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Trends in provincial and territorial economic statistics: 1981 - 2002

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Trends in provincial and territorial economic statistics: 1981 - 2002

This document contains five articles providing historical analysis of the provincial and territorial economies from 1981 to 2002. It looks at their structural changes from the perspectives of the evolution of industries and the different components of the Gross Domestic Product (GDP).

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Symbols

The following standard symbols are used in Statistics Canada publications:

. not available for any reference period
.. not available for a specific reference period
... not applicable
p preliminary
r revised
x suppressed to meet the confidentiality requirements of the Statistics Act
E use with caution
F too unreliable to be published

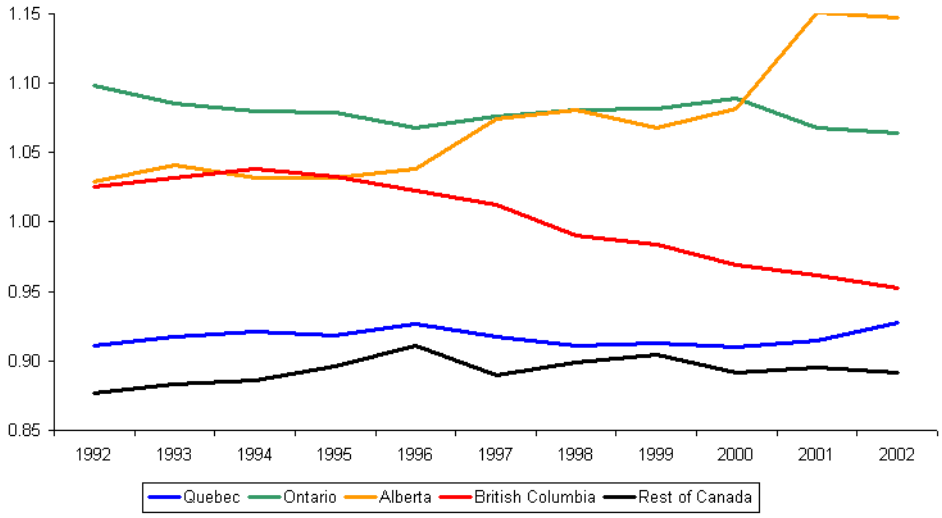
Review of personal disposable income

by Joe Wilkinson

Introduction

Personal income is the sum of all incomes received by residents of each province, including returns for labour and investments, and transfers from the government and other sectors (including old age security payments and employment insurance). Personal disposable income is the amount left over after payment of personal direct taxes, including income taxes, contributions to social insurance plans (such as the Canada Pension Plan contributions and Employment Insurance premiums) and other fees. It is a measure of the funds available for personal expenditure on goods and services and personal saving for investments as well as personal transfers to other sectors of the economy.

Chart 1: Per capita personal disposable income relative to Canada[1]

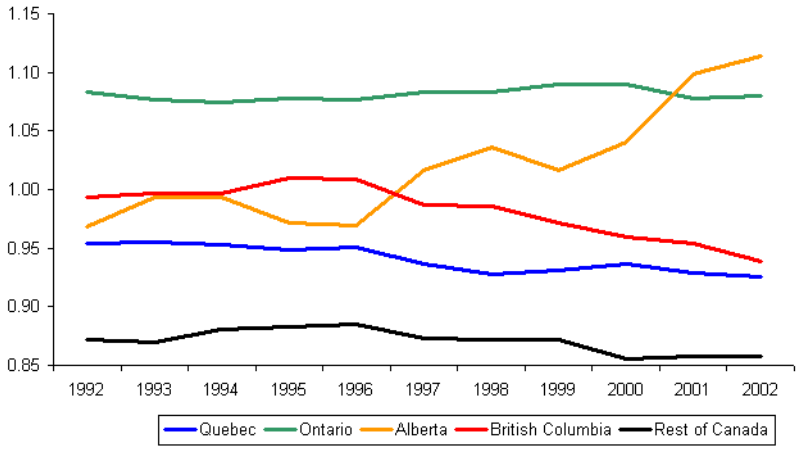


On a current dollar basis, personal disposable income per capita has increased in every province and territory over the past decade (see Appendix Table 1). On a per capita basis, personal disposable income (PDI) has remained relatively constant over the past decade in most provinces and territories relative to the national level as shown above in Chart 1.

