a number of departments, can be a source of expertise in our region for the preparation of exporters. Such sessions could be tailored to meet the various needs of clients depending on their background and experience.

Trade missions can be an opportunity to gain that experience. In fact, an important aspect of these missions which should not be underestimated is that they provide a setting for networking and informal mentoring: they offer a chance for the less-experienced exporter to learn from the veteran. However, to get the most out of a trade mission, an exporter should have reached a certain level of readiness. Generally speaking, missions that focus on a particular sector are more valuable to exporters. It can also be said that missions often constitute a stage on the road to becoming a successful exporter.

One point that should be stressed is that a trade mission is just the beginning of what is a long process: as important as the preparatory work can be, following up on a trade mission is equally important if not more so. And reaping the dividends can still be years away.

Geography *is* important. New England, for example, is relatively close to Atlantic Canada, and the language and culture are broadly similar. Consequently, that region of the U.S. can serve as a stepping stone to other foreign markets. The same can be said about France, the United Kingdom, or Ireland for firms hoping to develop new markets in Europe and about Australia and New Zealand for firms looking towards the Asia-Pacific region. It might thus be much easier for exporters to succeed initially in the last two countries than, for example, to go directly to China or Japan.

For the exporter doing business abroad, working in a culture very different from Canada's can be a totally new experience, even for a veteran exporter to the U.S., for instance. In a country where the exporter does not speak the language fluently, hiring an interpreter is probably a very good investment. An exporter should also have sample contracts for the jurisdiction in question, catalogues with prices in the national currency, a good understanding of the country's business culture, etc.

Exporters in our survey generally felt that they received very good service from the personnel in Canadian embassies and consulates. Most of the services requested focused on accessing market intelligence. It was pointed out by DFAIT personnel that other services are probably underutilized. For example, when exporters are in a city with an embassy or a consulate, it might be a good idea to ask for the use of an office where they can meet their clients instead of meeting them in a hotel room. These offices can thus become a home away from home for aspiring exporters.

An idea that could reap important long-term dividends is the twinning of communities in Atlantic Canada with communities in other countries. This is a common practice in many European countries where communities are often twinned with several communities. This can be an excellent way of developing institutional networks that can lead to international trade and investments.

In the end, however, successful exporters prepare themselves by doing their homework. And that means knowing their sector, their markets and prospective clients, knowledge that can only be acquired through experience and hard work.

General Conclusion: Lessons Learned

What have we learned from our analysis? By now we should have a clearer picture of existing trends in Atlantic Canadian exports. Following are some of the highlights from the data:

- ▶ Exports of the four Atlantic provinces are more dependent on the U.S. market.
- ▶ A large proportion of Atlantic Canada's exports are closely linked with the region's natural resources.
- ▶ Recent growth in exports from Atlantic Canada is often in non-traditional sectors.
- ▶ The size of firms as measured by the value of exports does not seem to be a significant variable in explaining increased market share.
- ▶ Firms with a more "complex" corporate structure are more successful.
- ▶ The region's performance was strongest on the U.S. Southeast and U.S. Eastern Seaboard markets.
- ▶ Exports from rural Atlantic Canada were more successful than exports from urban Atlantic Canada.

These results lead us to make the following points:

1. Trade development strategy should focus on the U.S. in general and on the U.S. Southeast and U.S. Eastern Seaboard markets in particular. This should especially be the case for new exporters. Outside this region, Atlantic Canada's geographic situation makes the European market a natural choice.
2. For firms with a "simple" corporate structure, networking should be a priority, including attempting to develop joint ventures or other forms of association in order to be more successful.

3. Atlantic Canada was the only region where rural exporters outperformed urban exporters. Without neglecting urban exporters, exporters and potential exporters from rural regions should be specially emphasized in order to build upon this regional strength.
4. Although traditional resource-based sectors remain very important for the region, growth was experienced in new sectors. Continued support of these new sectors is thus warranted.

Our survey of exporting SMEs and those with a potential to export, as well as our consultations with DFAIT personnel, has yielded the following valuable insights:

- ▶ Generally, government support is very well-considered.
- ▶ In the field of financing, the following four factors often affect the chances of SMEs receiving financing from financial institutions:
 - What is the firm's track record?
 - Is the financing for the development of new, uncharted markets?
 - Is the firm active in nontraditional sectors?
 - Is the firm located in what can be considered a high-risk region like rural Atlantic Canada?
- ▶ Marketing is essential in order to succeed as an exporter. Having access to international marketing expertise, even on an ad hoc basis, is very important.
- ▶ Financing for new endeavours (new-product development, new-market development, development in new sectors) may require innovative approaches if the region's firms are to be successful.
- ▶ Accessing consultants can sometimes be difficult, especially in rural areas.
- ▶ Trade missions are generally more valuable for exporters when they are sector-focused.
- ▶ Training for the export market is very important. Over time, access to experts becomes increasingly invaluable. DFAIT personnel abroad could be part of a strategy to improve the level of the training offered.
- ▶ International markets cannot be developed overnight. In this context, government should establish long-term relationships with exporters and potential exporters.

