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Business Dynamics in Canada

2001



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Statistics Canada
Business and Labour Market Analysis Division

Business Dynamics in Canada

2001

by Sri Kanagarajah

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1. Introduction

Throughout the 1990s, changes in the economic environment have altered the way Canadian employers do business. Globalization has opened new market opportunities for some Canadian firms while confronting others with increased pressures of competition in the domestic and world markets. The recession in the early 90s and the technology boom after the mid-1990s have had a significant impact on business and employment creation and destruction. Likewise, the tremendous growth of technology and biotechnology industries during the last half of the decade has been a new feature of the Canadian economy.

Since the mid-1990s, the Canadian unemployment rate has been decreasing. As a result, there were about 2.2 million more workers in 2001 than in 1991. Canada, along with the United States and the United Kingdom, led the G-7 countries in terms of economic growth after the mid 1990s. Canada's total debt burden moved from being the second highest in the G-7 in the mid-1990s to among the lowest in the G-7 by 2001. On the international front, a number of trade liberalization initiatives, such as North American Free Trade Agreement (NAFTA), have been completed. The increasingly knowledge-intensive economy has led governments and policy makers to look at policies to encourage and maintain economic growth in this new economy. How did these changes affect Canadian businesses?

The goal of this report is to provide highlights of the impact of these economic changes on business dynamics over the past decade. Some of the key findings show that there were about 1 million businesses in Canada in 2001. The vast majority (92%) employed less than 20 workers and accounted for 21% of total employment. In contrast, a minority (0.2%) of firms employed 500 or more employees but represented 42% of total employment. These proportions have changed little over the last decade.

Between 1991 and 2001, the number of firms in Canada grew by 9%. Alberta led in growth with 31%. British Columbia and Ontario followed with 15% and 9%, respectively.

During this period, the number of businesses grew, on average, by 8,500 on a yearly basis. However, the number of new firms that started to operate each year averaged 140,500, i.e., more than sixteen times the net increases in businesses observed during the period. The number of deaths averaged 132,000.

Business creation in the high-knowledge sector was quite strong during the mid-1990s. Between 1996 and 1999, the proportion of new-born companies in high-knowledge industries varied between 18% and 20%, much higher than the rate of 15% observed in this sector in the early 1990s. Even though the rate of business creation in these industries dropped after 1998, it stood at 16% in 2001, much higher than the rate of 13.6% observed that year for the whole economy.

Of all firms that were born in the 1990s, roughly one quarter ceased to operate within the first two years. About 36% survived five years or more and only one-fifth were still in operation after ten years. Overall, the chances of survival have improved slightly during the 1990s. Firms that were born during the second half of the 1990s were more likely to keep operating than their counterparts born in the early 1990s, partly as a result of the economic recovery that followed the 1990-92 recession.

2. Number of businesses, 1991-2001

In 2001, roughly one million businesses¹ were operating in Canada. More than half of these were located in Ontario (33%) and Quebec (23%) combined. More than a quarter were located in British Columbia (15%) and Alberta (13%) combined. The remaining 16% were distributed among the other six provinces and three territories.

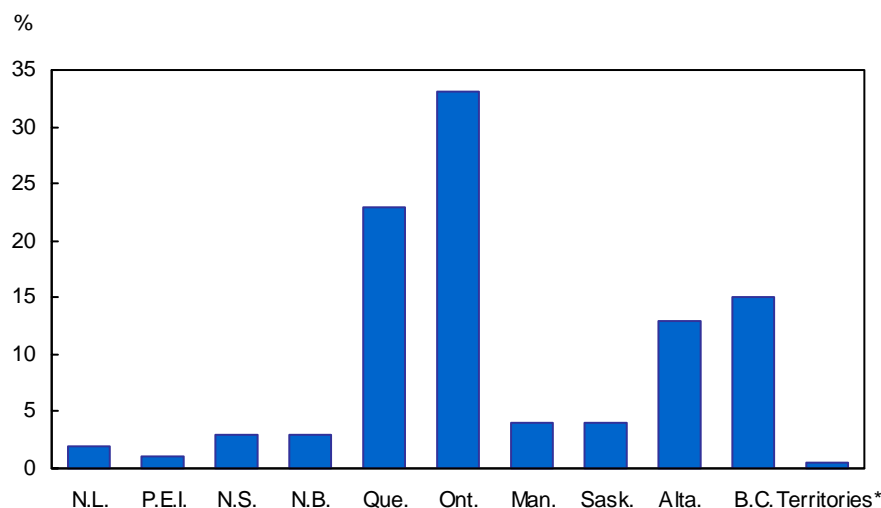
Table 1: Percentage distribution of businesses, by province, 1991 and 2001

	2001	1991
	%	
Ontario	32.7	32.6
Quebec	22.6	23.9
British Columbia	15.2	14.4
Alberta	13.3	11.0
Saskatchewan	3.9	4.5
Manitoba	3.5	3.8
Nova Scotia	3.1	3.3
New Brunswick	2.7	2.8
Newfoundland & Labrador	1.9	2.4
Prince Edward Island	0.7	0.8
Territories*	0.5	0.5
Total	100	100

* Territories include the Northwest Territories, Yukon Territory and Nunavut.

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Chart 1 – Percentage distribution of businesses by province, 2001



* Territories include the Northwest Territories, the Yukon Territory and Nunavut.

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

1. A "business" is a legal entity with paid employees, and includes all private and public sector entities which, during the reference years, remitted social security and tax deductions on behalf of these employees to the Canadian Revenue Agency. For the unincorporated sector, each legal entity with paid employees was treated as a separate business.

The vast majority of these businesses, i.e., about 92%, employed less than 20 workers. Another 7% employed 20 to 99 employees.² The remaining 1% employed at least 100 workers. These proportions have remained virtually constant during the past decade, even though business churning continued throughout these years with numerous business births and deaths³.

Slow firm growth in the 1990s

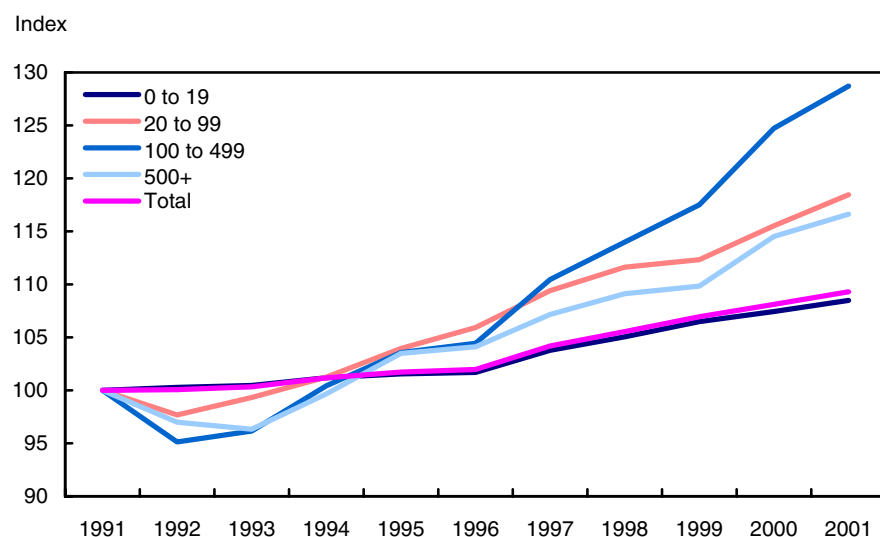
Between 1991 and 2001, the total number of businesses rose 9%, much less than the rate of 22% observed between 1983 and 1990. On a year-to-year basis, the number of businesses has grown at widely different rates. As expected, business growth stagnated during the 1991-1992 recession. It rose a little between 1993 and 1996 and increased faster between 1997 and 2001, with rates ranging from 1.1% to 2.2%.

Table 2: Percentage distribution of businesses, by firm size, Canada, 1991 and 2001

	Number of employees				Total
	0 to 19	20 to 99	100 to 499	500+	
	%				
1991	92.8	6.0	1.0	0.2	100
2001	92.3	6.4	1.1	0.2	100

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Chart 2 – Growth of number of businesses, by firm size, Canada, 1991 to 2001 (1991=100)



Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

- The employee in a firm is derived from Average Labour Units (ALU). ALU is a calculated measure portraying the average employment represented by a business's payroll if it paid the average earnings typical in its particular 4-digit industry category, province and business size. A detailed explanation can be found in the Methodology section.
- It should be noted that some deaths of firms could be associated with a legal merger or acquisition of several distinct entities by one legal entity and thus, one firm could be considered a death while another becomes a continuer and may not reflect true death. Example: ABC merges with DEF and becomes a new legal entity named XYZ but a substantial percentage of the employees of XYZ come from ABC then ABC is not considered to be a death, but rather a continuer and DEF Company is considered to be a death.

The growth in the number of firms was not uniform across size classes. Businesses employing 100 to 499 workers experienced the strongest growth. Their number rose 29% between 1991 and 2001. Businesses with 20 to 99 employees grew 18%. The number of large firms, those with 500 or more employees, increased by 17%. In contrast, the number of small firms, those employing less than 20 employees, rose only 8%.^{4,5}

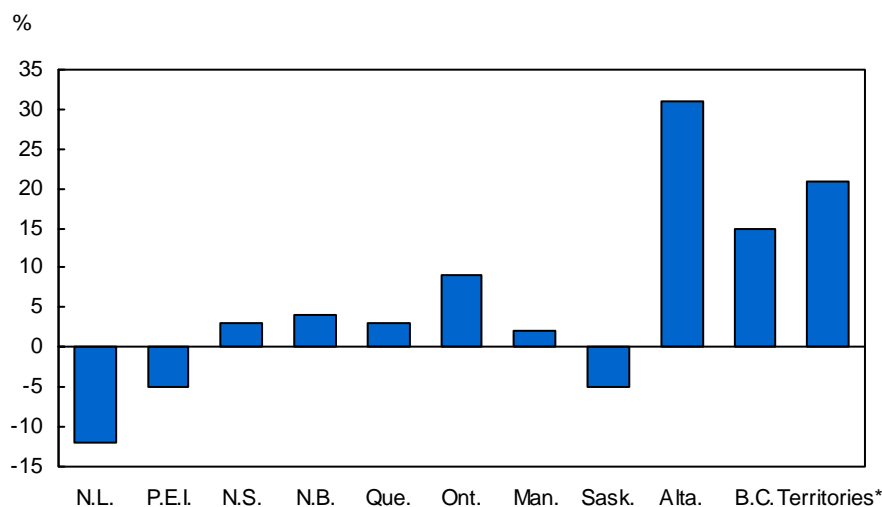
The growth in the number of firms across provinces was not uniform either. Alberta displayed, by far, the strongest firm growth over the 1991-2001 period: the number of businesses in this province rose a solid 31%. Only two other provinces saw their number of firms grow 9% or more during the period. This was the case for British Columbia (15%) and Ontario (9%). In contrast, Newfoundland and Labrador, Prince Edward Island and Saskatchewan experienced a decline in their number of businesses.

Table 3: Percentage change in the number of businesses, by firm size, Canada, 1991-2001

	Number of employees				Total
	0 to 19	20 to 99	100 to 499	500+	
	%				
1991-2001	8	18	29	17	9
1993-2001	8	19	34	21	9
1991-1996	2	6	4	4	2
1997-2001	5	8	17	9	5
1991-1992	0	-2	-5	-3	0
1993-1996	1	7	9	8	2

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Chart 3 – Percentage change in the number of businesses, by province, 1991 to 2001



* Territories include the Northwest Territories, the Yukon Territory and Nunavut.

