

Calgary's Labour Market from 1976 to 2015

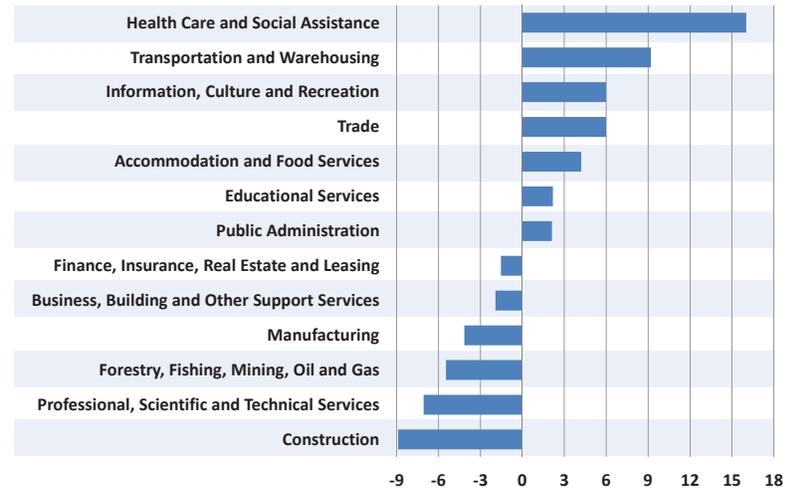
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The current oil price driven recession in Alberta is seeing mounting job losses in the Calgary Economic Region (CER). People lost their jobs because of employers' actions in cutting capital spending and reducing operating costs. The hardest hit industries were those that directly supply or serve the mining sector, including Construction, Professional, Scientific and Technical Services (PSTS), Mining, Oil and Gas, and Manufacturing industries (Chart 1). Weekly average wage data for the Calgary Census Metropolitan Area (CMA) shows that job cuts or reduced weekly earnings resulted in lower total wage bills in five out of eighteen industries in 2015, from the levels seen in 2014 (Table 1). The weak growth in labour income would weigh on growth in consumer spending and overall economic activity.

As low oil prices benefit oil importers but hurt exporters, Alberta is falling behind other provinces in economic growth. A province-wide recession is expected to continue for the second consecutive year in 2016. With no sign of a quick return to stable oil prices, labour market participants in the CER are becoming anxious about their job prospects. The long-range historical data illustrates that labour market downturns are

Chart 1: Calgary Economic Region: Total Employment Change by Industry (from 2014 to 2015, thousands of persons)



Sources: Statistics Canada, Corporate Economics, March 2016

Table 1. Calgary CMA Wage by Industry

Industry	Total employment ('000 persons)			Average weekly earning (\$)			Total weekly bills (million\$)		
	2014	2015	change	2014	2015	change	2014	2015	change
Mining, quarrying, and oil and gas extraction	58.6	53.9	(4.7)	1,779	1,827	48	104.3	98.5	(5.8)
Utilities	6.1	8.8	2.6	1,712	1,803	90	10.5	15.8	5.3
Construction	60.2	56.9	(3.3)	1,213	1,266	53	73.0	72.0	(1.0)
Manufacturing	45.1	43.3	(1.8)	1,172	1,140	(32)	52.9	49.3	(3.5)
Wholesale Trade	24.7	26.4	1.7	1,265	1,278	12	31.3	33.7	2.4
Retail Trade	74.8	77.3	2.5	619	676	57	46.3	52.3	6.0
Transportation and Warehousing	42.3	50.3	8.0	1,131	1,184	54	47.8	59.6	11.7
Information and Cultural Industries	12.2	13.0	0.8	1,099	1,026	(73)	13.4	13.4	(0.0)
Finance and Insurance	24.7	25.7	1.0	1,189	1,242	53	29.3	31.9	2.5
Real Estate Rental and Leasing	9.6	10.1	0.5	1,214	1,036	(177)	11.7	10.5	(1.2)
Professional Scientific and Technical Services	60.0	59.7	(0.2)	1,393	1,583	190	83.5	94.6	11.1
Administrative and Support	24.9	21.9	(3.0)	793	812	19	19.7	17.8	(2.0)
Educational Services	40.8	43.3	2.5	1,139	1,174	35	46.4	50.8	4.4
Health Care and Social Assistance	72.5	82.9	10.4	1,040	1,010	(29)	75.4	83.7	8.4
Arts Entertainment and Recreation	14.0	16.8	2.9	703	730	27	9.8	12.3	2.5
Accommodation and Food Services	46.9	51.3	4.5	490	502	12	22.9	25.7	2.8
Other Services(except Public Admin)	29.2	28.9	(0.4)	815	897	83	23.8	25.9	2.1
Public Administration	22.4	24.2	1.8	1,449	1,435	(14)	32.5	34.7	2.2
Total	668.9	694.6	25.7	NA	NA	NA	734.5	782.4	47.9

Sources: Statistics Canada, Corporate Economics, March 2016

Note: lack of data for Agriculture

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an important part of the cyclical nature of economy. History tells us that over the past forty years, Calgary's labour market not only went through three nation-wide recessions, but also grew faster than other major cities in Canada. It provided higher quality jobs, and became more service and knowledge based (Chart 2-8).

