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Key Small Business Statistics

Canada

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When is a business "small"?

The size of a business can be defined in many ways, by the value of its annual sales or shipments, for example, or by its annual gross or net revenue, the size of its assets, or the number of its employees. Many institutions define small businesses according to their own needs: the Canadian Bankers' Association classifies a loan authorization of less than $250,000 as small, while the Export Development Corporation defines small or "emerging" exporters as firms with export sales under $1 million. Industry Canada often uses a definition based on the number of employees: goods-producing firms are considered "small" if they have fewer than 100 employees, while for service-producing firms the cut-off point is 50 employees. Above that size, and up to 500 employees, a firm is considered medium-sized. The smallest of small businesses are called micro-enterprises, most often defined as having no employees to fewer than five. The term "SME" (for small- and medium-sized enterprise) is used to refer to all these components of the economy together.

As will be seen, in practice, reporting on small businesses can seldom adhere to any strict definition due to data limitations.

How many businesses are there in Canada?

The Business Register of Statistics Canada maintains a count of business establishments and publishes results twice a year. To be counted as a business establishment,[1] a business must have at least one paid employee, have annual sales revenues of $30,000, or be incorporated and have filed a federal corporate income tax return at least once in the previous three years.

As of June 2002, there were approximately 2.2 million businesses in Canada, as shown in Table 1. About half of all business establishments are called "employer businesses," since they maintain a payroll of at least one person (possibly the owner). Businesses are classified as "indeterminate" when the number of employees, if any, cannot be determined through payroll data; they may well provide employment on a contract basis. Indeterminate businesses account for the other half of business establishments in Canada.

About 58% of all businesses are located in Ontario and Quebec, 35% are in the western provinces, and 6% are in the Atlantic provinces. The distribution of employer businesses across provinces is almost the same as that for all business establishments.

[1] Statistics Canada uses four standard statistical business units for purposes of compiling statistics. Establishments are the smallest unit/grouping for which data are published. Establishments must:

a) produce a homogeneous set of goods or services;
b) not cross provincial boundaries; and
c) provide data on the value of output together with the cost of principal intermediate inputs used, along with the cost and quantity of labour resources used to produce the output.

For example, a business unit of a larger business enterprise that provides independent accounting information to the government on sales taxes and payroll deductions would be recognized as an individual business establishment.

Table 1: Total Number of Business Establishments, and Number of Establishments Relative to Provincial/ Territorial Population and Gross Domestic Product, June 2002

Provinces/Territories	No. of Business Establishments			No. of Establishments per 1 000 population	GDP per Business Establishment ($ thousands)
	Total	Employer Businesses	Indeterminate*		
Newfoundland	25 832	17 371	8 461	48.6	533
Prince Edward Island	10 581	7 020	3 561	75.4	329
Nova Scotia	51 687	31 357	20 330	54.7	488
New Brunswick	44 556	27 509	17 047	58.9	460
Quebec	494 583	240 787	253 796	66.3	464
Ontario	772 446	344 276	428 170	63.8	575
Manitoba	75 566	36 077	39 489	65.7	459
Saskatchewan	95 526	40 647	54 879	94.6	349
Alberta	285 095	136 499	148 596	91.2	531
British Columbia	311 342	156 535	154 807	75.0	420
Yukon Territory	2 874	1 698	1 176	96.8	415
Northwest Territories	2 707	1 805	902	65.4	1 186
Nunavut	803	622	181	27.9	1 122
Canada Total	**2 173 598**	**1 042 203**	**1 131 395**	**69.0**	**503**

Source: Statistics Canada, Business Register, June 2002; National Income and Expenditure Accounts 2001; Estimates of Population by Age and Sex for Canada, the Provinces and the Territories, October 2002.

Note*: The indeterminate category consists of incorporated or unincorporated businesses without employees. The Business Register classifies a business as “indeterminate” when it cannot be determined through payroll data that the firm has paid employees. The firm may well provide work under contract.

Relative to population, the western provinces, the Yukon and Prince Edward Island have more business establishments than elsewhere, with the highest rates in the Yukon and Saskatchewan, at 96.8 and 94.6 per 1 000 population, respectively. Nunavut, Newfoundland, Nova Scotia and New Brunswick have the lowest ratios of business establishments per 1 000 population. Ontario and Quebec are below the national average of 69.0, with 63.8 and 66.3 business establishments per 1 000 people, respectively.

Looking at the ratio of Gross Domestic Product (GDP) per business establishment by province, Ontario shows the highest ratio at $575,000 per establishment; Newfoundland and Alberta are above the national average of $503,000; and Prince Edward Island and Saskatchewan show the lowest ratios. Except for Alberta, provinces with more business establishments per 1 000 population than the national average also record a lower-than-average ratio of GDP per establishment.

Of just over 1 million employer businesses, less than 3 000 or 0.3% have more than 500 employees. Most (98%) have fewer than 100, 75% have fewer than 10 and 58% have from 1 to 4 employees, as shown in Table 2.

Table 2: Number of Business Establishments by Sector and Size (Number of Employees), June 2002

Number of Employees	Cumulative Percent of Employer Businesses	No. of Business Establishments		
		Total	Goods-Producing Sector†	Service-Producing Sector†
Indeterminate*		1 131 395	313 539	817 856
Employer Business Total	*100.0%*	*1 042 203*	*245 034*	*797 169*
1–4	58.0%	604 409	151 919	452 490
5–9	74.9%	175 989	35 195	140 794
10–19	86.4%	120 175	24 044	96 131
20–49	94.7%	85 975	18 831	67 144
50–99	97.7%	31 452	8 008	23 444
100–199	99.1%	14 671	4 281	10 390
200–499	99.7%	6 752	2 136	4 616
500+	100.0%	2 780	620	2 160
Grand Total		**2 173 598**	**558 573**	**1 615 025**

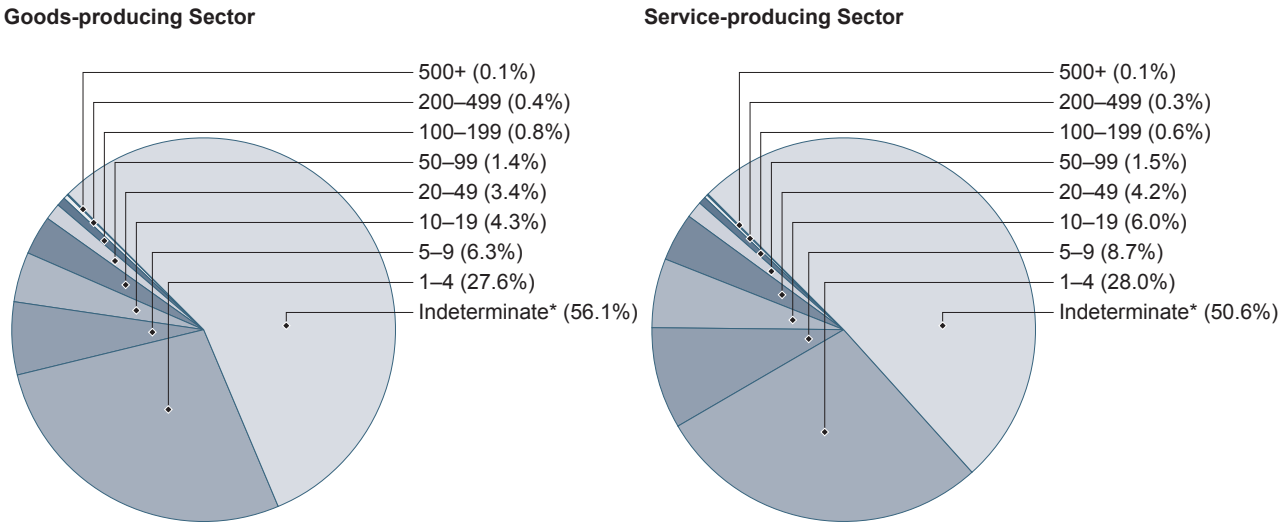
Source: Statistics Canada, Business Register, June 2002.

Note*: The indeterminate category consists of incorporated or unincorporated businesses without employees. The Business Register classifies a business as “indeterminate” when it cannot determine through payroll data that the firm has paid employees. The firm may well provide work under contract.

Note+: By conventional Statistics Canada definition, the goods-producing sector consists of North American Industry Classification System (NAICS) codes 11 to 31–33, while NAICS codes 41 to 91 define the service-producing sector.

About one quarter of all business establishments, indeterminate and employer businesses alike, produce goods, while the others provide services. Small firms (those with fewer than 100 employees), make up 97% of goods-producing employer businesses (Table 2 and Figure 1). Of all service-producing employer businesses, 95% have fewer than 50 employees.

Figure 1: Distribution of Business Establishments in the Goods-Producing and Service-Producing Sectors by Size (Number of Employees), December 2001



Source: Table 2

Note*: The indeterminate category consists of incorporated or unincorporated businesses without employees. The Business Register classifies a business as “indeterminate” when it cannot determine through payroll data that the firm has paid employees. The firm may well provide work under contract.

Table 3 shows the distribution of employer businesses by size in each province and territory. Overall, small firms (those with fewer than 100 employees) make up 97% to 98% of total employer businesses, while medium-sized firms comprise from 1.4% to 3.0% and large firms from 0.1% to 0.3% of the total. However, there is some variation between provinces; for example, there is a higher percentage of businesses with 1 to 4 employees in Quebec (64%) than in Ontario or Manitoba (54%).

Table 3: Employer Businesses by Size (Number of Employees) in Provinces and Territories, June 2002

Provinces/Territories	Total	Employer Buinesses Percent of Total							
		1–4	5–9	10–19	20–49	50–99	100–199	200–499	500+
Newfoundland	17 371	61.2	17.9	9.8	6.9	2.2	1.1	0.5	0.3
Prince Edward Island	7 020	58.5	17.8	11.9	7.8	2.3	1.0	0.5	0.1
Nova Scotia	31 357	56.3	17.8	12.4	8.5	2.8	1.4	0.5	0.3
New Brunswick	27 509	58.4	17.6	11.7	7.8	2.5	1.1	0.5	0.2
Quebec	240 787	63.7	15.4	9.6	6.7	2.5	1.2	0.6	0.3
Ontario	344 276	53.9	17.4	12.5	9.6	3.7	1.8	0.8	0.3
Manitoba	36 077	54.1	17.3	13.1	9.6	3.4	1.4	0.8	0.3
Saskatchewan	40 647	60.2	17.7	11.3	7.0	2.2	0.9	0.5	0.2
Alberta	136 499	58.2	16.8	11.8	8.2	3.0	1.3	0.5	0.2
British Columbia	156 535	58.6	17.3	11.7	7.8	2.7	1.2	0.5	0.2
Yukon Territory	1 698	53.3	18.9	13.4	9.3	2.8	1.3	0.9	0.1
Northwest Territories	1 805	41.7	20.2	18.2	13.2	3.6	2.2	0.8	0.1
Nunavut	622	33.0	21.2	16.9	18.0	8.0	1.9	0.8	0.2
Canada Total	**1 042 203**	**58.0**	**16.9**	**11.5**	**8.2**	**3.0**	**1.4**	**0.6**	**0.3**

Source: Statistics Canada, Business Register, June 2002.

So where are the self-employed in this count of businesses?

In short, everywhere. The designation “self-employed” is based on Statistics Canada’s *Labour Force Survey*, which is a count of persons (see **Who is self-employed?**). This section, on the other hand, provides counts of business establishments. It is easy to confuse the two because of the common perception that self-employed persons operate their own businesses. While this is generally true, the two are distinct counts. First, a business owned by a person who is identified as self-employed and who is on the payroll would be captured as an “employer business” in the appropriate size category (Tables 1 to 3). Similarly, the business of a self-employed owner, who is not on the payroll and has nobody else on the payroll, would be counted among the 1 million “indeterminate” business establishments. On the other hand, while many self-employed persons operate a business, many others do not, at least not as defined by the Business Register (see **How many businesses are there in Canada?**), and thus would not be included in the count of business establishments. It is not known to what degree there is a correspondence between the 2.2 million “business establishments” in Canada and the 2.3 million persons in the population who are identified as “self-employed.” For more on self-employment, see **How many people are self-employed?** For more on small business employment based on payroll data, see **How many people work for small businesses?**

How many businesses appear and disappear each year?