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

4. These patterns change little when attention is restricted to the 1993-2001 expansion period. During this period, the number of businesses grew 8%, 19%, 34% and 21% among firms employing less than 20 employees, 20 to 99 employees, 100 to 499 employees and 500 or more employees, respectively.
5. It is important to emphasize that the aforementioned statistics on business growth by firm size are not necessarily a good indicator of the extent to which small firms and large firms create new jobs. For instance, part of the growth in the number of medium-sized businesses over a given period could result from the merger of two small firms and/or the expansion of a small firm into a medium-sized one. Conversely, part of the growth in the number of businesses could reflect the legal separation of a medium-sized business into two distinct small firms and/or the contraction of a medium-sized business into a small one. In order to assess the extent to which small firms and large firms contribute to job creation, one must follow firms over time. For a detailed analysis of this issue, see Picot and Dupuy (1996).

Table 4: Percentage change in the number of businesses, by knowledge industry, Canada, 1991-2001

Knowledge-based industries	Goods	Services	All
		%	
Low knowledge	-6	-2	-3
Medium knowledge	3	17	12
High knowledge	29	90	75
Public, education & health ¹	...	21	21
All industries	1	13	9

... Not applicable.

1. Public, Education & Health industry consists of all government related departments and operations at all 3 levels of government as well as firms and departments involved in the health sector and the education sector. These businesses include government departments, municipalities, fire departments, police, schools, universities, colleges, doctors, dentists and hospitals etc. Government Business Enterprises are generally classified and coded as all other types of businesses.

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 5: Percentage distribution of businesses, by knowledge industry, Canada, 1991 and 2001

Year	Knowledge industry					Total
	Low	Medium	High	Public admin.	Other	
	%					
1991	39	46	5	8	2	100
2001	35	48	7	9	1	100
Number of firms (000's)	Low	Medium	High	Public admin.	Other	Total
1991-2001	-10.1	52.0	31.7	16.0	-4.8	84.9
	%					
Share of increase	-12	61	37	19	-6	100

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Strong growth in the high-knowledge sector

Most of the growth in the number of firms occurred in the service-producing sector. The number of businesses in this sector grew 13% during the 1991-2001 period while it almost stagnated in the goods-producing sector, increasing by only 1%.

The number of businesses evolved at markedly different rates even within these two broad sectors. For instance, within the service-producing sector, the number of firms rose 90% in high-knowledge industries and 17% in medium-knowledge industries while falling 2% in low-knowledge industries.⁶ In the goods-producing sector, the number of firms in high-knowledge industries also grew much more than in other industries.

As a result, high-knowledge firms experienced by far the fastest growth between 1991 and 2001. Overall, their number grew a solid 75%, much more than the rate of 12% observed in medium-knowledge industries. Low-knowledge firms fared even worse as their number dropped 3% during the period. In contrast, the number of businesses in public administration, health and education related industries rose 21%.⁷

6. The industry definition is based on the methodology used by Morissette, Ostrovsky and Picot (2004), titled "Relative Wage Patterns among the Highly Educated in a Knowledge-Based Economy", and Lee and Has (1996) "A Quantitative Assessment of High-knowledge Industries versus Low-knowledge Industries. Simple definition is that high-knowledge industries is defined as high R&D and capital intensive and medium and low-knowledge industries are less R & D and capital intensive in comparison on this scale. Detailed explanation can be found in the Methodology section.

7. In 2001, about 48% of the firms were operating in medium-knowledge industries, 35% of the firms were in low-knowledge industries, 7% of the firms were in high-knowledge industries while 9% of the firms were in public administration, health and education related industries (Table 5).

Even though business growth was very strong in the high-knowledge industry, this sector accounted for only 37% of the net increase of 85,000 firms observed between 1991 and 2001. The reason is that relatively few firms were operating in this sector at the beginning of the 1990s.⁸ In fact, almost two-thirds (61%) of the net increase in the number of businesses originated from the medium-knowledge industry, mainly among small firms.

8. In 1991, only 5% of all businesses operated in the high-knowledge sector (Table 5).

3. Business creation and destruction, 1991-2001

Net increases in the number of firms result from two offsetting forces: business creation (firms' births) and business destruction (firms' deaths). Each year, the number of firms that start to operate or that cease to operate exceeds by far the net increase in businesses observed on a year-to-year basis, thereby reflecting a considerable firm turnover.

For instance, the number of businesses grew, on average, by 8,500 on a yearly basis during the 1991-2001 period. However, the number of new firms that started to operate each year averaged 140,500, i.e., more than sixteen times the net increases in businesses observed during the period. The number of deaths averaged 132,000.

Firms' birth rates and death rates vary tremendously by size. In all years of the 1991-2001 period, small firms were much more likely than large firms to start operating or to cease operation. During this period, birth rates and death rates of small firms averaged 16% and 15%, respectively. In contrast, birth rates and death rates of large firms amounted to 1% and 2%, on average.⁹

Firms' birth rates and death rates also vary throughout the business cycle. In 2001, about 136,000 firms, representing 13.6% of all businesses existing that year, were created. At 13.6%, the birth rate of firms was at its lowest value since the early 1990s, where it stood around 15%. The rate at which businesses were created rose between 1993 (right after the 1990-92 recession) and 1996 when it reached its peak. However, since 1996, it has declined every year up to, and including, 2001.

Table 6: Birth and death rates, Canada, 1991-2001

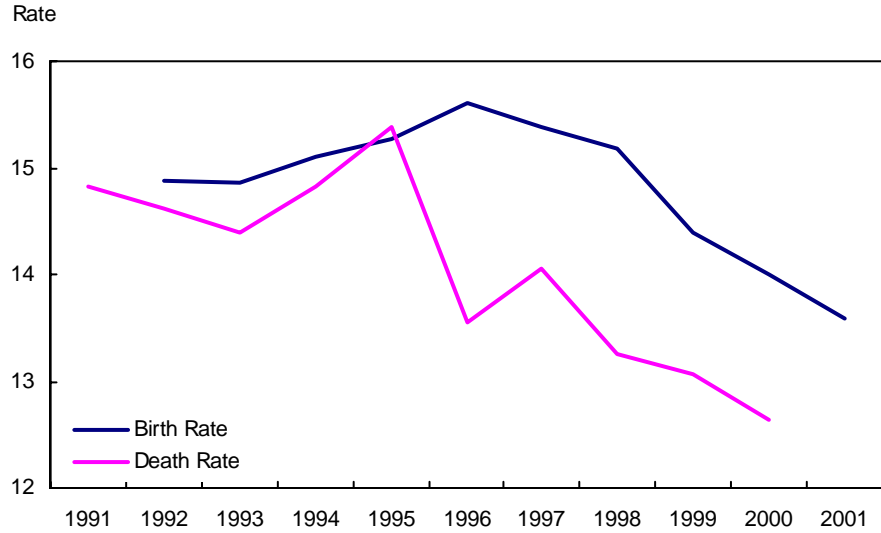
Year	Birth rate	Death rate
	%	
1991	...	14.8
1992	14.9	14.6
1993	14.9	14.4
1994	15.1	14.8
1995	15.3	15.4
1996	15.6	13.6
1997	15.4	14.1
1998	15.2	13.3
1999	14.4	13.1
2000	14.0	12.6
2001	13.6	...

... Not applicable.

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

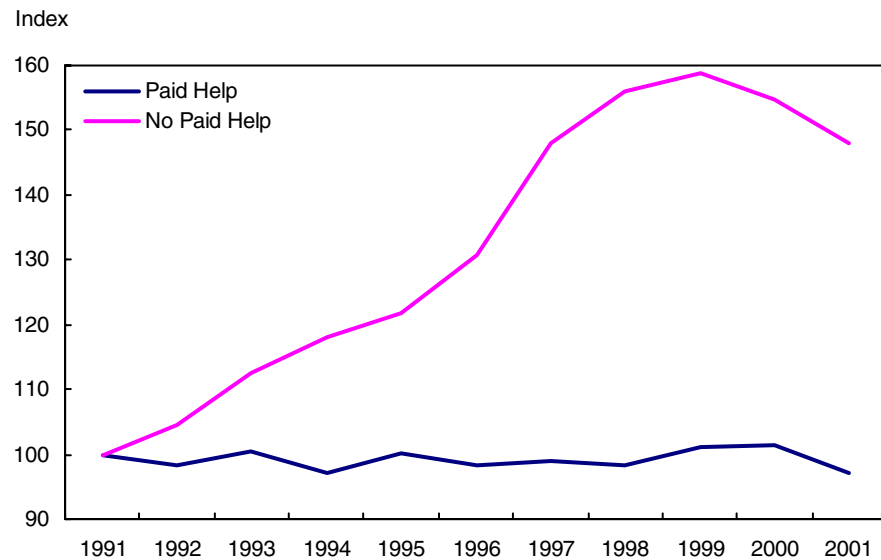
9. It must be acknowledged that some of the births associated with large firms could originate from the legal separation of a large business into several large distinct entities and thus, may not reflect true births. Likewise, an existing firm that appears like a newly-born business may in fact have been operating in previous years. While it is difficult to assess the magnitude of these phenomena, editing procedures have been implemented in order to minimize the importance of such cases.

Chart 4 – Business birth and death rates, Canada, 1991 to 2001



Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

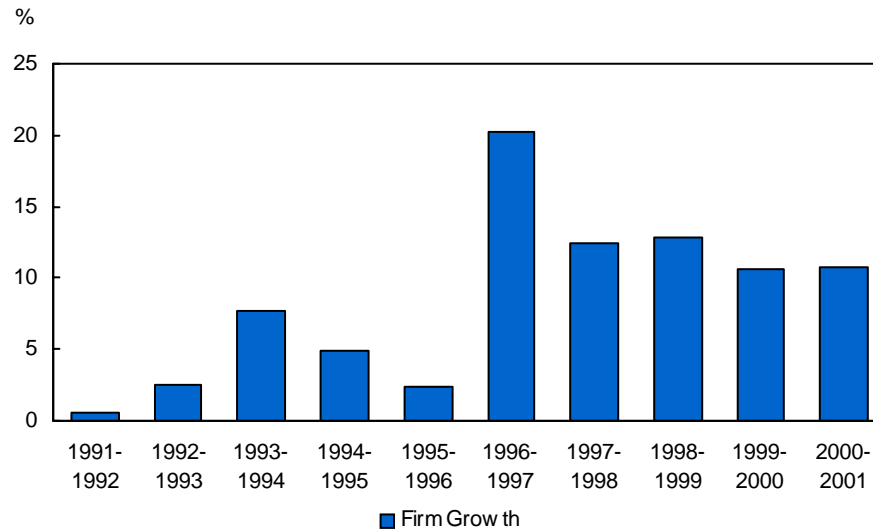
Chart 5 – Growth of self-employment (with or without paid help), Canada, 1991 to 2001 (1991=100)



Source: Labour Force Survey.

The factors underlying the decline in the birth rate of firms during the second half of the 1990s are currently unknown. One potential explanation is that, during the 1990s, there has been a shift from self-employed workers with a small number of employees to self-employed workers with no employees. Data from the Labour Force Survey indicate that between 1991 and 2001, the latter group has increased by 48% while the former group has displayed virtually no growth. Since self-employed workers with no employees are not captured in the data file used here—contrary to self-employed workers with employees—this shift in the composition of self-employment would lead, all else equal, to a drop in birth rates.

Chart 6 – Net increase in the number of businesses, Canada, 1991 to 2001



Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

While the rate at which new firms are created has slowed down since 1996, the rate at which they died has also fallen. Between 1991 and 1995, 14.4% to 15.4% of existing firms ceased their operations. Subsequent death rates were much lower as the fraction of firms ceasing their operations dropped continuously between 1997 and 2001. In 2001, firms' death rate was only 12.6%.

Since the number of firms that ceased operations fell more rapidly than the number of firms that were created, the total number of firms in operation kept growing during the 1997-2001 period. During this period, the population of firms displayed net year-to-year increases of at least 10,000 firms, much greater than those observed during the first half of the 1990s.

