

Revisiting Portraits of Small Business Growth and Employment in Western Canada

Number 86 2006 By Edward J. Chambers and Wade Church

Western Centre for Economic Research School of Business, University of Alberta Revisiting Portraits of Small Business Growth and Employment in Western Canada By Edward J. Chambers and Wade Church

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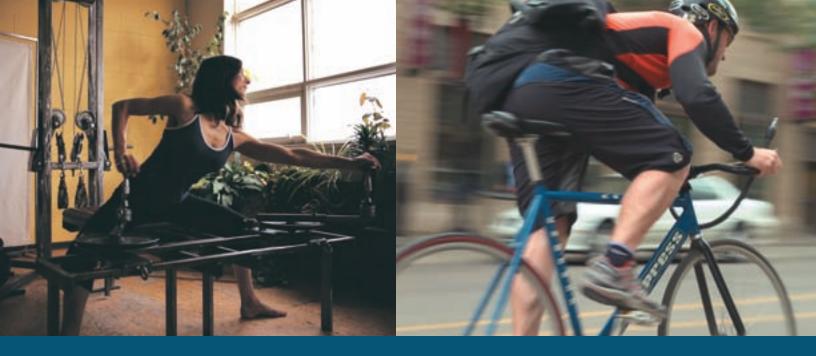
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Small business is of vital importance to the Western Canadian economy. Approximately one half of jobs in the West occur in establishments with less than 50 employees. As well, the level of new entrepreneurial activity remains considerably higher in Western Canada than in the rest of the country.

Three developments are of special importance during the period 1999 to 2004.

First, the performance of the small business sector in Western Canada dominated that in the rest of the country, with new businesses in the region accounting for a disproportionate share of those in the country as a whole. This reflects the relatively more rapid growth rate for the Western provincial economies and the region's entrepreneurial spirit. Second, the growth in Alberta small business enterprises generally outstripped that in the other Western provinces. The energy industry, at the core of the Alberta economy, together with its satellite sectors, provided tremendous growth opportunities for a wide range of small business in Alberta. Calgary and Edmonton rank first and second in Western Canada in the concentration of high tech small businesses.

Highlights



Third, small business in Saskatchewan and Manitoba was very much affected in this period by the experiences of the farm sector. Retrenchment in agriculture led to the loss of a substantial number of micro-businesses annually in these two provinces, and some of those losses spilled over to microbusiness in non-agricultural sectors of the economy.

Other findings of note are:

- Rural regions have a higher relative dependence upon small business than do urban areas.
- The service sector led small business growth but a higher proportion of small Western Canadian businesses produce goods than small businesses in the rest of Canada.
- For the most part, average weekly earnings rise as the size of the business establishment increases.

- The number of high tech businesses did not grow as dramatically as in the period 1992–1999 but there was measured growth in Alberta and, to a lesser extent, in British Columbia.
- Self-employment is more common in Western Canada than in other parts of the country. Though women account for roughly 45% of the labour force, they only make up about one third of the self-employed. The proportion of the selfemployed belonging to the 55 and over age group is twice the proportion of the labour force belonging to this group.



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This is the fourth report in a series investigating the small business sector in Western Canada. A Portrait of Small Business Growth and Employment in Western Canada, which launched the series, highlighted the importance of the small business sector to the region. It was followed by A Primer on Western Canadian Entrepreneurship which described various models and concepts related to the dynamics of new venture creation and examined the process of establishing and sustaining a small business. A Survey of Selling explored the market channels of small businesses, the markets served, the prospects for market expansion, and the key attributes of firms and their owners. Revisiting Portraits of Small Business Growth and Employment in Western Canada

is a systematic re-examination of the role of small business within the four Western provinces. Its purpose is to serve as a resource for policy makers and an update to the earlier study, *A Portrait of Small Business Growth and Employment in Western Canada* (1988–1999).

The previous studies underlined the challenges and demands of small business. While this report addresses the quantifiable impact of small business on the Western Canadian economy, it is helpful to keep in mind the risky nature of entrepreneurial activity, the marriage of ideas and processes necessary to succeed, the value of networking, the importance of choosing the right industry, and the need for effective bundling

Preface



of capital requirements—financial, human and social. The motivation necessary to create and sustain a business is certainly complex. That Western Canadians seem particularly good at being entrepreneurs is significant and provides the context for this study.

Four different data sources were used in this study: *Canadian Business Patterns*; the *Longitudinal Employment Analysis Program*; the *Survey of Employment, Payrolls and Hours*; and the *Labour Force Survey*. The first three are collections of data about business establishments and the fourth is a sample survey of households. *Portraits Revisited* offers a sectoral and provincial breakdown of small business growth. The high tech sector is given special emphasis, due to its perceived significance. The roles of gender, education attained, and age in the composition of the self-employed are also examined.



Small Business in Western Canada

The number of small businesses in Western Canada per thousand population is 30% higher than in the rest of Canada.

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What is a small business?

Small business is defined in this report to include:

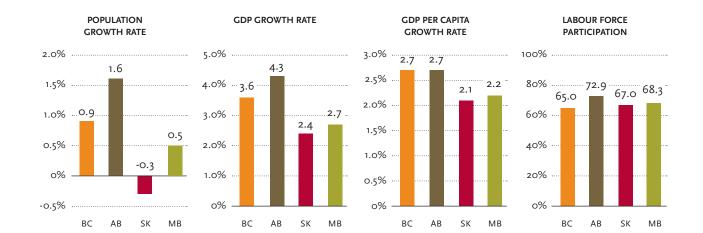
- enterprises with fewer than fifty employees¹, and
- enterprises operated by self-employed persons, whose business is unincorporated and who have no paid help.

The small business environment, 1999-2004

Annual economic growth rates varied somewhat amongst the provinces. Alberta's GDP growth rate, exclusive of inflation, of 4.3% was the highest while Saskatchewan's, at 2.4%, was the lowest. Annual per capita GDP growth ranged from 2.7% to 2.1%.

Demographics differed widely across the four Western provinces. The populations of Alberta, British Columbia, and Manitoba increased while the population of Saskatchewan decreased. Alberta experienced the most rapid rate of population growth, exceeding that in the other provinces by a substantial margin. Alberta also continued to have a labour force participation rate 4% to 7% higher than that of the other Western provinces. Alberta's high GDP growth rate, population increase and labour force participation rate led, as the following figures reveal, to an outstanding small business performance.

FIGURE 1 The Economic Environment, 1999–2004: Average Annual Growth and Participation Rates (%)



Source: CANSIM II and Labour Force Survey

¹ This includes incorporated businesses without paid help.

How many small businesses are there in Western Canada?

Small business continues to play a central role in the economy of Western Canada. In the period 1999–2004, an annual average of almost 800,000 small businesses were to be found in Western Canada, representing 36% of all small businesses in Canada. British Columbia accounted for 44% of these small businesses, or almost 347,500. Together, British Columbia and Alberta accounted for 77% of small businesses in Western Canada and 28% of all small businesses in Canada.

Western Canada averaged approximately 8.5 small businesses per hundred population, well above the 6.4 rate for the rest of Canada. Saskatchewan led the provinces with an average of 10.2 per hundred population.

