

Small Business Exporters: A Canadian Profile





Small Business Policy Branch

Industry Canada

David Halabisky Byron Lee Chris Parsley



This publication is available upon request in accessible formats. Contact:

Multimedia Services Section Communications and Marketing Branch Industry Canada Room 264D, West Tower 235 Queen Street Ottawa ON K1A 0H5

Tel.: 613-948-1554 Fax: 613-947-7155 Email: **multimedia.production@ic.gc.ca**

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1. INTRODUCTION

Context

Exports are a vital part of the Canadian economy. In 2002, exports accounted for 41 percent of Canada's Gross Domestic Product (GDP) and for one in every three jobs in Canada. Exports are strongly correlated with real GDP growth, with changes in exports driving changes in real GDP in Canada.¹ Under this export-led growth theory, the benefits of exports not only appear directly as a component of aggregate output, but also enhance GDP growth. The indirect benefits of exports are efficient resource allocation, greater capacity utilization, exploitation of economies of scale and stimulation of technological improvement as a result of foreign market competition.²

Small businesses (those with fewer than 100 employees) are an important engine of growth in the domestic economy.³ Given the significant role of exports in the Canadian economy, it seems pertinent to investigate the importance of small business in international markets. For the first time, this is possible thanks to enhancements to the Exporter Registry, which provides data on exports by size of firm. This paper uses these data to construct a profile of small business exporters that establishes new baseline information and provides a basis for policy development to better foster small business exports.

Literature

The literature offers many explanations as to why small firms are less likely to be involved in export activity. Early explanations emphasized the "experiential knowledge" gained through exporting, which assists export efforts in other markets.⁴ Multinational firms face lower entry costs as a result

¹ Awokuse, Titus O. "Is the Export-led Growth Hypothesis Valid for Canada?" *Canadian Journal of Economics*, 36, 1 (February 2003): 128.

² Ibid.

³ Parsley, Chris, and Erwin Dreessen. "Growth Firm Project: Key Findings." Ottawa: Industry Canada, August 2004. http://strategis.ic.gc.ca/epic/internet/insbrp-rppe.nsf/en/rd00816e.html

⁴ Penrose, Edith. The Theory of the Growth of the Firm. New York: John Wiley, 1959.

of such knowledge spillovers.⁵ Very small or microfirms are less likely to engage in exports simply because they lack resources such as time, finances and personnel.⁶ The market strategy of exporters is also important: firms can be proactive and initiate export activity or they can simply respond to export demands when they arise.⁷ Not surprisingly, proactive motivations led to a higher propensity to export among firms.⁸ Psychological, personal and opportunity costs are often the most important barriers in the minds of chief executive officers.⁹

There is also a variety of increased costs associated with export activity. Entry costs for export activity can be high because of the costs associated with starting up a new activity, or because of the uncertainty involved in exploring and testing new markets.¹⁰ For large firms, these costs can be spread over greater output levels and product ranges and are, therefore, less of a barrier than for small firms. In addition, the operational costs for activities such as financing, knowledge acquisition and transactions — including costs associated with linguistic, cultural and legal differences — are often very significant.¹¹ In all of these instances, larger firms are usually able to take advantage of economies of scale to arrive at lower unit costs of exporting than those of smaller firms.

Expectations

Given this background, one could expect the relationship between small businesses and exports to exhibit certain characteristics. First, because of the large number of small businesses, it is expected that there will also be a correspondingly large number of small exporters. However, there may be

⁵ Aitken, Brian, Gordon H. Hanson and Ann E. Harrison. "Spillovers, Foreign Investment and Export Behaviour." *Journal of International Economics*, 43 (1997): 103–132.

⁶ Mittelstaedt, John D., George N. Harben and William A. Ward. "How Small is Too Small? Firm Size as a Barrier to Exporting from the United States." *Journal of Small Business Management*, 41, 1 (January 2003): 68–84.

⁷ Czinotka, Michael, and George Tesar. Export Management. New York: Prager Publishers, 1982.

⁸ Pope, Ralph A. "Why Small Firms Export: Another Look." Journal of Small Business Management, 40, 1 (2002): 17–26.

⁹ Palmetto Consulting. "Costs of Developing a Foreign Market for Small Business: The Market and Non-market Barriers to Exporting by Small Firms." Washington: U.S. Small Business Administration, Office of Advocacy, November 2004.

¹⁰ Baldwin, Richard E. "Hysteresis in Import Prices: The Beachhead Effect." *American Economic Review*, 78, 4 (September 1988): 773–786.

fewer exporters among small businesses than among larger firms because of the large fixed costs of exporting. This would especially be true for microfirms, for which these large start-up costs would be a significant barrier. Second, as the literature demonstrates, the size of the firm is usually positively correlated with the available resources for export within the company. As a result, it is expected that as the size of the business increases, the annual value of exports of the firm will also increase. Third, because they can't take advantage of economies of scale to the same extent as large firms, small businesses are expected to make a significant power contribution to the value of exports, even though they may account for a significant number of exporters. Finally, with Ontario being the province with the largest economy in Canada, it is expected that this province would make the most significant contribution to both overall and small business exports.

Previous data on exports distinguish firms by the size of their exports, not the size of the firm. The 2001 profile of Canadian exporters shows that the contribution of small exporters (firms that export less than \$1 million per year) to the value of total exports is a mere 1.6 percent.¹² The assumption has long been that small exporters are small firms, and that small firms, therefore, do not contribute much to the overall value of exports. However, as this paper demonstrates, this assumption is faulty — small firms can be large exporters and, conversely, some large firms are small exporters. The principal conclusion of this paper is that the contribution of small businesses to the overall value of exports is much higher than was previously believed.

This profile of small business exporters is a more complete analysis than other summary articles that have appeared in the *Small Business Quarterly* and on the Small Business Research and Policy website.¹³ The paper is organized as follows: Section 2 examines the number of exporters and the impact of small business exporters compared with small exporters. Section 3 describes small business exporters by their annual value of exports and analyses the contribution of small firms to

¹¹ Kim, Linsu. "Transaction Costs and Export Channels of Small and Medium-sized Enterprises: The Case of Korea." *Contemporary Economic Policy*, 15, 1 (1997): 104–120.