- ▶ Market intelligence is vital. Most exporters have expressed a need for more pertinent market intelligence.
- ▶ Transportation is generally not perceived to be a major obstacle, although cost and reliability can be problems, especially with respect to air transportation.
- ▶ Geography and culture are important issues in international trade. Markets like New England in the U.S.; France, the United Kingdom, and Ireland in Europe; and, Australia and New Zealand in the Asia-Pacific region all share a common culture, language, etc., with Canada and may therefore decrease the level of difficulty for new or developing exporters.

These results lead us in turn to make the following points:

5. Government financial support for exporters is essential. Existing programs need to be re-evaluated with a view to emphasizing small- and medium-sized enterprises (SMEs), rural exporters, and innovative exporters — whether it be developing new markets and/or new products — and making long-term commitments.
6. Governments should consider increasing their support for exporters who seek greater and better access to consultants. The focus of such an initiative should be twofold: first, improving access to the appropriate consultant and, second, improving the access of rural exporters to consultants who often reside outside the region or in urban centres inside the region and are not always ready to make themselves available to only a few rural exporters.
7. While general trade missions are very important and their value should not be questioned, special attention should be paid to sector-specific trade missions.
8. Arrangements should be made for DFAIT personnel to visit the region regularly to offer exporters and potential exporters expertise from the field.
9. As was mentioned above, markets closer to Atlantic Canada should be targeted, especially for new exporters. The proximity can be geographical, but it should also be interpreted as including proximity in culture, language, etc. These markets could become stepping stones to help exporters gain international experience, after which they can go on to develop new markets.

10. Market intelligence is vital to success. Governments should continue to listen to exporters and support their intelligence needs both in finding existing information and also, when warranted, in generating new information.

Appendix

Table 20
**Variation in Export Share from Industry Effect,
 Regional Effect, and Total Effect,
 by Canadian Regions, 1993–95 and 1998–2000**

	Industry Effect	Regional Effect	Total Effect
Atlantic Canada	0.0337	0.2224	0.2561
Quebec	0.0843	1.8496	1.9339
Ontario	-0.0691	-1.7880	-1.8570
Prairies	-0.0897	2.2619	2.1722
British Columbia	0.0383	-2.5446	-2.5060

Source: Statistics Canada, special tabulation.

Table 21
Variation in Export Share from Industry Effect, Regional Effect, and Total Effect
Based on Size of Firms (Measured as Average Annual Exports), by Canadian Regions, 1993–95 and 1998–2000

Industry Effect	< \$30,000	\$30,000– \$99,999	\$100,000– \$999,999	\$1,000,000– \$4,999,999	\$5,000,000– \$24,999,999	≥ \$25,000,000
Atlantic Canada	-0.0008	-0.0002	0.0167	0.0623	0.0585	-0.1029
Quebec	-0.0038	0.0015	0.1085	0.3008	0.2586	-0.5818
Ontario	-0.0077	0.0060	0.2365	0.6751	0.6053	-1.5841
Prairies	-0.0037	-0.0011	0.0499	0.1252	0.0523	-0.3124
British Columbia	-0.0019	0.0053	0.0985	0.2256	0.1949	-0.4835
Regional Effect						
Atlantic Canada	0.0001	-0.0002	-0.0050	0.0011	0.0452	0.1814
Quebec	0.0005	0.0025	0.0374	0.1027	0.2958	1.4107
Ontario	-0.0002	-0.0016	-0.0210	-0.0560	-0.1890	-1.5212
Prairies	0.0001	0.0005	0.0157	0.0462	0.1078	2.0916
British Columbia	-0.0006	-0.0018	-0.0320	-0.1030	-0.2930	-2.1146
Total Effect						
Atlantic Canada	-0.0007	-0.0004	0.0115	0.0634	0.1037	0.0785
Quebec	-0.0033	0.0040	0.1459	0.4035	0.5544	0.8289
Ontario	-0.0079	0.0044	0.2156	0.6196	0.4167	-3.1053
Prairies	-0.0036	-0.0006	0.0656	0.1714	0.1601	1.7792
British Columbia	-0.0025	0.0035	0.0666	0.1224	-0.0980	-2.5981

Source: Statistics Canada, special tabulation.