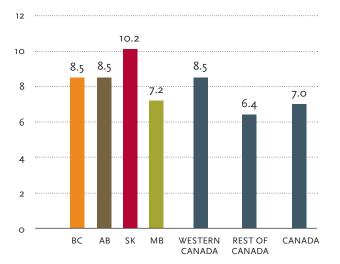
FIGURE 2 Average Annual Number of Small Businesses, 1999–2004

Source: Canadian Business Patterns and Labour Force Survey

	BC	AB	SK	МВ	Western Canada	Rest of Canada
Number of Small Businesses	347,500	262,600	101,600	82,700	794,400	1,400,600

FIGURE 3 Small Businesses per Hundred Population, 1999–2004

Source: Canadian Business Patterns and Labour Force Survey



Is the number of small businesses growing in Western Canada?

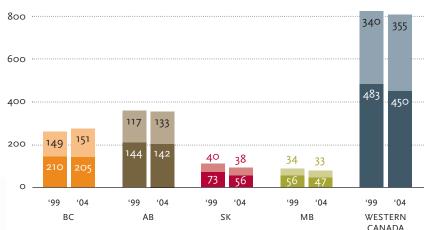
Figure 4 compares the small business population in the Western provinces for the years 1999 and 2004. The comparison reveals that the number of small businesses with employees increased over these years while the unincorporated self-employed without paid help declined. The declines in the latter were concentrated in Manitoba and Saskatchewan.

FIGURE 4 Number of Small Businesses, 1999 and 2004 (in thousands)



SELF-EMPLOYED UNINCORPORATED. 1000

Source: Canadian Business Patterns and Labour Force Survey





The performance of the small business sector in Western Canada dominates that in the rest of the country.

A more detailed analysis of these results is found in Figures 5 and 6. The two period comparison is presented because of the very large one time drop in the unincorporated self-employed without paid help in British Columbia between 1999 and 2000. That one time drop (of approximately 18,000) significantly skews the average annual experience of that province—and hence of the West as a whole—in 1999–2004 compared with 2000–2004.

Figure 5 compares the results for British Columbia over the 1999–2000 and 2000–2004 periods. The difference is accounted for largely by the unincorporated self-employed without paid help, and the influence on annual averages resulting from the one time fall in this category between 1999 and 2000. In fact, by 2004 this group had returned to the levels of 1999. Note that for British Columbia, small businesses with employees showed growth in both periods.

	'oo–'o4	'99–'04
Self-employed unincorporated, without paid help	3,200	-1,060
Businesses with < 50 employees	362	546
Total	3,562	-514

FIGURE 5 British Columbia Average Annual Change in Number of Small Businesses, 2000–2004 and 1999–2004

Source: Canadian Business Patterns and Labour Force Survey

FIGURE 6 Average Annual Change in Number of Small Businesses, 2000–2004

Source: Canadian Business Patterns and Labour Force Survey

	ВС	AB	SK	МВ	Western Canada	Rest of Canada
Self-employed unincorporated, without paid help	3,200	950	-2,850	-1,250	50	-6,800
Businesses with < 50 employees	362	1,952	-400	-93	1,822	-1,356
Total*	3,562	2,902	-3,250	-1,342	1,872	-8,156

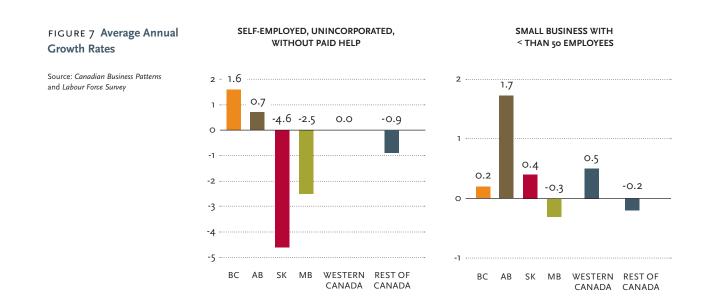
* Totals may not add due to rounding.



Figure 6, reporting results for the 2000–2004 period, shows that the small business sector in the West increased by an annual average of just under 1,900 units or by nearly 7,500 in total. However, this growth was not uniform across the West. There are significant provincial contrasts. Alberta and British Columbia show increases in both business units with employees and in the unincorporated self-employed without paid help. However, the growth of businesses with employees is the more important factor in Alberta while the self-employed account for the bulk of the increase in British Columbia. Manitoba and Saskatchewan show decreases in both categories but most notably in the self-employed.

Figure 6 also reveals the striking difference between the performance of the West as a region and other parts of Canada. While the West was gaining some 1,900 units annually, the rest of the country was losing over 8,100 small business units arising from declines both in the self-employed and in businesses with employees.

In Figure 7, the unit changes in small business shown in Figure 6 are converted to annual growth rates for the two categories of small business. The results show the substantial difference in growth rates for employee-based small business in Alberta and in the other geographical areas.



What sizes of small businesses are growing?

Taking the period 2000–2004 as shown in Figure 8, Western Canada saw considerable variation in the growth of different sizes of small business. For micro-business, or those with zero to four employees, there was little annual change, a marked contrast to the declines in the rest of the country. However, within the region, Alberta and British Columbia recorded growth. Manitoba and Saskatchewan saw substantial decreases, mostly accounted for by the agricultural sector. It is evident that these declines had severe consequences throughout the Manitoba and Saskatchewan small business sectors.

In those establishments with 5 employees or more, the growth in the West outpaced that in the rest of the country by a substantial margin and was shared across the four provinces. When all size classes of small business are considered, and the agricultural sector excluded, small business grew by an annual average of more than 6,000 units over the period.

FIGURE 8 Average Annual Change in Number of Small Businesses, 2000–2004

Source: Canadian Business Patterns and Labour Force Survey

Growth in numbers of small business in the 10 to 49 employee groups was particularly notable in the three Prairie provinces.

Category of Small Business	BC	AB	SK	МВ	Western Canada	Rest of Canada
Self-employed unincorporated,			. 0			6.9
<i>without</i> paid help	3200	950	-2,850	-1,250	50	-6,800
Businesses with 1 to 4 employees	153	930	-588	-372	123	-2,724
Businesses with 5 to 9 employees	142	437	37	116	732	488
Businesses with 10 to 19 employees	74	346	62	98	580	469
Businesses with 20 to 49 employees	-7	240	89	65	387	411
Total small business*	3,562	2,903	-3,250	-1,342	1,872	-8,157
Change due to agriculture	-72	-1,160	-2,302	-909	-4,443	-4,982
Change due to all other sectors	3,634	4,063	-948	-433	6,315	-3,175

* Totals may not add due to rounding.

How does the West rate in the creation of new business ventures?

Another way to look at the continuing vitality of the small business sector in the West is to develop an index which takes population size into account. Figure 9 reveals that entrepreneurial activity is substantially greater in Western Canada than in the rest of the country. When allowance is made for differences in population, and using new ventures in the rest of the country as a reference base (index = 100), the index of entrepreneurial activity in Western Canada during the 2000–2003 period was 177. Provincially, the index ranged from an astounding high of 213 in Alberta to 132 in Manitoba, a figure still measurably above the experience of the rest of the country.