¹² This figure is based on establishment data.

¹³ Parsley, Chris. "More Important Than Was Thought: A Profile of Small Business Exporters." Ottawa: Industry Canada, December 2004. http://strategis.ic.gc.ca/epic/internet/insbrp-rppe.nsf/en/rd00945e.html; and Parsley, Chris. "Canadian Small Business Exporters: A Profile and Implications for Policy. More Important Than Was Thought." *Proceedings of the 2005 Annual Conference of the Administrative Sciences Association of Canada*, Halifax: ASAC, June 2005.

the overall value of exports. More detail on the value of exports is provided in sections 4, 5 and 6 by province of origin, industry and export destination respectively. This is followed by a comparison of exports in Canada and the United States in section 7. Section 8 presents a summary of findings and section 9 concludes with some thoughts on the profile and impacts of small business exporters.

Data

Statistics Canada's *Business Register* is a central repository of information on businesses operating in Canada. It is used as the principal frame for most of Statistics Canada's economic statistical programs, including the Exporter Registry. The newly available data set used in this paper is derived from the Exporter Registry¹⁴ for the years 2000, 2001 and 2002, and draws its sample from both employer and non-employer (indeterminate) businesses in the *Business Register*. The two main sources for the trade data are U.S. Customs and the Canada Revenue Agency (CRA). This paper covers only merchandise (goods) exports, but includes businesses operating in both service and goods-producing industries. The breakdown by employee size class became available in 2001.

The standardized business classification model developed at Statistics Canada comprises several statistical entities and the data used contain both the enterprise and the establishment as the statistical unit of measure.¹⁵ An enterprise may consist of many establishments located in multiple provinces. An establishment is located within one province. As this paper is concerned with small businesses, enterprise data are of primary interest, but given that enterprises can span multiple provinces, establishment data are used as the point of reference when examining exports by province. As a result, establishment data from 2001 are included in the overall discussion, primarily as a point of comparison.

Because of budgetary constraints, data for 2000 were purchased at the establishment level, 2001 data are at both enterprise and establishment levels, and data for 2002 were purchased only at the enterprise level. Enterprise-level data permit firm size tabulations by industry and destination;

¹⁴ The Exporter Registry only includes merchandise exports that are domestically produced by employer and non-employer firms. The annual value of shipments must be greater than \$2000.

¹⁵ The enterprise level is the top of the hierarchy and is associated with a complete (consolidated) set of financial statements. The establishment level is the level at which the accounting data required to measure production are available (principal inputs, revenues, wages, etc.).

establishment-level data permit firm size tabulations by industry, destination and province. It is expected that the small business impact on exports will be significantly greater at the establishment level than at the enterprise level because of the higher number of firms grouped in smaller size classes. Appendix A provides detailed tables derived from Exporter Registry data. A comparison of data for 2000, 2001 and 2002 to test the robustness of the results is contained in Appendix B. Generally, the comparison shows that there were no significant differences in the pattern of exports over these three years. Appendix C provides some background on the different methodologies used to compile Canadian and U.S. export data. Throughout the analysis, a small firm is defined as having fewer than 100 employees, a medium-sized firm 100 to 499 employees, and a large firm 500 or more employees.

2. NUMBER OF EXPORTERS

A. Number of Exporters Overall

There were 35 594 exporting enterprises in Canada in 2002. Of these exporters, 84 percent were small businesses, 13 percent were medium-sized businesses and 3 percent were large businesses (see Table 1). As expected, small businesses made up a smaller share of total exporters (84 percent) than of enterprises in the domestic economy (99 percent of all enterprises are small businesses). Barriers to exporting may not be the only reasons why some small businesses are not exporters; some small firms may simply not be growth- or export-oriented, or may provide services that are not tradable. As anticipated, the gap between share of exporters and share of total enterprises was especially wide among microfirms, which constituted only 18 percent of exporting firms but represented more than 80 percent of all businesses in Canada. This is partly because of the large number of indeterminate firms¹⁶ (1 157 641) included in this count of micro enterprises.

As firm size increased, the percentage of enterprises that exported also increased.¹⁷ Only 1.4 percent of small enterprises exported in 2002; the figure was below 1 percent for firms with fewer than 20 employees, but rose to 14 percent for firms with between 20 and 99 employees. By contrast, 27 percent of medium-sized firms and 38 percent of large enterprises exported in 2002.¹⁸

¹⁶ An indeterminate business is one that does not have any employees registered with the Canada Revenue Agency. These businesses may indeed have no employees, or they may have contract workers, family members and/or the owners working for them.

¹⁷ It is important to note the differences in interpreting these ratios in each size group. Where the percentage of firms is used, each firm will account for a higher percentage of firms in the large firm group because the sample size decreases as firm size increases. Each firm has a lower percentage contribution among small firms.

¹⁸ The distribution of exporters across small, medium-sized and large businesses is similar in the establishment level data.

	Small (1–99)	Medium (100–499)	Large (500+)	All Firms
I. Overall exporters				
Distribution of Exporting Enterprises (%)	84.1	12.7	3.2	100
Distribution of All Enterprises (%)	99.1	0.8	0.1	100
Participation in Exporting (%)	1.4	27.0	37.7	1.7
II. Percentage within each firm size class				
Less than \$1 Million Exports	78	40	32	71
Between \$1 Million and \$25 Million Exports	22	48	23	25
Greater than \$25 Million Exports	1	11	45	4

Table 1: Number of Exporting Enterprises, Canada 2002

B. Within Each Firm Size Class

As expected, there was a positive correlation between the size of the business and the annual exports of the firm. The majority of small business exporters (78 percent) had annual exports of less than \$1 million, compared with 40 percent of medium-sized firms and 32 percent of large firms (see Table 1). At the other extreme, 45 percent of large firms annually exported goods valued at more than \$25 million, compared with only 11 percent of medium-sized firms and just 1 percent of small businesses. Approximately half of medium-sized enterprises annually exported goods worth between \$1 million and \$25 million.¹⁹

Among small firms with fewer than 20 employees, 87 percent had annual exports valued at less than \$1 million, whereas 58 percent of small firms with more than 20 employees annually exported goods with a value of between \$100 000 and \$5 million (Appendix A). As expected, larger firms have the capacity to export higher volumes than small firms.