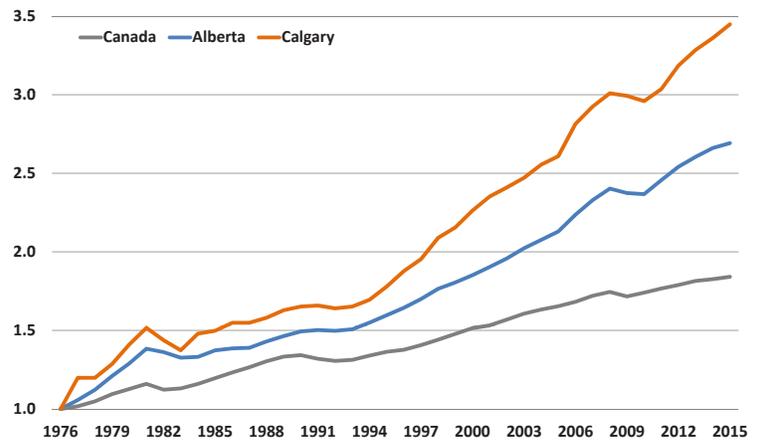
Recently retrieved data from Alberta Bureau of Statistics archives provides some labour market information for the Calgary CMA¹, dating back to 1976. Based on this data, a comparison was made among the CER², Alberta, and Canada. Chart 2 shows the total employment growth in these three geographies from 1976 to 2015. Over the past forty years, total employment in the CER grew by 2.5 times from 255,000 positions to 878,000 positions. During this period, total employment in Alberta grew by 1.7 times from 855,000 positions to 2,301,000 positions, and in Canada grew by 0.8 times from 9,747,000 positions to 17,947,000 positions. Obviously, the CER had the highest job growth among major Canadian economic regions from 1976 to 2015.

Chart 3 shows the unemployment rate in the CER, Alberta, and Canada, from 1976 to 2015. It is clear that over the past forty years, the CER and Alberta had the lowest unemployment rates in Canada. The only exception was during early to mid 80s, when the oil price crash sparked mass layoffs and nation-wide recession. Unemployment rates were higher in the CER (12.3 per cent in 1984 and 9.3 per cent in 1987) than in Canada (11.4 per cent in 1984 and 8.8 per cent in 1987).

Over the past decades³, demand for labour was high in the CER and employers provided high quality jobs, most of them were full-time and highly paid. Chart 4 shows the ratios of full-time to total employment in the CER, Alberta and Canada, from 1988 to 2015. The ratio was higher in the CER than in Canada during the whole period, with the gap increasing over the past ten years. Chart 5 shows the annual employment change in full-time and part-time positions from 1989 to 2015. The decline in full-time employment was only observed for four years during this period, most notable in 1992 (-10,900 positions) and in 2009 (-18,200 positions).

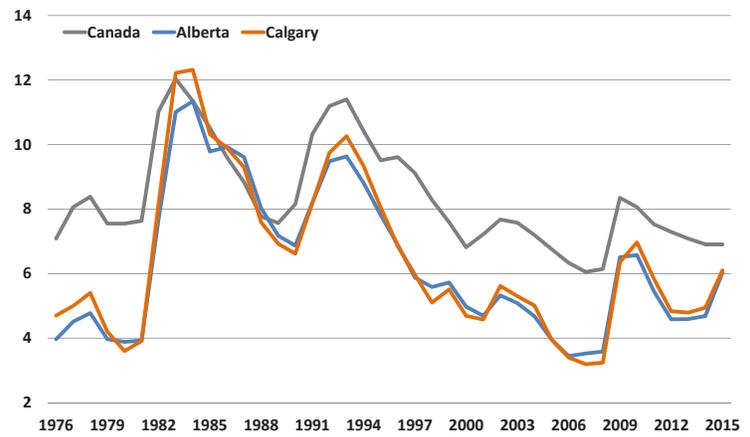
High labour demand and low unemployment rates meant stiff competition among employers to attract and retain qualified workers. As a result, companies in the CER offered above average hourly wage rate in Canada. Chart 6 shows the average hourly wage rate for all employees in the CER, Alberta and Canada, from 1998 to 2015. Starting from the same level of \$15.80 per