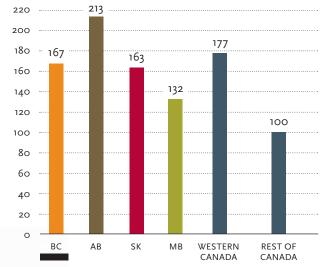


FIGURE 9 Index of New Small Business Ventures per capita, 2000–2003

Source: Western Centre for Economic Research. Basic data from Longitudinal Employment Analysis Program, Small Business and Special Surveys Division, Statistics Canada.

New entrepreneurial activity remains considerably higher in Western Canada.

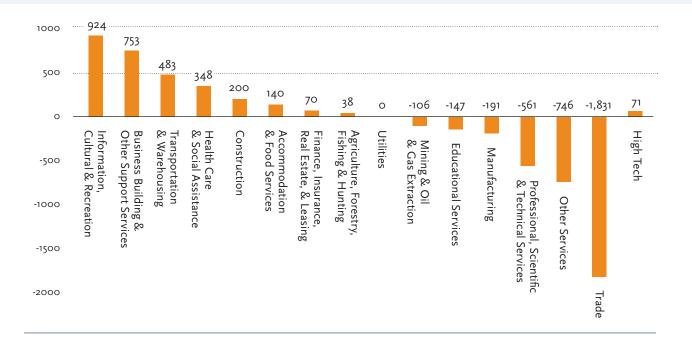


What are the provincial distributions of small business by sector?

In general, the service sectors were the strongest growth sectors. Growth in the Health Care and Social Assistance sector was common to all four provinces. In three provinces growth occurred in the Professional, Scientific, and Technical Services and the Information, Cultural, and Recreation sectors. The Trade and Manufacturing sectors, on the other hand, showed losses in all four provinces, with losses in Trade being the more significant. High Tech, which flourished in the period 1992–1999, showed only modest gains in British Columbia and Alberta. In the Prairie provinces, the Agriculture, Forestry, Fishing, and Hunting sector showed substantial losses. Nonetheless, in Alberta, Saskatchewan and Manitoba, the goods sector was still represented by a proportion greater than that seen in the rest of the country.

FIGURE 10 British Columbia Average Annual Change in Number of Small Businesses, 1999–2004

Source: Canadian Business Patterns and Labour Force Survey



In British Columbia, the Information, Cultural, and Recreation sector and the Business Building and Other Support Services sector led small business growth, followed by Transportation and Warehousing, Health Care and Social Assistance, and Construction. The Trade sector, however, experienced considerable losses. Alberta was the only other province where growth occurred in the Business Building and Other Support Services and in Construction.

In Alberta, unlike the other provinces, a majority of the sectors experienced growth. Two sectors, Professional, Scientific, and Technical Services, and Construction, dominated, with growth triple and double, respectively, that in any other sector. Mining and Oil and Gas Extraction, Finance, Insurance, Real Estate and Leasing, and Information, Cultural, and Recreation were the next three growth sectors. Agriculture, Forestry, Fishing and Hunting showed the greatest loss of small businesses, followed by Transportation and Warehousing, but these losses were more than offset by growth in other sectors. High Tech grew modestly.

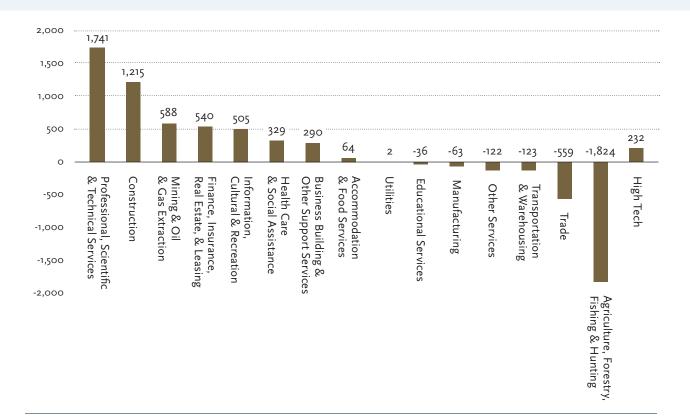
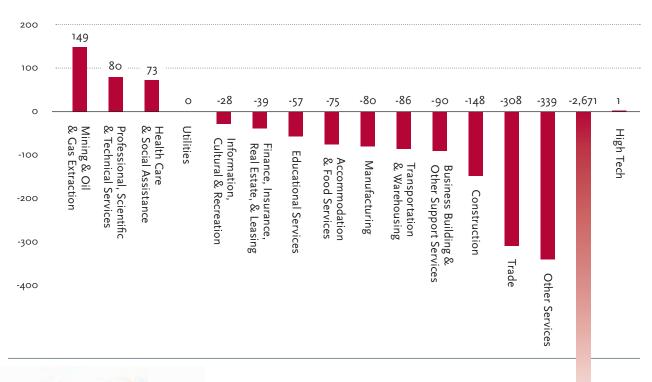


FIGURE 11 Alberta Average Annual Change in Number of Small Businesses, 1999–2004

Source: Canadian Business Patterns and Labour Force Survey FIGURE 12 Saskatchewan Average Annual Change in Number of Small Businesses, 1999–2004

Source: Canadian Business Patterns and Labour Force Survey In Saskatchewan, only three sectors experienced growth. Mining and Oil and Gas Extraction led the way, with the Professional, Scientific, and Technical Services sector and the Health Care and Social Assistance sector following. The Agriculture, Forestry, Fishing, and Hunting sector is notable for extraordinary losses in Saskatchewan and, to a lesser degree in Alberta and Manitoba. High Tech, which had grown substantially from 1992 to 1999, remained almost static from 1999 to 2004.



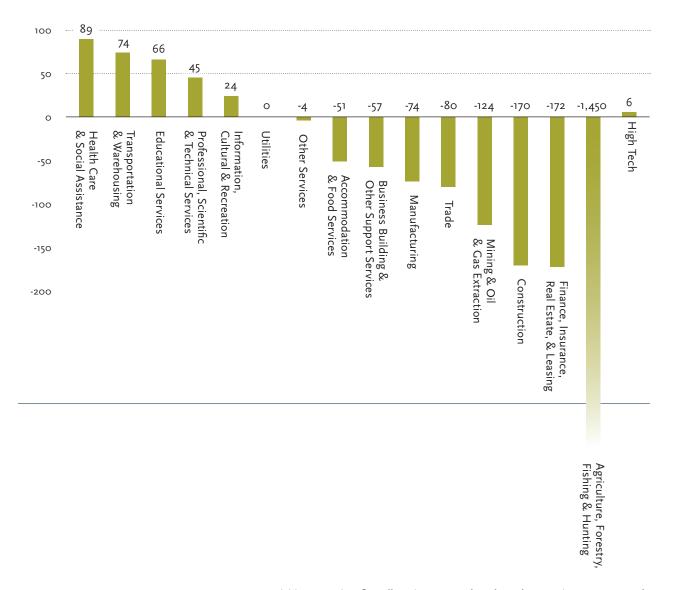


In the west, 30% of small businesses produce goods and 70% produce services. This contrasts with the rest of Canada where 21% produce goods and 79% produce services.