The data reveal several important details about small business exports. First, as expected, there were relatively fewer small business exporters compared with the total number of businesses, especially in

¹⁹ This pattern was also evident at the establishment level.

the case of microfirms. This indicates that there could be an opportunity to encourage more small firms to participate in exporting. Second, 90 percent of firms exporting goods with an annual value of less than \$5 million were small businesses. The collective value of these firms is examined in the next section. Additionally, even among exporters of between \$5 million and \$25 million, more than half were small businesses. Generally, this shows the strong impact that small businesses could make on Canadian exports and that not all small businesses are small exporters.

3. VALUE OF EXPORTS, CANADA

On an enterprise basis, Canadian firms exported a total value of \$343 billion in 2002. Of this total value, small businesses contributed nearly \$70 billion; medium-sized firms, \$53 billion; and large firms, \$220 billion (see Table 2). Small businesses accounted for 20 percent of the value of exports in Canada — a significant contribution to the Canadian economy.

	<5	5–49	50–99	Small (1–99)	Medium (100–499)	Large (500+)	A11
		0 17	00 //	(1)))		(500))	
Canada Export Value (\$ billion)	18	27	25	70	53	220	343
Distribution of Export Value (%)	5	8	7	20	15	64	100
Total Number of Exporting Firms	6 378	19 015	4 556	29 949	4 512	1 133	35 594
Export Value per Firm (\$ million)	2.8	1.4	5.5	2.3	11.8	194.5	9.6

 Table 2: Enterprise Export Value Generated per Firm, Canada 2002

Export value per firm rose with firm size (see Table 2). Small firms with fewer than 50 employees averaged \$1.7 million in exports. The per-firm value of exports increased appreciably for small enterprises with 50 or more employees, which averaged \$5.5 million in exports. Medium-sized firms averaged \$11.8 million in exports and large enterprises \$194.5 million. The same pattern, but with greater magnitudes, arises when the establishment is the frame of reference.

It is significant that the average value of exports for microfirms (\$2.8 million) exceeded the average value of exports for small businesses with between 5 and 49 employees. (For a discussion of these results, see the provincial results presented in section 4 of this report.)

In summary, although small businesses constitute the majority of exporting firms in Canada, individually they export much less than large firms. However, because of the large number of small businesses that export, their contribution to the value of exports overall is still significant at 20 percent. Furthermore, the average small business exporter is not a small exporter (a firm that exports less than \$1 million per year).

Number of Small Business Exporters Versus Number of Small Exporters

A more detailed analysis shows why the contribution of small business exporters jumps from 1.6 percent to 20 percent as one switches between size of exports and size of firm. Comparing new data on exports by size of firm, with those reporting by size of exporter, shows the impact of these different perspectives.²⁰

Enterprise data show that 29 949 small enterprises exported in 2002 (see Table 3). In the same year, 25 425 firms (of all sizes) were small exporters (exporting less than \$1 million). A total of 6698 small firms had more than \$1 million in exports; these firms represent 66 percent of exporters who export over \$1 million. At the same time, 2174 enterprises (1812 + 362 from Table 3) with more than 100 employees but with less than \$1 million in exports are considered small exporters. Making the incorrect assumption that small exporters are small businesses understates the contribution of small business to total exports.²¹ The degree of this understatement is not known because there are nearly 7000 small firms with more than \$1 million in exports, but the total value of their exports is not known.

The data (using either an enterprise or an establishment perspective) indicate that small businesses made a more significant contribution to exports (in terms of both number of exporting firms and the expected value of exports) than had been previously indicated by a definition focusing on small exporters. Consequently, policies that encourage small businesses to export could have a significant impact.

²⁰ The different definitions with regard to what is small reflect the different interests of data users. Industry Canada is interested in small businesses and often uses a definition of small businesses based on the number of employees (defined in this report as firms with fewer than 100 employees). In contrast, Export Development Canada (EDC) is interested in encouraging firms of all sizes to export and has identified small or "emerging" exporters, which are defined as firms with export sales of less than \$1 million per year.

²¹ The differences between small firms and small exporters are magnified when viewed on an establishment basis. A total of 35 067 small firms exported in 2001; there were 29 134 firms that were small exporters that same year. There were 8277 small firms with more than \$1 million in exports and 2344 medium-sized and large firms with less than \$1 million in exports. Once again, one can expect that assuming that small exporters are small businesses, and vice versa, will understate the contribution of small business to exports. Establishment data show that the contribution of small exporters to the overall value of exports in 2001 was 1.6 percent.

Table 3: Small Business Exporters and Small Exporters, Enterprises, 2002

	Small (1–99)	Medium (100–499)	Large (500+)	All Firms
Export Value Less than \$1 Million	23 251 (91%)	1 812 (7%)	362 (1%)	25 425
Export Value \$1 Million and Greater	6 698 (66%)	2 700 (27%)	771 (8%)	10 169
All Exporters	29 949 (84%)	4 512 (13%)	1 133 (3%)	35 594

4. VALUE OF EXPORTS BY PROVINCE

As indicated, enterprise data are not comparable at the provincial level, so establishment data are required to compare exports across provinces.²² From the data examined thus far, establishment data confirm the enterprise patterns, but with greater magnitudes because of higher firm counts in establishment data. One can expect, therefore, that the same should hold true for provincial data.

A. Within Each Firm Size Class

Establishments in Ontario made by far the greatest contribution to exports of all the provinces. Forty-seven percent of all exports (\$175 billion) came from Ontario, followed by Quebec (18 percent) and Alberta (17 percent) (see Table 4).

More than 90 percent of small business exporters were concentrated in four provinces: Ontario, Alberta, Quebec and British Columbia (see Table 4). However, Ontario's share of exports among small businesses was only 35 percent. This was a result of the high share in Alberta — 31 percent, representing \$51 billion in small business exports. This percentage is almost double Alberta's overall contribution to total exports. Examining the Alberta data in greater detail revealed that this figure was driven by the province's extremely high share of microfirm exports. Alberta was responsible for 74 percent of microfirm exports across Canada; many of these microfirms are likely to be found in the oil and gas industries.