Table 22

**Variation in Export Share from Industry Effect, Regional Effect,
and Total Effect Based on Complexity of Firms,
by Canadian Regions, 1993–95 and 1998–2000**

	1. Very Complex Firms	2. Complex But Specialized Firms	3. Other Complex Firms	4. Singles
Industry Effect				
Atlantic Canada	-0.0324	0.0276	0.2034	-0.1525
Quebec	-0.0864	0.0308	0.0942	-0.0352
Ontario	-0.9888	0.2124	0.9099	-0.3346
Prairies	0.1585	0.3286	0.6131	-1.0681
British Columbia	0.2145	-0.0910	0.4339	-0.4370
Regional Effect				
Atlantic Canada	0.0696	0.0207	0.1047	0.0175
Quebec	1.2083	0.0118	-0.0334	0.7435
Ontario	-1.7067	0.0188	-0.2086	0.2408
Prairies	1.3711	0.3181	0.5522	-0.1014
British Columbia	-0.6202	-0.4002	-0.5223	-1.0835
Total Effect				
Atlantic Canada	0.0372	0.0483	0.3081	-0.1350
Quebec	1.1219	0.0426	0.0608	0.7083
Ontario	-2.6955	0.2312	0.7013	-0.0938
Prairies	1.5296	0.6467	1.1653	-1.1695
British Columbia	-0.4057	-0.4912	-0.0884	-1.5205

1. Very Complex Firms: Establishments within an enterprise that has many establishments in many locations, in more than one province, and in more than one activity.
2. Complex But Specialized Firms: Establishments within an enterprise that has many establishments in many locations and in more than one province, but in one activity only.
3. Other Complex Firms: Mostly establishments within an enterprise that has many establishments in many locations, but in only one province and in one activity. It also includes other cases not covered by 1 and 2, such as an enterprise with many activities but in only one province.
4. Singles: Single establishments.

Source: Statistics Canada, special tabulation.

Table 23
Variation in Export Share from Industry Effect, Regional Effect, and Total Effect Based on Destination,
by Canadian Regions, 1993–95 and 1998–2000

	Europe	Asia	Latin America	Other	U.S.	U.S. Heartland	U.S. Eastern Seaboard	U.S. Midwest	U.S. Southeast	U.S. West
Industry Effect										
Atlantic Canada	-0.0348	-0.0350	-0.0234	-0.0067	0.1786	-0.0484	0.0881	-0.0253	0.1399	0.0243
Quebec	-0.3165	-0.3760	-0.0213	0.0147	0.8869	-0.5462	0.6531	0.2362	0.3174	0.2264
Ontario	-0.2368	-0.7396	-0.0402	-0.0644	0.7533	-2.4929	0.7606	0.5008	0.3446	1.6402
Prairies	-0.1264	-0.4690	0.0606	0.0502	0.7507	-0.5909	0.5955	0.1945	0.1154	0.4362
British Columbia	-0.1334	-1.1268	-0.0270	-0.0843	1.1654	-0.0291	-0.0167	0.0544	0.0853	1.0715
Regional Effect										
Atlantic Canada	0.0318	0.0706	-0.0078	-0.0026	0.0858	0.0001	0.0334	-0.0384	0.0935	-0.0028
Quebec	0.1513	0.0787	0.0165	0.0506	1.4487	0.2753	0.6970	0.2236	0.2024	0.0504
Ontario	-0.0240	-0.1688	-0.0448	-0.0429	-1.2490	-0.5112	-0.8059	0.0488	-0.1985	0.2181
Prairies	0.0750	0.3477	0.1201	0.0941	1.2690	0.2410	0.6629	0.3022	0.0674	-0.0045
British Columbia	-0.2169	-0.5785	-0.0799	-0.1094	-1.3150	-0.1510	-0.3135	-0.3056	-0.1040	-0.4407
Total Effect										
Atlantic Canada	-0.0030	0.0356	-0.0312	-0.0093	0.2644	-0.0483	0.1215	-0.0637	0.2334	0.0215
Quebec	-0.1652	-0.2973	-0.0048	0.0653	2.3356	-0.2709	1.3501	0.4598	0.5198	0.2768
Ontario	-0.2608	-0.9084	-0.0850	-0.1073	-0.4950	-3.0041	-0.0453	0.5496	0.1461	1.8583
Prairies	-0.0514	-0.1213	0.1807	0.1443	2.0197	-0.3499	1.2584	0.4967	0.1828	0.4317
British Columbia	-0.3503	-1.7053	-0.1069	-0.1937	-0.1490	-0.1801	-0.3302	-0.2512	-0.0187	0.6308

Source: Statistics Canada, special tabulation.