Thousands of businesses enter and exit the marketplace throughout the year. Keeping track of these births and deaths is no easy matter. Our best source is Statistics Canada's Employment Dynamics, which compares businesses in a base year with those in the following year. If a business is observed to exist in the base year but not in the following year, it is considered an "exit" and vice versa for an "entry." While there may be other reasons why a business cannot be found in either year,[1] the data give a good overall picture of the turbulence of new and disappearing businesses.

The Employment Dynamics data are based on payroll deduction information issued by employers (T4 slips) and therefore cover only employer businesses. The most recent data available are for 1998–99. The counting unit of "employee" in Employment Dynamics is an Average Labour Unit (ALU), a derived unit obtained by dividing the total payroll in a business by the average annual earnings in a firm of that size class in the same industry. ALUs aim to measure the number of people, on average, who worked for a business in the course of a year, that is, the average level of employment in a business.

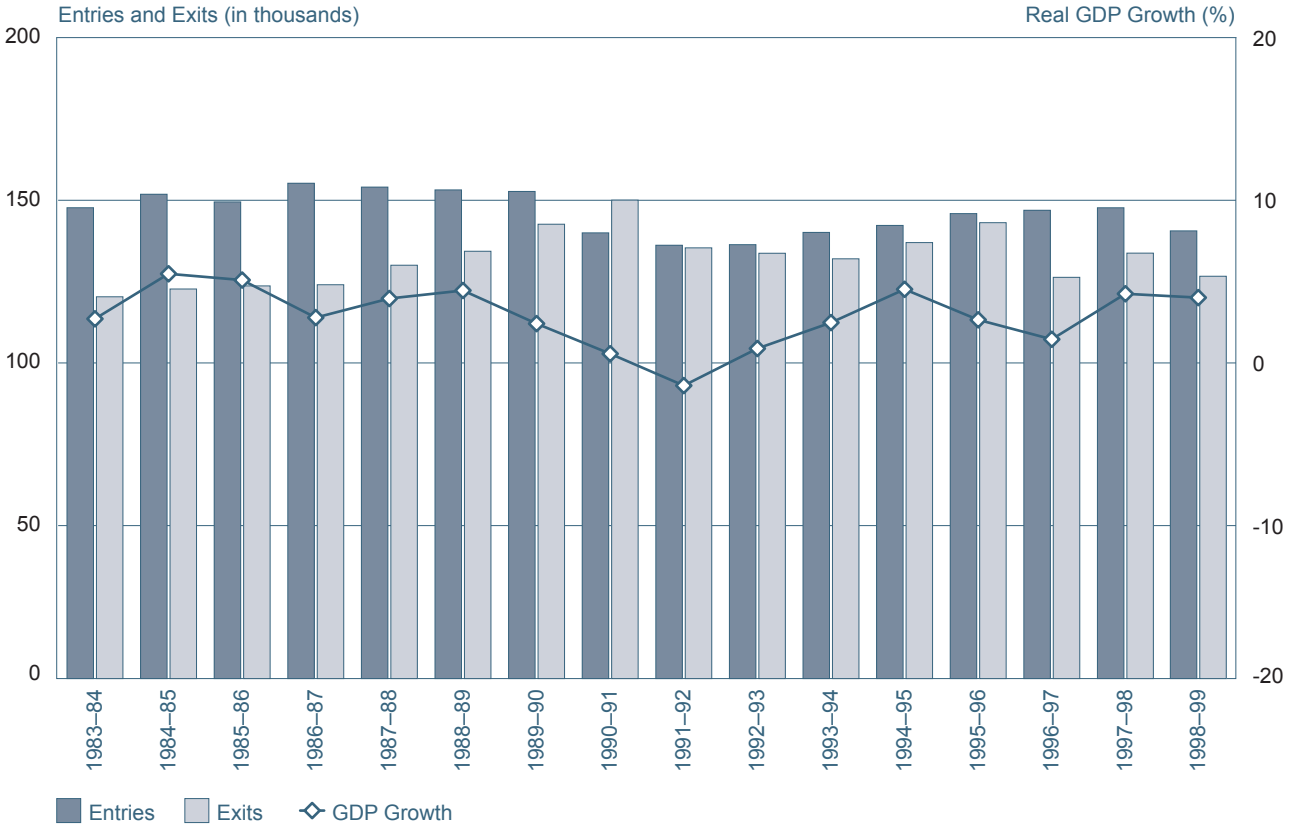
Figure 2 shows the number of SMEs (those with up to 500 employees) that entered and exited the marketplace annually between 1983 and 1999. For most of the 1980s, the number of entries remained at around 150 000 per year, while the number of exits increased steadily to a record 150 000 in 1990–91, the only time the number of exits exceeded the number of entries. After a drop during the recession in the early 1990s, the number of entries again grew and stabilized close to the 150 000-level by the mid 1990s. From 1990–91, the number of exits varied but generally decreased. On a net basis, entries averaged approximately 27 500 annually from 1984 to 1988; were near zero in 1991–92 and remained low until 1996–97, when they again began approaching pre-recession levels.

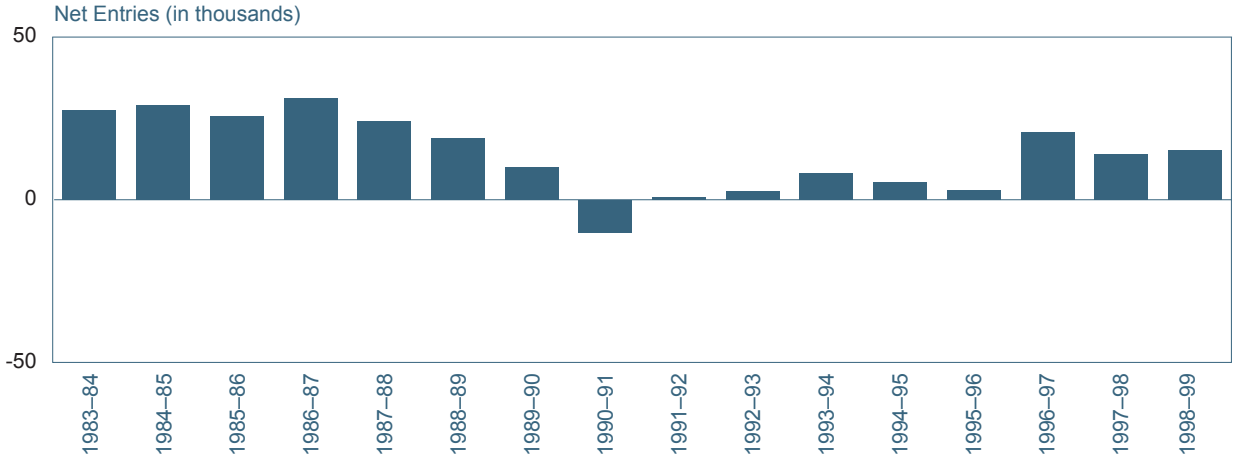
Figure 2 also shows entries and exits in relation to real GDP growth, a measure of the state of the economy. The business cycle is a key explanation for the variation of entries and exits overtime. The number of entries increases when the economy expands and drops in a slow-down, while the number of exits is inversely related to the state of the economy.

Entry and exit data by province show that Ontario and Quebec account for much of the volatility in net entries. They had positive net entries except for the early 1990s, while British Columbia and Alberta had positive net entries for the entire period. The Maritime provinces, Prairie provinces and northern territories experienced positive net entries through most of the 1980s, but negative net entries during most of the 1990s.

[1] Reorganization in a firm may involve name changes, mergers, a division of existing payroll accounts or more. To the greatest extent possible, false signals about deaths and births are deleted from the data. A legitimate firm death can occur in certain merger cases, as a result of an owner's decision to cease operations, because the firm has gone bankrupt, or for a number of other reasons. For more on bankruptcies, see **Bankruptcy statistics**.

Figure 2: Entries and Exits of Canadian Businesses up to 500 Employees, and GDP Growth, 1983–84 to 1998–99





Source: Statistics Canada, Employment Dynamics, 1983–1999; National Income and Expenditure Accounts.

Bankruptcy statistics

Only a small proportion of firms that exit the marketplace end up filing for bankruptcy. On average over the last 13 years, there have been approximately 12 000 business bankruptcies per year in Canada. They gradually increased from about 11 000 in 1990 to a peak of more than 14 000 in 1996. Since then, business bankruptcies have been on the decline, to about 9 500 in 2002. More detailed statistics on business bankruptcies and the liabilities involved are regularly reported in Industry Canada's *Small Business Quarterly*, and are also available on the web site of the Office of the Superintendent of Bankruptcy at http://strategis.ic.gc.ca/sc_mrksv/bankrupt/engdoc/superint.html

How long do small businesses survive?

How long a business stays in business is influenced by many different factors. Geographic location, type of industry, size and age are some predictable factors in how long a business stays active. Unforeseen factors also affect a business's survival, including such market influences as the number and size of competitors and new entrants, as well as general economic conditions.

One way to answer the question of how long small businesses survive is to determine the probability of survival based on predictable factors. It is a more useful way than determining the average age of businesses because the majority of start-up firms do not operate for very long. The probability of survival is defined as the percentage of new firms that continue to operate when they reach a given age. Table 4 presents the survival rates from start-up, by region, for two sizes of business: micro-enterprises (those with fewer than 5 employees) and small employer businesses (those with 5 to 99 employees). The table is based on firms that entered the market from 1984 to 1995; therefore, the highest age observable was 11 years. As an example, the table indicates that 30% of micro-enterprise entrants in the Atlantic provinces stayed in business for at least four years.

The percentage of new firms that remain in business after one, two or three years declines rapidly. That is to say, failure rates are high the first few years after start-up. This is even more true for micro-enterprises than for other small businesses — beyond the first three years, survival rates of micro-enterprises continue to be well below those of larger small firms. The likelihood that micro-enterprises require less investment could induce these firms to take more risks, which may explain the higher probability of failure.

The survival rates of new micro-enterprises of any age are consistently lowest in the Atlantic region and among the lowest for other small firms. Small-firm survival rates are also lower in the Prairie provinces. The survival rates in Quebec, Ontario and British Columbia are very similar for all ages and both sizes of small firms.

Table 4: Survival Rates of Micro-enterprises and Small Employer Businesses, by Region, Size and Age of Business (Percent), 1984–95

AGE (years)	Micro-enterprises (<5 employees)					Small Employer Business (5–99 employees)				
	ATLANTIC	QUE	ON	PRAIRIE	BC	ATLANTIC	QUE	ON	PRAIRIE	BC
1	61%	74%	78%	72%	76%	86%	90%	91%	89%	91%
2	45%	58%	62%	56%	59%	74%	78%	79%	75%	78%
3	37%	47%	50%	46%	48%	65%	68%	69%	65%	68%
4	30%	40%	42%	39%	40%	58%	61%	61%	57%	61%
5	26%	34%	36%	33%	34%	52%	54%	55%	51%	55%
6	22%	30%	31%	29%	30%	47%	49%	49%	46%	50%
7	19%	26%	27%	25%	26%	43%	44%	44%	42%	46%
8	17%	23%	24%	22%	23%	39%	41%	40%	39%	43%
9	15%	21%	21%	20%	21%	36%	38%	37%	36%	39%
10	13%	19%	19%	18%	19%	34%	35%	33%	33%	36%
11	12%	17%	17%	16%	17%	30%	32%	31%	30%	34%

Source: John Baldwin et al., *Failure Rates for New Canadian Firms: New Perspectives on Entry and Exit,* Statistics Canada, 2000.

How many people work for small businesses?

To best answer this question, it is necessary to look at business establishments as part of the larger enterprise to which they belong, where applicable. Statistics Canada defines a business enterprise as "a family of businesses under common ownership and control for which a set of consolidated financial statements is produced on an annual basis." Statistics Canada's *Survey of Employment, Payrolls and Hours* (SEPH) covers employer businesses in Canada and reports the number of employees at the enterprise level. Self-employed persons who are not on a payroll are not included in these figures, nor are employees in the following industries: agriculture, fishing and trapping, private household services, religious organizations and military personnel of defence services. Firms are grouped into seven size categories: those with fewer than 4 employees; and those with from 5 to 19; from 20 to 49; from 50 to 99; from 100 to 299; from 300 to 499; and 500 and more employees.

According to SEPH data, on average in 2001, about 4.8 million employees on payroll, or 49% of the total private labour force,[1] worked for small enterprises (those with fewer than 100 employees), as shown in Table 5. Another 1.6 million, or 16%, worked for medium-sized firms (those with 100 to 499 employees). In total, therefore, SMEs employed close to 6.4 million or 65% of all employees in the private sector covered by SEPH.