Most provincial and territorial residents have similar amounts to spend on goods or services or to invest in savings on a relative basis. However, Albertans and British Columbians have seen their relative positions change. Albertans' share of PDI has expanded, while British Columbia's residents have seen their relative position deteriorate. British Columbians' PDI is now less than the national average on a per capita basis.

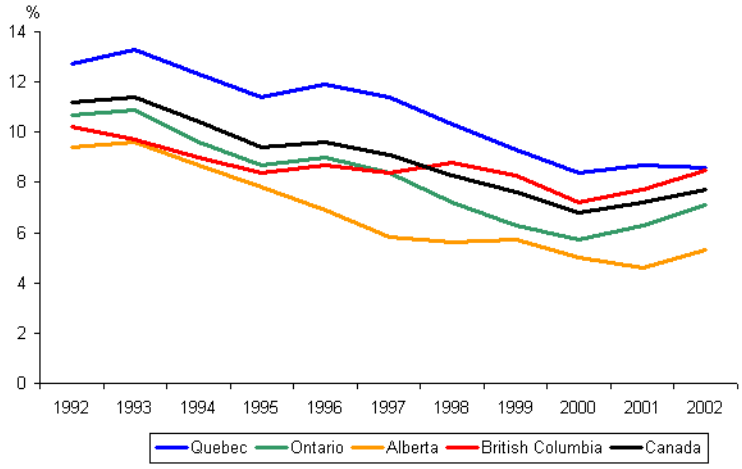
1. This is a ratio of per capita personal disposable income by province to the per capita personal disposable income of Canada.

Chart 2: Wages, salaries and supplementary labour income per employee relative to Canada[2]



Labour income per employee relative to the national average shows a pattern very similar to PDI. In Alberta, there has been growth in employment in goods-producing industries relative to service industries, notably construction, manufacturing, mining, and oil and gas industries. Average incomes in the mining, and oil and gas industries, in particular, are significantly higher than in other industries. In British Columbia, growth in employment in services-producing industries has been greater than in goods-producing industries. From 1997 to 2002, service-producing industries' salaries per employee in British Columbia were about 80% of goods-producing industries. During this period, employment in service-producing industries increased 10.6% while employment in goods-producing industries decreased 5.5%.

Chart 3: Unemployment Rate



In addition to the impact of labour income, PDI per capita can also be influenced by the unemployment rate and the participation rate. As the unemployment rate decreases, a greater percentage of the labour force is earning labour income and this would increase PDI on a per capita basis if other factors remained constant. The

2. This is a ratio of wages, salaries and supplementary labour income per employee by province to wages, salaries and supplementary labour income per employee of Canada.

unemployment rate in Alberta fell over the entire period and the pattern of change was similar to the pattern of change for Canada. Over the period the unemployment rate in Alberta fell 4.1% while it fell 4.5% for all of Canada. As Alberta's change in unemployment is similar to Canada's, the impact of PDI per capita was limited.

In British Columbia, unemployment fell from 10.2% in 1992 to 8.5% in 2002. Relative to the rest of Canada, this was a smaller decline in unemployment and as a result, the change in unemployment in British Columbia is a factor which influenced its relative decline in PDI per capita.