Chart 2: Total Employment Growth
(1976-2015, Index 1976=1)



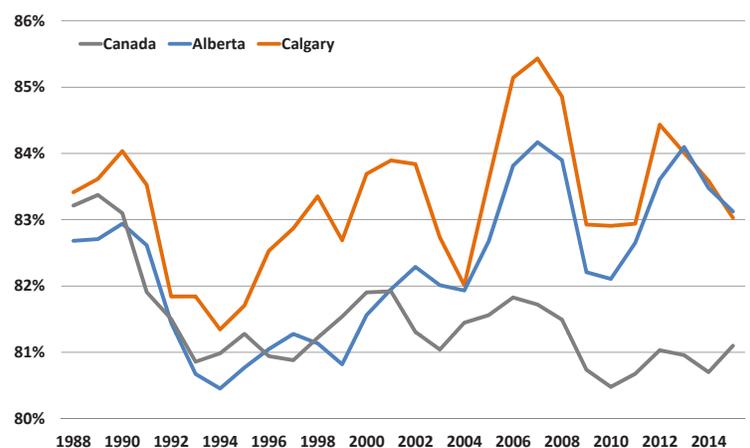
Sources: Statistics Canada, Corporate Economics, March 2016

Chart 3: Unemployment Rate
(1976-2015, per cent)



Sources: Statistics Canada, Corporate Economics, March 2016

Chart 4: Ratio of Full-time to Total Employment
(1988-2015, per cent)



Sources: Statistics Canada, Corporate Economics, March 2016

1 Alberta Statistics Review (quarterly), by Alberta Bureau of Statistics
 2 Data for Calgary CMA from 1976 to 1988 was converted to CER data for the consistency of time series.
 3 More detailed data for the CER is only available from 1988 and 1989 for chart 4, chart 5, chart 7, and chart 8, and from 1998 to 2015 for chart 6.

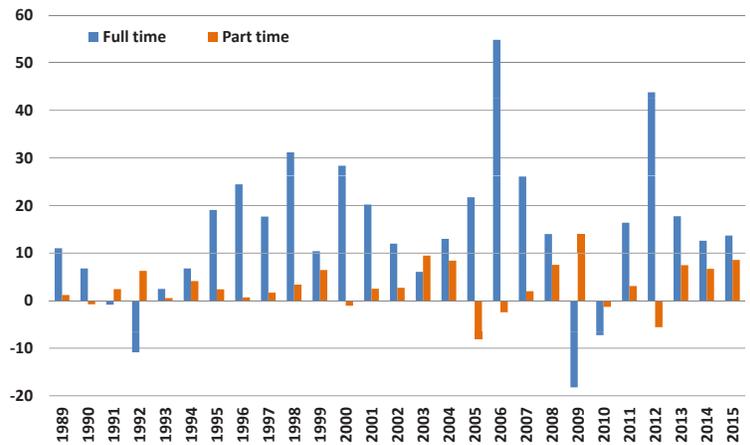
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hour in 1998, average hourly wage rate increased much faster in the CER than in Canada, with a total growth of 90 per cent and 60 per cent respectively during 1998-2015. By 2015, average wage rate was \$29.90 per hour in the CER, 19 per cent higher than the national average of \$25.20 per hour.

Investment in conventional oil and natural gas and in oil sands has been the driving force for Alberta's economy. And the CER benefited from it as the Canadian headquarters center for big energy companies. As a result, jobs in the CER were more concentrated in the mining, oil and gas, and supporting industries. However, over the years Calgary's economy became more diversified, with growth leaders shifting from goods-producing to service-producing industries. Chart 7 shows the change of total employment in goods-producing and service-producing sectors in the CER, from 1989 to 2015. Over the past 26 years, total employment in the goods-producing sector increase by 101 per cent, from 108,000 to 209,100 positions; while total employment in the service-producing sector increase by 374 per cent, from 294,300 to 668,400 positions.