The distribution of employment by size of firm varies considerably across industries. As shown in Table 5 and Figure 3, small businesses account for over two thirds of employment in the construction industry (78%), other services (73%), and accommodation and food (68%). In another 8 industries more than half the work force is employed by small businesses. In terms of the total number of employees, industries that had the largest number of employees working for small firms were, in order of magnitude, retail trade (0.75 million), manufacturing (0.65 million), accommodation and food (0.64 million), construction (0.45 million) and wholesale trade (0.4 million), which together accounted for over 60% of all jobs in small firms in Canada.

[1] Private sector employment in the SEPH data was identified with the aid of Employment Dynamics and Small Business Profiles data for corresponding years and by projecting trends for more recent years. A technical note on the methodology employed is available; please contact **Customer Services**. In addition to the industries excluded by SEPH, data shown in Table 5 exclude em
funded health care services, but include employment in private sector health practices and beer and liquor stores.

Table 5: Number of Private Sector Employees by Industry and Size of Business Enterprise, 2001[1]

Industry[2]	Total	Size of Business Enterprise (No. of Employees)								
		0–4	5–19	20–49	50–99	*Small (<100)*	100–299	300–499	*Medium (100–499)*	*Large (500 +)*
Forestry	76 448	10 686	17 657	10 642	6 143	45 128	6 115	—	—	—
Mining	138 685	6 865	12 074	9 352	8 095	36 386	13 892	9 038	22 930	79 369
Utilities*	112 067	552	1 879	1 896	2 249	6 576	5 621	3 044	8 665	96 826
Construction	575 702	117 805	176 722	97 855	55 909	448 291	50 029	12 997	63 026	64 385
Manufacturing	2 037 873	48 808	177 294	215 049	206 653	647 804	339 732	144 108	483 840	906 229
Wholesale Trade	723 310	56 618	144 269	115 752	84 381	401 020	100 480	37 459	137 939	184 351
Retail Trade	1 488 916	123 423	289 180	191 330	148 603	752 536	119 403	33 938	153 341	583 038
Transportation & Warehousing*	510 719	43 061	66 885	54 706	37 864	202 516	61 471	22 444	83 915	224 288
Information & Cultural	346 620	10 356	23 312	21 038	18 445	73 151	32 702	18 805	51 507	221 962
Finance and Insurance	555 641	27 161	40 223	35 113	28 585	131 082	38 227	18 756	56 983	367 575
Real Estate and Rental	215 859	39 047	51 621	27 596	18 036	136 300	24 761	9 059	33 820	45 739
Professional Services	639 322	121 186	128 984	79 460	53 260	382 890	71 511	30 737	102 248	154 184
Management of Companies and Enterprises	83 802	13 433	13 837	10 373	5 691	43 334	9 636	—	—	—
Administration, Waste Management	527 270	45 386	80 949	57 634	45 342	229 311	77 186	39 901	117 087	180 872
Health*	187 283	87 621	82 436	11 487	2 341	183 885	1 654	863	2 517	880
Arts, Entertainment & Recreation	223 041	13 818	38 521	35 507	25 855	113 701	35 950	13 389	49 339	59 999
Accommodation & Food	941 651	52 933	237 830	216 542	134 619	641 924	118 741	34 428	153 169	146 558
Other Services	476 021	102 643	150 376	58 693	34 396	346 108	47 303	19 493	66 796	63 116
Industry Aggregate Total*	**9 860 230**	**921 402**	**1 734 050**	**1 250 025**	**916 467**	**4 821 943**	**1 154 414**	**453 544**	**1 607 957**	**3 430 326**

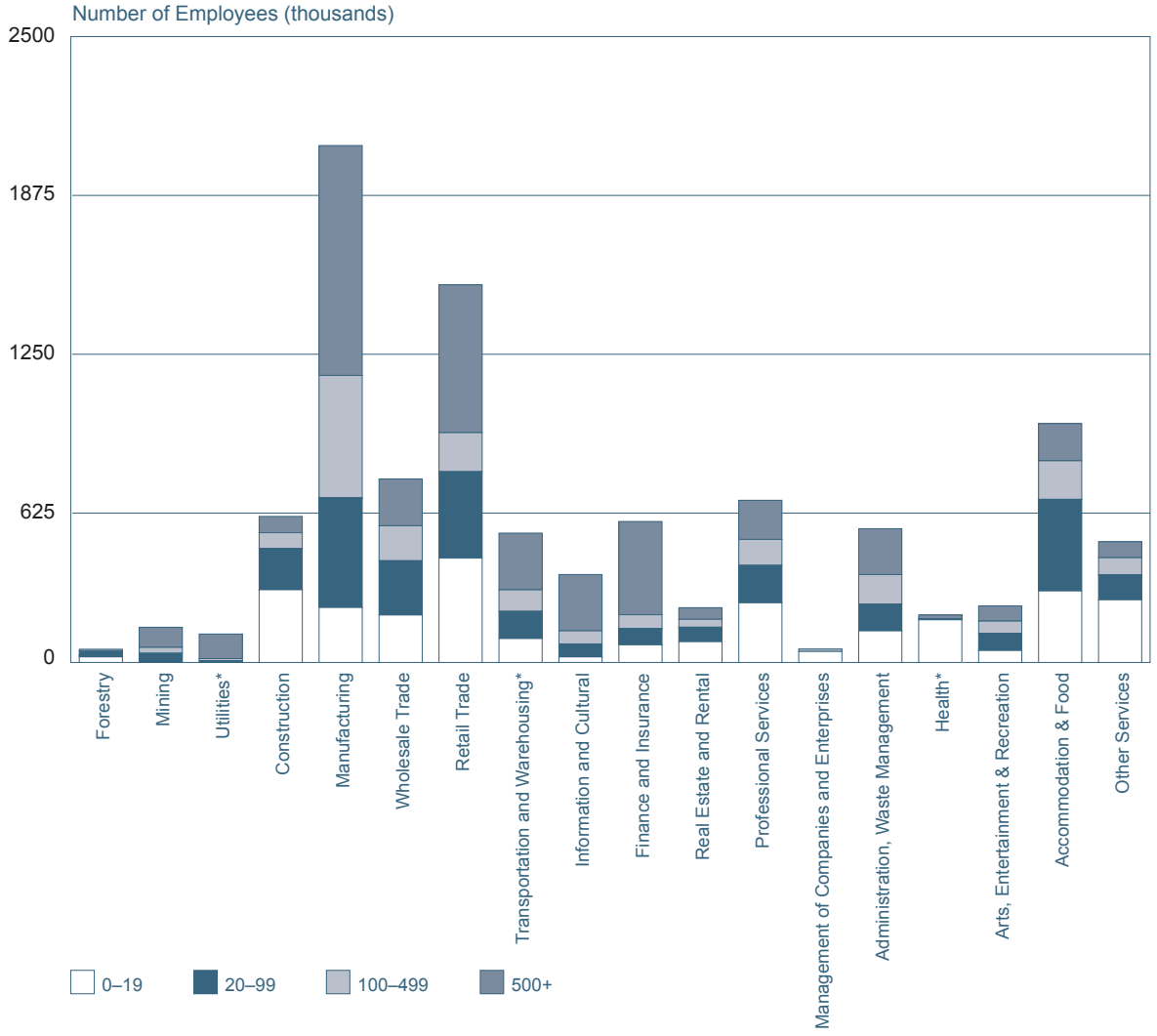
Source: Statistics Canada, *Survey of Employment, Payrolls and Hours* (SEPH), January 2002, and calculations by Industry Canada. Industry data are classified in accordance with Statistics Canada's NAICS.

Note[1]: SEPH data exclude self-employed workers who are not on a payroll, and employees in the following industries: agriculture, fishing and trapping, private household services, religious organizations and military personnel of defence services. The data breaking down employment by size of firm also exclude unclassified industries.

Note[2]: In two industries, data for firms with 300 or more employees were suppressed for confidentiality reasons but were included in both the size aggregate and industry totals. Therefore, the sum of individual industry data does not add up to the industry aggregate total nor does the sum over the size categories equal the size totals for those two industries. Size data and industry data do not always add up to their respective totals due to rounding.

Note*: Data shown in this table exclude employment in public administration, postal services, public transit, educational services and institutional and other government-funded health care services, but include employment in private sector health practices and beer and liquor stores. Industry Canada's *Small Business Quarterly* regularly publishes data similar to those in Table 5, but without excluding public sector employment. A technical note on the separation of public and private sector employment is available; please contact **Customer Services**.

Figure 3: Number of Private Sector Employees by Industry and Size of Business Enterprise, 2001



Source and notes: Table 5

How many jobs do small businesses create?

Over the last seven years, data have become available on which size of firms create most net jobs in the economy. The data are derived from Statistics Canada's *Survey of Employment, Payrolls and Hours* (SEPH), and have been regularly published in *Small Business Quarterly.* SEPH data exclude self-employed workers who are not on a payroll. Other limitations also apply (see **How many people work for small businesses?**).

Table 6 and Figure 4 display the relative contribution to net change in private sector paid employment by small, medium, and large businesses from 1994 to 2000. During that period, data availability limits the definition of small businesses to firms with fewer than 50 employees; medium businesses are defined as those with more than 50 but fewer than 300 employees, while large businesses are those with more than 300 employees. The relative contribution by each size class has varied considerably, and throughout the seven-year period each size has played a major role in creating jobs in Canada for a certain time period. In 1994 and 1995, large businesses were shedding jobs and most of the positive change was found in small enterprises. In 1996 and 1997, the lion's share of jobs occured in medium-sized enterprises. In the last three years of the period, less than a quarter of net new jobs were found in small businesses, while large enterprises were responsible for more than half of the total.

A significant limitation of the data is that they cover a generally expansionary period, with only a mild downturn in 1995–96. In a more severe downturn or a recession, the percentage contributions to job creation (or loss) by smaller businesses may be quite different.

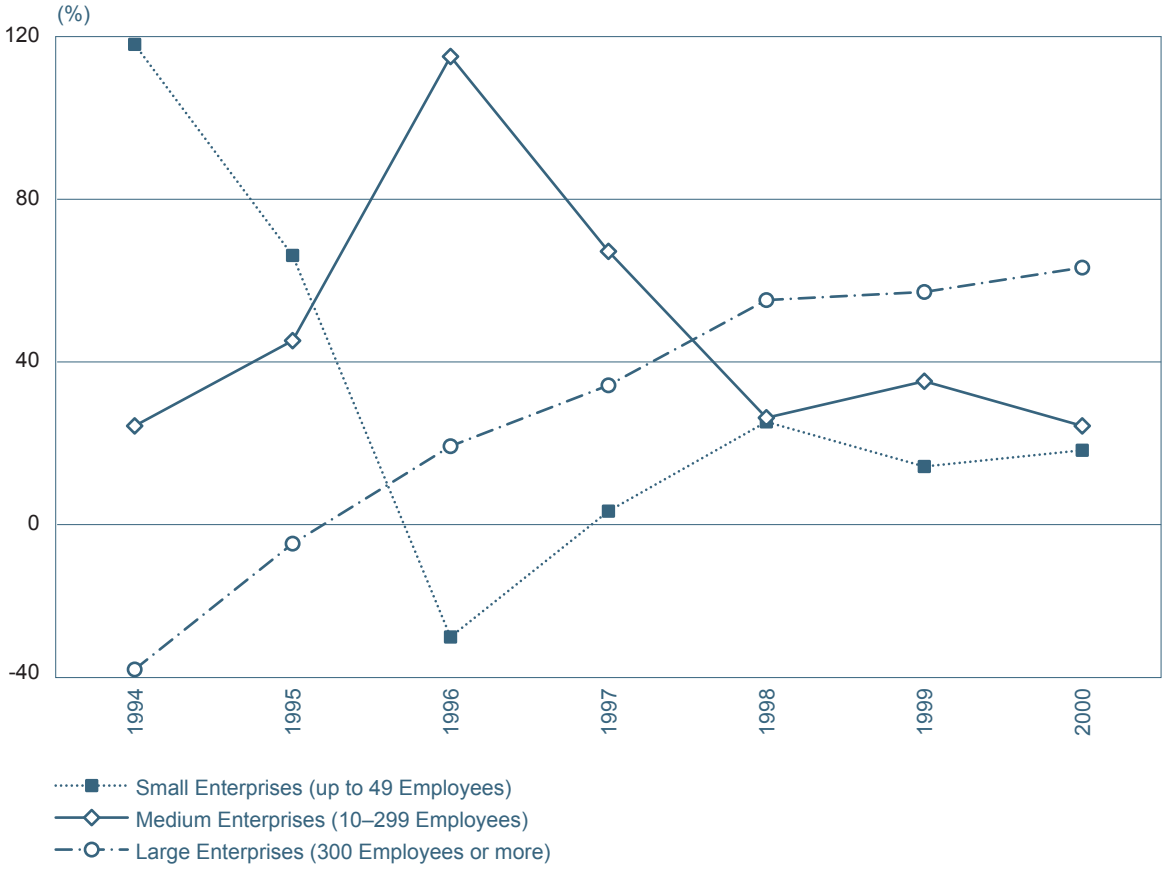
Table 6: Percent Contribution to Net Private Sector Paid Employment Change by Size of Business Enterprise (Annual Averages), 1994–2000

Year	% Contribution to Private Sector Employment Change		
	Small Enterprises (Up to 49 Employees)	Medium Enterprises (50 to 299 Employees)	Large Enterprises (300 Employees or more)
1994	116%	22%	-38%
1995	64%	43%	-7%
1996	-30%	113%	17%
1997	3%	65%	32%
1998	23%	24%	53%
1999	12%	33%	55%
2000	16%	22%	61%

Source: Statistics Canada, *Survey of Employment, Payrolls and Hours* (SEPH); special tabulation for Industry Canada; and calculations by Industry Canada. The underlying data are regularly published in *Small Business Quarterly*.