Business creation in the high-knowledge sector was quite strong during the mid-1990s. Between 1996 and 1999, in high-knowledge industries, the proportion of all firms that were newly-born varied between 18% and 20%, much higher than the rate of 15% observed in this sector in the early 1990s. The rate of business creation in these industries dropped after 1998 and stood at 16% in 2001. Meanwhile, the birth rate of firms declined by 2001 in the low-knowledge by two percentage points and it remained constant in the medium-knowledge industries.

While firms' birth rate in high-knowledge industries displayed substantial variation during the 1990s, their death rate was fairly constant at 12% or 13%, whatever year is considered. Throughout the period, the highest death rates were observed in low-knowledge industries, no doubt reflecting the overrepresentation of small firms in this sector.

Table 7: Business birth rates by knowledge industry, Canada, 1991-2001 (%)

Year	Births by knowledge industries				Total
	Low	Medium	High	Public admin.	
1992	16	14	15	9	15
1993	16	14	15	9	15
1994	16	14	16	9	15
1995	16	14	17	10	15
1996	17	14	18	10	16
1997	16	14	19	10	15
1998	16	14	20	9	15
1999	15	14	18	9	14
2000	14	13	17	9	14
2001	14	13	16	9	14

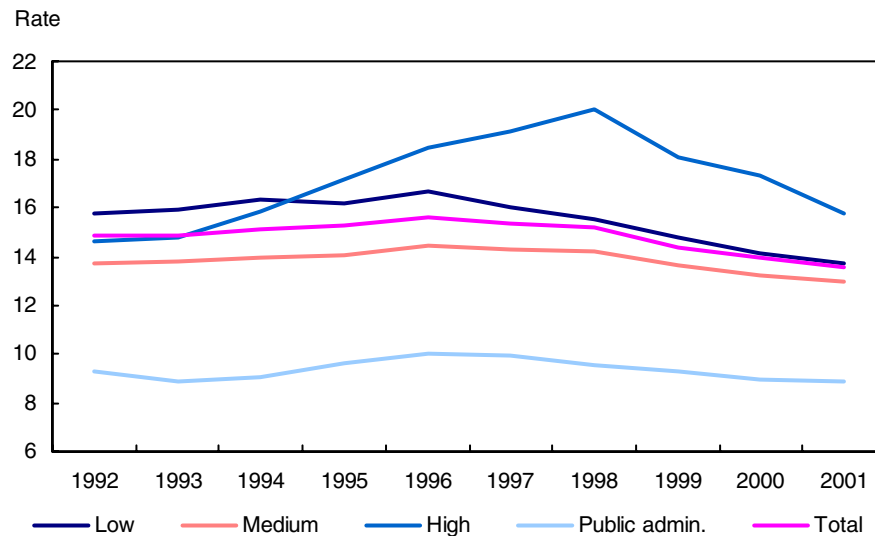
Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 8: Business death rates by knowledge industry, Canada, 1991-2001 (%)

Year	Deaths by knowledge industries				Total
	Low	Medium	High	Public admin.	
1991	16	13	13	7	15
1992	16	13	12	7	15
1993	16	13	12	7	14
1994	17	14	12	7	15
1995	18	14	13	8	15
1996	16	12	12	8	14
1997	16	13	12	9	14
1998	14	12	12	8	13
1999	14	12	13	8	13
2000	14	12	13	8	13

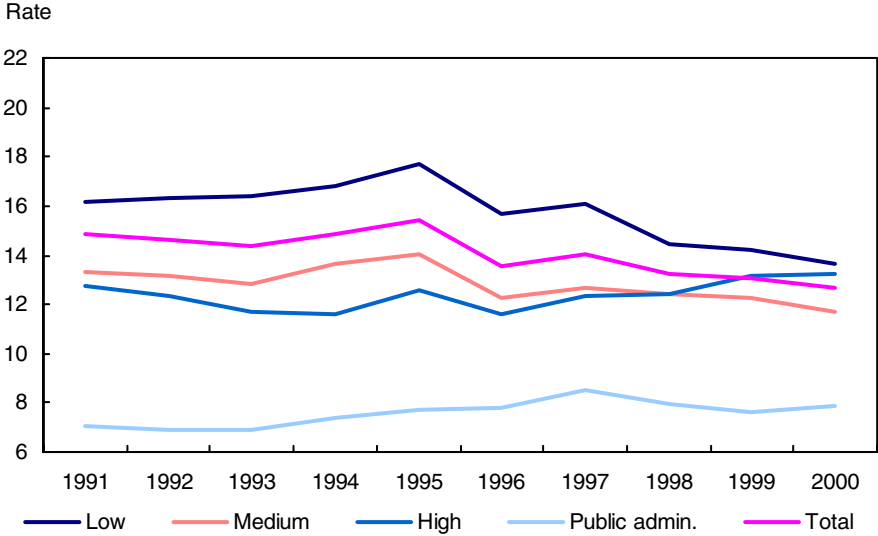
Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Chart 7 – Business birth rates by knowledge industry, Canada, 1991 to 2001



Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Chart 8 – Business death rates by knowledge industry, Canada, 1991 to 2001



Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

4. Employment trends by industry and size

While small firms accounted for more than 90% of all businesses in 2001, they employed 21% of the workforce. In contrast, large firms represented only 0.2% of all businesses but employed 42% of all workers.

Since wages and fringe benefits vary substantially by firm size (Morissette, 1993), analysts often examine whether employment has moved away from or towards small firms or large firms over a given period of time. Has the share of total employment accounted for by small and large firms changed markedly over the last decade?

The answer is no. Both in 1991 and 2001, small firms employed 21% of all workers. Large firms saw their share of total employment decrease slightly, dropping two percentage points over the last decade. This decline was offset by a corresponding increase in the share of employment accounted for by firms with 20 to 499 employees.

The relative importance of large firms in total employment also fell during the 1980s. Between 1983 and 1990, the share of total employment accounted for by large firms dropped roughly four percentage points. Once again, this decline was offset by a corresponding increase in the relative importance of firms with 20 to 499 employees.

Table 9: Percentage distribution of employment, by firm size, Canada, 1991 and 2001

	Number of employees				Total
	0 to 19	20 to 99	100 to 499	500+	
	%				
1991	21	19	15	44	100
2001	21	20	17	42	100

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Chart 9 – Percentage distribution of employment by firm size, Canada, 2001

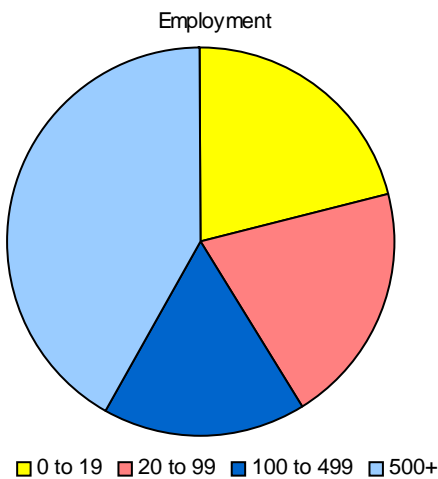
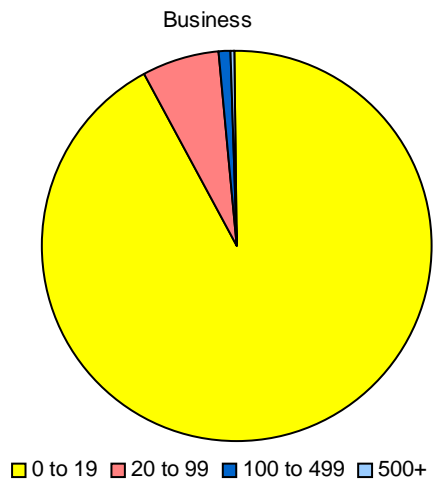


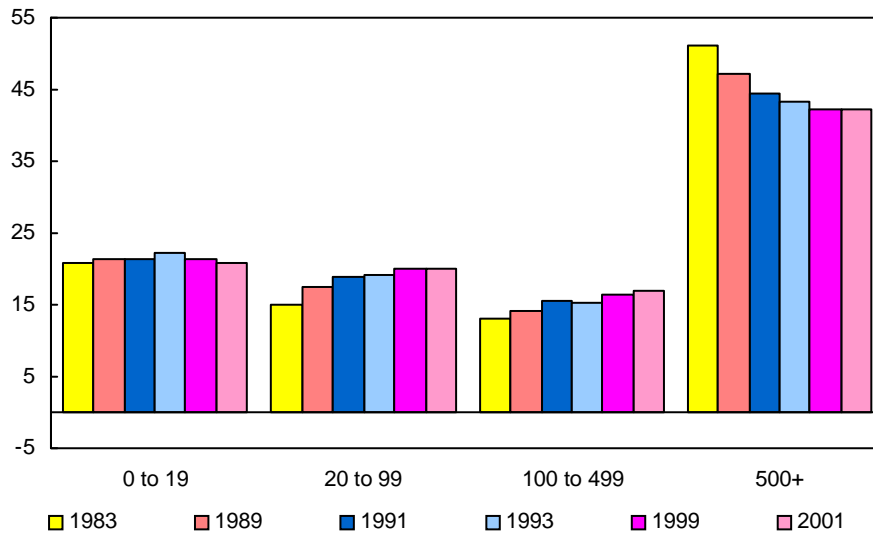
Chart 10 – Percentage distribution of businesses by firm size, Canada, 2001



* Size categories used above in the charts refer to number of employees (for example 0 to 19 employees).

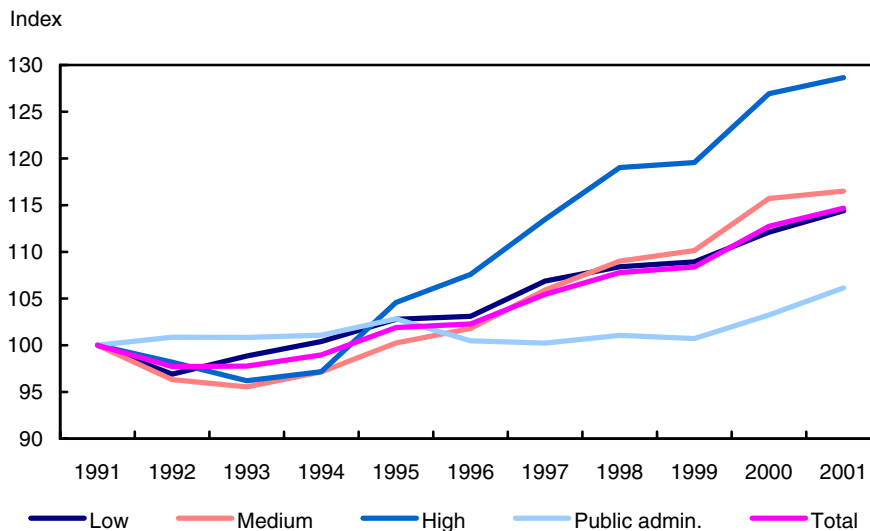
Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Chart 11 – Percentage distribution of employment by firm size, Canada, in 1983, 1989, 1991, 1993, 1999 and 2001



Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Chart 12 – Employment growth by knowledge industry, Canada, 1991 to 2001 (1991=100)



Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Partly as a result of strong business creation, high-knowledge industries had dramatic growth in employment over the last decade. Employment in these businesses grew 29% between 1991 and 2001. Medium-knowledge industries followed behind with a moderate 17% growth in employment. Even though the number of firms in low-knowledge industries fell during this period, employment in these industries rose 14%, thereby suggesting that average firm size rose in these industries. Public administration, health and education related industries experienced weaker employment growth (6%).