Table 24
Variation in Export Share from Industry Effect, Regional Effect, and Total Effect Based on the Number of Destinations, by Canadian Regions, 1993–95 and 1998–2000

	Number of Destinations								
	1 or 2	3	4	5	6	7	8	9	
Industry Effect									
Atlantic Canada	0.0416	0.0386	0.0136	-0.1288	-0.0015	-0.0122	0.0444	0.0372	
Quebec	0.0474	0.0796	-0.0164	-0.2697	0.0854	0.0074	-0.3305	0.2488	
Ontario	0.1632	0.2016	0.1063	0.7829	-0.0607	-0.3868	-0.0686	-0.9389	
Prairies	0.3877	0.6638	-0.3754	0.1697	-0.3057	0.1388	-0.2746	-0.1555	
British Columbia	0.1353	0.3242	-0.1315	0.1734	0.1280	-0.1433	-0.2932	-0.1274	
Regional Effect									
Atlantic Canada	-0.0001	-0.0390	0.0466	-0.0731	0.0152	0.0553	0.0862	0.1325	
Quebec	-0.0130	-0.0150	0.0824	0.1170	0.2536	0.1991	0.2637	1.1933	
Ontario	0.0579	-0.0870	0.1704	-0.4560	-0.1182	-0.3204	0.1561	-1.0586	
Prairies	0.0212	0.2411	-0.0136	0.7069	-0.0938	0.3612	0.0197	0.0430	
British Columbia	-0.3060	-0.0790	-0.3309	-0.4112	-0.0191	-0.3138	-0.5439	-0.5677	
Total Effect									
Atlantic Canada	0.0415	-0.0003	0.0602	-0.2019	0.0137	0.0431	0.1306	0.1697	
Quebec	0.0345	0.0650	0.0660	-0.1527	0.3390	0.2065	-0.0668	1.4421	
Ontario	0.2211	0.1145	0.2767	0.3269	-0.1789	-0.7072	0.0875	-1.9975	
Prairies	0.4089	0.9049	-0.3890	0.8766	-0.3995	0.5000	-0.2549	-0.1120	
British Columbia	-0.1710	0.2456	-0.4624	-0.2378	0.1089	-0.4571	-0.8371	-0.6951	

Source: Statistics Canada, special tabulation.

Table 25
 Variation in Export Share from Industry Effect, Regional Effect, and Total Effect
 Based on Industry, by Canadian Regions, 1993–95 and 1998–2000

Industry Effect	Industry Codes									
	11	21	311	313	315	321	322	324	327	327
Atlantic Canada	-0.0439	-0.0319	0.0866	0.0049	0.0005	0.0283	-0.1954	-0.0459	0.0045	0.0045
Quebec	-0.0088	-0.1428	0.0268	0.0856	0.1505	-0.0119	-0.8015	0.0545	0.0223	0.0223
Ontario	-0.0009	-0.3478	0.1669	0.0526	0.0960	0.0062	-0.5455	0.1767	0.0601	0.0601
Prairies	-0.3227	0.1198	0.1166	0.0011	0.0164	-0.1373	-0.0659	-0.2626	0.0445	0.0445
British Columbia	-0.3180	0.1912	0.0468	0.0044	0.0392	-0.2585	-0.6520	-0.0066	0.0403	0.0403
Regional Effect										
Atlantic Canada	0.0313	-0.0214	0.0589	0.0021	0.0001	0.0687	0.1321	0.0258	0.0019	0.0019
Quebec	0.0492	-0.0657	0.0192	0.0412	0.0172	0.2280	0.2785	0.1923	0.0078	0.0078
Ontario	0.0636	-0.4179	-0.0817	-0.0290	0.0001	0.0851	-0.1079	-0.0135	-0.0580	-0.0580
Prairies	0.2120	1.0576	0.1314	-0.0007	0.0014	-0.0148	0.1137	0.0164	0.0403	0.0403
British Columbia	-0.3895	-0.1166	-0.0988	0.0009	-0.0090	-0.6580	-0.5368	-0.0975	0.0048	0.0048
Total Effect										
Atlantic Canada	-0.0126	-0.0533	0.1455	0.0070	0.0006	0.0970	-0.0633	-0.0201	0.0064	0.0064
Quebec	0.0404	-0.2085	0.0460	0.1268	0.1677	0.2161	-0.5230	0.2468	0.0301	0.0301
Ontario	0.0627	-0.7657	0.0852	0.0232	0.0961	0.0913	-0.6534	0.1632	0.0025	0.0025
Prairies	-0.1107	1.1774	0.2480	0.0004	0.0178	-0.1521	0.0478	-0.2462	0.0848	0.0848
British Columbia	-0.7075	0.0746	-0.0520	0.0053	0.0305	-0.9165	-1.1897	-0.1041	0.0451	0.0451