Note: SEPH data exclude self-employed workers who are not on a payroll, and employees in the following industries: agriculture, fishing and trapping, private household services, religious organizations and military personnel of defence services. Data underlying this table exclude employment in public administration, postal services, public transit, educational services and institutional and other government-funded health care services, but include employment in private sector health practices and beer and liquor stores.

Figure 4: Percent Contribution to Net Private Sector Paid Employment Change by Size of Business Enterprise, 1994–2000



Source: Table 6

In October 2001, Statistics Canada started to publish employment data from the *Survey of Employment, Payrolls and Hours* (SEPH) in more detail by size of business enterprise. Data on this basis are available only from the first quarter of 2000 onwards; for the four quarters of 2000, data based on the Standard Industrial Classification (SIC-1980) were backcasted to the new North American Industrial Classification System (NAICS). Net changes in employment in the quarters of 2001 over the corresponding quarters of 2000 should therefore be treated with some caution. According to the new data, total year-over-year private sector payroll jobs continued to increase over the seven consecutive quarters since the first quarter of 2001, but at an ever slower rate, up to the first quarter of 2002, when net job gain was less than one fourth that in the first quarter of 2001 (see Table 7 and Figure 5). Momentum was gradually regained from the first quarter of 2002 on.

In the first quarter of 2001, large businesses were responsible for over half of the job growth but thereafter most jobs were added by small firms. The contribution to an increase in the number of payroll jobs by medium-sized and large firms was robust in the beginning of 2001, turned negative later in 2001, but recovered in the following quarters. During the period when overall change was at its lowest (the last quarter of 2001 and the first quarter of 2002), small firms contributed a whopping 154% and 104% of jobs, compensating for negative contributions by medium-sized and large businesses. Small businesses with more than 20 but fewer than 100 employees showed a robust contribution to job creation throughout the period.

Table 7: Year-over-Year Net Private Sector Paid Employment Change and Percent Contribution by Size of Business Enterprise, 2001 Q1 to 2002 Q3*

Year and Quarter[2]	Total Net Change	Net Private Sector Paid Employment Change by Size of Business[1]								
		0–4	5–19	20–49	50–99	Small (<100)	100–299	300–499	Medium (100–499)	Large (500+)
2001 Q1	407 347	45 652	7 874	39 919	28 325	*121 770*	56 549	20 749	*77 298*	208 284
Q2	295 963	10 736	32 899	44 279	42 142	*130 057*	43 296	9 025	*52 321*	113 588
Q3	201 273	67 512	14 444	40 255	38 505	*160 715*	14 152	-3 161	*10 991*	29 580
Q4	98 074	48 088	45 229	42 077	15 796	*151 190*	-18 959	-29 994	*-48 953*	-4 177
2002 Q1	94 804	-1 316	27 927	40 190	32 209	*99 010*	-3 269	-22 345	*-25 614*	21 402
Q2	207 386	1 966	8 844	69 809	77 224	*157 842*	42 684	-27 809	*14 875*	34 663
Q3	310 595	1 776	5 264	73 549	90 353	*170 942*	72 379	-23 958	*48 421*	91 222
% Contribution to Private Sector Employment Change by Size of Business										
2001 Q1	100%	11.2%	1.9%	9.8%	7.0%	*29.9%*	13.9%	5.1%	*19.0%*	51.1%
Q2	100%	3.6%	11.1%	15.0%	14.2%	*43.9%*	14.6%	3.0%	*17.7%*	38.4%
Q3	100%	33.5%	7.2%	20.0%	19.1%	*79.8%*	7.0%	-1.6%	*5.5%*	14.7%
Q4	100%	49.0%	46.1%	42.9%	16.1%	*154.2%*	-19.3%	-30.6%	*-49.9%*	-4.3%
2002 Q1	100%	-1.4%	29.5%	42.4%	34.0%	*104.4%*	-3.4%	-23.6%	*-27.0%*	22.6%
Q2	100%	0.9%	4.3%	33.7%	37.2%	*76.1%*	20.6%	-13.4%	*7.2%*	16.7%
Q3	100%	0.6%	1.7%	23.7%	29.1%	*55.0%*	23.3%	-7.7%	*15.6%*	29.4%

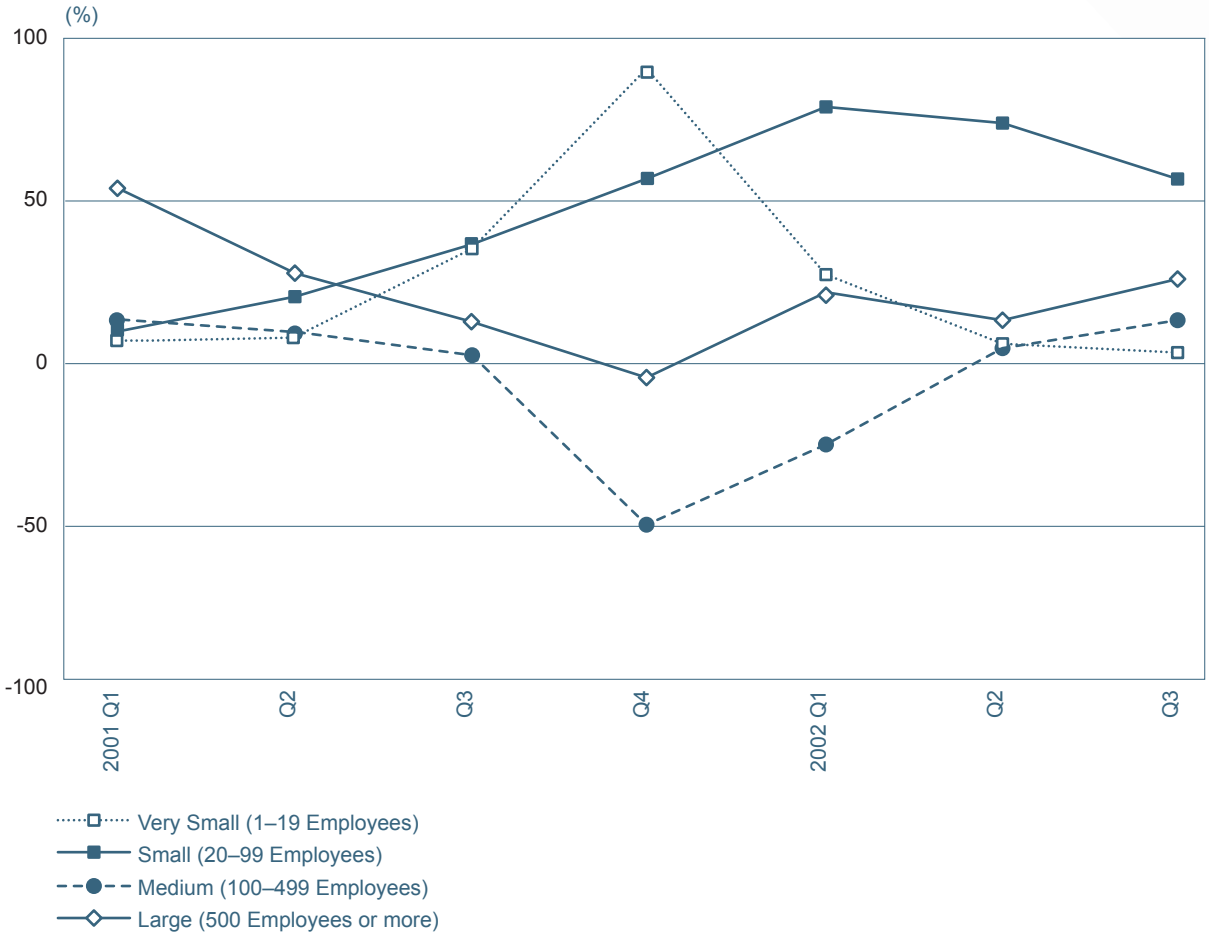
Source: Statistics Canada, *Survey of Employment, Payrolls and Hours* (SEPH), October 2002, and calculations by Industry Canada. Data shown in this table exclude employment in public administration, postal services, public transit, educational services and institutional and other government-funded health care services, but include employment in private sector health practices and beer and liquor stores.

Note[1]: SEPH data exclude self-employed workers who are not on a payroll, and employees in the following industries: agriculture, fishing and trapping, private household services, religious organizations and military personnel of defence services. The data breaking down employment by size of firm also exclude unclassified industries.

Note[2]: Statistics Canada cautions that data by size produced for quarters prior to year 2001 were estimated from the previous data based on the 1980 SIC and then backcasted on the new NAICS classification. Especially in the smallest size categories, more volatility in the data should be expected.

Note*: Differences between these data and those published in the July 2002 version of *Key Small Business Statistics* are largely due to revisions to the SEPH data. A small proportion of the differences is the result of refinements in the methodology used to separate the private and public sectors. A technical note on the separation of public and private sector employment is available upon request by contacting **Customer Services**.

Figure 5: Percent Contribution to Year-over-Year Private Sector Employment Change by Size of Business Enterprise, 2001 Q1 to 2002 Q3



Source: Table 7

How much do employees of small businesses earn?

Statistics Canada's *Survey of Employment, Payrolls and Hours* (SEPH) publishes average weekly earnings at the enterprise level based on weekly payroll data. Data include gross pay, as well as overtime and bonuses, commissions and other special payments, before major deductions such as income taxes, employment insurance contributions, etc., but exclude taxable allowances and benefits, and employer contributions to employment insurance, pension plans and other welfare plans. Average weekly earnings are derived by dividing total weekly payrolls by payroll employment (see **How Many People Work for Small Businesses**). SEPH excludes self-employed persons not on a payroll, and does not cover the following industries: agriculture, fishing and trapping, private household services, religious organizations and military personnel of defence services.

In 2001, an average worker in Canada's private sector earned approximately $676 per week (Table 8 and Figure 6). Generally, the size of a business was positively related to the weekly earnings of its employees: employees working for businesses with fewer than 100 employees earned below the average with weekly earnings of $583, whereas those working for medium-sized firms (more than 100 but fewer than 500 employees) and large firms (more than 500 employees) earned above the average with weekly earnings of $702 and $756, respectively. The only exception to this pattern are firms with more than 5 but fewer than 20 employees in the service-producing sector, where weekly earnings are lower than for smaller firms (those with fewer than 5 employees). This is primarily due to the fact that over 30% of total employment in that size class is comprised of the two lowest-paying industries, namely retail trade, and accommodation and food services.

On average in 2001, employees in the goods-producing sector were paid $240 more per week than those working in the service-producing sector. The difference in earnings between the two sectors was greatest in large firms, at about $296 per week, or an annual average differential of $15,000. However, goods-producing employees also worked longer hours, so on a per-hour basis the difference in earnings would be less pronounced.