Agriculture, Forestry, Fishing & Hunting FIGURE 13 Manitoba Average Annual Change in Number of Small Businesses, 1999–2004

Source: Canadian Business Patterns and Labour Force Survey

In Manitoba, the Health Care and Social Assistance sector again led small business growth, followed closely by the Transportation and Warehousing sector. Unlike the other Western provinces, Manitoba saw prominent growth in the Educational Services sector. Trade and Other Services, which grew from 1992 to 1999, declined in the 1999–2004 period. Undoubtedly, the retrenchments in agriculture had a broad impact on the provincial economy.



How many people are employed in small business in Western Canada?

Small businesses provided an average of over 2.3 million jobs per year from 2000 to 2004, over 9% more jobs than in the 1996 to 1999 period. This represented 33.7% of all small business jobs in Canada and 49.6% of all jobs in Western Canada. In contrast, small businesses contributed only 42.9% of total jobs in the rest of the country.

In British Columbia, Alberta and Saskatchewan one-half of all jobs were in small business. The proportion in Manitoba was 42.3%, closely resembling that in the rest of the country.

36% of Canada's self-employed were located in the West. The self employed share of total small business employment was somewhat less than in the 1996–1999 period, ranging in 2000–2004 from a high of 42.2% in Saskatchewan, to just over 36% in British Columbia and Manitoba, to a low of 35.4% in Alberta.

In Alberta, British Columbia, and Saskatchewan, the percentage of total employment due to small business was greater than in the rest of the country, while in Manitoba the distribution among the self employed, small business employees and jobs in large business and the public sector closely mirrored that in other parts of the country.

FIGURE 14 Average Annual Small Business Employment (in thousands), 2000–2004

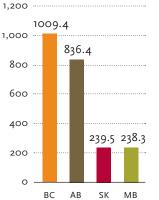


FIGURE 15 Average Annual Employment (in thousands), 2000–2004

Source: Survey of Employment, Payroll,

and Hours and Labour Force Survey

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BC

AR

100% 101.1 86.1 1,516.7 NUMBER OF 367.0 295.9 SELF-EMPLOYED 80% 3,048.5 642.4 540.5 138.3 152.3 - NUMBER EMPLOYED BY SMALL BUSINESS 60% 40% 967.9 835.8 232.1 325.6 6,075.4 NUMBER EMPLOYED BY LARGE BUSINESS 20% & PUBLIC SECTOR

sк

MB

REST OF

CANADA

Source: Survey of Employment, Payroll, and Hours and Labour Force Survey

20

How many small business jobs were created in Western Canada from 2000 to 2004?

Over 148,000 new small business jobs were created in Western Canada from 2000 to 2004. This represents 44.7% of the national increase, and an average of 37,100 new jobs annually. More than one-half of the annual increase in small business employment occurred in Alberta. In Saskatchewan and Manitoba, retrenchments, realignments and adversities in the farm sector led to job losses in the self-employed category.

Over 148,000 new small business jobs were created from 2000 to 2004.



Source: Survey of Employment, Payroll, and Hours and Labour Force Survey

Category of Business	ВС	АВ	SK	МВ	Western Canada	Rest of Canada
Self-employed	6.7	9.6	-3.8	-1.1	11.3	5.4
Employed in businesses with < 50 employees	11.1	12.5	0.6	1.6	25.8	40.5
Total small business employment increase	17.8	22.1	-3.2	0.4	37.1	45.9
Employed in businesses with 50 to 99 employees	4.5	4.9	0.8	1.4	11.5	18.4
Employed in businesses with 100+ employees	8.2	26.0	6.1	5.5	45.9	87.6
Employed in public sector	4.0	5.2	1.5	3.6	14.3	56.0

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Western Canadian annual rates of growth in job creation, for all categories of business, exceeded those recorded in the rest of the country in the period 2000–2004. The rates for Alberta reflect the large absolute number of jobs created.

FIGURE 17 Average Annual Growth Rate: Employment, 2000–2004

Source: Survey of Employment, Payroll, and Hours and Labour Force Survey

Category of business	ВС	AB	SK	МВ	Western Canada	Rest of Canada
Self-employed	1.8%	3.1%	-3.6%	-1.3%	1.3%	0.3%
Employed in businesses with < 50 employees	1.8%	2.5%	0.4%	1.0%	1.8%	1.4%
Employed in businesses with 50 to 99 employees	3.4%	4.3%	2.8%	3.7%	3.7%	2.4%
Employed in businesses with 100+ employees	1.0%	3.3%	2.7%	1.7%	2.1%	1.6%
Employed by public sector	1.1%	1.9%	1.3%	2.6%	1.6%	2.8%

Almost 50% of all Western Canadian employment is attributable to small business.

How do wages and salaries in small business compare to those in large business?

An index of average weekly earnings for each business size class (based on number of employees) is shown in Figure 18. Average earnings across all business sizes are given an index of 100. In all provinces wage and salary levels generally increase with size. They range from an index low of approximately 80 for the 5 to 19 employee group, to a high in the range of 110 to 117 for those firms with 500 or more employees. Enterprises with up to 100 employees are uniformly below the all-size average. Higher levels in the 0 to 4 employee group reflect a concentration of professional and technical enterprises.

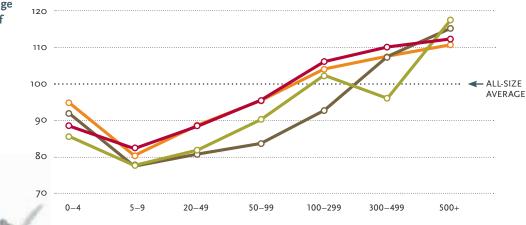


FIGURE 18 Index of Average Weekly Earnings by Size of Business, 2000–2004



Source: WCER adapted from CANSIM II data





The Intra-Provincial Experience

Rural regions have a higher relative dependence upon small business than do urban areas.

How large is the contribution of small business to provincial economic regions?

The Labour Force Survey identifies 27 economic regions across the four Western provinces. Figure 19, using data from *Canadian Business Patterns*, shows the average annual number of small business units located in each economic region, the rate of growth for each economic region, and the average annual increase in numbers over the 1999-2004 period. The economic regions are ranked by growth rate.

Three features of Figure 19 stand out:

First, the number of small businesses generally reflects population densities. In British Columbia, the Lower Mainland/Southwest region, which includes Vancouver, accounts for some 57% of small businesses; in Alberta, about 34% and 30% are in Calgary and Edmonton respectively; in Manitoba, some 50% are in Winnipeg; and in Saskatchewan, the Saskatoon/Biggar and Regina/Moose Mountain regions together account for over one half of the units.

Second, the eight Alberta regions recorded the highest growth rates in the entire West.

Third, there were substantial variations in growth rates across the economic regions of the West. Growth ranged from a high of 2.9% annually to a low of -2.2%, with 15 of the regions recording positive rates and 12 having negative rates.