Industry Effect	Industry Codes									
	331	333	334	336	337	339	41	51	99	
Atlantic Canada	-0.0035	0.0124	0.0118	0.0385	0.0080	0.0044	0.0006	0.0002	0.0031	
Quebec	-0.5840	0.1245	0.9242	-0.1044	0.1797	0.0417	-0.0039	0.0011	0.0063	
Ontario	-0.4182	0.6776	-0.1654	0.2041	0.4705	0.1595	0.0288	0.0119	0.0257	
Prairies	-0.0070	0.0354	0.2906	0.0566	0.0841	0.0610	-0.0001	0.0028	-0.0022	
British Columbia	0.0186	0.1179	0.0656	0.0734	0.0216	0.0374	0.0140	-0.0020	0.0233	
Regional Effect										
Atlantic Canada	0.0105	0.0069	0.0094	0.0422	0.0010	0.0016	0.0007	0.0002	0.0018	
Quebec	0.0470	0.0472	0.8497	0.2321	0.0541	-0.0270	0.0005	0.0008	0.0013	
Ontario	-0.0568	-0.0730	-1.0542	-0.6738	-0.0760	-0.0150	-0.0057	0.0026	-0.0045	
Prairies	0.0779	0.0141	0.2883	0.1154	0.0349	0.0491	0.0034	0.0030	-0.0023	
British Columbia	-0.0202	-0.0050	-0.0444	0.0143	-0.0090	0.0057	-0.0020	-0.0080	0.0071	
Total Effect										
Atlantic Canada	0.0070	0.0193	0.0212	0.0807	0.0090	0.0060	0.0013	0.0004	0.0049	
Quebec	-0.5370	0.1717	1.7739	0.1277	0.2338	0.0150	-0.0034	0.0019	0.0076	
Ontario	-0.4750	0.6048	-1.2196	-0.4697	0.3945	0.1444	0.0231	0.0145	0.0212	
Prairies	0.0709	0.0495	0.5789	0.1720	0.1190	0.1101	0.0033	0.0058	-0.0045	
British Columbia	-0.0016	0.1126	0.0212	0.0877	0.0131	0.0431	0.0111	-0.0090	0.0304	

- 11: Agriculture, Forestry, Fishing, and Hunting
- 21: Mining and Oil and Gas Extraction (including 21: Utilities)
- 311: Food Manufacturing (including 312: Beverage and Tobacco Product Manufacturing)
- 313: Textile Mills (including 314: Textile Product Mills; and 316: Leather and Allied Product Manufacturing)
- 315: Clothing Manufacturing
- 321: Wood Product Manufacturing

- 322: Paper Manufacturing
- 324: Petroleum and Coal Products Manufacturing (including 325: Chemical Manufacturing; and 326: Plastics and Rubber Products Manufacturing)
- 327: Non-Metallic Mineral Product Manufacturing
- 331: Primary Metal Manufacturing (including 332: Fabricated Metal Product Manufacturing)
- 333: Machinery Manufacturing
- 334: Computer and Electronic Product Manufacturing (including 335: Electrical Equipment, Appliance, and Component Manufacturing)
- 336: Transportation Equipment Manufacturing
- 337: Furniture and Related Product Manufacturing
- 339: Miscellaneous Manufacturing
- 41: Wholesale Trade
- 51: Information and Cultural Industries
- 99: Other

Source: Statistics Canada, special tabulation.