Ontario accounted for the largest share of exports among medium-sized firms (49 percent) and large firms (65 percent). This, as the industry data will show, reflects the large manufacturing base in that province.

²² The value of exports by business establishment is different from the value of exports by business enterprise because of the reconciliation of business establishments into business enterprises. The success rate of matching establishment data with enterprise data was 93 percent. As a result, unmatched establishments and the value of their exports are not included in the enterprise data results. The value of the exports of these unmatched establishments accounts for 4 percent of the total value of exports.

	Small (1–99)	Medium (100–499)	Large (500+)	All Firms
Distribution (%) for selec	cted provinces, wi	thin each firm size class ¹		
Quebec	14	24	21	18
Ontario	35	49	65	47
Alberta	31	6	4	17
British Columbia	10	11	5	9
Canada	100	100	100	100
Establishment share (%)	of exports ¹			
Quebec	33	34	33	100
Ontario	32	27	41	100
Alberta	84	9	7	100
British Columbia	52	32	16	100
Canada	44	26	30	100

Table 4: Establishment Export Value for Selected Provinces, 2001

¹ See Appendix A for all other provinces.

B. Within Each Province

Small business establishments generated 44 percent of the value of Canadian exports in 2001. As already discussed, this contribution was much higher than previous estimates of the value generated by small business enterprises due to the greater number of establishments placed in smaller size classes.

The small business contribution to exports within different provinces varied greatly, ranging from 23 percent in Newfoundland to 84 percent in Alberta. Among small firms, Ontario and Alberta generated the largest export values.

Small business establishments thus played an important, but uneven, role in exports within all provinces.

5. VALUE OF EXPORTS BY INDUSTRY

The Exporter Registry covers trade in domestically produced merchandise, but does not include trade in services. If a service-producing business exported goods, then this firm was included in the Exporter Registry under a services industry code. Caution must also be used when interpreting the enterprise data by industry classification. An enterprise may contain more than one establishment and each of these establishments may export within different industries. The industry that the enterprise is classified under (the "dominant industry") is the industry in which the enterprise produces the largest exporting value. As a result, the total for each industry may not always reflect the true value exported within that industry. To maintain confidentiality, data for certain industries have been combined in the enterprise frame.

Canada

From an enterprise perspective, manufacturing industries exported \$256 billion in merchandise in 2002. The transportation equipment industry (part of the manufacturing sector) accounted for \$100 billion of these exports. The other key industries responsible for a large proportion of exports in Canada were mining, oil and gas extraction, and utilities; wholesale trade; and the aggregation of information and cultural industries and finance and insurance (ICFI). Goods-producing industries²³ were responsible for 83 percent of Canadian exports, with service-producing industries²⁴ accountable for the rest (see Table 5).²⁵

A. Within Each Firm Size Class

On an enterprise basis, the manufacturing sector constituted 75 percent of the total export value created in Canada in 2002, of which 29 percent originated from transportation equipment. Also, a major contributor to exports from the manufacturing sector was the wood product, paper and

²³ Goods-producing industries are defined as agriculture, forestry, fishing and hunting; mining, oil and gas extraction, and utilities; construction; and manufacturing.

²⁴ Service industries are defined as wholesale trade, retail, trade, transportation and warehousing, information and cultural industries/finance and insurance industries; and business services.

²⁵ Establishment data, which may be more appropriate for industry analysis because establishments within the same enterprise can be assigned to different industries, reveal that the same key industries were responsible for a large proportion of Canadian exports. However, service-producing industries played a larger role by producing about 25 percent of all exports in Canada in 2001.

printing, and related support activities industry, which contributed 15 percent. The other nine major industries in the sector each had a share of less than 10 percent of manufacturing exports. The only major goods-producing contributor outside the manufacturing sector was mining, oil and gas extraction, and utilities, with an 8-percent share of total Canadian exports. In the service-producing industries, wholesale trade and the ICFI group accounted for 7 percent and 5 percent of the value of Canadian exports respectively. The other four service-producing industries together constituted only 5 percent of total merchandise exports in Canada (see Table 5).

The profile of small business exporters varies significantly across industries. Only 4 percent of small business exports originated from the mining, oil and gas extraction, and utilities industry. At the other extreme, 59 percent of small business exports were by firms in service-producing industries, especially wholesale trade and the ICFI group. Manufacturing, the largest export industry, accounted for 33 percent of small business exports. It is worth reiterating that the data cover only goods exports by service firms; service exports would likely increase this number considerably. Obtaining reliable data on service exports is difficult and remains a research priority.

The manufacturing sector was responsible for 90 percent of exports from medium-sized and large enterprises, driven primarily by the transportation and equipment industry.²⁶

²⁶ Establishment data generally show the same distribution of exports within each firm size as enterprise data. However, one key difference between the two measurement frames was establishments in the manufacturing sector. These establishments made a 39-percent contribution to small business exports; the contribution of the service industries to small business exports, therefore, was lower (50 percent).

	Share (%) of Export Value by Firm Size (number of employees)			
Industry, 2002	Small (1–99)	Medium (100–499)	Large (500+)	All Firms
Agriculture, Forestry, Fishing and Hunting	3	0.8	0.3	0.9
Mining, Oil and Gas Extraction, and Utilities	4	6	9	8
Construction	1	0.3	0	0.2
Manufacturing	33	79	86	75
Goods-producing Industries	41	86	96	83
Wholesale Trade	22	9	1	7
Retail Trade	2	0.4	0.2	0.5
Transportation and Warehousing	11	0.7	0.4	2.5
Information and Cultural Industries and Finance and Insurance (ICFI)	20	2	0.4	5
Business Services	4	2	1	2
Other	0.7	0.3	0.8	0.7
Service-producing Industries	59	14	4	17
All Industries	100	100	100	100

Table 5: Share of Export Value by Firm Size

B. Within Each Industry

The enterprise data indicate that small business exporters made a significant contribution to exports in non-manufacturing industries. In two out of the three goods-producing industries outside of the manufacturing sector, small businesses had the largest share of industry exports of any firm size: 66 percent of exports in agriculture, forestry, fishing and hunting and 81 percent of exports in construction were produced by small businesses (see Table 6). Small enterprises also accounted for almost three quarters (74 percent) of all exports originating from service-producing industries. It is evident that small businesses were an integral part of merchandise exports outside of manufacturing.²⁷

On the other hand, small business enterprises constituted just 9 percent of exports in the manufacturing sector. Although small enterprises did not play a leading role in exports from the manufacturing sector, they still contributed more than a quarter of the exports in 3 of the 11 manufacturing industries.²⁸

Although small businesses made a significant contribution to merchandise exports in the serviceproducing industries and the goods-producing industries outside of the manufacturing sector, medium-sized and large firms were mainly responsible for exports in the manufacturing sector. This suggests that small businesses could be important niche exporters with a competitive advantage in small markets.