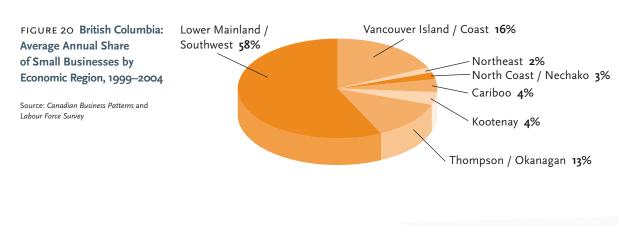
FIGURE 19 Economic Regions: Average Annual Number of Businesses and Growth Rates, 1999–2004

Source: Canadian Business Patterns and Labour Force Survey

	Total Number of Small Businesses	Growth Rate (%)	Average Annual Growth in Numbers
Calgary	43,490	2.9	1,227
Red Deer	6,837	2.4	165
Edmonton	38,765	2.2	861
Wood Buffalo / Cold Lake	3,657	2.1	75
Athabasca, Grand Prairie / Peace River	11,255	2.1	231
Banff, Jasper / Rocky Mountain House	4,251	2.0	86
Lethbridge / Medicine Hat	10,153	1.5	153
Camrose / Drumheller	9,086	1.2	110
Kootenay	6,165	1.1	70
Northeast BC	3,068	1.1	33
Lower Mainland / Southwest BC	85,607	0.6	542
Vancouver Island / Coast	24,677	0.5	117
Winnipeg	17,183	0.5	77
South Central MB	2,070	0.1	2
Interlake MB	2,604	0.1	3
Saskatoon / Biggar	11,357	-0.2	-19
Southwest MB	4,332	-0.4	-19
Regina / Moose Mountain	9,933	-0.5	-49
Thompson / Okanagan	19,406	-0.5	-99
North Central MB	1,659	-0.8	-13
Parklands / North MB	3,348	-1.1	-37
Prince Albert / Northern SK	8,948	-1.2	-103
Swift Current / Moose Jaw	5,146	-1.4	-73
MB Southeast	2,693	-1.8	-47
Yorkton / Melville	3,870	-1.8	-71
Cariboo	6,561	-1.9	-126
North Coast / Nechako BC	4,307	-2.2	-92

British Columbia

Some 57% of small business units are located in the Vancouver/Lower Mainland region. Next in importance, with almost one-fifth of small businesses, is Vancouver Island and the Sunshine Coast. However, these were not the regions of highest growth. With growth rates of 1.1%, the regions of Northeast BC and Kootenay led British Columbia. The Lower Mainland/Southwest region had a rate of growth of 0.6%, representing an increase of, on average, 547 businesses annually. Three regions saw a decline in the number of small businesses: Thompson-Okanagan at -0.5% or 99 fewer businesses annually; Cariboo at -1.9% or 126 fewer businesses; and BC Coast/Nechako at -2.2% or 92 fewer businesses. In the 1995-1999 period, Northeast BC and North Coast/Nechako also saw declines but Cariboo had the highest growth rate in Western Canada.

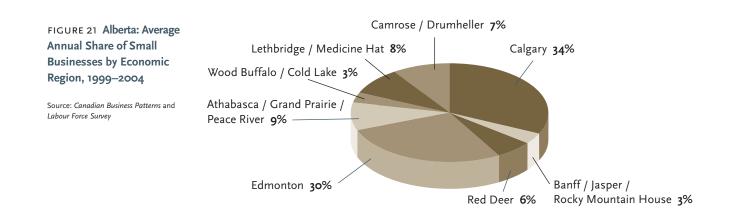


More than half of BC's small businesses are located in the Lower Mainland.



Alberta

Over three-fifths of small business units are found in the Calgary and Edmonton regions, with the balance fairly equally distributed between northern and southern parts of the province. Notably, in this period, Alberta regions ranked at the top of growth rates for the West. Calgary, at 2.9%, had the highest growth rate in the West and, with an average of 1,227 new businesses annually, also the highest growth in absolute numbers. Five other regions in the province experienced growth rates of 2.0% or more. Lethbridge/Medicine Hat and Camrose/Drumheller with growth rates of 1.5% and 1.2% respectively, ranked seventh and eighth in the West.

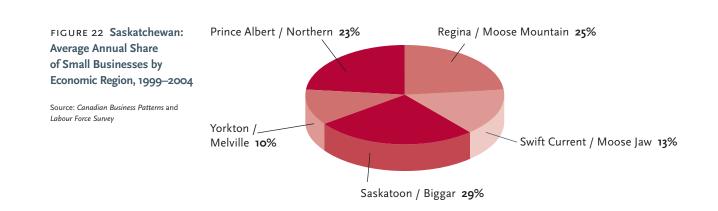




The energy industry at the core of the Alberta economy, together with its satellite sectors, provided tremendous growth opportunities for a wide range of small businesses.

Saskatchewan

Over one half of small business units are located in the Regina and Saskatoon regions. Difficulties in the farm sector were apparent throughout the province, with every region recording losses in the number of small businesses during the 1999–2004 period. This was a marked contrast to the 1995–1999 period, when only Yorkton/Melville had negative growth. Intra-provincial growth rates ranged in 1999–2004 from -0.2% in Saskatoon/Biggar to -1.8% in Yorkton/Melville.

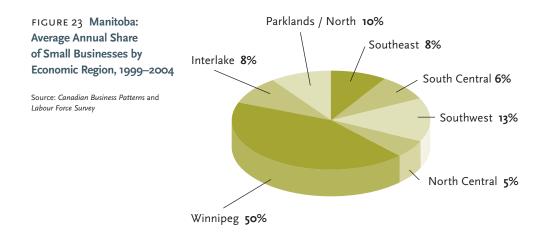


Difficulties in agriculture were reflected in the loss in the number of small businesses.

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Manitoba

One half of all small business units are in the Winnipeg region. The other half is relatively evenly distributed across the remaining regions of the province. Winnipeg, South Central and Interlake were the three Manitoba regions that saw an increase in small business units in 1999–2004, though this growth was only modest. With an average annual increase of 77 businesses, Winnipeg's growth rate was 0.5%, while Interlake and South Central registered growth of only 0.1%. The remaining four Manitoba regions all had negative growth rates. This contrasted with the 1995–1999 period, when all regions saw positive growth.



One half of all small business units are in the Winnipeg region with the other half evenly distributed across the province.

How dependent are the regions on small business?

Another way to assess the relationship between a region and small business is to consider the number of businesses relative to a measure of population size. When the concentration of small businesses per thousand of population aged 15 and over is examined, the high dependence of rural areas on small business becomes evident. Small business densities ranged from almost 185 per thousand in the Swift Current/Moose Jaw region to just under 70 per thousand in Winnipeg.

FIGURE 24 Small Business Concentration by Economic Region, 1999–2004

Source: Canadian Business Patterns and Labour Force Survey

	Small business firms per thousand units 15 and over	Economic Region	Small business firms per thousand units 15 and over
Swift Current / Moose Jaw	184.60	Interlake MB	118.28
Yorkton / Melville	173.97	Kootenay	117.24
South Central MB	173.97	Wood Buffalo / Cold Lake	116.45
Camrose / Drumheller	170.27	Thompson / Okanagan	112.95
Banff / Jasper / Rocky Mountain Ho	use 156.03	Southeast MB	112.22
Prince Albert / Northern SK	155.75	North Coast / Nechako BC	111.82
Athabasca / Grand Prairie / Peace R	iver 146.13	Regina, Moose Mountain	110.61
North Central MB	144.44	Vancouver Island / Coast	109.72
Southwest MB	144.25	Cariboo	108.17
Red Deer	134.08	Lower Mainland / Southwest BC	101.91
Lethbridge / Medicine Hat	128.11	Calgary	100.02
MB Parklands / North	125.23	Edmonton	90.60
Northeast BC	124.98	Winnipeg	69.52
Saskatoon / Biggar	118.51		



The High Technology Sector

Technology is a driver of business and employment growth and small business is often seen as an ideal vehicle for adapting to the ever-changing demands of the technological marketplace. The high tech sector is characterized by product and process innovation and the rapid absorption of these advancements. (The definition of the high tech sector as used in this report is found in Appendix A.)