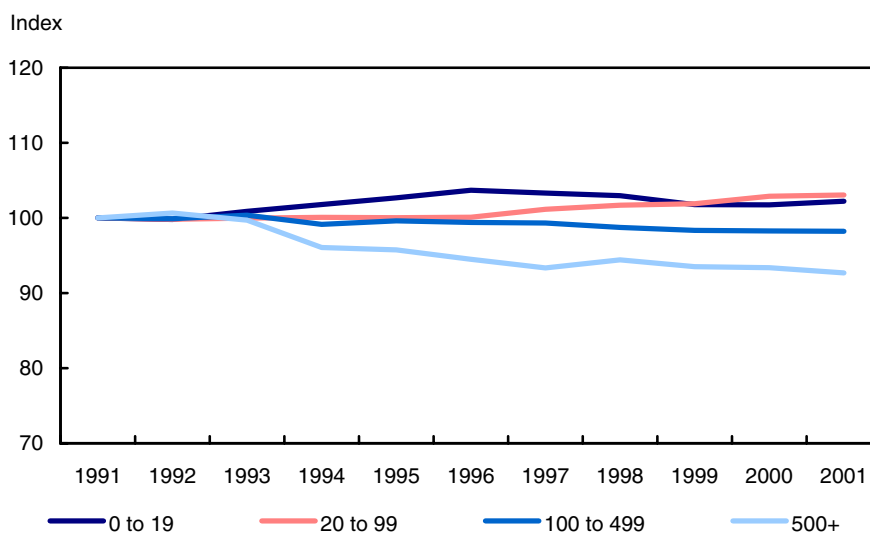
Even though employment growth was fairly strong in high-knowledge industries, most of the growth in total employment over the last decade originated from medium-knowledge industries.¹⁰ The reason is that medium-knowledge industries accounted for a much bigger share of total employment at the beginning of the period (39%) than high-knowledge industries (8%).

10. Between 1991 and 2001, total employment rose 1.7 million. Over this period, employment in medium-knowledge industries increased by 745,000, much more than the increase of 465,000 observed in low-knowledge industries.

5. Average number of employees per business

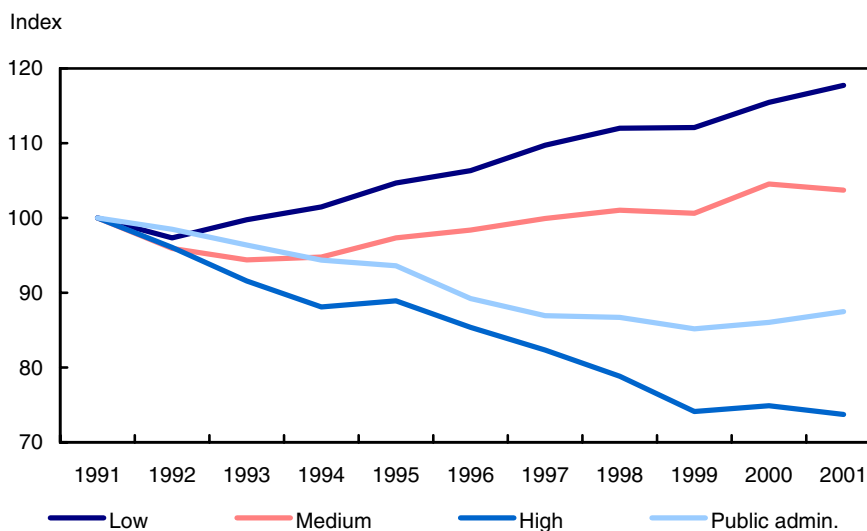
The Logitudinal Employment Analysis Program (LEAP) file is the only Canadian data set that allows analysts to determine how many employees are working in firms belonging to various size classes. It shows that small firms employed on average about three workers in 2001. The corresponding numbers for firms with 20 to 99 workers and those with 100 to 499 workers are 41 and 192, respectively. Large firms, on average, had about 2,262 individuals on their payroll during that year.

Chart 13 – Average number of employees in a business, by firm size, Canada, 1991 to 2001 (1991=100)



Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Chart 14 – Average number of employees in a business by knowledge industry, Canada, 1991 to 2001 (1991=100)



Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

The average number of workers employed in large firms shrunk slightly between 1991 and 2001: it fell 7%. However, it changed little among other firms.

The average number of workers per firm also varied by industry. High-knowledge industries employed about 16 workers per firm, on average, while low- and medium-knowledge industries had about 11 employees per firm respectively. While the average number of employees per business grew in both low- and medium-knowledge industries, it fell almost 26% in high-knowledge industries, dropping from 21 in 1991 to 16 in 2001.

6. Chances of survival of new firms, 1991-2001

Even though a considerable number of firms start operating each year—the number of births amounted to at least 136,000 for each year of the 1990s—a sizable fraction dies within a short period of time. Of all firms that were born in the 1990s, roughly one-quarter ceased to operate¹¹ within the first two years. About 36% survived five years or more and only one-fifth were still in operation after ten years.

Overall, the chances of survival have improved slightly during the 1990s. Firms that were born during the second half of the 1990s were more likely to keep operating than their counterparts born in the early 1990s.

Chances of survival also varied by industry. Of all firms that started operating in high-knowledge industries between 1992 and 1997, 46% survived five years or more. The corresponding numbers for medium- and low-knowledge industries were 39% and 33%, respectively.¹² The chances of firm survival in low-knowledge industries improved over time, as they amounted to 38% for firms born in 1997 compared to 33% for firms born in 1992. The rate for the other two knowledge industries remained constant.

Table 10: Survival rate of new firms, born in 1992, 1995, 1997 and 2000, Canada

Year	1992	1995	1997	2000
	# of births	# of births	# of births	# of births
(000's)	135.9	141.8	146.2	138.1
X percent lasted at least...				
2 Years	72	72	72	76
5 Years	36	39	40	..
10 Years	20	..	..	..

.. Not available for a specific reference period.

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 11: Survival rate of new firms born in 1992 and 1997, by knowledge industries, Canada

Industry	Born in 1992			Born in 1997	
	X % lasted at least...			X % lasted at least...	
	2 years	5 years	10 years	2 years	5 years
Low knowledge	74	33	17	72	38
Medium knowledge	75	39	22	75	39
High knowledge	79	46	28	79	46

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

11. As mentioned earlier, it should be noted that some deaths of firms could be associated with a legal merger or acquisition.

12. A similar qualitative conclusion holds when 10-year survival rates are considered. Of all firms that started operating in high-knowledge industries in 1992, 28% survived 10 years or more. The corresponding numbers were 22% and 17% for firms that started operating in medium- and low-knowledge industries, respectively.

7. Mobility of firms across size classes

While a sizable fraction of firms cease to operate within a short period of time, those who survive may expand or contract as time elapses. Yet, many remain in their initial size class, even after several years.

For instance, of all firms that employed, on average, less than 20 employees between 1991 and 1993 and that were still in operation in 2001, fully 91% still employed, on average, less than 20 employees between 1999 and 2001. Eight percent ended up employing 20 to 99 employees in 1999 and 2001. A negligible fraction ended up employing 100 or more employees during this period.

Likewise, of all firms that employed, on average, 500 or more employees between 1991 and 1993 and that were still operating in 2001, more than four-fifths (82%) still had 500 or more employees between 1999 and 2001. Roughly fifteen percent employed 100 to 499 workers during the 1999-2001 period. Only 3.2% ended up employing less than 100 workers during that period.

Firms that operated throughout the period saw their average number of employees change significantly between 1991 and 2001. Those that employed 500 or more employees during the 1991-1993 period saw their average number of employees decrease by 23%. In contrast, those who initially employed 100 to 499 workers almost doubled the size of their workforce between the early 1990s and the late 1990s. Those that had less than 100 employees in the early 1990s also increased the size of their workforce.

Table 12: Mobility matrix by firm size, Canada, between 1991-1993 and 1999-2001 (%)

Firm size 1991-1993	Firm size 1999-2001				No. firms 000's
	0 to 19	20 to 99	100 to 499	500+	
0 to 19	91.2	8.5	0.3	0.0	273.4
20 to 99	23.7	65.7	10.5	0.2	74.3
100 to 499	2.7	18.6	70.6	8.2	17.1
500+	1.3	1.9	15.2	81.7	3.7
No. firms (000's)	267.4	75.2	21.3	4.6	368.5

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 13: Average number of employees, by firm size, Canada, for businesses operating both in 1991-1993 and 1999-2001

Size	Average employment	Average employment	Change
	1991-1993*	1999-2001*	
0 to 19	4	6	44%
20 to 99	40	50	26%
100 to 499	198	338	71%
500+	2,666	2,046	-23%

Note: * Businesses operating both in 1991-1993 and in 1999-2001.

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

8. Conclusion

The primary goal of this publication is to show the evolution of the Canadian business environment in light of economic changes in Canada during the 1991 to 2001 period. It is intended to provide statistics and overview of business and employment dynamics in Canada during this period. *Business Dynamics in Canada* evolved from response to continuous demand for statistics on business counts, business creation (firm births) and business destruction (firm deaths); the relative share and distribution of businesses and employment across various categories of firms (size—small, medium and large size firms, Industry—low-knowledge, medium-knowledge and high-knowledge industries, as well as goods and services industries and by Geography—province and territories); and survival rates of newly created businesses (lifespan of new businesses).

9. Methodology

Longitudinal Employment Analysis Program (LEAP)

The Longitudinal Employment Analysis Program (LEAP) file, constructed and maintained by the Business and Labour Market Analysis Division of Statistics Canada, contains employment information for each *employer* business in Canada, for each year from 1991 to 2001. The LEAP file has existed for almost two decades, and is the primary data source for many studies on employment creation and destruction by firm size in Canada. It has the advantage of covering the entire economy. There are approximately one million companies in the commercial economy that paid more than \$1 in payroll to employees and that are included in this database and in this analysis. Due to the fact that these were data recently converted to the North American Industry Classification System (NAICS 1997) and one of the input files used did not have the required employment information with NAICS codes prior to 1991, a decision was made to maintain the file from 1991. This database of employers used to cover a longer period from 1983 to 2000 but it was based on the older industry classification, namely, the Standard Industrial Classification (SIC 1980). This information still exists in this format and was partly used to compare totals without industry breakdown.

The LEAP database is used extensively in research and has proven to be a valuable tool in studying employment and business dynamics. This is the source most often used for longitudinal analysis of employment change in Canada. Annual files are merged into one comprehensive and longitudinal file that spans the many years outlined above. It has both cross-sectional and longitudinal dimensions to it. In order to fuel these and other longitudinal analyses, extensive quality assurance takes place to ensure that the file is as good as possible.

Data sources

LEAP uses three major inputs: survey related Survey of Employment, Payrolls and Hours (SEPH), administrative T4 data from Canada Revenue Agency, as well as information from Statistic Canada's central frame database (CFDB). The T4 file constitutes LEAP's universe and contains payroll data.

Canada Revenue Agency (CRA)

As discussed, the target population of LEAP is the EMPLOYER in Canada. By law, every employer is required to have at least one Business Number (BN) account (a unique identifier provided to each business in Canada) and issue his/her employees a T4 for tax purposes. This T4 summarizes payrolls received within the year. These T4 remittance forms associate each employee to their employers (BN account) in the CFDB. Thus, the T4 file constitutes a good foundation for the establishment of a representative universe of the target population of employers. The self-employed that do not draw a salary are not included in this universe, and thus are not counted in LEAP.

Central Frame Database – (CFDB)

The CFDB provides LEAP with information on the structure of each business, as well as geographic and industrial detail. The structural information gathered from the CFDB is the Statistical Enterprise. The fundamental contribution of the CFDB to LEAP is to relate each BN account (from CRA) to its business identifier on the CFDB.

The Survey of Employment, Payrolls and Hours (SEPH)

The Survey of Employment, Payrolls and Hours (SEPH) is a Statistic's Canada monthly establishment survey that produces estimates on employment, payrolls, and hours. LEAP uses SEPH data to measure Average Annual Earnings. The average annual earnings derived by the Survey of Employment, Payrolls and Hours (SEPH) reflect the annual mix of workers and wages (regular, short and overtime hours) found over the year in each particular province/4-digit 1997 NAICS and business size combination. For further information on concepts, methods and definitions of SEPH, see Monthly Survey of Employment, Payrolls and Hours publication, Statistics Canada (cat. No. 72C0001, monthly) and Annual Estimates of Employment, Earnings and Hours based on the North American Industrial Classification System (NAICS), 2004 publication, (cat. No. 72F0023XCB, annual).