Table 8: Average Weekly Earnings by Firm Size (Number of Employees) in the Private Sector, 2001

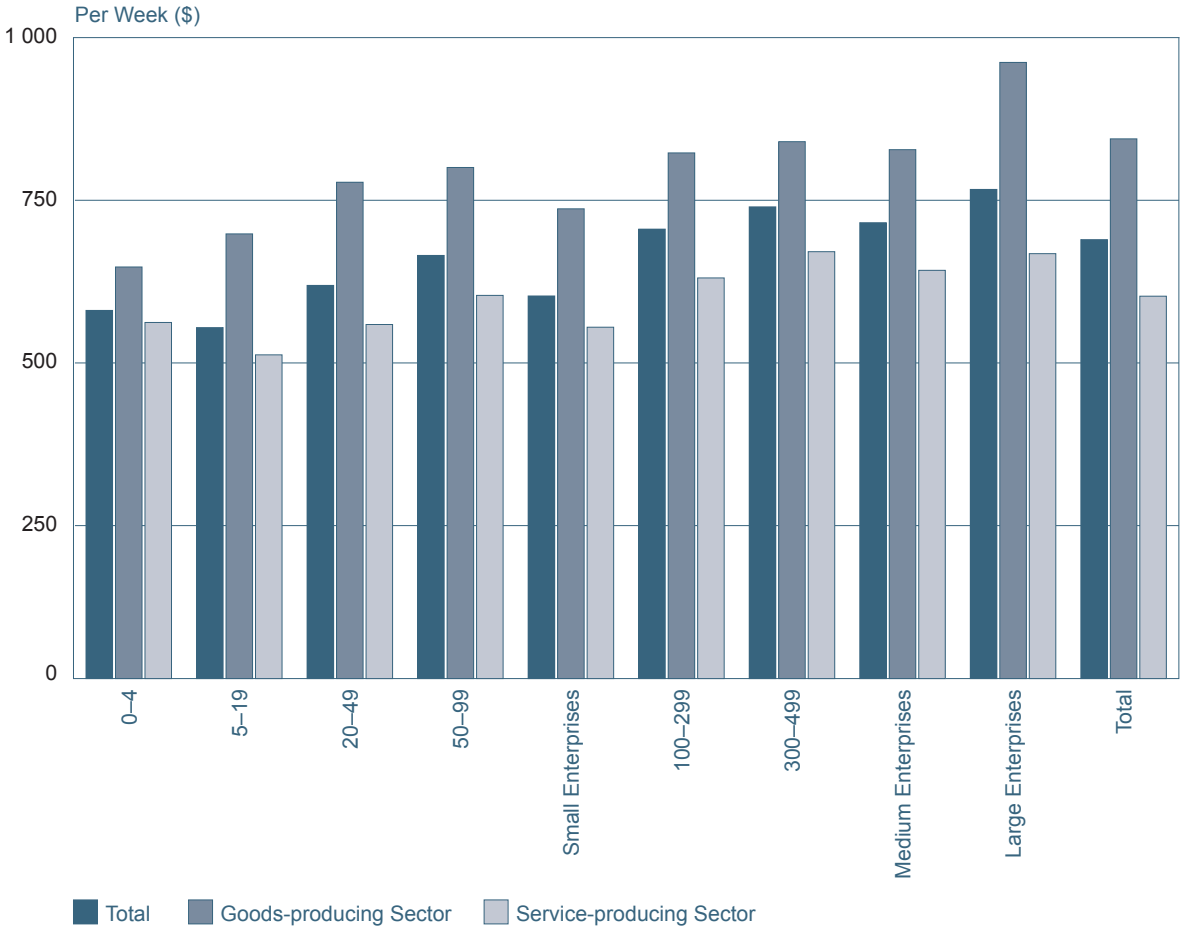
Number of Employees	Private Sector	Goods-producing Sector+	Service-producing Sector+
0–4	$564.71	$633.74	$548.40
5–19	$538.57	$684.70	$498.88
20–49	$605.70	$764.21	$550.41
50–99	$651.68	$786.95	$594.88
Small Enterprises (fewer than 100)	*$583.40*	*$723.32*	*$536.35*
100–299	$692.49	$809.39	$628.10
300–499	$726.79	$826.71	$675.15
Medium Enterprises (100–499)	*$701.57*	*$814.40*	*$627.98*
Large Enterprises (500 or more)	*$756.17*	*$948.71*	*$652.30*
Total	**$676.20**	**$831.04**	**$591.35**

Source: Statistics Canada, *Survey of Employment, Payrolls and Hours* (SEPH), January 2002; calculations by Industry Canada.

Note: SEPH data exclude self-employed workers who are not on a payroll, and employees in the following industries: agriculture, fishing and trapping, private household services, religious organizations and military personnel of defence services. Data underlying this table exclude employment in public administration, postal services, public transit, educational services and institutional and other government-funded health care services, but include employment in private sector health practices and beer liquor stores. A technical note on the separation of public and private sector employment is available upon request by contacting **Customer Services**.

Note+: By conventional Statistics Canada definition, the goods-producing sector consists of NAICS codes 11 to 31–33, while NAICS codes 41 to 91 define the service-producing sector.

Figure 6: Average Weekly Earnings in the Goods-Producing and Service-Producing Sector by Firm Size, 2001



Source: Table 8

What is the contribution of small businesses to Canada's Gross Domestic Product?

Gross Domestic Product (GDP) is a key measure of economic production. It can be used to compare the value that a sector adds to the inputs it uses with the value of another sector. One of its major strengths is that it avoids double-counting.

Because it measures unduplicated value added, GDP is considered more useful for gauging economic performance than, say, revenue, business counts or even employment.

The Organisation for Economic Cooperation and Development (OECD) has published estimates of the contribution to GDP by small businesses in member countries. Its 2000 Canada profile states that 43% of private sector GDP can be attributed to SMEs, where SMEs are defined as businesses with fewer than 500 employees.

In Canada, the Government of British Columbia (BC Stats) has developed a top-down method to determine small business contribution to GDP by province, using the income-based approach in the System of National Accounts.[1]

BC Stats' definition of small business is limited to businesses with fewer than 50 employees, plus those operated by a self-employed person with no paid employees. By this definition, it is estimated that, in 2001, small businesses accounted for approximately 24% of Canada's GDP. The percentage varies from a low of 18% in Newfoundland to a high of 28% in British Columbia. The percentage of small business's contribution to GDP for Canada and each province from 1993 to 2001 is shown in Table 9.

[1] A background note describing the method in somewhat greater detail is available upon request; plese contact **Customer Services**.

Table 9: Small Business Contribution to GDP by Province, 1993 to 2001

	Contribution to GDP (percent)								
Province	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**
British Columbia	32	31	32	31	30	29	27	28	28
Alberta	26	25	28	26	26	27	24	22	22
Saskatchewan	29	27	29	31	26	27	25	23	24
Manitoba	24	24	25	26	24	22	21	22	23
Ontario	22	22	24	23	22	22	22	22	23
Quebec	26	26	27	26	24	23	23	23	24
New Brunswick	26	25	27	25	24	23	22	23	24
Nova Scotia	24	24	27	26	24	23	22	24	24
Prince Edward Island	34	33	34	28	27	26	25	28	27
Newfoundland	21	20	21	21	21	19	17	17	18
Canada	**25**	**24**	**26**	**25**	**24**	**24**	**23**	**23**	**24**

Source: BC Stats

Who is self-employed?

Self-employed persons are people who earn income directly from their own business, trade or profession rather than earn a specified salary or wage from an employer. Statistics Canada defines self-employed persons as working owners of an unincorporated or incorporated business, persons who work on their own account but do not have a business and persons working without pay in a family business. All data shown in this section are derived from Statistics Canada's *Labour Force Survey.*

How many people are self-employed?

In 2002, self-employed persons represented approximately 15% of the total labour force in the Canadian economy. The number of self-employed persons peaked at about 2.5 million in 1999 and currently stands at about 2.4 million (Table 10). In recent years, slightly over one third of self-employed workers have been female; the share of female self-employment has increased steadily from just over 25% in 1976 to 35% in 2002.

Table 10: Total Number of Self-Employed Persons by Sex, Yearly and Quarterly (Thousands), 1976–2002

Year and Quarter		Total	Male	% of Total	Female	% of Total
1976		1 193.3	879.3	74%	313.9	26%
1977		1 226.2	892.8	73%	333.4	27%
1978		1 283.6	924.6	72%	359.1	28%
1979		1 336.2	951.3	71%	384.9	29%
1980		1 385.9	986.3	71%	399.6	29%
1981		1 442.5	1 031.6	72%	410.9	28%
1982		1 503.7	1 069.9	71%	433.8	29%
1983		1 551.3	1 099.6	71%	451.8	29%
1984		1 569.0	1 095.4	70%	473.6	30%
1985		1 685.1	1 162.8	69%	522.3	31%
1986		1 656.0	1 164.6	70%	491.5	30%
1987		1 695.6	1 183.2	70%	512.5	30%
1988		1 772.2	1 231.2	69%	541.0	31%
1989		1 803.4	1 242.5	69%	560.9	31%
1990		1 842.7	1 265.7	69%	577.0	31%
1991		1 887.4	1 303.9	69%	583.4	31%
1992		1 919.3	1 309.0	68%	610.3	32%
1993		2 027.1	1 372.3	68%	654.8	32%
1994		2 036.3	1 356.0	67%	680.2	33%
1995		2 097.8	1 391.6	66%	706.2	34%
1996		2 169.4	1 426.4	66%	743.0	34%
1997		2 353.7	1 524.5	65%	829.2	35%
1998		2 425.2	1 562.2	64%	863.0	36%
1999		2 462.9	1 600.5	65%	862.4	35%
2000		2 421.4	1 568.5	65%	852.8	35%
2001		2 309.2	1 525.9	66%	783.3	34%
2002		2 346.0	1 525.2	65%	820.7	35%
2001	Q1	2 305.0	1 520.5	66%	784.5	34%
	Q2	2 324.3	1 534.8	66%	789.6	34%
	Q3	2 319.9	1 550.2	67%	769.8	33%
	Q4	2 287.5	1 498.3	65%	789.2	35%
2002	Q1	2 274.7	1 475.6	65%	799.1	35%
	Q2	2 345.6	1 527.9	65%	817.7	35%
	Q3	2 381.0	1 556.3	65%	824.7	35%
	Q4	2 382.7	1 541.3	65%	841.4	35%

Source: Statistics Canada, *Labour Force Survey.*

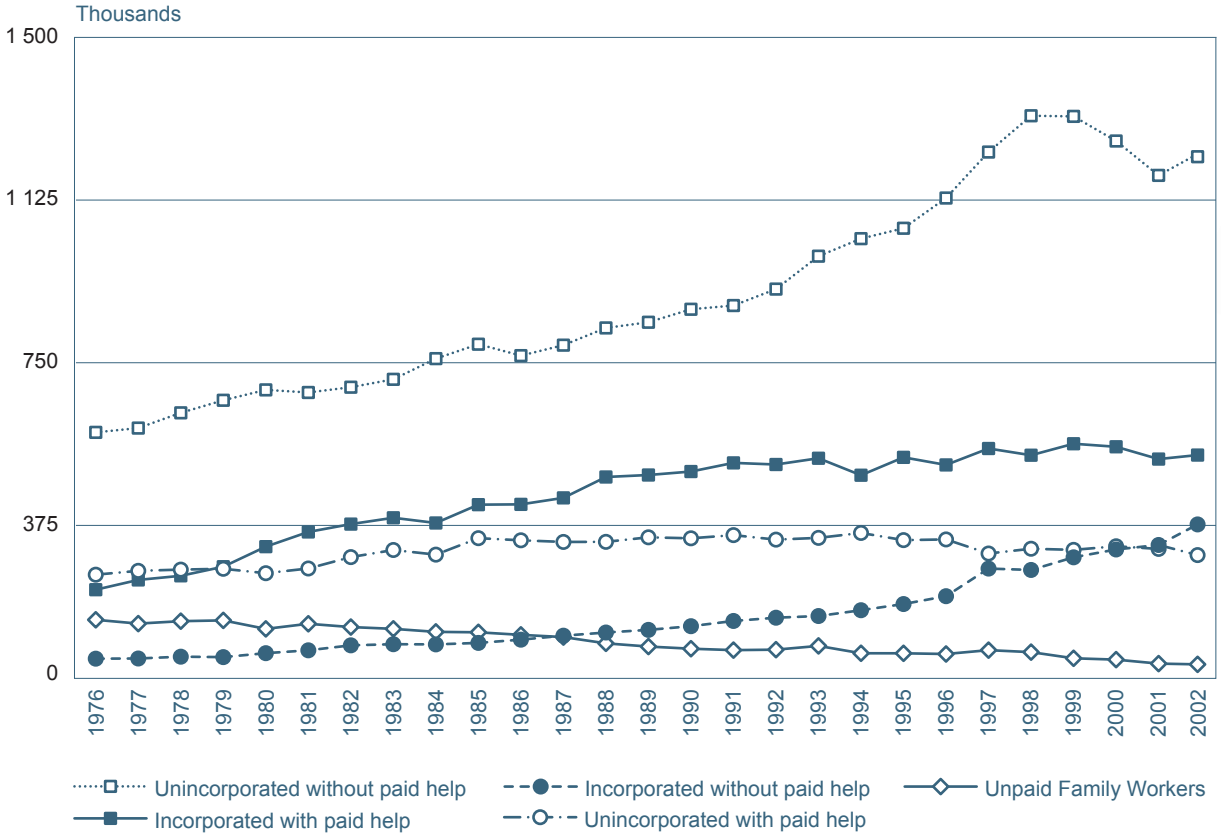
Table 11 shows a breakdown of the self-employed in five categories from 1976 to 2002. On average in 2002, of 2.3 million self-employed persons, 64% had no paid help, 34% worked with paid help and 1.4% were unpaid family workers. Both self-employed workers with and without paid help are further categorized according to whether their businesses were incorporated or not. Of those who worked without paid help, 1.2 million or 78% were unincorporated; this category accounted for half the total number of self-employed in Canada.