Is the high technology industry important to small business activity?

Figure 25 shows the average annual change in number of high tech small businesses during the period 1999–2004. While the dramatic growth seen in 1992–1999 was not repeated, there was measured yearly growth in Alberta and, to a lesser extent, in British Columbia. The Professional, Scientific, and Technical Service Industries included in the definition accounted for most or all of the growth: 97.1% in Alberta and 110.2% in British Columbia.

	BC	AB	SK	МВ
High Tech Total*	71	232	1	6
Professional, Scientific, and Technical Services Industries included in High Tech	78	225	0	6
Other High Tech	-7	7	1	-1
Professional, Scientific, and Technical Service Industries % share	110.2%	97.1%	0.0%	110.3%

Change in Number of High Tech Small Businesses, 1999–2004

FIGURE 25 Average Annual

Source: Canadian Business Patterns

* Totals may not add due to rounding.

The number of high tech businesses did not grow as dramatically as in the period 1992-1994 but there was measured growth in Alberta and, to a lesser extent, in British Columbia.

How much employment was generated by small high technology businesses?

Alberta small business led the way by a substantial margin in creating jobs in the high tech sector. Over the period from mid 1999 to mid 2004 the average annual number of new jobs in the high tech sector in Alberta was 743, with most of this growth occurring in the Professional, Scientific, and Technical Service Industries. In Saskatchewan and Manitoba the lower growth in numbers was almost equally divided between Professional, Scientific and Technical Service Industries and other high tech activities. In British Columbia, job losses were seen in Professional, Scientific and Technical Service Industries and other high tech activities.

Is the high tech sector important to general employment growth? Relative to changes in total small business employment and in terms of comparative growth rates, it is not. However, high tech jobs require highly skilled labour, a strong plus factor in regional development and an enhancement to any economy.

Figure 27 compares growth rates for employment in high tech businesses with growth rates for employment in all small businesses, using data from Canadian Business Patterns. The data indicate that job growth in the high tech sector of small business has not quite kept pace with the overall job growth in the small business sector.

The greatest labour force density in high tech small businesses is in the Calgary-Edmonton corridor, followed by the BC Lower Mainland / Southwest, Vancouver Island / Coast and the Thompson / Okanagan regions. FIGURE 26 Average Annual Change in Number of Jobs in High Tech Small Businesses, 1999–2004

Source: Canadian Business Patterns

	ВС	AB	SK	МВ
High Tech Total	-185	743	32	59
Professional, Scientific, and Technical Service Industries included in High Tech	-61	585	16	28
Other High Tech	-124	158	16	31
Professional, Scientific, and Technical Service Industries % share	-32.9%	78.7%	50.0%	47.4%



Total small business employment grew at a rate greater than that of high tech employment.

FIGURE 27 Average Annual Growth Rates for High Tech and Total Employment in Small Businesses, 1999–2004

Source: Canadian Business Patterns

	ВС	AB	SK	МВ
Total High Tech Employment	-0.6%	1.9%	0.5%	1.3%
Total Small Business Employment	0.6%	2.2%	0.9%	1.5%

In what regions are high technology small businesses concentrated?

Saskatchewan and Manitoba have fewer high tech small businesses than Alberta and British Columbia. Their economic regions had lower, often negative growth rates. The number of high tech businesses per thousand of regional labour force is shown in Figure 28.

British Columbia

The Vancouver area leads British Columbia in concentration of high tech small businesses, and accounts for almost 70% of the province's total. The Vancouver Island/Coast region had the highest rate of growth followed by the Lower Mainland. All other regions had negative rates of growth.

Alberta

Calgary has the highest concentration of high tech small businesses, with 61% of Alberta's total, followed by Edmonton with 28% of Alberta's total. These two regions led Western Canada as well. All of Alberta's regions experienced solid positive growth. Wood Buffalo/Cold Lake and Banff/Jasper/Rocky Mountain House had the highest growth rates.

Saskatchewan

Saskatoon and Regina hold the highest concentrations of high tech small businesses and together account for almost 85% of the province's total. Saskatoon/Biggar was the only Saskatchewan region to have a positive rate of growth.

Manitoba

Winnipeg is home to 80% of Manitoba's high tech small businesses. Winnipeg was also the only Manitoba region to have a positive rate of growth.

FIGURE 28 High Tech Small Business Concentration by Economic Region, 1999–2004

Source: Canadian Business Patterns

Economic region High tech small businesses per thousand of regional labour force		Economic region	High tech small businesses per thousand of regional labour force		
Calgary	6.14	Northeast BC	1.14		
Edmonton	3.12	North Coast / Nechako BC	1.12		
Lower Mainland / Southwest BC	2.61	Wood Buffalo / Cold Lake	1.09		
Vancouver Island / Coast	2.42	Lethbridge / Medicine Hat	1.05		
Thompson / Okanagan	1.75	Camrose / Drumheller	0.90		
Red Deer	1.72	Interlake MB	0.71		
Regina / Moose Mountain	1.61	North Central MB	0.57		
Banff / Jasper / Rocky Mountain Ho	ouse 1.56	Southeast MB	0.56		
Cariboo	1.52	Prince Albert / Northern SK	0.56		
Athabasca / Grand Prairie / Peace I	River 1.48	Southwest MB	0.50		
Kootenay	1.47	South Central MB	0.47		
Saskatoon / Biggar	1.38	Yorkton / Melville	0.45		
Winnipeg	1.37	Swift Current / Moose Jaw	0.40		
		Parklands / North MB	0.31		



Profile of Small Business Owners

This section is based on those who identified themselves as self-employed in the *Labour Force Survey*. Included are those operating incorporated or unincorporated small businesses with or without paid help.



How many self-employed are there in Western Canada?

From 1999 to 2004, an annual average of 842,300 individuals in Western Canada identified themselves as self-employed. Of these, more than half were unincorporated and operated their business without paid help. This proportion was highest in Saskatchewan at 62.2% and lowest in Alberta at 47.0%.

Though women account for roughly 45% of the labour force, they only make up approximately one-third of the self-employed.