Table 26
**Variation in Export Share from Industry Effect,
 Regional Effect, and Total Effect Based
 on the Number of Sectors in Which Firms Export,
 by Canadian Regions, 1993–95 and 1998–2000**

	1. Products in 1 Industry Grouping	2. Products in 2 to 5 Industry Groupings	3. Products in 6 to 15 Industry Groupings	4. Products in More Than 15 Industry Groupings
Industry Effect				
Atlantic Canada	0.0138	0.0816	-0.0234	-0.0716
Quebec	0.0434	-0.2377	-0.0841	0.2435
Ontario	0.0500	0.6473	0.2031	-1.2532
Prairies	0.6851	-0.3242	0.0572	-0.1395
British Columbia	-0.0428	0.1744	0.1815	-0.2069
Regional Effect				
Atlantic Canada	0.0049	0.1315	0.0594	0.0607
Quebec	0.0237	-0.0315	0.8110	1.1653
Ontario	-0.0376	0.4779	-0.8892	-1.0550
Prairies	0.6870	0.0933	0.8403	0.2729
British Columbia	-0.5346	-0.6876	-0.8790	-0.5109
Total Effect				
Atlantic Canada	0.0187	0.2131	0.0360	-0.0109
Quebec	0.0671	-0.2692	0.7269	1.4088
Ontario	0.0124	1.1252	-0.6861	-2.3082
Prairies	1.3721	-0.2309	0.8975	0.1334
British Columbia	-0.5574	-0.5132	-0.6975	-0.7178

Source: Statistics Canada, special tabulation.

Table 27

**Variation in Export Share from Industry Effect,
Regional Effect, and Total Effect for Urban (CMA) and Rural Firms,
by Canadian Regions, 1993–95 and 1998–2000**

	Urban (Census Metropolitan Areas)	Rural
Industry Effect		
Atlantic Canada	-0.0511	0.0268
Quebec	0.2598	-0.2774
Ontario	0.1419	-0.1045
Prairies	0.0968	-0.0803
British Columbia	0.0487	-0.0603
Regional Effect		
Atlantic Canada	0.0204	0.2609
Quebec	1.5452	0.4058
Ontario	-1.6668	-0.2262
Prairies	1.8568	0.2989
British Columbia	-1.7534	-0.7408
Total Effect		
Atlantic Canada	-0.0307	0.2877
Quebec	1.8050	0.1284
Ontario	-1.5261	-0.3307
Prairies	1.9536	0.2186
British Columbia	-1.7047	-0.8011

Source: Statistics Canada, special tabulation.

Table 28
Variation in Export Share from Industry Effect, Regional Effect, and Total Effect
Based on Firms' Experience, by Canadian Regions, 1993-95 and 1998-2000

Industry Effect	Number of Years Exporting from 1993 to 2000							
	1	2	3	4	5	6	7	8
Atlantic Canada	0.0032	0.0572	-0.0264	0.0451	0.0349	0.0287	-0.0706	-0.0624
Quebec	0.0146	0.0520	-0.2261	0.1591	0.4047	0.1746	0.4137	-1.0715
Ontario	0.0411	0.2118	-0.0406	0.7147	0.7944	0.2444	0.3417	-2.6889
Prairies	0.0234	0.1782	0.0065	0.6083	0.2541	0.7896	-0.2086	-1.4568
British Columbia	-0.0034	0.1365	-0.2512	0.2529	0.5518	0.0146	0.2409	-0.7990
Regional Effect								
Atlantic Canada	-0.0009	0.0103	0.0004	-0.0170	-0.0400	-0.0060	-0.0800	0.3812
Quebec	0.0066	-0.0350	-0.0678	-0.0490	-0.0110	0.0484	0.3897	1.7306
Ontario	0.0142	-0.0190	0.0910	-0.1250	-0.0410	-0.2320	-0.0609	-1.1032
Prairies	0.0126	0.0425	0.1612	0.2861	0.0153	0.4715	-0.2064	1.1945
British Columbia	-0.0304	0.0131	-0.2065	-0.0380	0.0774	-0.2100	-0.0800	-2.1739
Total Effect								
Atlantic Canada	0.0023	0.0675	-0.0260	0.0282	-0.0060	0.0223	-0.1506	0.3188
Quebec	0.0212	0.0169	-0.2939	0.1099	0.3940	0.2230	0.8034	0.6591
Ontario	0.0553	0.1930	0.0504	0.5899	0.7534	0.0126	0.2808	-3.7921
Prairies	0.0360	0.2207	0.1677	0.8944	0.2694	1.2611	-0.4150	-0.2623
British Columbia	-0.0338	0.1496	-0.4577	0.2145	0.6292	-0.1960	0.1609	-2.9729

Source: Statistics Canada, special tabulation.