The high contribution of Alberta's small businesses to exports has already been noted. More detailed data show that 74 percent of exports by microfirms originated from Alberta, which primarily exports oil and gas. In addition, 67 percent of microfirm exports in Canada come from the finance and insurance industries. This could suggest that Alberta oil and gas producers hire microfirms in the finance and insurance industry to handle the export functions. Cross-tabulation by province and industry would be necessary to further explore this hypothesis.

²⁷ As expected, small establishments made a much larger impact on exports than on an enterprise basis. In most industries outside of the manufacturing sector, small businesses made the largest contribution (54 percent) to exports of any firm size. Specifically, small firms exported 68 percent of the merchandise from goods-producing industries outside of the manufacturing sector. Additionally, 86 percent of exports from service-producing industries originated from small businesses. Small firms accounted for more than 85 percent of exports in four of these seven industries.

²⁸ Conversely, small establishments contributed more than a quarter of the exports in 10 out of the 11 industries.

	Contribution (%) to Value of Exports by Firm Size (number of employees)			
Industry, 2002 (enterprise data)	Small (1–99)	Medium (100–499)	Large (500+)	All Firms
Agriculture, Forestry, Fishing and Hunting	66	14	20	100
Mining, Oil and Gas Extraction, and Utilities	10	13	77	100
Construction	81	17	2	100
Manufacturing	9	16	75	100
Wholesale Trade	68	21	11	100
Retail Trade	70	11	20	100
Transportation and Warehousing	86	4	10	100
Information and Cultural Industries and Finance and Insurance (ICFI)	88	6	6	100
Business Services	47	15	38	100
Other	21	6	73	100
All Industries	20	15	64	100

Table 6: Contribution to Value of Exports by Industry and Firm Size

6. VALUE OF EXPORTS BY DESTINATION

Canada

A. Within Each Firm Size Class

Most Canadian exports went to the United States in 2002. Canadian businesses sent \$298 billion in exports (87 percent of all exports) to the United States and \$45 billion to non-U.S. destinations. Within the United States, \$194 billion went to the eastern seaboard and the industrial heartland.

Generally, the division of exports between the United States and other countries remained constant regardless of firm size (see Table 7). Microfirms, however, sent 93 percent of their exports to the United States, whereas enterprises with 5 to 9 employees shipped only 84 percent of exports there.

Of exports to the United States, 56 percent were sent to the eastern seaboard and industrial heartland. This reflects the area's proximity to Ontario, the largest exporting province in Canada. The percentage of exports sent to these two areas increased within firm size, reaching a high of 60 percent of all exports to the United States by large enterprises. Small firms tended to focus on the West in addition to the eastern seaboard and industrial heartland. The main driving force behind small business exports to the West was enterprises with fewer than 50 employees. The West was the destination for 22.7 percent of all exports from firms with fewer than 50 employees, compared with 13.1 percent for firms with more than 50 employees.

The European Union was the most important destination outside of the United States, receiving \$15 billion in Canadian exports in 2002. Of total exports, excluding the United States, primary destinations were the European Union (4.3 percent) and to a lesser extent Japan (2.7 percent). Large enterprises sent 5.1 percent of their exports to the European Union. Small and medium-sized businesses tended to be more diverse than other firm sizes in their non-U.S. exports. They sent a smaller proportion (compared with other large firms) to the European Union, while increasing their exports to other non-specified countries outside the United States. Small enterprises also sent a

significant proportion of exports to Japan (3.4 percent).²⁹ Canada's exports to Asia are currently low, but these markets are expected to become an increasingly important part of world trade.

Destination	Small (1–99)	Medium (100–499)	Large (500+)	All Firms
U.S. (Total)	87.6	85.7	86.9	86.9
Eastern Seaboard	27.3	27.2	18.8	21.8
Industrial Heartland	21.8	24.0	41.5	34.8
Midwest	13.3	15.1	9.2	11.0
Southeast	9.0	8.6	5.6	6.8
West	16.2	10.8	11.7	12.5
Non-U.S. (Total)	12.4	14.3	13.1	13.1
European Union	2.6	3.6	5.1	4.3
Japan	3.4	4.2	2.2	2.7
Mexico	0.3	0.7	0.7	0.6
South America	0.6	0.5	0.5	0.5
Other	5.4	5.3	4.6	4.9
Total	100.0	100.0	100.0	100.0

Table 7: Enterprise Value (%) of Exports, Within Each Firm Size Class, 2002

²⁹ On an establishment basis, the distribution of exports within each firm size class was quite similar to the enterprise distribution: small and medium-sized establishments sent about 85 percent of their exports to the United States, microfirms sent an above-average percentage of their exports to the United States, and establishments with between five and nine employees concentrated more on destinations outside of the United States. A notable difference was in large establishments' exports; large businesses concentrated more on the U.S. market, exporting 91 percent of their goods there.

B. Within Each Export Destination

Small business enterprises accounted for approximately 20 percent of the value of both U.S. and non-U.S. exports (see Table 8). In comparison, large businesses made up 64 percent of the value of exports sent to both U.S. and non-U.S. destinations. Medium-sized enterprises contributed the least, with 15 percent and 17 percent contributions to U.S. and non-U.S. exports respectively.