FIGURE 29 Average Annual Number of Self-Employed (in thousands), 1999–2004

Source: Labour Force Survey

Category	ВС	AB	SK	MB	Western Canada	Canada	Western Canada % share
Self-employed incorporated with paid help	80.1	70.6	16.2	16.3	183.2	520.8	35.2%
Self-employed incorporated without paid help	49.0	58.4	9.0	7.4	123.7	323.2	38.3%
Self-employed unincorporated with paid help	40.6	24.7	12.7	12.1	90.1	287.9	31.3%
Self-employed unincorporated without paid help	197.6	136.5	62.4	48.8	445.3	1213.2	36.7%
Total self-employed	367.3	290.1	100.3	84.6	842.3	2345.1	35.9%
Proportion of unincorporated self-employed <i>without</i> paid help to total self-employment	53.8%	47.0%	62.2%	57.7%	52.9%	51.7%	102.2%

As shown in Figure 30, the growth rate of the self-employed in Western Canada was very small at only 0.2%. Saskatchewan and Manitoba experienced substantial negative growth of -3.6% and -1.6%, much of this attributable to agriculture. Alberta experienced solid positive growth of 1.8%. The British Columbia numbers are very much influenced by the large one-time drop of 30.4 thousand in the self-employed between 1999 and 2000.

The incorporated self-employed category was the only category that grew across all four provinces. In Alberta and British Columbia, the growth rates for selfemployed without paid help were greater than those for self-employed with paid help, contrasting with Saskatchewan and Manitoba where both categories experienced negative growth rates.

Category	BC	AB	SK	MB	Western Canada
Self-employed with paid help	-1.3%	1.5%	-2.8%	-1.2%	-0.4%
Self-employed without paid help	1.0%	2.0%	-3.9%	-1.8%	0.5%
Self-employed incorporated	0.6%	5.3%	2.0%	2.4%	2.8%
Self-employed unincorporated	0.1%	-1.0%	-5.5%	-3.1%	-1.4%
Total self-employed	0.3%	1.8%	-3.6%	-1.6%	0.2%

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FIGURE 30 Self-Employed Average Annual Growth Rates, 1999–2004

Source: Labour Force Survey

36% of Canada's self-employed are located in Western Canada.

How many of the small business owners are women?

In the West and in Canada, about one third of the self-employed are women, though women account for roughly 45% of the total labour force. Self-employed women, as a percentage of total self-employed, ranged from a high of 36.3% in British Columbia to a low of 31.1% in Manitoba. The number of male selfemployed grew at a faster rate than that of women. Only in Alberta did the number of self-employed women show positive growth from 1999 to 2004. These trends are quite different from those seen in the 1988–1999 period, when the growth rates for self-employed women far outstripped those for men.

FIGURE 31 Trends of Self-Employment by Gender, 1999–2004

Source: Labour Force Survey

Annual Average	ВС	АВ	SK	MB	Western Canada	Rest of Canada
Number (in thousands) - Male	236.3	192.6	70.2	60.2	559.3	995.0
Number (in thousands) - Female	134.9	103.8	33.8	27.1	299.6	527.1
Share (%) - Male	63.7	65.0	67.5	68.9	65.1	65.4
Share (%) - Female	36.3	35.0	32.5	31.1	34.9	34.6
Growth Rate (%) - Male	0.5	2.1	-3.8	-0.9	0.4	0.3
Growth Rate (%) - Female	-0.6	1.3	-4.5	-2.9	-0.6	-0.1

The gender composition of the self-employed by major sector in Western Canada differs substantially from the rest of Canada. In the three Prairie provinces, there was a larger proportion of both male and female selfemployed in the goods producing sectors. Some 50% of male and 26% of female self-employed were involved in goods production, compared with only 30% and 11% respectively in the rest of Canada. Again, this is due to the significance of the farming sector in the Prairie provinces. In contrast, British Columbia's sector distribution is quite similar to that in the rest of the country.

What education levels have the small business owners attained?

From 1999 to 2004, about one half of both the male and female self-employed in Western Canada came from the top two education brackets, possessing either a post-secondary certificate or a university degree. The share for men ranged from a high of 56.4% in British Columbia to a low of 37.9% in Saskatchewan, and for women, from 54.1% in British Columbia to 47.4% in Saskatchewan. Western Canada's shares are lower than those seen in the rest of the country because of the lower percentage of university graduates among the selfemployed in the three Prairie provinces.



A large percentage of small business owners have a post-secondary education.

FIGURE 32 Average Annual Self-employment by Level of Education, 1999–2004

Source: Labour Force Survey

		0–8 Years		School	Some Post- e secondary	Certificate/ Diploma	University Degree	Total, All Education Levels
ВС	Males (in thousands) Males (%)	6.2 2.6	25.2 10.7	47.9 20.3	23.8 10.1	74.7 31.6	58.6 24.8	236.3
	Females (in thousands) Females (%)	2.8 2.1	13.9 10.3	29.7 22.0	15.5 11.5	44·3 32.8	28.8 21.3	134.9
AB	Males (in thousands) Males (%)	9.7 5.0	28.1 14.6	37.6 19.5	15.1 7.8	66.5 34·5	35.7 18.5	192.6
	Females (in thousands) Females (%)	2.4 2.3	13.6 13.1	23.7 22.8	10.0 9.6	35.5 34.2	18.4 17.7	103.8
SK	Males (in thousands) Males (%)	8.7 12.4	14.5 20.7	15.3 21.8	5.0 7.1	19.0 27.1	7.6 10.8	70.2
	Females (in thousands) Females (%)	0.9 2.7	5.8 17.2	7.9 23.4	2.6 7.7	12.6 37.3	3.5 10.4	33.8
MB	Males (in thousands) Males (%)	6.3 10.5	12.6 20.9	11.7 19.4	3.9 6.5	15.4 25.6	10.3 17.1	60.2
	Females (in thousands) Females (%)	0.4 1.5	4.6 17.0	6.0 22.1	2.0 7.4	8.9 32.8	4.5 16.6	27.1
Western Canada	Males (in thousands) Males (%)	30.9 5.5	80.4 14.4	112.6 20.1	47.7 8.5	175.5 31.4	112.2 20.1	559.3
	Females (in thousands) Females (%)	6.4 2.1	37.9 12.7	67.2 22.4	30.1 10.0	101.2 33.8	55.1 18.4	299.6
Rest of Canada	Males (in thousands) Males (%)	66.4 6.7	120.4 12.1	175 17.6	66.2 6.7	314.4 31.6	252.7 25.4	995.0
	Females (in thousands) Females (%)	26.0 4.9	60.1 11.4	99.4 18.9	39.2 7.4	179.2 34.0	124.9 23.7	527.1

What is the age profile of the small business owner?

In Western Canada, 25.2% of self-employed men and 19.4% of self-employed women belonged to the 55 and over age group, ranging for men from a high of 32.4% in Saskatchewan to a low of 23.2% in British Columbia, and for women from 25.7% in Saskatchewan to 17.7% in British Columbia. In general, the 55 and over category is represented amongst the self-employed at approximately double the level it is represented within the labour force as a whole. The older baby boomers are retiring early but not necessarily leaving the workforce.

The share of the self-employed in the 25–54 age group reflects their share of the labour force. In Western Canada, 70.4% of self-employed men and 74.1% of self-employed women belonged to the 25–54 age group, ranging for men from a high of 73.0% in British Columbia to a low of 62.4% in Saskatchewan, and for women from 75.6% in British Columbia to 66.9% in Saskatchewan.

The 15–24 age group is poorly represented amongst the self-employed.

The levels of self-employed are skewed towards the older age cohorts.