Methodology, terms and definitions

The LEAP universe

The unit of analysis in LEAP is the employer. LEAP is a company-level file; the company is defined as the legal entity (considered to be the statistical enterprise on the Central Frame Database Base) that reports to CRA for taxation purposes. This universe incorporated or not, consists of every business that issued a record of employment earnings to each of its employees for tax purposes (a T4 remittance slip). This process creates a link between the employee and the company through the Business Numbers (BN). The reported payroll to CRA allows estimates of annual employment to be made. Businesses comprised solely of individuals or partnerships that do not draw a salary are excluded from LEAP.

Business Numbers are the primary key by which the Business Register identifies new businesses. When a new BN account is reported by CRA, the Business Register assesses whether this is a new business, or a BN that belongs to an already existing business. Further testing is done throughout the production of the LEAP files to ensure that this distinction is made to ensure that continuing businesses that see their business register identification number change from one year to another are not classified as business deaths and births, but remain classified as continuers. This process is described in detail in the section related to labour tracking.

Establishing the NAICS of a company at the provincial and national level

The dominant industry (NAICS) and total payroll for each company (legal entity) is established both at the provincial and national level. This allows analysis to be conducted at both national and provincial levels. The dominant NAICS of the enterprise is determined based on the company having the highest payroll within the hierarchy of the organization and this NAICS code is then assigned to the enterprise.

Calculation of annual average earnings

One of the objectives of the LEAP program is to calculate for every employer in the Canadian economy a measure of employment. This is done by dividing the payroll of a given business by an annual average earnings (AAE) measure of individuals involved in businesses having the same industrial activity (by province and size). The calculation of AAE is done using the SEPH data for employment. The methodology uses business size when calculating AAE to allow the allocation of size to be more precise for each business. This calculation is done by calculating the AAE at the 4-digit NAICS industry; province and business size level allow the allocation of AAE to be more precise. This involves an initial stage where AAE size ratios are calculated by NAICS and size using head counts (number of employees) from the T4 summary file. Then the real AAE is calculated by taking total T4 pay divided by the SEPH employment.

Employment is average labour unit (ALU)

Employment counts used in this publication refer to Average Labour Unit (ALU). An ALU is a calculated measure portraying the average employment represented by a business's payroll if it paid the average earnings typical in its particular 4-digit industry category, province and business size. In the absence of complete longitudinal data on employment in all businesses, the average employment was calculated by converting each business's payroll into an approximation of the annual average level of employment it represented. The ALU employment estimate is derived by dividing the business's payroll (from T4 system) by the corresponding NAICS industry/province/size AAE per employee (from SEPH system). The ALU is calculated for every business at the province level first. ALUs at the national level are calculated by summing the provincial estimates. Thus, LEAP constitutes a census of every employing business in Canada. This operation is described in the Statistics Canada publication (catalogue number 18-501) "Developing a Longitudinal Database on Businesses in the Canadian Economy: An Approach to the Study of Employment". Recently, the methodology has been enhanced: conversion factors are produced at the province / 4-digit NAICS 1997 and size level (before all sizes were treated the same way). The resulting employment measure (the ALU) is conceptually identical to the employment measure from SEPH, which is an average annual head count of employees, and is available for every employing business in Canada. This measure is not a full-time equivalent count, and does not distinguish between part-time and full-time work.

Each year, analysis is done by comparing the LEAP ALU estimates with the employment estimates of SEPH, and of the Statistics Canada monthly Labour Force Survey (LFS) estimates. In these comparisons it is typically found that levels are different, with LEAP somewhere between SEPH (low) and LFS (high), but the trends are similar at the major industry group level. The differences in level can often be ascribed to conceptual differences in the surveys. Payroll and employment information is then organized *longitudinally*, that is, each observation on the database corresponds to a particular firm whose employment, payroll and industry characteristics are recorded at different points in time. The terms workers and employees are used interchangeably in the document to refer to the same entities.

Creating a longitudinal file / labour tracking

Annual files with records that represent legal entities within a province or nationally are created in the way just described. Each record has information on the NAICS, payroll, and an estimate of average annual employment (ALUs). The next step in this process is to create a longitudinal file of the type required to carry out analysis of employment dynamics. The legal entity number, called a Statistical ('S' number), is a unique identifier for a statistical enterprise provided by the Business Register if an enterprise has a few BNs, then they are amalgamated into one statistical number. The 'S' number in the Business Register is the foundation for this longitudinal linkage. A comprehensive longitudinal file that spans many years is created by linking on this number. Considerable methodological verification takes place to ensure that the longitudinal linkage of the companies is reliable. In particular, "real or false" births and deaths are identified by using a "labour tracking" methodology recently introduced. More information on Labour Tracking can be found in "Development of Longitudinal Panel Data from Business Registers: Canadian Experience" by Baldwin, Dupuy and Penner (1993), *Statistical Journal*, and UN Economic Commission for Europe.

The longitudinal nature of LEAP allows entry and exit times to be measured with precision. Entrants (or 'births') in any given year are firms that have current payroll data, but that did not have payroll data in the previous year. Similarly, exits (or 'deaths') are identified by the absence of current payroll data, where such data had existed in the previous year. Real births and deaths reflect the creation of new firms and the failure of existing ones; false births and deaths may simply reflect organizational restructuring within a firm, or a change in its reporting practices. These false births and deaths are identified, and then corrected on the file, using a method of 'labour tracking'. This approach essentially tracks workers as they move from company to company from one year to the next. If a new firm (or birth) contains a large

majority of employees from a 'death', then the status of this death and birth is subject to verification. In cases where a birth and death share the same (or a similar) name, or shares a significant portion of employees engaged in the same industrial activity, then corrections are made to the file to link these businesses and declare them as continuers rather than births or deaths. This process is run against every business in the file. Labour tracking is able to find and solve most of the erroneous births/deaths problems found in the file (with the exception of those found in the very smallest business). Labour tracking is performed for the full set of two-year sequences covered by the LEAP 1991-2001 reference period. The sequences are chained and a new longitudinal identifier is produced for each, distinct from the central frame identifiers.

Payroll

All employees who are issued T4 tax remittance slips from CRA taxation are covered. These earnings represent gross pay before deductions; they include salaries, wages, overtime pay, piece work and regular commissions, regular incentives, cost of living and other bonuses paid by a firm to its employees for a given period (week, month or year).

Business (firms)

A "business" is a legal entity with paid employees, and includes all private and public sector entities which, during the reference years, remitted social security and tax deductions on behalf of these employees to CRA. For the unincorporated sector, each legal entity with paid employees, were treated as a separate business. A firm may exist in more than one province and therefore when comparing firm counts at national and provincial level, there will be a variance in firm counts.

Geography = province and territory

Refers to 10 provinces and 3 territories in Canada for a total of 13 geographical areas. A firm may exist in more than one province and therefore, when comparing firm counts at the national and provincial level, there will be a variance in firm counts.

Business size

The size of a business was determined according to its' estimated number of ALUs in the initial year or in the year when the business was first identified. The size groupings of small, medium and large are defined relative to each other in this population of businesses providing employment and do not represent an absolute definition of business size groups. The LEAP database contains detailed size categories, but for analytical purposes, the following aggregate levels are used: 0 to 19.99, 20 to 99.99, 100 to 499.99 and 500+.

Small: businesses with less than 20 employees

Large: businesses with greater than 500 employees

Births rate (new firms, business entry, business creation)

A birth occurs when a business is not observed in year t but appears in year $t+1$. If a firm is identified in the terminal year and not the initial year, that firm is classified as a birth, which is similar but not identical to business start-ups or true births. There may be cases where firm mergers have not yet been identified by Statistics Canada. Such firms are erroneously, but unavoidably, counted in the births counts.

The birth rate is equal to the total number of firms operating in year $t+1$, but not operating in year t divided by the total number of firms observed in year $t+1$.

Death rate (business exits, businesses ceasing operation)

A death occurs if a business observed is in year t and not found in year $t+1$. If a business is identified in the initial year and not in the terminal year, that business is classified as a death, which is similar but not identical to business closures or deaths.

The death rate is equal to the number of firms operating in year t , but not operating in year $t+1$ divided by the number of firms observed in year $t+1$.

Industry classification

The North American Industry Classification System (NAICS 1997) arranges producing units into industries. In any one industry class, the units produce a homogeneous set of goods and services or, alternatively, the units are engaged in the same or similar kind of economic activity. Businesses are then classified according to Statistics Canada's Business Register industrial classification based on NAICS codes (Cat. No. 12-501-XPE, occasional). For multi-industry businesses, the assigned NAICS code is that of the BN with the greatest value added (sometimes measured by a proxy such as greatest employment or revenue). In this database, the earnings, as reported to SEPH, are the measure used to classify multi-industry businesses. For businesses that are not covered by the Business Register or SEPH, they are subsequently coded to the "Unclassified" industry. Firms that alter their industry activity over time are classified according to the latest NAICS code reported.

Knowledge-based industries

Lee and Has (1996) divide industries on the basis of three R&D measures : the R&D-to-sales ratios, the proportion of R&D personnel to total employment, and the proportion of professional R&D personnel to total employment; and three measures of human capital: the ratio of workers with post-secondary education to total employment, the ratio of knowledge workers (occupations in the natural sciences, engineering and mathematics, education, management and administration, social sciences, law and jurisprudence, medicine and health, and writing) to total employment, and the ratio of the number of employed scientists and engineers to total employment (Baldwin and Johnson, 1999, p. 21). High-knowledge industries are those that fall in the top third on the basis of two of the R&D measures *and* two of the human capital indices. We classify industries into high-, medium-, and low-knowledge industries (henceforth K3, K2 and K1) based on R&D and human indicators according to Lee and Has (1996) (Table Knowledge). Educational services, health care and public administration sectors constitute a separate category (K4). We follow Baldwin and Johnson (1999) in classifying industries into K3 (science-based industries) but retain Lee and Has's grouping into K2 and K1. Some industries have mixed high- and medium-knowledge components. These industries are included in K3 when the high-knowledge components appear to dominate. Some unclassified and unknown industries were coded to K5. We are using the methodology used in the study by Morissette, Ostrovsky and Picot (2004), titled "Relative Wage Patterns among the Highly Educated in a Knowledge-Based Economy" and made some further allocation of industries that they did not use or classify. The definition below was adapted from authors Morissette, Ostrovsky and Picot (2004) and Lee and Has (1996).

Industry definition Knowledge intensity classification

High-knowledge (K3)

Scientific and professional equipment
 Communication and other electronic equipment
 Aircraft and parts
 Office, store and business machines
Architecture, engineering, scientific and related services
 Pharmaceutical and medicine products
Electric power systems
 Other chemical products industries
 Machinery
 Refined petroleum and coal products
Pipeline transportation
 Other telecom industries
Services incidental to agriculture
 Industrial chemical industries
 Record player, radio and TV receiver industries
 Plastic and synthetic resin industries
 Electrical industrial equipment industries
 Agricultural chemical industries
 Communication and energy wire and cable industries
*Computer and related services**
 Telecommunication broadcasting industries*
 Motion picture, audio and video production and distribution*

Medium-knowledge (K2)

Other manufacturing products
Management consulting services
Other business services
 Other transportation equipment
 Primary metals, ferrous and non-ferrous
 Textiles
 Paper and allied industries
 Mining (includes quarries in 2001)
 Rubber
 Plastics
 Non-metal mineral products
Wholesale trade
 Crude petrol and gas
 Fabricated metal products
 Motor vehicles and parts
 Food
 Beverages
 Tobacco
Finance insurance and real estate
Other utilities (excl. electrical power)
Services incidental to mining
Other services
 Printing and publishing
 Construction
Amusement and recreational services (except motion picture production and distribution)
Postal and courier service
Membership organizations
Accounting and bookkeeping services
Advertising services
Offices of lawyers and notaries
Employment agencies
 Railroad rolling stock industry
 Boatbuilding and repair industry
 Jewellery, sporting goods & toys, sign & display industry
 Household appliance manufacturing
 Paint & varnish, soap & cleaning compounds, and toilet preparations industries

Low-knowledge (K1)

Fishing and trapping
 Other electrical products
 Wood
 Furniture and fixture
 Logging and forestry
Transportation
Storage and warehouse
 Agriculture
Retail trade
Personal services
 Quarries and sand pits
Accommodation, food and beverage services
 Clothing
 Leather

Educational services, health care and public administration sectors (K4)

Educational services = NAICS 61
 Includes schools, colleges, universities and other education related establishments.
 Health care services = NAICS 62
 Includes office of physicians, Dentists, hospitals, social assistance services, child day care services.
 Public administration = NAICS 91
 Includes Federal, Provincial and Municipal government

Other unknown (K5)

Some unknown or not easily classifiable industries were coded to this code. Units that are in our database as unclassified, this is less than 1.4% of firms in LEAP.