Destination	Small (1–99)	Medium (100–499)	Large (500+)	All Firms
U.S. (Total)	20.5	15.2	64.2	100.0
Eastern Seaboard	25.5	19.3	55.3	100.0
Industrial Heartland	12.7	10.7	76.6	100.0
Midwest	24.7	21.3	54.0	100.0
Southeast	27.0	19.6	53.4	100.0
West	26.4	13.3	60.3	100.0
Non-U.S. (Total)	19.2	16.9	63.9	100.0
European Union	12.2	12.9	74.9	100.0
Japan	25.4	23.8	50.8	100.0
Mexico	9.9	16.0	74.0	100.0
South America	22.9	14.8	62.2	100.0
Other	22.8	16.8	60.4	100.0
Total	20.4	15.5	64.2	100.0

Table 8: Enterprise Value (%) of Exports, Within Each Destination, 2002

Large enterprises were the leading contributors to exports to all U.S. regions. Small businesses contributed at least a quarter of the exports sent to all U.S. regions except the industrial heartland (see Table 8), again indicating a small business focus outside the principal U.S. markets.

Large firms were once again the main contributor to exports to non-U.S. countries. Small firms accounted for approximately one quarter of Canadian exports to Japan, South America and other unspecified countries. Small businesses appear to be focusing on exporting to a greater range of countries than are medium-sized and large firms.³⁰

In summary, although most Canadian exports were sent to the United States, small businesses contributed only about one fifth of exports to the United States and other destinations. There was some evidence that small businesses sent their exports to a wider diversity of countries compared with medium-sized and large firms. Small firms may be able to penetrate smaller export markets to a greater degree than large export markets. This may be because economies of scale are less important in smaller export markets, making them less attractive to large firms. Additional research would be required to test this hypothesis.

³⁰ From an establishment frame, it is expected that small businesses would make a significant contribution to exports by destination because of high costs. The contribution of small firms to various export destinations is vastly different when the establishment is used as the statistical measure. More than 43 percent of Canadian exports to the United States were generated by small establishments, and small establishments were the leading contributors to exports to all U.S. regions except for the industrial heartland. Even more impressive is the contribution of small establishments to exports to non-U.S. destinations: 50 percent of exports to non-U.S. destinations were from small business establishments. Medium-sized firms followed this pattern, contributing 26 percent of U.S. exports and 30 percent of non-U.S. exports. Conversely, large firms accounted for 31 percent of exports to the United States but only 20 percent of exports to non-U.S. destinations.

7. COMPARISON WITH THE UNITED STATES

The data also permit an examination of the contribution of small business merchandise exporters in Canada and the United States, and highlight important differences between U.S. and Canadian exporters (see Table 9).

The most recent export-related U.S. report is the export profile by the Foreign Trade Division in the U.S. Department of Commerce for 2001. The U.S. data originate from the Exporter Database, which is generally comparable to Canada's Exporter Registry. However, caution must be used in comparing the results of the two data sets. Appendix C describes the key differences between the two surveys.

	Small (1–99)	Medium (100–499)	Large (500+)	All Firms
Canada				
Distribution of Number of Exporters (%)	85	12	3	100
Distribution of Value of Exports (%)	22	15	63	100
Exports per Firm (\$ millions)	2.7	12.7	208.4	10.3
United States				
Distribution of Number of Exporters (%)	89	8	3	100
Distribution of Value of Exports (%)	21	8	71	100
Exports per Firm (\$ millions) ³¹	0.9	4.5	90	3.7

Table 9: Comparison of Exporting Enterprises in the United States and Canada, 2001

³¹ These values were converted using the 2001 exchange rate obtained from the Bank of Canada.

Table 9 compares Canadian and American export data for 2001 at the enterprise level. There were 212 568 small business exporters in the United States that year. The distribution of exporters in the United States was as follows: 89 percent were small businesses, 8 percent were medium-sized businesses and 3 percent were large businesses. Canada's distribution of exporters is similar, except that Canada has slightly fewer small exporting firms, counterbalanced by more medium-sized exporting firms. In terms of value, small businesses in the United States exported \$130 billion or 21 percent of all U.S. exports. Small businesses in Canada exported \$79 billion, contributing 22 percent of the country's export value. By number and value, it appears that Canadian and U.S. small business exporters are very similar. However, differences emerge when examining exports per firm. In 2001, small businesses in the United States exported C\$0.9 million per firm;³² Canadian small enterprises averaged C\$2.7 million per firm. Medium-sized and large businesses followed suit. U.S. medium-sized and large businesses averaged C\$4.5 million and C\$90 million in exports respectively; Canadian medium-sized and large companies averaged C\$13 million and C\$208 million. Canadian exporting companies are clearly more active internationally than their U.S. counterparts. This reflects the relative strength of the U.S. domestic market and the imperative for Canadian businesses to export.

³² The values of exports for the United States have been converted into Canadian dollars using the 2001 exchange rate obtained from the Bank of Canada.

8. SUMMARY OF FINDINGS

Although exports are a vital part of the Canadian economy — accounting for 41 percent of Canada's Gross Domestic Product in 2002 — the contribution of small businesses to exports has usually been perceived as very low. This perception is in part the result of the way export data have been reported. Before 2001, export data were reported by size of exports, not size of firm. Small exporters were defined as "firms that export less than \$1 million annually" and they contributed 1.6 percent to the value of total exports in 2001. This report has constructed exporter profiles for 2002 by firm size, which presents a very different picture.

- There were 35 594 exporting enterprises in Canada in 2002; of these, 84 percent were small businesses, 13 percent were medium-sized businesses and 3 percent were large businesses.
- Canadian enterprises exported a total value of \$343 billion in 2002. Of this amount, small businesses contributed nearly \$70 billion (20 percent); medium-sized firms, \$53 billion (15 percent); and large firms, \$220 billion (64 percent).
- Only 1.4 percent of small enterprises exported in 2002; this figure fell to less than 1 percent for firms with fewer than 20 employees, rising to 14 percent for firms with between 20 and 99 employees. In contrast, 27 percent of medium-sized firms and 38 percent of large enterprises exported in 2002.
- Small firms exported, on average, \$2.3 million (microfirms averaged \$2.8 million and firms with between 20 and 99 employees averaged \$2.2 million). Medium-sized firms had average exports of \$11.8 million and large firms of \$194.5 million.
- The small business contribution to exports varied greatly by province, ranging from 23 percent in Newfoundland to 84 percent in Alberta.
- Small firms in Ontario, Quebec and Alberta generated the largest export values. Ontario accounted for the largest share of exporters among medium-sized firms (49 percent) and large firms (65 percent).
- Alberta was responsible for 74 percent of exports by microfirms.
- Nearly 60 percent of goods exports by small businesses were from firms in serviceproducing industries; most goods exports from medium-sized and large firms originated from enterprises in the manufacturing sector.