Table 11: Average Number of Self-Employed Persons by Category (Thousands) 1976–2002, and Average Annual Growth Rates (Percent), 1977–2002

Year	Total	With Paid Help			Without Paid Help			Unpaid Family Workers
		Total	Incorporated	Unincorporated	Total	Incorporated	Unincorporated	
1976	**1 193.3**	444.3	204.8	239.5	613.7	45.5	568.2	135.3
1977	**1 226.2**	475.8	227.4	248.4	624.0	45.9	578.1	126.5
1978	**1 283.6**	488.1	236.9	251.2	663.4	50.1	613.3	132.1
1979	**1 336.2**	511.0	257.9	253.1	691.4	49.1	642.3	133.9
1980	**1 385.9**	547.1	304.2	242.9	724.5	58.2	666.3	114.3
1981	**1 442.5**	591.5	337.7	253.8	725.1	64.8	660.3	126.1
1982	**1 503.7**	636.4	356.3	280.1	748.8	76.3	672.5	118.5
1983	**1 551.3**	667.4	370.9	296.5	769.6	78.9	690.7	114.4
1984	**1 569.0**	644.7	358.9	285.8	817.0	78.5	738.5	107.4
1985	**1 685.1**	725.0	401.2	323.8	853.7	81.9	771.8	106.4
1986	**1 656.0**	720.8	401.9	318.9	834.8	89.4	745.4	100.5
1987	**1 695.6**	732.0	416.9	315.1	868.2	98.6	769.6	95.4
1988	**1 772.2**	780.4	465.1	315.3	910.9	101.5	809.4	80.9
1989	**1 803.4**	795.5	469.7	325.8	934.5	112.0	822.5	73.5
1990	**1 842.7**	801.2	477.7	323.5	973.0	120.5	852.5	68.5
1991	**1 887.4**	828.6	497.5	331.1	993.7	132.6	861.1	65.0
1992	**1 919.3**	813.8	493.6	320.2	1 039.2	140.1	899.1	66.3
1993	**2 027.1**	832.9	508.4	324.5	1 119.1	144.0	975.1	75.0
1994	**2 036.3**	805.1	469.2	335.9	1 173.0	157.4	1 015.6	58.0
1995	**2 097.8**	829.8	510.5	319.3	1 210.1	170.5	1 039.6	57.9
1996	**2 169.4**	813.9	493.0	320.9	1 299.2	189.8	1 109.4	56.3
1997	**2 353.7**	819.3	530.9	288.4	1 469.2	253.6	1 215.6	65.2
1998	**2 425.2**	814.8	515.4	299.4	1 549.8	250.4	1 299.4	60.6
1999	**2 462.9**	838.7	541.9	296.8	1 577.6	279.6	1 298.0	46.5
2000	**2 421.4**	840.0	534.9	305.1	1 538.1	297.0	1 241.1	43.3
2001	**2 309.2**	805.4	506.5	298.9	1 469.8	308.1	1 161.7	34.1
2002	**2 346.0**	803.4	511.0	292.4	1 508.8	327.7	1 181.1	33.9
Average Annual Growth Rate, 1977–2002								
	2.6%	2.3%	3.6%	0.8%	3.5%	7.9%	2.9%	-5.2%

Source: Statistics Canada, *Labour Force Survey*.

Figure 7: Self-employed Persons by Category (Thousands) 1976–2001



Source: Table 11

As the relatively gentle slopes of the lines in Figure 7 indicate, the overall composition of self-employed persons by category has not changed dramatically in the past 27 years; however, some shifts did occur. Total self-employment has increased at an average annual rate of 2.6%. The number of self-employed persons who were incorporated, whether they had paid help or not, increased at a faster rate than average; the number of those without paid help increased at almost 8% per year, while the number of those with paid help grew at a more moderate 3.6% per year. On the other hand, the number of unpaid family workers decreased at a rate of 5.2% per year. The number of unincorporated self-employed persons with paid help grew at a rate of 0.8%, far less than average. The largest category, unincorporated self-employed persons without paid help, made up just under half the total number of self-employed in 1976 and just over half in 2002; that is, their numbers grew slightly faster than the overall average.

In 2002, self-employment continued to show solid growth, with two exceptions: the number of unincorporated self-employed persons with paid help and unpaid family workers decreased by 2.2% and 0.6%, respectively. The other three categories more than made up for the losses, especially self-employed persons without paid help, incorporated and unincorporated, who contributed 106% to the net growth.

How has self-employment contributed to job creation?

Generally, the increasing trend toward self-employment has supported total employment growth. Positive contributions to total net employment growth have ranged from 6% to 111% between 1977 and 2002 (Table 12). During that time there have been just three years (1986, 2000 and 2001) when the net change in self-employment was negative. In 1982 and 1991–92, self-employment grew strongly, while total employment growth turned negative due to economic recessions. This is because, when job market conditions tighten, people who cannot find suitable employment tend to start their own businesses and become self-employed. Table 12 and Figure 8 show the percentage contribution to job growth through self-employment in the private sector only. In this table, private sector employment is defined as the sum of self-employment and private sector employees for all sizes of firms.[1] Again, it is clear that self-employment contributes strongly to job creation during and around recessionary years, and that its contribution varies substantially in other years.

[1] The definition of private sector employees in the *Labour Force Survey* used in Table 8 is not identical to the definition underlying the SEPH data in Tables 5 to 7 but the differences are not large.

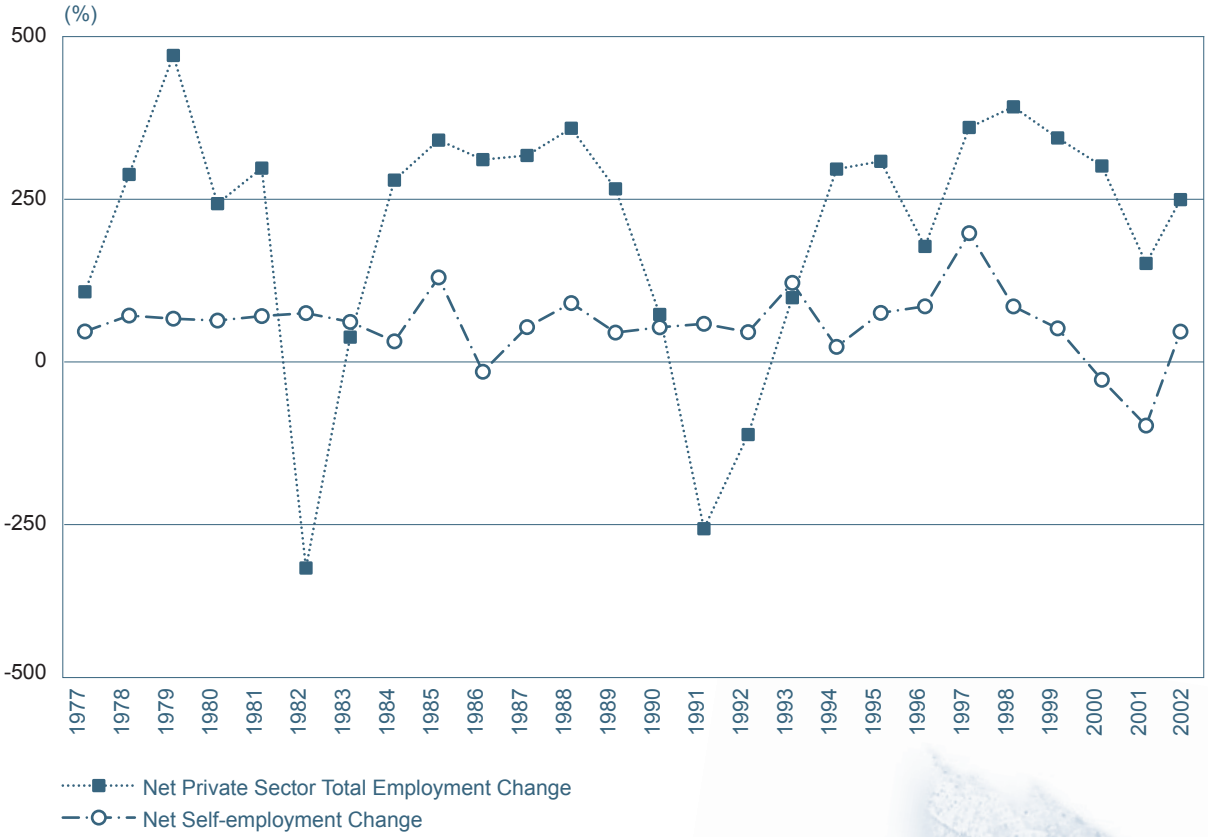
Table 12: Total Net Employment Change, Net Employment Change for Private Sector Employees and Net Change in Self-Employment, Year-to-Year, (Thousands/Percent), 1977–2002

Year	Total Net Employment Change	Private Sector Total Net Employment Change	Private Sector Employees			Self-employed Persons		
			Net Change	% of Total Employment Change	% of Total Private Sector Employment Change	Net Change	% of Total Employment Change	% of Total Private Sector Employment Change
1977	138.5	94.0	61.1	44%	65%	32.9	24%	35%
1978	297.5	274.7	217.3	73%	79%	57.4	19%	21%
1979	445.6	457.9	405.3	91%	89%	52.6	12%	11%
1980	312.3	229.7	180.0	58%	78%	49.7	16%	22%
1981	326.7	284.4	227.8	70%	80%	56.6	17%	20%
1982	-349.7	-331.3	-392.5	112%	(-)118%	61.2	(+) 17%	(+) 18%
1983	79.9	24.2	-23.4	-29%	(-) 97%	47.6	60%	197%
1984	273.0	265.9	248.2	91%	93%	17.7	6%	7%
1985	317.3	327.5	211.4	67%	65%	116.1	37%	35%
1986	361.7	297.6	326.7	90%	110%	-29.1	(-) 8%	(-) 10%
1987	341.7	303.9	264.2	77%	87%	39.7	12%	13%
1988	389.6	345.7	269.2	69%	78%	76.5	20%	22%
1989	276.1	252.5	221.3	80%	88%	31.2	11%	12%
1990	97.6	59.1	19.8	20%	34%	39.3	40%	66%
1991	-233.3	-270.8	-315.5	135%	(-)117%	44.7	(+) 19%	(+) 17%
1992	-90.7	-125.8	-157.7	174%	(-)125%	31.9	(+) 35%	(+) 25%
1993	97.5	84.9	-22.9	-23%	(-) 27%	107.8	111%	127%
1994	254.3	282.9	273.7	108%	97%	9.2	4%	3%
1995	245.1	294.8	233.3	95%	79%	61.5	25%	21%
1996	105.7	164.0	92.4	87%	56%	71.6	68%	44%
1997	311.8	347.0	162.7	52%	47%	184.3	59%	53%
1998	366.0	378.8	307.3	84%	81%	71.5	20%	19%
1999	390.8	330.9	293.2	75%	89%	37.7	10%	11%
2000	378.5	287.7	329.2	87%	114%	-41.5	(-) 11%	(-) 14%
2001	167.1	137.7	249.9	150%	181%	-112.2	(-) 67%	(-) 81%
2002	335.0	248.8	212.0	63%	85%	36.8	11%	15%

Source: Statistics Canada, *Labour Force Survey* (LFS). The LFS definition of private sector generally agrees with the definition underlying the SEPH data but the two are not identical.