Note: * industries with mixed components; *italics* indicate commercial services.
 Source: Baldwin (1999) and Lee and Has (1996).

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Table 1a: Business counts, by firm size, Canada, 1983-2001

Year	Business counts by firm size (000's)				Total
	0 to 19	20 to 99	100 to 499	500+	
1983	712.7	36.6	6.2	1.7	757.1
1984	736.4	39.8	6.6	1.7	784.5
1985	762.8	42.1	6.9	1.7	813.5
1986	785.9	44.4	7.2	1.8	839.3
1987	813.1	47.7	7.7	1.9	870.4
1988	833.8	50.4	8.1	1.9	894.2
1989	850.2	52.4	8.4	2.0	913.0
1990	860.8	51.8	8.3	2.0	922.9
1991	847.2	54.3	9.0	2.1	912.6
1992	849.5	53.1	8.6	2.0	913.2
1993	851.0	54.0	8.7	2.0	915.7
1994	857.2	55.0	9.1	2.1	923.4
1995	860.3	56.5	9.4	2.2	928.3
1996	861.4	57.5	9.4	2.2	930.6
1997	879.1	59.4	10.0	2.2	950.8
1998	890.0	60.6	10.3	2.3	963.2
1999	902.1	61.0	10.6	2.3	976.0
2000	910.2	62.8	11.3	2.4	986.6
2001	919.1	64.3	11.6	2.4	997.5

Note: Data prior to 1991 was backcasted from a model.

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 1b: Percentage change in the number of businesses, by firm size, Canada, 1983-2001

Year	Business counts by firm size				Total
	0 to 19	20 to 99	100 to 499	500+	
	%				
1984	3.3	8.8	6.9	1.1	3.6
1985	3.6	5.6	5.1	2.7	3.7
1986	3.0	5.5	4.3	2.8	3.2
1987	3.5	7.5	6.2	5.8	3.7
1988	2.5	5.7	5.4	3.5	2.7
1989	2.0	3.9	3.8	1.7	2.1
1990	1.2	-1.0	-1.3	-0.2	1.1
1991	-1.6	4.8	9.1	6.5	-1.1
1992	0.3	-2.3	-4.9	-3.0	0.1
1993	0.2	1.7	1.1	-0.7	0.3
1994	0.7	1.9	4.4	3.5	0.8
1995	0.4	2.7	3.1	3.8	0.5
1996	0.1	1.9	0.8	0.6	0.2
1997	2.1	3.3	5.8	2.9	2.2
1998	1.2	2.0	3.2	1.8	1.3
1999	1.4	0.6	3.1	0.7	1.3
2000	0.9	2.9	6.1	4.3	1.1
2001	1.0	2.5	3.2	1.8	1.1

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 1c: Percentage distribution of businesses, by firm size, Canada, 1983-2001

Year	Business counts by firm size				Total
	0 to 19	20 to 99	100 to 499	500+	
			%		
1983	94.1	4.8	0.8	0.2	100.0
1984	93.9	5.1	0.8	0.2	100.0
1985	93.8	5.2	0.9	0.2	100.0
1986	93.6	5.3	0.9	0.2	100.0
1987	93.4	5.5	0.9	0.2	100.0
1988	93.2	5.6	0.9	0.2	100.0
1989	93.1	5.7	0.9	0.2	100.0
1990	93.3	5.6	0.9	0.2	100.0
1991	92.8	6.0	1.0	0.2	100.0
1992	93.0	5.8	0.9	0.2	100.0
1993	92.9	5.9	0.9	0.2	100.0
1994	92.8	6.0	1.0	0.2	100.0
1995	92.7	6.1	1.0	0.2	100.0
1996	92.6	6.2	1.0	0.2	100.0
1997	92.5	6.3	1.0	0.2	100.0
1998	92.4	6.3	1.1	0.2	100.0
1999	92.4	6.3	1.1	0.2	100.0
2000	92.3	6.4	1.1	0.2	100.0
2001	92.1	6.5	1.2	0.2	100.0

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 2a: Distribution of businesses, by province and territories, 1991-2001 (000's)

Year	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C. Territories	Total	
1991	22.5	7.6	31.5	27.0	227.0	309.9	35.7	42.4	104.8	136.6	4.3	949.4
1992	22.9	7.4	31.7	27.0	225.7	306.4	35.4	41.9	105.7	140.4	4.5	949.1
1993	23.1	7.4	32.1	27.3	225.0	304.7	35.3	41.3	107.5	143.6	4.4	951.6
1994	22.2	7.7	32.4	27.7	225.9	306.2	35.9	41.1	110.8	147.5	4.7	962.1
1995	21.7	7.7	32.2	28.0	229.2	304.9	35.8	40.9	112.8	149.3	4.9	967.3
1996	20.5	7.5	31.5	27.6	229.1	305.0	35.8	41.1	114.9	151.1	4.9	969.0
1997	20.5	7.6	32.3	27.7	230.0	312.6	36.3	41.8	121.6	155.2	5.1	990.6
1998	20.4	7.7	32.5	28.3	233.2	321.4	36.9	41.4	127.1	156.6	5.5	1,010.9
1999	20.3	7.8	33.1	28.5	235.3	328.5	37.0	41.0	130.1	156.8	4.2	1,022.5
2000	19.9	7.3	32.4	28.0	235.0	333.4	36.3	40.3	133.1	156.4	5.0	1,027.2
2001	19.9	7.2	32.4	28.0	234.7	339.4	36.6	40.3	137.8	157.7	5.2	1,039.0

Note: A firm may exist in more than 1 province and therefore, firm counts at the provincial and at the national level vary in counts.
Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 2b: Percentage distribution of businesses, by province and territories 1991-2001

Year	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C. Territories	Total	
%												
1991	2	1	3	3	24	33	4	4	11	14	0	100
1992	2	1	3	3	24	32	4	4	11	15	0	100
1993	2	1	3	3	24	32	4	4	11	15	0	100
1994	2	1	3	3	23	32	4	4	12	15	0	100
1995	2	1	3	3	24	32	4	4	12	15	1	100
1996	2	1	3	3	24	31	4	4	12	16	1	100
1997	2	1	3	3	23	32	4	4	12	16	1	100
1998	2	1	3	3	23	32	4	4	13	15	1	100
1999	2	1	3	3	23	32	4	4	13	15	0	100
2000	2	1	3	3	23	32	4	4	13	15	0	100
2001	2	1	3	3	23	33	4	4	13	15	0	100

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 2c: Percentage change in the number of businesses, by province and territories, 1991-2001

Year	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C. Territories	Total	
%												
1992	2	-3	1	0	-1	-1	-1	-1	1	3	5	5
1993	1	0	1	1	0	-1	0	-1	2	2	-2	-2
1994	-4	5	1	2	0	1	2	-1	3	3	6	6
1995	-3	-1	-1	1	1	0	0	0	2	1	4	4
1996	-5	-2	-2	-1	0	0	0	0	2	1	0	0
1997	0	2	2	0	0	2	1	2	6	3	4	4
1998	0	1	1	2	1	3	2	-1	5	1	9	9
1999	0	0	2	1	1	2	0	-1	2	0	-24	-24
2000	-2	-5	-2	-2	0	2	-2	-2	2	0	18	18
2001	0	-2	0	0	0	2	1	0	4	1	4	4

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 2d: Percentage change in the number of businesses, by province and territories, 1991-2001

Year	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C. Territories	Total	
%												
1991-2001	-12	-5	3	4	3	9	2	-5	31	15	21	9
1993-2001	-14	-2	1	2	4	11	4	-3	28	10	18	9
1991-1996	-9	-2	0	2	1	-2	0	-3	10	11	14	2
1997-2001	-3	-5	0	1	2	9	1	-4	13	2	2	5

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 3a: Distribution of businesses by goods vs. services industry, Canada, 1991-2001 (000's)

Year	Number of businesses in the goods industry	% of total	Number of businesses in the services industry	% of total	Unknown/Other	% of total	Total number of businesses
1991	232.0	25	662.3	73	18.3	2	912.6
1992	230.1	25	667.1	73	16.0	2	913.2
1993	228.9	25	672.8	73	13.9	2	915.7
1994	229.7	25	681.1	74	12.6	1	923.4
1995	227.1	24	688.2	74	13.0	1	928.3
1996	224.7	24	694.0	75	11.9	1	930.6
1997	131.2	14	707.8	74	111.7	12	950.8
1998	232.1	24	718.2	75	13.0	1	963.2
1999	233.3	24	730.6	75	12.1	1	976.0
2000	220.4	22	740.2	75	25.9	3	986.6
2001	234.0	23	749.9	75	13.6	1	997.5

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 3b: Growth in the number of firms in the goods vs. services industry, Canada, 1991-2001 (000's)

	Number of businesses in the goods industry	Number of businesses in the services industry	Unknown/Other	Total number of businesses
1991-2001	2.0	87.7	-4.8	84.9
1993-2001	5.1	77.1	-0.3	81.8
Difference	3.1	-10.6	4.4	-3.0

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 3c: Percentage change in the number of firms in the goods vs. services industry, Canada, 1991-2001

	Number of businesses in the goods industry	Number of businesses in the services industry	Unknown/Other	Total number of businesses
%				
1991-2001	1	13	-26	9
1991-1996	-3	5	-35	2
1997-2001	78	6	-88	5
1993-2001	2	11	-2	9

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 4a: Number of businesses, by knowledge industry, Canada, 1991-2001

Year	Knowledge industry (000's)					Total
	Low	Medium	High	Public admin.	Other	
1991	354.8	422.1	42.5	74.9	18.3	912.6
1992	353.2	423.8	43.5	76.7	16.0	913.2
1993	351.5	427.2	44.7	78.3	13.9	915.7
1994	351.1	432.6	46.9	80.2	12.6	923.4
1995	348.4	434.7	50.0	82.3	13.0	928.3
1996	344.0	436.7	53.6	84.3	11.9	930.6
1997	345.6	447.3	58.6	86.3	12.9	950.8
1998	343.4	455.4	64.2	87.3	13.0	963.2
1999	344.8	462.0	68.6	88.6	12.1	976.0
2000	344.5	467.2	72.1	89.9	13.0	986.6
2001	344.7	474.1	74.2	90.9	13.6	997.5

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 4b: Percentage change in the number of businesses, by knowledge industry, Canada, 1991-2001

Year	Knowledge industry					Total
	Low	Medium	High	Public admin.	Other	
%						
1992	0	0	2	2	-13	0
1993	0	1	3	2	-13	0
1994	0	1	5	2	-10	1
1995	-1	0	7	3	3	1
1996	-1	0	7	3	-8	0
1997	0	2	9	2	9	2
1998	-1	2	10	1	0	1
1999	0	1	7	1	-7	1
2000	0	1	5	1	8	1
2001	0	1	3	1	5	1