- In 2002, Canadian business enterprises sent \$298 billion, or 87 percent, of their exports to the United States and \$45 billion to non-U.S. destinations.
- The United States and Canada have a similar distribution of exporters by firm size except that Canada has slightly fewer small exporting firms and more medium-sized exporters.
- On average, small enterprises in the United States exported C\$0.9 million; Canadian small enterprises exported an average of C\$2.7 million.

9. CONCLUSION

This profile presents some interesting revelations about small business exporters in Canada. First and foremost, Canadian small business merchandise exports are more important than previously perceived. Although small exporters (firms that export less than \$1 million per year) account for approximately 1.6 percent of the value of merchandise exports, small businesses that export account for 20 percent of overall export value and on average exported \$2.3 million of goods in 2002. Clearly, the typical small business exporter is a significant exporter.

However, the majority of Canada's exports still stem from a small number of large firms. The percentage of small businesses that export does not reflect the overall significance of small firms to the economy. Certainly, many small businesses are unlikely to seek either exports or growth; a study of microfirms found that 40 to 45 percent did not have growth aspirations beyond the local market.³³ In addition, many small businesses (e.g. restaurants, hairdressers) provide services with little export potential.

However, there are likely small firms that do wish to grow and for which exporting is an important mechanism to do so. The very low participation rate of small businesses in exporting suggests there are barriers to small business exporting. High start-up costs may be an initial barrier; they can arise from a lack of knowledge of the international market, uncertainty cost and the opportunity cost of developing export markets versus domestic opportunities.³⁴ Economies of scale in export activity could be another reason why large firms predominate in exports. Such firms have better knowledge and contact networks, can afford to develop a large international sales force, and can spread the transactions costs of exporting across higher levels of output than smaller firms.

³³ Papadaki, Evangelia, and Bassima Chami. "Growth Determinants of Micro-businesses in Canada." Ottawa: Industry Canada, July 2002. http://strategis.ic.gc.ca/epic/internet/insbrprppe.nsf/vwapj/growth_determinants.pdf/\$FILE/growth_determinants.pdf

³⁴ Palmetto Consulting. "Costs of Developing a Foreign Market for Small Business: The Market and Non-market Barriers to Exporting by Small Firms." Washington: U.S. Small Business Administration, Office of Advocacy, November 2004.

The important question for public policy-makers is how to identify and encourage small firms to export on a regular and proactive basis. Strategically, dependence on a concentrated number of exporting firms has the potential to leave an economy vulnerable to shifting changes in trade patterns. Seen in this light, the small business contribution to exports is potentially a strategically important one: attempts to seek out small firms wishing to grow and to encourage their new and enhanced exporting activities can provide some diversification in the composition of exporters.

Similarly, dependence on a single export market can leave an economy with limited growth prospects. For example, the expectation that the Chinese economy will assume greater importance in the world economy over the coming decade poses an important challenge for Canada, given the preponderance of Canadian exports shipped to the United States. Investigating ways to increase the participation of small businesses in exports, perhaps in smaller export markets, could contribute to the diversification of markets, which would improve growth prospects for the Canadian economy. The very significant participation of Alberta microfirms in export activity is certainly pertinent in this regard. Finally, if, as Dhanaraj and Beamish (2003) assert, leadership, innovation and commitment (i.e. entrepreneurship), and technological intensity are important determinants of export activity, public policy would need to be tailored to meet specialty needs and develop these characteristics in small business to increase their export potential as part of a competitiveness agenda.

The analysis in this paper has been confined to the diagnostic: using baseline information to show the importance of small firms in exporting. To gain a better understanding of the process of exporting in small businesses, more in-depth analysis of the data is required. This would include understanding the nature of the small business, including its fundamental business motivations, its export potential and the type of export strategy used, as well as the barriers it faces in exporting. Research into links between firms that export and the positive benefits that flow to these businesses, such as firm growth, could form a useful part of work on enhancing overall competitiveness.

References

Aitken, Brian, Gordon H. Hanson and Ann E. Harrison. "Spillovers, Foreign Investment and Export Behaviour." *Journal of International Economics*, 43 (1997): 103–132.

Awokuse, Titus O. "Is the Export-led Growth Hypothesis Valid for Canada?" *Canadian Journal of Economics*, 36, 1 (February 2003): 126–137.

Baldwin, Richard E. "Hysteresis in Import Prices: The Beachhead Effect." *American Economic Review*, 78, 4 (September 1988): 773–786.

Czinotka, Michael, and George Tesar. Export Management. New York: Prager Publishers, 1982.

Department of Commerce. A Profile of U.S. Exporting Companies, 2000–2001. United States Census Bureau, Foreign Trade Division. <u>http://www.census.gov/foreign-trade/aip/edbrel-0001.pdf</u>

Dhanaraj, Charles, and Paul W. Beamish. "A Resource-based Approach to the Study of Export Performance." *Journal of Small Business Management*, 41, 3 (2003): 242–260.

Export Development Canada. "Why Trade is Crucial to Canada." http://www.edc.ca/corpinfo/whoweare/why_trade_e.htm

Kim, Linsu. "Transaction Costs and Export Channels of Small and Medium-sized Enterprises: The Case of Korea." *Contemporary Economic Policy*, 15, 1 (1997): 104–120.

Mittelstaedt, John D., George N. Harben and William A. Ward. "How Small is Too Small? Firm Size as a Barrier to Exporting from the United States." *Journal of Small Business Management*, 41, 1 (January 2003): 68–84.

Palmetto Consulting. "Costs of Developing a Foreign Market for Small Business: The Market and Non-market Barriers to Exporting by Small Firms." Washington: U.S. Small Business Administration, Office of Advocacy, November 2004.