FIGURE 33 Average Annual Self-employment by Age Cohort, 1999–2004

Source: Labour Force Survey

		15–24	Males 25–54	55+	15–24	Females 25–54	55+
BC	Thousands % Share % Labour Force	9.0 3.8 15.2	172.5 73.0 71.9	54.8 23.2 13.0	9.0 6.7 16.5	102.1 75.6 73.0	23.9 17.7 10.5
АВ	Thousands % Share % Labour Force	8.0 4.2 17.8	137.1 71.2 70.1	47.5 24.7 12.0	6.0 5.8 19.1	78.1 75.2 71.0	19.7 19.0 9.9
SK	Thousands % Share % Labour Force	3.6 5.1 18.4	43.9 62.4 66.3	22.8 32.4 15.3	2.5 7.4 18.7	22.6 66.9 69.5	8.7 25.7 11.8
MB	Thousands % Share % Labour Force	3.5 5.8 17.8	40.6 67.3 69.0	16.2 26.9 13.2	2.0 7.4 18.8	19.3 71.2 70.5	5.8 21.4 10.7
Western Canada	Thousands % Share % Labour Force	24.1 4·3 16.8	394.0 70.4 70.3	141.2 25.2 12.9	19.5 6.5 17.9	222.1 74.1 71.7	58.1 19.4 10.4



Small business makes a significant contribution to employment and the economy in Western Canada. Its influence is certainly greater in the West than in the rest of the country, with approximately half of all jobs being generated by small business, as compared to 43% elsewhere. The West boasts 8.5 small businesses per hundred people while the national rate sits at 6.4.

The growth in Alberta small business, fuelled by the energy industry, generally outpaced that in other Western provinces. British Columbia, after experiencing a one time decline in small businesses without paid help in 1999, also saw solid growth in small business numbers. An index of new venture creation shows a substantially higher level of entrepreneurial activity in Western Canada than in the rest of the country.

A retrenchment in agriculture led to a substantial loss in the number of small businesses in Saskatchewan and Manitoba from 1999 to 2004. Despite this drop in number the small business sector in the West outperformed that in the rest of Canada.

Employment due to small business grew at a rate below that of larger businesses.

The self-employed account for 37% of small business jobs in Western Canada, or almost two of every five small business jobs.

Conclusion



In all four provinces wage and salary levels generally increase with business size. Businesses with up to 100 employees are uniformly below the all size average, with the lowest levels found in the 5 to 19 employee group. The somewhat higher levels found in the 0 to 4 employee group reflect a concentration of professional and technical businesses in this category.

The distribution of small businesses by sector is distinctive for each Western province. As in the rest of the country, small businesses remain concentrated in the services sector. However, in the three Prairie provinces, the goods sector was still represented by a proportion greater than that seen in the rest of the country. Across the West, the services sector dominated small business growth, particularly the Health Care and Social Assistance sector, the Professional, Scientific, and Technical Services sector, and the Information, Cultural, and Recreation sector. In Saskatchewan mainly, but in Alberta and Manitoba as well, the Agriculture, Forestry, Fishing and Hunting sector accounted for some dramatic losses in the number of small businesses.

As in the 1995-1999 period, most small businesses are found in areas of high population density but, when population size is taken into account, rural economic regions still have the greatest concentrations of small businesses.



Growth rates varied widely among the regions, with some rural and some urban regions experiencing positive growth while others were experiencing negative growth.

The high tech economy is thought to be a catalyst for employment growth, but this has not been the case for small business recently. Total small business employment grew at a rate greater than that of high tech employment. Among the self-employed, over two thirds operate their businesses without paid help. Women account for a smaller share of the self-employed than of the overall labour force, and the number of selfemployed women grew at a rate less than that of self-employed men. The relationship between the self-employed and the level of education attained is not definitive. And the levels of the self-employed are skewed towards the higher age cohorts.



Appendix A

The definition of the high technology sector used in this report was developed by BCSTATS. The NAICS industries included for the years after the 2002 NAICS code changes are:

Manufacturing Industries

325189 Other Inorganic Chemicals

- 325410 Pharmaceutical and Medicine
- 333310 Commercial and Service Industry
- 334110 Computer and Peripheral
- 334210 Telephone Apparatus
- 334220 Radio, Television Broadcasting and Wireless Communications Equipment
- 334290 Other Communications Equipment
- 334310 Audio and Video Equipment
- 334410 Semiconductor and Other Electronic Components
- 334511 Navigational and Guidance Instruments
- 334512 Measuring, Medical and Controlling Devices
- 334610 Manufacturing and Reproducing Magnetic and Optical Media
- 335315 Switchgear and Switchboard, and Relay and Industrial Control Apparatus
- 335920 Communication and Energy Wire and Cable
- 335990 All Other Electrical Equipment and Component
- 336410 Aerospace Products and Parts
- 339110 Medical Equipment and Supplies

Service Industries

- 511210 Software Publishers
- 516110 Internet Publishing and Broadcasting
- 518210 Data Processing, Hosting and Related
- 541330 Engineering
- 541510 Computer Systems Design and Related

The NAICS industries included for the years before the 2002 NAICS code changes are the same except for the following: industries 516110 Internet Publishing and Broadcasting and 518210 Data Processing, Hosting and Related are not included; and industries 5142 Data Processing are.

Note: Professional, Scientific, and Technical Industries included in the definition of the High Tech sector are:

541330 Engineering 541510 Computer Systems Design and Related.

Western Centre for Economic Research recent publications pertaining to small business

- NO. 79 Western Canada's Small Business Markets: A Survey of Selling Les marches des petites enterprises de l'Ouest canadien : sondage sur la vente by Edward J. Chambers, Jean Frost and Stephen Janzen (December 2004)
- NO. 76 A Primer on Western Canadian Entrepreneurship by Edward J. Chambers and Stuart E. Shaw (April 2004)
- NO. 70 Alberta's Small and Medium Sized Enterprises and Their Export Activity by S. Stephen Janzen, Stuart E. Shaw and R. Jean Frost (May 2002)
- NO. 63 A Portrait of Small Business Growth and Change in Western Canada by Edward J. Chambers and Nataliya Rylska (March 2001)
- NO. 60 Small Business Growth and Change in Western Canada: 1988-1999 by Edward J. Chambers and Nataliya Rylska (March 2001) Available on line only.
- NO. 58 Alberta Non-Tariff Trade Barriers Study, 2000 by Stephen Janzen and R. Jean Frost (November 2000)
- NO. 50 The Rural Renaissance in Alberta: Some Empirical Evidence by Edward J. Chambers and Mae Deans (May 1998)
- NO. 47 Communications Technology and the Business Service Sector: A Renaissance for Alberta's Communities? by Mae Deans and Edward J. Chambers (December 1997)

All of the above are available at www.bus.ualberta.ca/wcer

Other recent WCER publications

- NO. 89 The WTO Ministerial Conference Hong Kong, December 2005 A Multi Disciplinary Discussion of Impacts on the NAFTA and US-Canada Trade by Greg Anderson, Linda Reif, Michele Veeman, and Rolf Mirus (February 2006)
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- NO. 84 Alberta Tariff Reduction and Elimination Priorities 2002–2004 by Jeff Koskinen (August 2005)
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- NO. 82 15 Years of Free Trade: Looking Back–Looking Forward: Conference Proceedings (September 2004)
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