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 4c: Percentage distribution of the number of businesses, by knowledge industry, Canada, 1991-2001

Year	Knowledge industry					Total
	Low	Medium	High	Public admin.	Other	
%						
1991	39	46	5	8	2	100
1992	39	46	5	8	2	100
1993	38	47	5	9	2	100
1994	38	47	5	9	1	100
1995	38	47	5	9	1	100
1996	37	47	6	9	1	100
1997	36	47	6	9	1	100
1998	36	47	7	9	1	100
1999	35	47	7	9	1	100
2000	35	47	7	9	1	100
2001	35	48	7	9	1	100

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 4d: Percentage change in the number of businesses, by knowledge industry, Canada, 1991-2001

Year	Knowledge industry					Total
	Low	Medium	High	Public admin.	Other	
%						
1991-1996	-3	3	26	13	-35	2
1997-2001	0	6	27	5	5	5
1991-2001	-3	12	75	21	-26	9
1993-2001	-2	11	66	16	-2	9

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 5a: Employment by firm size in Canada, 1983-2001 (000's)

Year	0 to 19	20 to 99	100 to 499	500+	Total
1983	2,035.7	1,472.8	1,273.6	4,975.8	9,758.0
1984	2,177.7	1,634.8	1,378.8	5,086.0	10,277.3
1985	2,243.1	1,706.6	1,427.2	5,189.6	10,566.5
1986	2,415.1	1,864.0	1,537.3	5,484.2	11,300.5
1987	2,494.5	1,973.3	1,596.7	5,574.4	11,638.8
1988	2,545.3	2,053.9	1,653.7	5,621.2	11,874.1
1989	2,476.1	2,023.0	1,628.1	5,452.5	11,579.6
1990	2,450.3	1,957.5	1,562.8	5,323.2	11,293.8
1991	2,444.7	2,152.4	1,771.3	5,067.3	11,435.8
1992	2,446.4	2,098.1	1,683.1	4,948.0	11,175.6
1993	2,476.5	2,136.2	1,709.9	4,858.1	11,180.8
1994	2,516.6	2,181.6	1,764.3	4,855.4	11,317.9
1995	2,548.1	2,239.9	1,827.7	5,037.0	11,652.7
1996	2,577.1	2,282.8	1,836.3	5,000.7	11,696.9
1997	2,621.8	2,382.2	1,941.5	5,113.2	12,058.8
1998	2,644.3	2,445.3	1,987.6	5,249.1	12,326.3
1999	2,649.8	2,466.3	2,044.0	5,233.8	12,393.9
2000	2,675.6	2,560.4	2,166.9	5,489.8	12,892.6
2001	2,715.7	2,627.9	2,232.7	5,537.8	13,114.1

Note: Data prior to 1991 were backcasted based on SIC based data.

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 5b: Percentage distribution of employment, by firm size, Canada, 1983-2001

Year	0 to 19	20 to 99	100 to 499	500+	Total
	%				
1983	21	15	13	51	100
1984	21	16	13	49	100
1985	21	16	14	49	100
1986	21	16	14	49	100
1987	21	17	14	48	100
1988	21	17	14	47	100
1989	21	17	14	47	100
1990	22	17	14	47	100
1991	21	19	15	44	100
1992	22	19	15	44	100
1993	22	19	15	43	100
1994	22	19	16	43	100
1995	22	19	16	43	100
1996	22	20	16	43	100
1997	22	20	16	42	100
1998	21	20	16	43	100
1999	21	20	16	42	100
2000	21	20	17	43	100
2001	21	20	17	42	100

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 5c: Percentage change in the number of employees, by firm size, Canada, 1983-2001

Year	0 to 19	20 to 99	100 to 499	500+	Total
	%				
1984	7	11	8	2	5
1985	3	4	4	2	3
1986	8	9	8	6	7
1987	3	6	4	2	3
1988	2	4	4	1	2
1989	-3	-2	-2	-3	-2
1990	-1	-3	-4	-2	-2
1991	0	10	13	-5	1
1992	0	-3	-5	-2	-2
1993	1	2	2	-2	0
1994	2	2	3	0	1
1995	1	3	4	4	3
1996	1	2	0	-1	0
1997	2	4	6	2	3
1998	1	3	2	3	2
1999	0	1	3	0	1
2000	1	4	6	5	4
2001	1	3	3	1	2

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 5d: Percentage change in the number of employees by firm size, Canada, 1983-2001

Year	0 to 19	20 to 99	100 to 499	500+	Total
	%				
1983-1990	20	33	23	7	16
1991-2001	11	22	26	9	15
1991-1996	5	6	4	-1	2
1997-2001	4	10	15	8	9

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 6a: Employment by knowledge industry, Canada, 1991-2001 (000's)

Year	Low	Medium	High	Public admin.	Other	Total
1991	3,228.7	4,511.0	910.3	2,762.4	23.4	11,435.8
1992	3,128.9	4,345.0	893.9	2,786.4	21.3	11,175.6
1993	3,191.4	4,310.3	875.7	2,785.5	17.9	11,180.8
1994	3,241.8	4,382.4	884.6	2,792.4	16.6	11,317.9
1995	3,318.7	4,521.8	952.1	2,840.6	19.6	11,652.7
1996	3,328.9	4,592.3	979.4	2,775.6	20.6	11,696.9
1997	3,450.8	4,777.6	1,033.1	2,768.9	28.4	12,058.8
1998	3,500.0	4,917.2	1,083.5	2,791.7	34.0	12,326.3
1999	3,516.8	4,968.6	1,088.4	2,782.4	37.7	12,393.9
2000	3,619.5	5,219.8	1,155.5	2,851.9	45.8	12,892.6
2001	3,693.9	5,255.4	1,171.2	2,932.3	61.3	13,114.1

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 6b: Percentage distribution of the number of employees, by knowledge industry, Canada, 1991-2001

Year	Low	Medium	High	Public admin.	Other	Total
	%					
1991	28	39	8	24	0	100
1992	28	39	8	25	0	100
1993	29	39	8	25	0	100
1994	29	39	8	25	0	100
1995	28	39	8	24	0	100
1996	28	39	8	24	0	100
1997	29	40	9	23	0	100
1998	28	40	9	23	0	100
1999	28	40	9	22	0	100
2000	28	40	9	22	0	100
2001	28	40	9	22	0	100

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 6c: Percentage change in the number of employees, by knowledge industry, Canada, 1991-2001

Year	Low	Medium	High	Public admin.	Other	Total
	%					
1992	-3	-4	-2	1	-9	-2
1993	2	-1	-2	0	-16	0
1994	2	2	1	0	-7	1
1995	2	3	8	2	18	3
1996	0	2	3	-2	6	0
1997	4	4	5	0	37	3
1998	1	3	5	1	20	2
1999	0	1	0	0	11	1
2000	3	5	6	2	21	4
2001	2	1	1	3	34	2

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 7a: Average size of business by firm size, Canada, 1991-2001

Year	Number of employees			
	0 to 19	20 to 99	100 to 499	500+
1991	3	40	196	2,440
1992	3	40	196	2,456
1993	3	40	197	2,433
1994	3	40	194	2,345
1995	3	40	195	2,337
1996	3	40	195	2,306
1997	3	40	195	2,278
1998	3	40	193	2,304
1999	3	40	193	2,282
2000	3	41	193	2,279
2001	3	41	192	2,262

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 7b: Percentage change in the average size of business, by firm size, Canada, 1991-2001

Year	Number of employees			
	0 to 19	20 to 99	100 to 499	500+
			%	
1991-2001	2	3	-2	-7

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 8a: Average size of business by knowledge industry, Canada, 1991-2001

Year	Knowledge industry				
	Low	Medium	High	Public admin.	Other
1991	9	11	21	37	1
1992	9	10	21	36	1
1993	9	10	20	36	1
1994	9	10	19	35	1
1995	10	10	19	35	2
1996	10	11	18	33	2
1997	10	11	18	32	2
1998	10	11	17	32	3
1999	10	11	16	31	3
2000	11	11	16	32	4
2001	11	11	16	32	5

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 8b: Percentage change in the average size of business, by knowledge industry, Canada, 1991-2001

Year	Knowledge industry				
	Low	Medium	High	Public admin.	Other
			%		
1991-2001	18	4	-26	-13	...

... Not applicable.

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 9a: Percentage of new firms by number of years in business, which lasted x years, Canada, 1991 to 2001

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
	number of births									
(000)	135.9	136.0	139.5	141.8	145.1	146.2	146.0	140.5	138.1	135.5
x percent lasted at least										
2 Years	72.0	72.8	73.0	71.9	75.2	72.1	75.6	75.6	76.5	..
3 Years	54.1	53.9	54.0	55.5	58.2	56.0	58.9	59.3	..	..
4 Years	43.2	42.8	44.3	45.6	47.9	46.3	49.0	..	..	..
5 Years	35.7	36.0	37.6	39.0	40.9	39.7	..	..	..	..
6 Years	30.8	31.2	32.8	34.1	35.8	..	..	..	..	..
7 Years	27.0	27.4	29.0	30.3	..	..	..	..	..	..
8 Years	24.1	24.5	26.1	..	..	..	..	..	..	..
9 Years	21.9	22.3	..	..	..	..	..	..	..	..
10 Years	19.9	..	..	..	..	..	..	..	..	..

Note: .. not available for a specific reference period.

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 10a: Percentage of new low-knowledge firms by number of years in business, which lasted x years, Canada, 1991 to 2001

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
	number of births									
(000)	135.9	136.0	139.5	141.8	145.1	146.2	146.0	140.5	138.1	135.5
x percent lasted at least...										
2 Years	74.5	74.7	75.1	73.0	75.9	72.0	77.0	77.4	78.4	..
3 Years	54.2	53.7	53.9	54.9	57.2	55.3	59.1	59.6	..	..
4 Years	41.7	40.8	42.7	43.9	46.2	45.0	48.4	..	..	..
5 Years	33.3	33.3	35.4	36.8	38.7	38.0	..	..	..	..
6 Years	27.9	28.1	30.4	31.7	33.3	..	..	..	..	..
7 Years	23.8	24.4	26.5	27.7	..	..	..	..	..	..
8 Years	20.9	21.5	23.5	..	..	..	..	..	..	..
9 Years	18.7	19.2	..	..	..	..	..	..	..	..
10 Years	16.8	..	..	..	..	..	..	..	..	..

Note: .. not available for a specific reference period.

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 10b: Percentage of new medium-knowledge firms by number of years in business, which lasted x years, Canada, 1991 to 2001

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
	number of births									
(000)	135.9	136.0	139.5	141.8	145.1	146.2	146.0	140.5	138.1	135.5
x percent lasted at least...										
2 Years	74.8	75.4	74.5	74.2	76.7	74.7	76.9	76.7	78.1	..
3 Years	57.6	56.7	55.8	58.5	60.3	58.3	60.4	61.0	..	..
4 Years	46.8	45.7	46.4	48.7	50.1	48.4	50.7	..	..	..
5 Years	39.1	38.9	39.6	41.9	43.1	41.6	..	..	..	..
6 Years	34.1	33.9	34.7	36.9	37.9	..	..	..	..	..
7 Years	30.2	29.9	30.9	33.0	..	..	..	..	..	..
8 Years	27.1	26.8	27.9	..	..	..	..	..	..	..
9 Years	24.6	24.5	..	..	..	..	..	..	..	..
10 Years	22.5	..	..	..	..	..	..	..	..	..

Note: .. not available for a specific reference period.