Note: (-) indicates a negative contribution to Total Net Employment Change;
(+) indicates a positive contribution, despite a negative Total Net Change.

Figure 8: Net Employment Change for Private Sector Employees and Self-Employment, Year-to-Year (Thousands), 1977–2002



Source: Table 12

Do the self-employed work longer hours than employees?

The evidence is strong that the self-employed work longer hours than employees; this has been the case since at least 1987. A self-employed person worked 42.8 hours per week in 2002 compared with 36.7 hours for employees, on average. Even more striking is the large difference in those who usually worked over 50 hours per week in 2002: 33% of self-employed persons worked over 50 hours compared with only 5 percent of employees (Figure 9). Clearly, the self-employed usually work longer hours than employees.

When it comes to working part-time (less than 30 hours per week), the self-employed are very similar to employees; 22% of the self-employed and 18% of employees worked part-time in 2002.

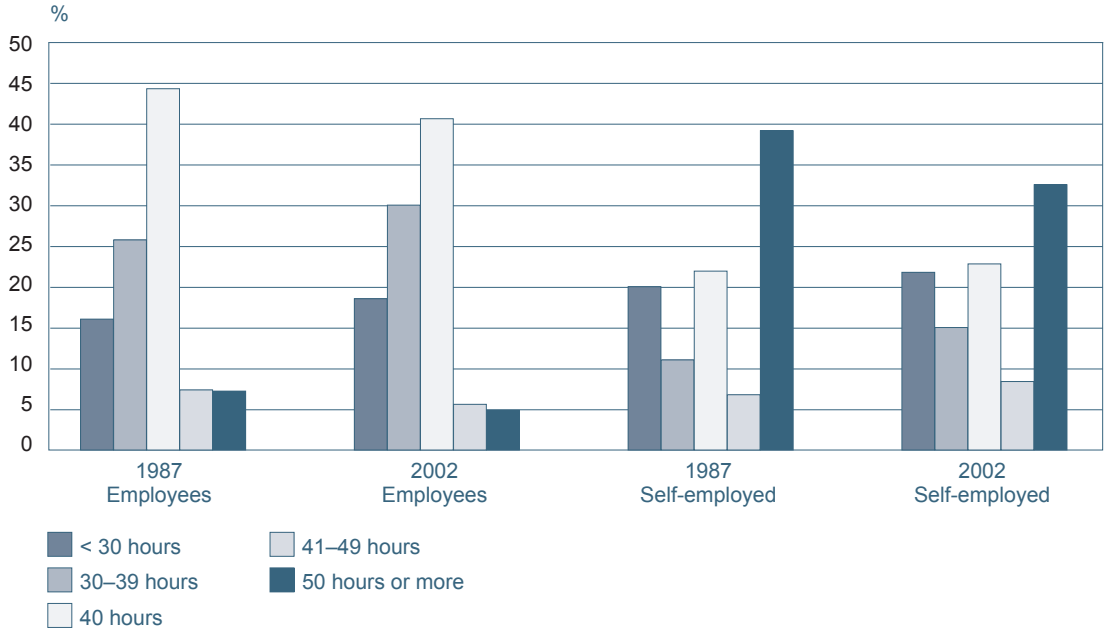
Less than one third of the self-employed usually worked 35 to 40 hours per week in 2002, compared with almost two thirds of employees.

These differences between the self-employed and employees persisted over the 1987–2002 period, although there has been some abatement of the tendency of the self-employed to work over 50 hours per week since 1999. As well, there has been a small rise in the proportion of those working part-time, both among the self-employed and among employees.

As shown in Figure 10, there are also major differences between men and women in usual weekly hours worked: men are more likely to work long hours, while women are more likely to work part-time. On average, self-employed men worked 44.8 hours per week in 2002, compared with only 33.4 hours for self-employed women. Furthermore, 40% of self-employed men worked over 50 hours in 2002, compared with only 19% of self-employed women. The same pattern applies among employees, although at much lower levels: 7% of male employees worked over 50 hours in 2002 compared with only 2% of female employees.

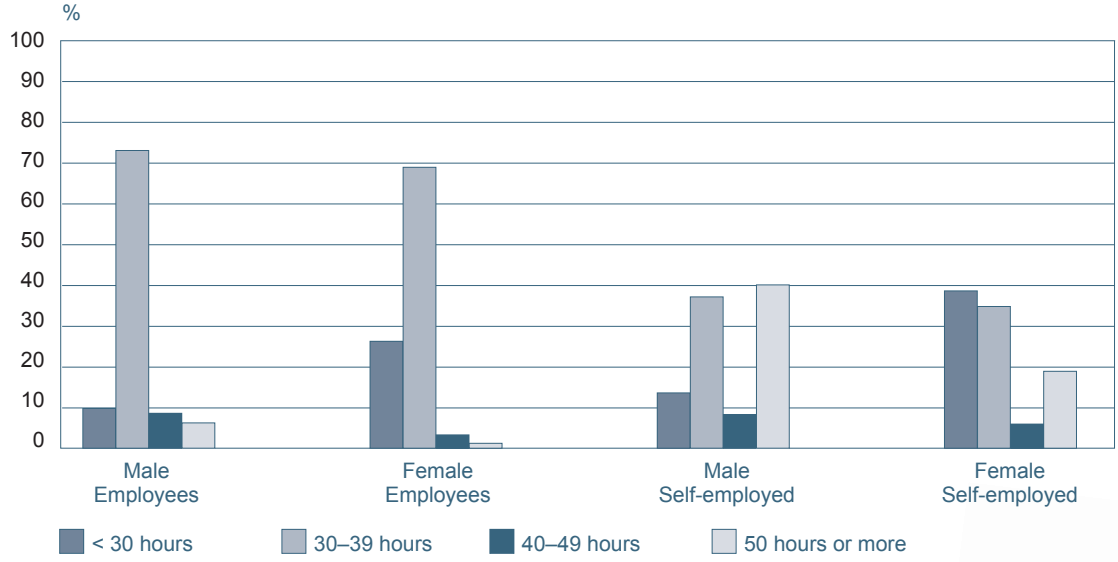
Females are more likely to work part-time, whether they are self-employed or are employees. Among the self-employed, 39% of women worked part-time (less than 30 hours) in 2002, compared with 13% of men. Among employees, 26% of women worked part-time in 2002, compared with 10% of men.

Figure 9: Usual Weekly Hours of Employees and Self-employed, 1987 and 2002



Source: Statistic Canada, *Labour Force Survey.*

Figure 10: Usual Weekly Hours Worked, by Class of Worker and Sex, 2002



Source: Statistic Canada, *Labour Force Survey*.

How many small business entrepreneurs are women?

There is no easy way to precisely determine the number of entrepreneurs in Canada, much less the number of women entrepreneurs. However, it is possible to estimate the number using available data on self-employment and business ownership.

Statistics Canada's *Labour Force Survey* reports there were 820,700 self-employed women in Canada in 2002, accounting for about one third of all self-employed persons. (While not all of the self-employed would identify themselves as entrepreneurs, the number of self-employed women provides an upper limit for the number of female entrepreneurs.[1]) Over the past 10 years, the number of self-employed women has grown by 34.5%, compared with 16.5% growth in male self-employment.

Another way to count entrepreneurs is through business ownership. The Survey of Small and Medium-Sized Enterprise (SME) Financing in Canada[2] distinguishes four types of business ownership based on gender: majority female ownership, equal partnership between male and female owners, minority female ownership and no female ownership.

Based on this survey, it is estimated that 45% of SMEs or about 647,000 businesses had at least some degree of female ownership in 2000. Of those, some 211,000 were majority owned by women, while 272,000 were owned by an equal partnership between male and female owners.

The survey found that SMEs majority owned by women were less likely than other SMEs to employ more than 20 employees; they had also started up more recently than firms that are majority owned by men. A large number of SMEs owned by women operated in the wholesale, retail and professional services industries. Women owners of SMEs also tended to have fewer years of experience in the industries in which they operated compared with male owners.

[1] Some entrepreneurs, especially if they are on the payroll of their own businesses, may not identify themselves as being self-employed; however, this number is likely to be smaller than the number of self-employed who are not entrepreneurs.

[2] Government of Canada, *Small and Medium-Sized Enterprise (SME) Financing in Canada*, 2000. http://strategis.gc.ca/fdi.

Are women who are majority owners in a business refused bank credit more often than men?

The 2000 Survey of Small and Medium-Sized Enterprise Financing in Canada[3] suggests that women entrepreneurs do not face greater difficulty than men in obtaining bank credit. In the case of SMEs that are majority owned by women, 17% requested debt financing and 82% of requests were approved, while for SMEs majority owned by men, 23% requested debt financing with an 80% rate of approval.

That said, certain characteristics of SMEs majority owned by women appear to make them less likely to request debt financing. Whether businesses apply for financing or not varies greatly across industries and size of businesses.

As already noted (see **How many small business entrepreneurs are women?**), SMEs majority owned by women tend to be smaller and younger relative to SMEs owned by men. In addition, SMEs owned by women are more likely to operate in the wholesale, retail and professional services industries.

Survey results showed that SMEs with fewer than 5 employees had the lowest rate of requests for debt financing and approval rates. SMEs that operated in the wholesale, retail and professional services industries also had lower-than-average rates of requests for debt and lease financing.

The survey recorded that women owners of SMEs who required financing but did not often apply cited difficulties in the application process and the likelihood of their requests not being approved as reasons for not applying. In contrast to these perceptions, the survey found that women owners of SMEs who did apply for debt financing were not required to provide any more documentation to suppliers of credit than were owners of SMEs in general.

The survey's results support the conclusion that it is not the gender of a business owner, but rather the sector in which a business operates and its size and age that determine access to financing.

3 Government of Canada, *Small and Medium-Sized Enterprise (SME) Financing in Canada*, 2000. http://strategis.gc.ca/fdi.

Do SMEs innovate as much as large firms?

In a world with limited resources, the fastest way to boost productivity and economic growth is to innovate — to increase the efficiency with which those limited resources are put to use. Innovation is often thought to be synonymous with high technology inventions, but innovative behaviour encompasses much more than that. The government's January 2001 White Paper on Canada's Innovation Strategy defines innovation as "the creative process of applying knowledge and the outcome of that process." [1]

One indicator of innovative behaviour is the amount of research and development (R&D) expenditures a firm undertakes. R&D is not necessarily easy to measure, especially in the context of SMEs. But insofar as firms claim tax credits for such expenditures, data are readily at hand. Statistics on Science Research and Experimental Development tax credits reveal two telling facts about innovation by SMEs: they spend far less than large firms do in terms of absolute amounts; but, as a percent of revenue (R&D intensity), spending on innovation by SMEs far outstrips that of larger firms.

In 2000, according to Statistics Canada, nearly 8,000 firms spent approximately $11.4 billion on R&D, as shown in Table 13. Of the total R&D spending, 30% came from some 7,500 firms with fewer than 500 employees, or an average of $0.45 million per SME. On the other hand, just 321 larger firms accounted for a staggering 70% of total R&D expenditures, an average of $24.6 million per firm. However, when looking at R&D expenditure as a percentage of company revenues, SMEs, on average, stood at 6.3%, whereas larger companies achieved a ratio ranging from 3.6% to less than 2% of revenues for the very largest firms.

[1] Government of Canada, *Achieving Excellence: Investing in People, Knowledge and Opportunity*, January 2001, p. 4.

Table 13: Science Research and Experimental Development Expenditures by Employment Size, 2000

Employment Size	Number of Companies	R&D Expenditures ($ millions)	Average Expenditures ($ millions)	% of Performing Company Revenues
Non-commercial	22	157	7.1	—
1–49	5 915	1 097	0.2	6.7
50–99	798	653	0.8	6.4
100–199	520	734	1.4	4.3
200–499	320	902	2.8	2.4
500–999	131	1 054	8.0	3.6
1 000–1 999	96	1 508	15.7	2.5
2 000–4 999	56	1 166	20.8	1.1
>5 000	38	4 178	109.9	1.5
Total	7 896	11 449	1.3	2.1

Source: Statistics Canada, *Industrial Research and Development — 2002 Intentions*, Cat. No. 88-202-XIB, October 2002.