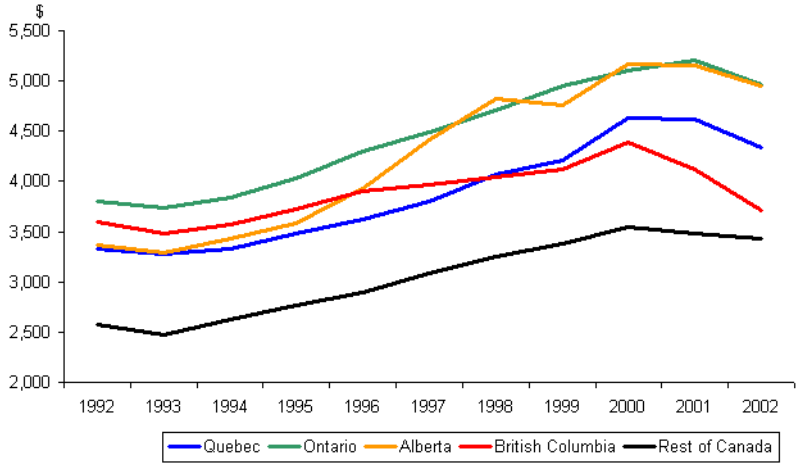
Table 1: Participation rate

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
						%					
Quebec	62.5	62.2	62.3	62.1	61.9	62.1	62.6	62.8	63.2	63.6	65.1
Ontario	67.3	66.8	66.0	65.6	65.6	65.8	66.0	66.6	67.2	67.3	67.8
Alberta	72.2	71.7	72.1	72.3	72.3	72.1	72.5	72.6	72.2	72.3	73.0
British Columbia	66.9	66.7	67.2	66.3	65.7	65.6	64.9	65.1	64.9	64.1	64.9
Canada	**65.7**	**65.4**	**65.2**	**64.9**	**64.7**	**64.9**	**65.1**	**65.6**	**65.9**	**66.0**	**66.9**

The participation rates[3] indicate that in Alberta there is greater percentage of the population who are part of the labour force. As a result, on a per capita basis, PDI would be greater as the percentage of the population who would generate current labour income is greater. In British Columbia, the participation rate is falling and there are less people as a percentage of the population who can generate current labour income over the period. While Alberta's participation rate is high, it has remained relatively stable over the period and it should not have impacted its change in PDI. However, British Columbia's falling participation has impacted its PDI.

The participation rate would be affected by an increasing percentage of the population who are retired. From a national accounting perspective, amounts received by retirees as pension or other forms of retirement income are not considered current income but a drawing down of savings (or wealth) from past periods.

Chart 4: Direct taxes per capita

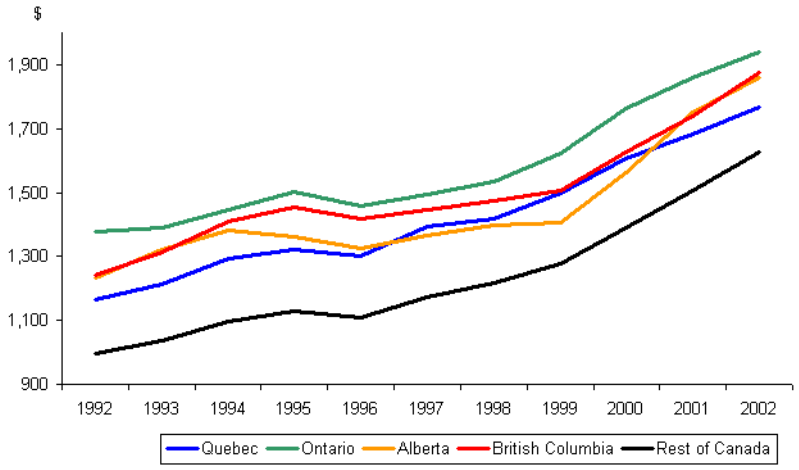


Direct taxes, such as income tax, are deducted from personal income to derive disposable income. The taxes are influenced by the trend in income, the tax base, and by changes in its composition. They are also affected by

3. The participation rate for all ages is defined as the total (or civilian) labour force for all ages divided by the total population for ages 15 and over. This data comes from the Labour Force Survey

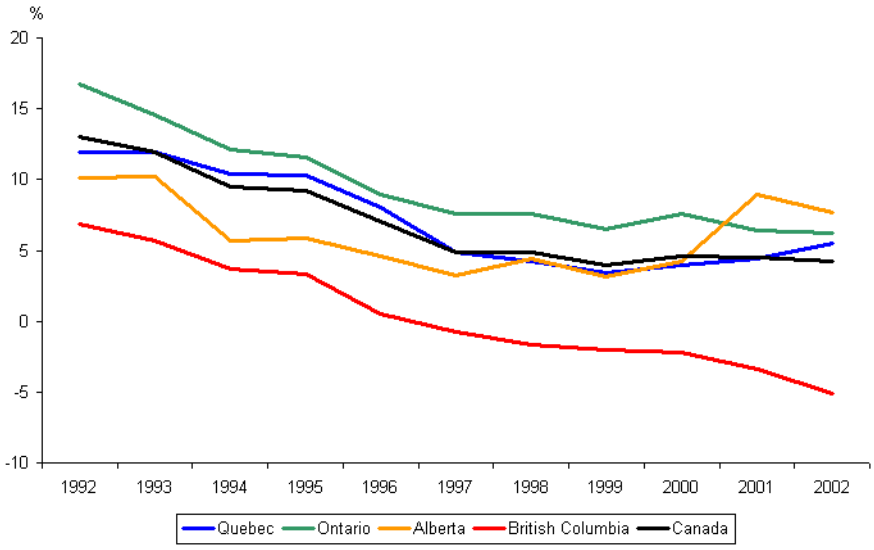
tax rate increases or decreases by provincial and federal governments. The patterns of change in direct taxes on a per capita basis are similar across most provinces. However, in British Columbia, direct taxes per capita have fallen most significantly to almost the same level as at the beginning of the period. This change would have a positive impact on PDI in B.C., particularly at the end of the period where direct taxes in B.C. are falling more rapidly than elsewhere. It would offset some of the effect of the relative decline in terms of wages, salaries and supplementary labour income, increasing relative unemployment and the falling participation rate.