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 10c: Percentage of new high-knowledge firms by number of years in business, Canada, 1991 to 2001

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
	number of births									
(000's)	135.9	136.0	139.5	141.8	145.1	146.2	146.0	140.5	138.1	135.5
x percent lasted at least...										
2 Years	79.5	79.8	81.0	78.8	80.9	78.9	81.6	79.0	80.3	..
3 Years	63.4	63.9	63.9	63.3	65.6	63.5	64.9	62.1	..	..
4 Years	52.9	54.0	54.9	53.9	56.1	53.4	54.5	..	..	..
5 Years	46.2	47.5	48.4	47.3	48.8	46.0	..	..	..	..
6 Years	40.6	42.4	42.5	42.2	43.2	..	..	..	..	..
7 Years	36.4	37.9	38.1	37.7	..	..	..	..	..	..
8 Years	33.0	34.4	34.3	..	..	..	..	..	..	..
9 Years	30.2	31.4	..	..	..	..	..	..	..	..
10 Years	27.7	..	..	..	..	..	..	..	..	..

Note: .. not available for a specific reference period.

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 10d: Percentage of new firms in the public education and health industry sector, by the number of years in business which lasted x years, Canada, 1991 to 2001

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
	number of births									
(000's)	135.9	136.0	139.5	141.8	145.1	146.2	146.0	140.5	138.1	135.5
x percent lasted at least...										
2 Years	83.5	84.7	85.1	84.0	84.5	81.5	84.7	84.6	85.3	..
3 Years	71.0	71.2	71.9	70.7	70.8	67.4	70.8	71.4	..	..
4 Years	62.5	62.9	64.1	62.1	61.6	58.7	61.6	..	..	..
5 Years	56.5	57.0	58.3	55.5	55.4	52.0	..	..	..	..
6 Years	51.4	52.2	53.8	50.8	50.3	..	..	..	..	..
7 Years	47.7	47.9	50.2	46.9	..	..	..	..	..	..
8 Years	44.5	44.9	46.9	..	..	..	..	..	..	..
9 Years	41.7	42.2	..	..	..	..	..	..	..	..
10 Years	39.1	..	..	..	..	..	..	..	..	..

Note: .. not available for a specific reference period.

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 11a: Mobility matrix by firm size, Canada, (1991-1993)-(1999-2001) (%)

Firm size 1991-1993	Firm size 1999-2001				Total
	0 to 19	20 to 99	100 to 499	500+	
			%		(000's)
0 to 19	91.2	8.5	0.3	0.0	273.4
20 to 99	23.7	65.7	10.5	0.2	74.3
100 to 499	2.7	18.6	70.6	8.2	17.1
500+	1.3	1.9	15.2	81.7	3.7
Total (000's)	267.4	75.2	21.3	4.6	368.5

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

**Table 12a: Business births, Canada, 1991-2001
(000's)**

Year	All businesses	Business births	Birth rate
			%
1992	913.2	135.8	14.9
1993	915.7	136.0	14.9
1994	923.4	139.5	15.1
1995	928.3	141.8	15.3
1996	930.6	145.2	15.6
1997	950.8	146.3	15.4
1998	963.2	146.1	15.2
1999	976.0	140.5	14.4
2000	986.6	138.1	14.0
2001	997.5	135.5	13.6
	Year	Businesses	
Births	1992-2001	1,404.9	
	Number of years	10	
	Average births	140.5	

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

**Table 12b: Business deaths, Canada, 1991-2001
(000's)**

Year	All businesses	Business deaths	Death rate
			%
1991	912.6	135.2	14.8
1992	913.2	133.6	14.6
1993	915.7	131.8	14.4
1994	923.4	136.8	14.8
1995	928.3	142.9	15.4
1996	930.6	126.1	13.6
1997	950.8	133.7	14.1
1998	963.2	127.7	13.3
1999	976.0	127.5	13.1
2000	986.6	124.6	12.6
	Year	Businesses	
Deaths	1991-2000	1,320.0	
	Number of years	10	
	Average deaths	132.0	

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

**Table 12c: Net business growth, Canada, 1991-2001
(000's)**

Year	All businesses	Business growth
1990-91	912.6	..
1991-92	913.2	0.6
1992-93	915.7	2.4
1993-94	923.4	7.7
1994-95	928.3	4.9
1995-96	930.6	2.3
1996-97	950.8	20.2
1997-98	963.3	12.4
1998-99	976.0	12.8
1999-00	986.7	10.6
2000-01	997.5	10.8
	Year	Businesses
	1992-1996	18
	1993-2000	73
	1992-2001	85
	Number of years	10
	Average	8.5

.. Not available for a specific reference period.

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 13a: Business births, by size of firm, Canada, 1991-2001 (000's)

Year	Birth rate by size														
	0 to 19			20 to 99			100 to 499			500+			All Sizes		
	Firms	Births	Birth Rate %	Firms	Births	Birth Rate %	Firms	Births	Birth Rate %	Firms	Births	Birth Rate %	Firms	Births	Birth Rate %
1992	849.54	134.52	16	53.06	1.19	2	8.60	0.12	1	2.03	0.01	1	913.22	135.84	14.9
1993	851.00	134.68	16	53.95	1.19	2	8.69	0.12	1	2.02	0.01	0	915.66	136.00	14.9
1994	857.19	138.19	16	55.00	1.22	2	9.07	0.11	1	2.09	0.01	1	923.36	139.53	15.1
1995	860.31	140.35	16	56.47	1.30	2	9.36	0.13	1	2.17	0.01	1	928.30	141.79	15.3
1996	861.44	143.59	17	57.54	1.44	2	9.44	0.13	1	2.18	0.02	1	930.60	145.18	15.6
1997	879.13	144.96	16	59.43	1.16	2	9.98	0.16	2	2.24	0.01	0	950.79	146.29	15.4
1998	889.99	143.99	16	60.64	1.79	3	10.30	0.24	2	2.29	0.10	4	963.21	146.11	15.2
1999	902.05	138.77	15	61.02	1.50	2	10.62	0.20	2	2.30	0.03	1	975.99	140.51	14.4
2000	910.16	136.37	15	62.76	1.52	2	11.27	0.20	2	2.40	0.03	1	986.59	138.11	14.0
2001	919.06	133.85	15	64.35	1.42	2	11.63	0.22	2	2.44	0.03	1	997.48	135.52	13.6
Average			16			2			2			1			

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 13b: Business deaths by size of firm, Canada, 1991-2001 (000's)

Year	Death rate by size														
	0 to 19			20 to 99			100 to 499			500+			All Sizes		
	Firms	Deaths	Death Rate %	Firms	Deaths	Death Rate %	Firms	Deaths	Deaths Rate %	Firms	Deaths	Death Rate %	Firms	Deaths	Death Rate %
1991	847.17	133.50	16	54.32	1.52	3	9.04	0.21	2	2.09	0.02	1	912.62	135.24	21.8
1992	849.54	131.94	16	53.06	1.43	3	8.60	0.16	2	2.03	0.03	1	913.22	133.56	21.4
1993	851.00	130.28	15	53.95	1.37	3	8.69	0.17	2	2.02	0.01	1	915.66	131.84	20.4
1994	857.19	135.06	16	55.00	1.53	3	9.07	0.22	2	2.09	0.03	2	923.36	136.85	22.5
1995	860.31	141.29	16	56.47	1.35	2	9.36	0.22	2	2.17	0.03	1	928.30	142.88	22.5
1996	861.44	124.87	14	57.54	1.06	2	9.44	0.15	2	2.18	0.02	1	930.60	126.11	18.9
1997	879.13	131.73	15	59.43	1.55	3	9.98	0.29	3	2.24	0.11	5	950.79	133.68	25.4
1998	889.99	125.98	14	60.64	1.50	2	10.30	0.22	2	2.29	0.04	2	963.21	127.73	20.5
1999	902.05	125.78	14	61.02	1.49	2	10.62	0.22	2	2.30	0.02	1	975.99	127.50	19.4
2000	910.16	122.64	13	62.76	1.69	3	11.27	0.27	2	2.40	0.04	2	986.59	124.63	20.1
Average			15			3			2			2			

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 14a: Business birth by knowledge industry, Canada, 1991-2001 (000's)

Year	Birth rate by knowledge industry																
	Low			Medium			High			Public admin.			Other		Total Firms		
	Firms	Births	Rate %	Firms	Births	Rate %	Firms	Births	Rate %	Firms	Births	Rate %	Firms	Births	Total firms	Total births	Rate
1992	353.2	55.8	16	423.8	58.0	14	43.5	6.3	15	76.7	7.1	9	16.0	8.6	913.2	135.8	14.9
1993	351.5	55.9	16	427.2	59.0	14	44.7	6.6	15	78.3	7.0	9	13.9	7.6	915.7	136.0	14.9
1994	351.1	57.2	16	432.6	60.2	14	46.9	7.4	16	80.2	7.3	9	12.6	7.4	923.4	139.5	15.1
1995	348.4	56.3	16	434.7	60.9	14	50.0	8.6	17	82.3	7.9	10	13.0	8.1	928.3	141.8	15.3
1996	344.0	57.3	17	436.7	63.2	14	53.6	9.9	18	84.3	8.4	10	11.9	6.4	930.6	145.2	15.6
1997	345.6	55.4	16	447.3	64.0	14	58.6	11.2	19	86.3	8.5	10	12.9	7.2	950.8	146.3	15.4
1998	343.4	53.3	16	455.4	64.6	14	64.2	12.9	20	87.3	8.3	9	13.0	7.0	963.2	146.1	15.2
1999	344.8	51.0	15	462.0	63.0	14	68.6	12.4	18	88.6	8.2	9	12.1	5.9	976.0	140.5	14.4
2000	344.5	48.6	14	467.2	61.9	13	72.1	12.5	17	89.9	8.0	9	13.0	7.1	986.6	138.1	14.0
2001	344.7	47.3	14	474.1	61.5	13	74.2	11.7	16	90.9	8.0	9	13.6	7.0	997.5	135.5	13.6

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.

Table 14b: Business death by knowledge industry, Canada, 1991-2001 (000's)

Year	Death rate by knowledge industry																
	Low			Medium			High			Public admin.			Other		Total Firms		
	Firms	Deaths	Rate %	Firms	Deaths	Rate %	Firms	Deaths	Rate %	Firms	Deaths	Rate %	Firms	Deaths	Total firms	Total deaths	Rate
1991	354.8	57.3	16.2	422.1	56.3	13.3	42.5	5.4	12.7	74.9	5.3	7.1	18.3	11.0	912.6	135.2	14.8
1992	353.2	57.6	16.3	423.8	55.6	13.1	43.5	5.4	12.4	76.7	5.3	6.9	16.0	9.7	913.2	133.6	14.6
1993	351.5	57.7	16.4	427.2	54.8	12.8	44.7	5.2	11.7	78.3	5.4	6.9	13.9	8.7	915.7	131.8	14.4
1994	351.1	59.0	16.8	432.6	58.8	13.6	46.9	5.5	11.6	80.2	5.9	7.3	12.6	7.7	923.4	136.8	14.8
1995	348.4	61.6	17.7	434.7	61.2	14.1	50.0	6.3	12.6	82.3	6.3	7.7	13.0	7.5	928.3	142.9	15.4
1996	344.0	53.8	15.6	436.7	53.4	12.2	53.6	6.2	11.6	84.3	6.5	7.8	11.9	6.1	930.6	126.1	13.6
1997	345.6	55.5	16.1	447.3	56.6	12.7	58.6	7.3	12.4	86.3	7.4	8.5	12.9	7.0	950.8	133.7	14.1
1998	343.4	49.6	14.4	455.4	56.4	12.4	64.2	8.0	12.4	87.3	6.9	8.0	13.0	6.8	963.2	127.7	13.3
1999	344.8	48.9	14.2	462.0	56.7	12.3	68.6	9.0	13.1	88.6	6.7	7.6	12.1	6.1	976.0	127.5	13.1
2000	344.5	47.0	13.6	467.2	54.7	11.7	72.1	9.5	13.2	89.9	7.0	7.8	13.0	6.4	986.6	124.6	12.6

Source: Longitudinal Employment Analysis Program (LEAP) 1991-2001, Business and Labour Market Analysis Division.