Papadaki, Evangelia, and Bassima Chami. "Growth Determinants of Micro-businesses in Canada." Ottawa: Industry Canada, July 2002. <u>http://strategis.ic.gc.ca/epic/internet/insbrp-rppe.nsf/vwapj/growth_determinants.pdf/</u>

Parsley, Chris. "More Important Than Was Thought: A Profile of Small Business Exporters." Ottawa: Industry Canada, December 2004. <u>http://strategis.ic.gc.ca/epic/internet/insbrp-rppe.nsf/en/rd00945e.html</u>

Parsley, Chris. "Canadian Small Business Exporters: A Profile and Implications for Policy. More Important Than Was Thought." *Proceedings of the 2005 Annual Conference of the Administrative Sciences Association of Canada*, Halifax: ASAC, June 2005.

Parsley, Chris, and Erwin Dreessen. "Growth Firm Project: Key Findings." Ottawa: Industry Canada, August 2004. <u>http://strategis.ic.gc.ca/epic/internet/insbrp-rppe.nsf/en/rd00816e.html</u>

Penrose, Edith. The Theory of the Growth of the Firm. New York: John Wiley, 1959.

Pope, Ralph A. "Why Small Firms Export: Another Look." *Journal of Small Business Management*, 40, 1 (2002): 17–26.

Statistics Canada. A Profile of Canadian Exporters: 1993–2000. Catalogue No: 65-506-XIE. Ottawa: 2002.

Statistics Canada. A Profile of Canadian Exporters: 1993–2001. Catalogue No: 65-506-XIE. Ottawa: 2002.

Appendix A: Data Tables

1. Number of Exporting Enterprises and Value of Exports, by Industry and by Destination, 2002

- 2. Number of Exporting Enterprises and Establishments, 2001
- 3. Value of Exports Generated per Enterprise and per Establishment, 2001
- 4. Provincial Establishment Export Value, 2001
- 5. Enterprise and Establishment Export Value by Industry, 2001
- 6. Enterprise and Establishment Export Value by Destination, 2001
- 7. Establishment Export Data, 2000
- 8. U.S. Enterprise Export Data, 2001

To obtain a copy of the data tables in MS Excel format, please contact David Halabisky at halabisky.david@ic.gc.ca

Appendix B: Data Comparability Over Time

2000 to 2002 Export Comparison

Data broken down by firm size for the years 2000 to 2002 are available from the Exporter Registry. However, as mentioned in the text, enterprise and establishment data were not purchased for each year. Detailed data from 2001 were obtained at both the enterprise and establishment levels. Limited data are available from 2000 using the establishment as the frame of reference, whereas detailed data from 2002 use the enterprise as the frame of reference. As a result, the three years of data are not directly comparable and a trend cannot be developed from the data. However, a comparison between the years is desirable to test the robustness of the 2001 data and to examine any other profiles that may emerge. Table A provides a summary of the comparison of data for 2000 to 2002.

A. 2000 to 2001 Establishment Comparison

The number of exporting establishments increased by more than 2400 from 2000 to 2001. The bulk of this increase can be attributed to small businesses, which accounted for 93 percent of the rise in the number of exporters in Canada. Despite this, the distribution of the number of firms by employee size class and by the value of their exports did not change between the two years.

Export value in 2001 decreased by 3 percent from \$379 billion in 2000. The decrease in exports was solely because of medium-sized and large businesses, which exported \$43 billion less than the year before. Conversely, small firms exported \$32 billion more during the same period. The share of Canadian exports by small businesses increased from 34 percent in 2000 to 45 percent in 2001. The evidence indicates that the rise in the value of exports by small businesses was not solely because of the higher number of small business exporters. Rather, existing small establishments also increased the value of their exports: in 2001, each small business exporter averaged \$4.62 million, compared with \$3.95 million in 2000.

	Small (1–99)	Medium (100–499)	Large (500+)	All Firms	
Exporting Establishments, Canada	, 2000				
Number of Exporters	32 827	3 476	2 561	38 864	
Value of Exports (\$ billion)	130	471	202^{2}	379	
Exporting Establishments, Canada, 2001					
Number of Exporters	35 067	5 431	772	41 270	
Value of Exports (\$ billion)	162	401	165 ²	367	
Exporting Enterprises, Canada, 200	01				
Number of Exporters	29 442	4 332	1 080	34 854	
Value of Exports (\$ billion)	79	55	225	359	
Exporting Enterprises, Canada, 2002					
Number of Exporters	29 949	4 512	1 133	35 594	
Value of Exports (\$ billion)	70	53	220	343	

Table A: Exporting Enterprises and Establishments, Canada 2000 to 2002

¹ For exporters with between 100 and 199 employees.

² For exporters with 200 and more employees.

B. 2001 to 2002 Enterprise Comparison

The number of exporters increased by 740 during this one-year period. Again, the bulk of these exporters (69 percent) were small businesses. Despite this, the distribution of the number of firms by employee size class and by their share of export value remained the same between the two years. Exports in 2002 decreased by 4 percent to \$343 billion and all three size categories had decreased exports in 2002. Small businesses accounted for 57 percent of the decrease in exports. As expected, exports per firm also decreased. In 2001, small businesses exported an average of \$2.68 million, which decreased to \$2.33 million in 2002.

See Appendix A for a more detailed comparison of Canadian exports between 2001 and 2002. In general, the detailed distribution of enterprise exports was similar between the two years. This indicates that the results of the cross-sectional data in 2001 are robust.

Appendix C: U.S. Data Comparability

Differences Between the Methodology in the U.S. Exporter Database and the Canadian Exporter Registry

Canadian Exporter Registry

- The Exporter Registry captures only those companies that have at least one export shipment during the year valued at C\$2000 or more.
- The Exporter Registry covers more than 95 percent of the total export value.

U.S. Exporter Database

- The Exporter Database captures only those companies that have at least one export shipment during the year valued at US\$2501 or more.
- Less than 3 percent of the total export value for each year was excluded from this matching process because the export transactions cannot be attributed to specific exporting companies.

The U.S. Exporter Database categorizes some exporters into a size class labelled "unknown." According to the U.S. Exporter Database, exporters in this category are:

- missing employment data;
- non-employers (self-employed); or
- companies that reported an annual payroll but did not report any employees.

Subsequently, these exporters were classified as small businesses by the United States. For purposes of comparison, these exporters were considered to be part of the 1–19 employee size class.