Table 29
Variation in Export Share from Industry Effect,
Regional Effect and Total Effect Based on
Export Products' Province of Origin vs. Exporters' Province
of Residence, by Canadian Regions, 1993–95 and 1998–2000

Exporter's Province of Residence	Export Product's Province of Origin				
	Atlantic Canada	Quebec	Ontario	Prairies	British Columbia
Industry Effect					
Atlantic Canada	-0.0539	0.0192	0.0480	0.0003	0.0298
Quebec	-0.0027	-0.2270	0.2930	0.0048	-0.0840
Ontario	-0.0285	-0.6468	0.8115	0.1532	-0.6280
Prairies	0.0794	0.0671	0.1846	0.4703	-0.1450
British Columbia	-0.0237	-0.0805	-0.0001	0.2141	-1.0140
Regional Effect					
Atlantic Canada	0.1009	0.0219	0.0517	-0.0001	0.0391
Quebec	0.0257	1.5599	0.3687	0.0048	-0.0097
Ontario	-0.0370	-0.6976	-1.4402	0.0829	0.0084
Prairies	0.0907	0.0797	0.2310	0.9229	0.1914
British Columbia	-0.0430	-0.1178	-0.0425	-0.1690	-1.2284
Total Effect					
Atlantic Canada	0.0470	0.0411	0.0997	0.0002	0.0689
Quebec	0.0230	1.3329	0.6617	0.0096	-0.0937
Ontario	-0.0655	-1.3444	-0.6287	0.2361	-0.0544
Prairies	0.1701	0.1468	0.4156	1.3932	0.0464
British Columbia	-0.0667	-0.1983	-0.0426	0.0451	-2.2424

Source: Statistics Canada, special tabulation.

Figures

1.	Value of Canadian Exports, by Selected Destinations, 1992–2001	20
2.	Value of Atlantic Canada Exports, by Selected Destinations, 1992–2001	21
3.	Value of Newfoundland and Labrador Exports, by Selected Destinations, 1992–2001	22
4.	Value of Prince Edward Island Exports, by Selected Destinations, 1992–2001	23
5.	Value of Nova Scotia Exports, by Selected Destinations, 1992–2001	24
6.	Value of New Brunswick Exports, by Selected Destinations, 1992–2001	25
7.	Annual Growth of Canadian Exports, by Selected Destinations, 1993–2001	26
8.	Annual Growth of Atlantic Canada Exports, by Selected Destinations, 1993–2001	27
9.	Annual Growth of Newfoundland and Labrador Exports, by Selected Destinations, 1993–2001	28
10.	Annual Growth of Prince Edward Island Exports, by Selected Destinations, 1993–2001	29
11.	Annual Growth of Nova Scotia Exports, by Selected Destinations, 1993–2001	30
12.	Annual Growth of New Brunswick Exports, by Selected Destinations, 1993–2001	31
13.	Atlantic Canada’s Share of Canadian Exports, by Selected Destinations, 1992–2001	32

14.	Newfoundland and Labrador's Share of Canadian Exports, by Selected Destinations, 1992–2001	33
15.	Prince Edward Island's Share of Canadian Exports, by Selected Destinations, 1992–2001	34
16.	Nova Scotia's Share of Canadian Exports, by Selected Destinations, 1992–2001	35
17.	New Brunswick's Share of Canadian Exports, by Selected Destinations, 1992–2001	36
18.	Variation in Export Share from Industry Effect, Regional Effect, and Total Effect, by Canadian Regions, 1993–95 and 1998–2000	78
19.	Variation in Export Share (Total Effect) Based on Size of Firms, by Canadian Regions, 1993–95 and 1998–2000	79
20.	Variation in Export Share (Total Effect) Based on "Complexity" of Firms, by Canadian Regions, 1993–95 and 1998–2000	80
21.	Variation in Export Share (Total Effect) Based on Destination, by Canadian Regions, 1993–95 and 1998–2000	81
22.	Variation in Export Share (Total Effect) Based on the Number of Destinations, by Canadian Regions, 1993–95 and 1998–2000	83
23.	Variation in Export Share (Total Effect) Based on Industry, by Canadian Regions, 1993–95 and 1998–2000	84

24.	Variation in Export Share (Total Effect) Based on the Number of Sectors in Which Firms Export, by Canadian Regions, 1993–95 and 1998–2000	85
25.	Variation in Export Share (Total Effect) for Urban (CMA) and Rural Firms, by Canadian Regions, 1993–95 and 1998–2000	86
26.	Variation in Export Share (Total Effect) Based on Firms’ Experience, by Canadian Regions, 1993–95 and 1998–2000	87
27.	Variation in Export Share (Total Effect) Based on Export Products’ Province of Origin vs. Exporters’ Province of Residence, by Canadian Regions, 1993–95 and 1998–2000	88