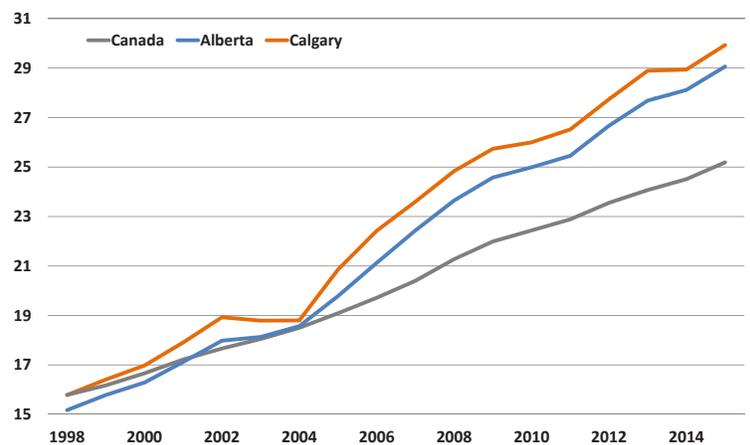
Chart 8 shows the change of industry structure in the CER from 1988 to 2015, indicated by the ratio of employment by industry to the total employment of all industries. The major industries in the CER were still energy related, with employment in the PSTS, Construction, and Mining, Oil and Gas industries accounted for 27 per cent of total employment in all industries. However, fast growing industries were also seen outside energy sectors, such as Health Care and Social Assistance, and Accommodation and Food Services industries that provide people services. The share of these two industries to the total employment in all industries increased from 13 per cent in 1988 to 19 per cent in 2015. With an aging population and weaker Canadian dollar, these people-service industries are expected to grow even further.

Chart 5: Employment Change by Type in the CER
(year-over-year change, thousands of persons)



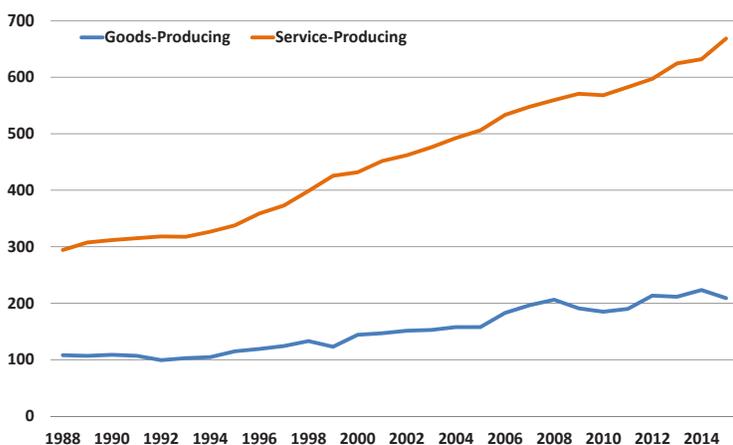
Sources: Statistics Canada, Corporate Economics, March 2016

Chart 6: Average Hourly Wage Rate for All Employees
(1998-2015, dollars per hour)



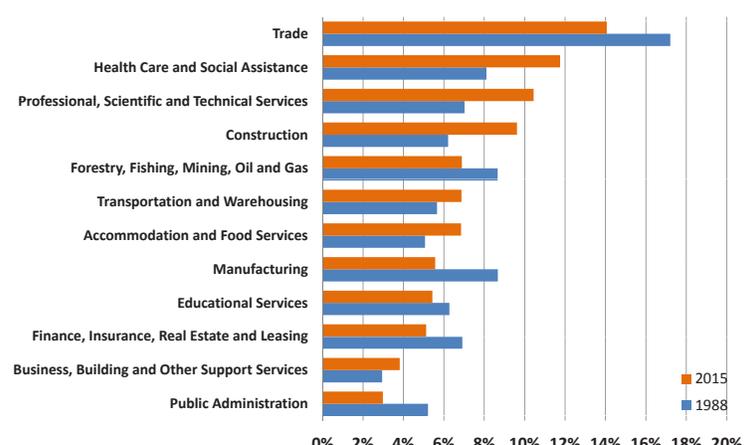
Sources: Statistics Canada, Corporate Economics, March 2016

Chart 7: Total Employment by Sector in the CER
(1988-2015, thousands of positions)



Sources: Statistics Canada, Corporate Economics, March 2016

Chart 8: CER Industry Structure Change from 1988 to 2015
(employment by industry/total employment, per cent)



Sources: Statistics Canada, Corporate Economics, March 2016

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Who We Are

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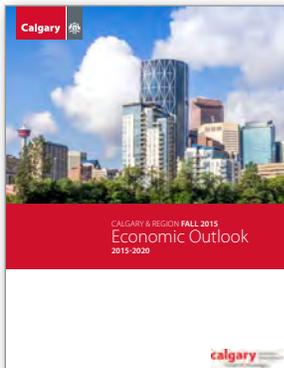
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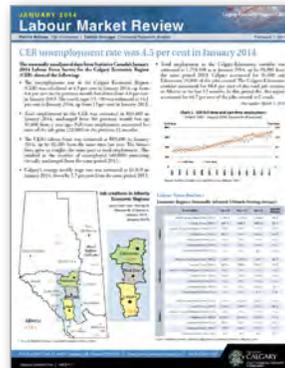
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Sources: Statistics Canada, Corporate Economics.