Note: For firms funding or performing less than $1 million in R&D and applying for a tax credit under the Science Research and Experimental Development program, the data are derived from administrative Canada Customs and Revenue Agency data. For firms spending more than $1 million, the data are obtained from a mail-out survey of all firms.

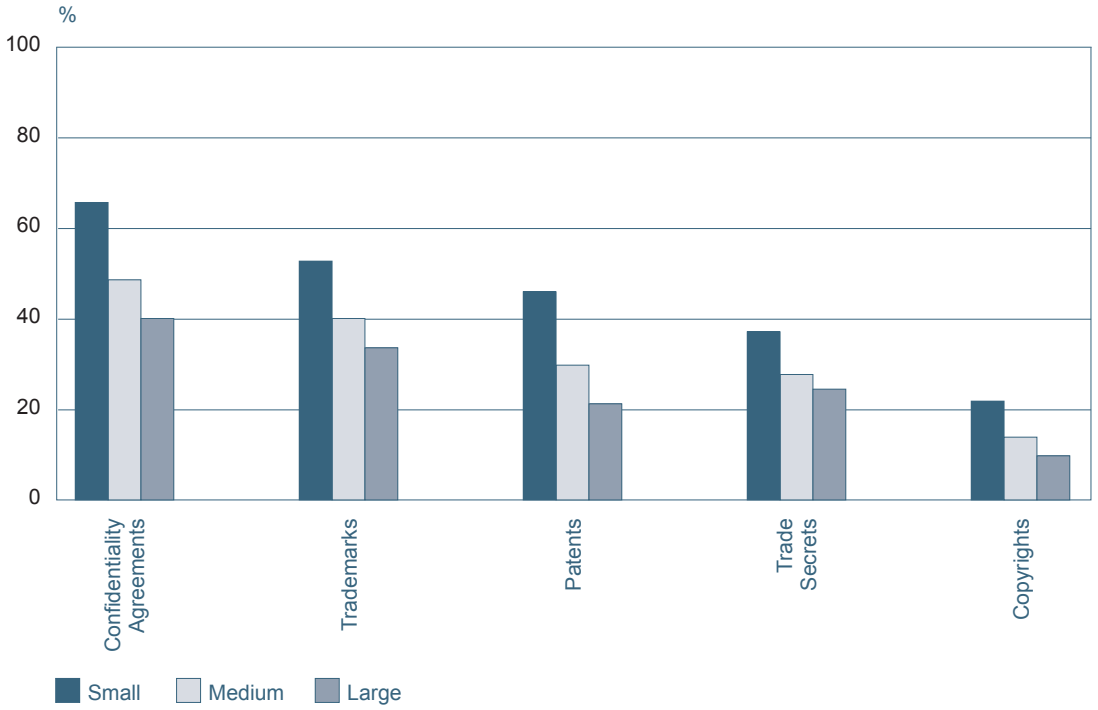
A broader gauge of innovative behaviour, but only among manufacturing firms, can be found in Statistics Canada's 1999 Survey of Innovation.[2] The survey found that 80% of SMEs successfully innovated, only slightly less than 88% for large firms. SMEs are defined here as manufacturing firms with between 20 and 249 employees. Successfully innovating SMEs generally displayed the same characteristics as larger innovators; for example, the sales ratio of innovative products in SMEs and large firms differed little from the overall average of 27%. Furthermore, smaller innovators identified the same top seven objectives of innovation and ranked them in almost the same order as did large firms. (These were, in order of importance to SMEs: to improve product quality, increase production capacity, extend product range, reduce production time, improve production flexibility, increase speed of delivering products to the market and reduce labour costs.)

While innovators in manufacturing exhibited similar characteristics regardless of their size, the magnitude of innovation did vary with size; for example, SMEs scored lower than large firms in all measures of involvement in innovative activities, novelty of the innovation, rate of collaboration, use of intellectual property rights and use of government support. Large firms were consistently more involved than were SMEs in innovative activities such as training, industrial design and engineering, acquisition of machinery

[2] The 1999 Survey of Innovation covered approximately 6,000 provincial enterprises in manufacturing industries and asked about their innovative activities during the three-year period between 1997 and 1999. Its definition of innovation, based on the Oslo manual (OECD, 1996), was the introduction of new or improved products or processes. Only firms with more than 20 employees and at least $250,000 in annual gross business revenues were included in the survey.

and equipment, tool-up and production start-up, and R&D activities. Fewer innovating SMEs were world-first or Canada-first innovators — 41% compared with 61% for large firms. As for collaboration, 31% of innovating SMEs collaborated with other firms to acquire complementary knowledge and technologies, compared with 46% for large innovators. Figure 11 shows differences between small, medium-sized and large manufacturing firms regarding the use of intellectual property rights, while Figure 12 illustrates differences with regard to use of government support. In these figures, small refers to firms with at least 20 but fewer than 50 employees, while medium-sized firms are those with between 50 and 249 employees. While small, medium-sized and large firms scored their practices in the same order, as noted above, Figures 11 and 12 show the differences in the degree to which these practices were used, depending on the size of firm.

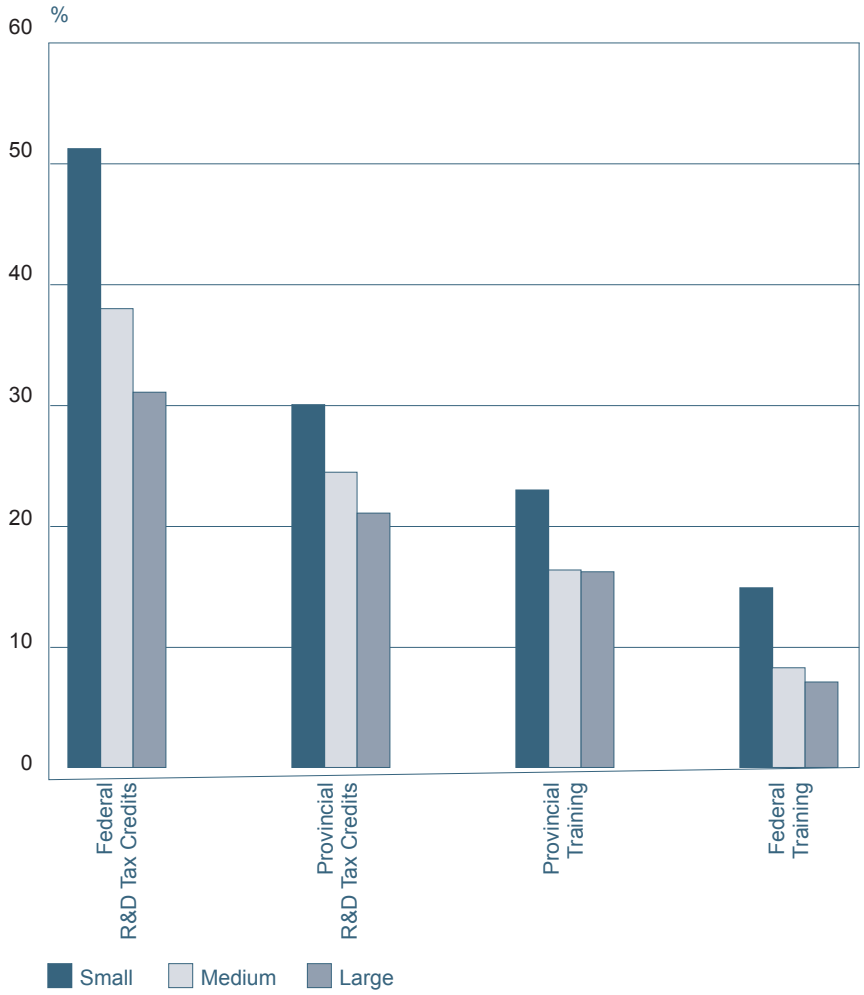
Figure 11: Use of Intellectual Property, 1999 (Percent of Manufacturing Innovative Firms)



Source: Can D. Le and D. Tourigny, *Innovation in Canadian Manufacturing SMEs* (Draft), Industry Canada, January 2003; and unpublished data.

Note: Small firms are defined as having fewer than 50 employees, medium-sized as having between 50 and 249 employees, and large as having more than 250 employees. Only manufacturing firms with more than 20 employees and at least $250,000 in annual gross business revenues were included in Statistics Canada's 1999 Survey of Innovation, on which these data are based.

Figure 12: Use of Government Support, 1999 (Percent of Innovative Manufacturing Firms)



Source: Can D. Le and D. Tourigny, *Innovation in Canadian Manufacturing SMEs*, Draft, Industry Canada, January 2003; and unpublished data.

Note: Small firms are defined as having fewer than 50 employees, medium-sized as having between 50 and 249 employees, and large as having more than 250 employees. Only manufacturing firms with more than 20 employees and at least $250,000 in annual gross business revenues were included in Statistics Canada's 1999 Survey of Innovation, on which these data are based.

How many small businesses use e-business?

Using electronic business (e-business) means using the Internet "for providing or sharing information, or for delivering services and/or realizing some or all of [a business's] revenues" from Internet-based transactions and/or the manufacturing and sale of Internet-related products or services.[1] In addition to online purchases and transactions (referred to as e-commerce), e-business includes portfolio management, business planning, and Internet- or Intranet-based communication between a business and its clients, suppliers and other partners.

Embracing e-business can offer many benefits to a firm, regardless of its size. Using the Internet as a business tool can improve coordination within the production process, improve communication with suppliers and customers, optimize supply sources and increase a firm's presence in the marketplace. However, the extent to which firms use e-business, and for what purposes, varies considerably depending on a firm's size.

Data on e-business are available from a variety of sources, which often do not agree. The reason for the discrepancies is that e-business survey results are very sensitive to sample selection and timing. The most reliable source of data on e-business is Statistics Canada's Survey of Electronic Commerce and Technology (SECT), which has been administered annually since 2000.[2] This survey covers more than 23,000 firms, and defines small firms as having fewer than 20 employees, medium-sized firms as having between 20 and 99 employees (499 for manufacturing) and large firms as having more than 100 employees (500 for manufacturing). Table 14 is based on this survey.

Having an Internet connection does not necessarily mean a business is embracing e-business, although being connected may serve as an indicator for e-business activity because it is a minimum requirement for participation in almost any form of e-business. While the rate of small firms connecting to the Internet is increasing, they continue to lag behind medium-sized and large firms in terms of both connection rates and the ways in which the Internet is put to use in the business. The overall rate of firms connected to the Internet was 71% in 2001, but small firms lagged well behind at 68%, compared with 91% and 94% of medium-sized and large firms connected to the Internet, respectively.

Web site ownership rates also increase with firm size. More than twice as many medium-sized firms owned a web site (57%) compared with small firms (24%), while three times as many large firms as small firms owned web sites (74%). These percentages have changed little in recent years.

[1] Report of the Canadian E-business Opportunities Roundtable, March 2002.

[2] The minimum level of revenue required to be included in Statistics Canada's Survey of Electronic Commerce and Technology (SECT) varies depending on the industry but ranges from $150,000 to $250,000 per year. Businesses with no full-time employees but that meet the minimum revenue criterion were included in the survey. Those without full-time employees included self-employed persons without paid help, seasonal businesses and virtual firms.

As firm size increases, there is clearly a higher percentage of firms that buy and sell online. Furthermore, the number of firms that buy online is roughly three times the number of firms that sell online, and this holds true for all sizes of firms. For instance, only 6% of small firms sell online, while 20% purchase online; for medium-sized firms, 12% sell and 30% purchase online; and for large firms, the percentages are 15% and 52%, respectively. The percentage of firms that sell or purchase online has increased only slightly in recent years.

Table 14: Internet Access and Use by Firm Size (Percent), 2001

	Size of Firm			
	Small	**Medium**	**Large**	**Total**
Internet Access	68%	91%	94%	71%
Own Website	24%	57%	74%	29%
Sell Online	6%	12%	15%	7%
Purchase Online	20%	30%	52%	22%

Source: Sandra Charles, Mathew Ivis and André Leduc, *Embracing e-business: Does Size Matter?*, Statistics Canada, 2002.

Note: Statistics Canada's Survey of Electronic Commerce and Technology (SECT), on which these data are based, defines small firms as having fewer than 20 employees, medium-sized firms as having between 20 and 99 employees and large firms as having more than 100 employees for all industries except manufacturing. The upper limit for the medium-size category in the manufacturing industry is 499 employees and firms with 500 employees or more are considered large.