Tables

1.	NAICS Codes.....	37
2.	Canada: Top Five Export Sectors, by Selected Destinations, 1992, 1995, 1998, and 2001.....	40
3.	Atlantic Canada: Top Five Export Sectors, by Selected Destinations, 1992, 1995, 1998, and 2001.....	42
4.	Newfoundland and Labrador: Top Five Export Sectors, by Selected Destinations, 1992, 1995, 1998, and 2001.....	44
5.	Prince Edward Island: Top Five Export Sectors, by Selected Destinations, 1992, 1995, 1998, and 2001.....	48
6.	Nova Scotia: Top Five Export Sectors, by Selected Destinations, 1992, 1995, 1998, and 2001.....	50
7.	New Brunswick: Top Five Export Sectors, by Selected Destinations, 1992, 1995, 1998, and 2001.....	52
8.	Canada: Growth of Exports (%) by Sector in 2001 Compared to the Sectoral Average for 1992 to 2001, by Selected Destinations.....	55
9.	Atlantic Canada: Growth of Exports (%) by Sector in 2001 Compared to the Sectoral Average for 1992 to 2001, by Selected Destinations.....	56
10.	Newfoundland and Labrador: Growth of Exports (%) by Sector in 2001 Compared to the Sectoral Average for 1992 to 2001, by Selected Destinations.....	58

11.	Prince Edward Island: Growth of Exports (%) by Sector in 2001 Compared to the Sectoral Average for 1992 to 2001, by Selected Destinations	59
12.	Nova Scotia: Growth of Exports (%) by Sector in 2001 Compared to the Sectoral Average for 1992 to 2001, by Selected Destinations	61
13.	New Brunswick: Growth of Exports (%) by Sector in 2001 Compared to the Sectoral Average for 1992 to 2001, by Selected Destinations	62
14.	Atlantic Canada: Share of Canadian Exports (%), by Sector and Selected Destinations, 1992 and 2001.....	64
15.	Newfoundland and Labrador: Share of Canadian Exports (%), by Sector and Selected Destinations, 1992 and 2001	68
16.	Prince Edward Island: Share of Canadian Exports (%), by Sector and Selected Destinations, 1992 and 2001.....	70
17.	Nova Scotia: Share of Canadian Exports (%), by Sector and Selected Destinations, 1992 and 2001.....	72
18.	New Brunswick: Share of Canadian Exports (%), by Sector and Selected Destinations, 1992 and 2001.....	74
19.	Characteristics of the Firms Surveyed.....	92
20.	Variation in Export Share from Industry Effect, Regional Effect, and Total Effect, by Canadian Regions, 1993–95 and 1998–2000	110
21.	Variation in Export Share from Industry Effect, Regional Effect, and Total Effect Based on Size of Firms (Measured as Average Annual Exports), by Canadian Regions, 1993–95 and 1998–2000	111

22.	Variation in Export Share from Industry Effect, Regional Effect, and Total Effect Based on Complexity of Firms, by Canadian Regions, 1993–95 and 1998–2000	112
23.	Variation in Export Share from Industry Effect, Regional Effect, and Total Effect Based on Destination, by Canadian Regions, 1993–95 and 1998–2000	113
24.	Variation in Export Share from Industry Effect, Regional Effect, and Total Effect Based on the Number of Destinations, by Canadian Regions, 1993–95 and 1998–2000	114
25.	Variation in Export Share from Industry Effect, Regional Effect, and Total Effect Based on Industry, by Canadian Regions, 1993–95 and 1998–2000	115
26.	Variation in Export Share from Industry Effect, Regional Effect, and Total Effect Based on the Number of Sectors in Which Firms Export, by Canadian Regions, 1993–95 and 1998–2000	118
27.	Variation in Export Share from Industry Effect, Regional Effect, and Total Effect for Urban (CMA) and Rural Firms, by Canadian Regions, 1993–95 and 1998–2000	119
28.	Variation in Export Share from Industry Effect, Regional Effect, and Total Effect Based on Firms’ Experience, by Canadian Regions, 1993–95 and 1998–2000	120
29.	Variation in Export Share from Industry Effect, Regional Effect and Total Effect Based on Export Products’ Province of Origin vs. Exporters’ Province of Residence, by Canadian Regions, 1993–95 and 1998–2000	121