Chart 5: Per capita contribution to social insurance plans



Contributions to social insurance plans (such as the Canada Pension Plan contributions and employment insurance premiums) are also deducted from personal income to derive disposable income. As with direct taxes, the provincial patterns of change in contributions to social insurance plans are similar. They are not responsible for the relative changes in PDI.

Chart 6: Personal savings rate



Personal saving is the amount left after deducting personal expenditure on consumer goods and services and personal transfers to other sectors from personal disposable income. Saving can be used for investment purposes (both financial and non-financial) as well as to reduce outstanding debt; in other words, to accumulate wealth.

The personal saving rate is defined as personal saving expressed as a percentage of personal disposable income. Most of the provinces have shown a similar propensity to save. But, British Columbia's personal saving rate is markedly different. Since 1997, British Columbians have been spending more than their current personal disposable income on consumer goods and services and transfers to other sectors. In other words, they are dis-saving.

Table 2: Total net worth per capita

	1999
	$
Newfoundland and Labrador	46,726
Prince Edward Island	85,456
Nova Scotia	73,391
New Brunswick	71,702
Quebec	87,280
Ontario	107,561
Manitoba	82,877
Saskatchewan	96,053
Alberta	106,634
British Columbia	125,264
Canada	**100,156**

Accumulated wealth[4], which includes retirement saving from prior periods, is a potential source of funds which can be drawn upon to supplement current income in order to finance current personal expenditure. When drawn upon, this source of funds appears as dis-saving in the national accounts, and takes the form of reductions of assets in the financial transactions account. This source of funds for pensioners is their retirement income. On a per capita basis, residents of British Columbia had the largest pool of personal wealth from which to draw in 1999.

Summary

Changes in wages, salaries and supplementary labour income have the most significant impact in terms of the relative shifts in PDI. More employees in Alberta work in industries where wages, salaries and supplementary labour income are higher. In British Columbia, there has been a shift to employment in industries where wages, salaries and supplementary labour income are lower (i.e. services industries). Unemployment has affected the relative decline in PDI in British Columbia as it has fallen less than elsewhere. In addition, the participation rates have affected PDI in British Columbia where a falling percentage of the population is generating current labour income. On a per capita basis, personal spending by British Columbians has grown faster than current incomes. Under these circumstances, spending can be sustained by drawing down personal wealth. As populations age in all provinces, spending funded by drawing down wealth rather than spending funded from current income is becoming more evident.

4. Data are taken from the 1999 Survey of Financial Security. Accumulated wealth or net worth is calculated by summing all assets and subtracting all liabilities on a per capita basis. While provincial data is available from this survey occasionally, estimates of wealth for each sector on a national basis are published quarterly. Available on CANSIM: tables 378-0003 to 378-0007.

Appendix

Table 1: Personal disposable income per capita

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
						$					
Newfoundland and Labrador	13,362	13,697	13,930	14,275	14,237	14,348	14,857	15,719	16,593	17,441	18,274
Prince Edward Island	14,611	15,303	14,903	15,274	15,221	15,460	15,730	16,662	17,603	17,905	18,956
Nova Scotia	15,359	15,637	15,657	15,955	15,909	16,435	17,142	18,016	18,779	19,607	20,123
New Brunswick	14,547	14,872	15,017	15,569	15,688	15,960	16,705	17,562	18,298	18,772	19,189
Quebec	15,498	15,819	15,902	16,247	16,478	16,704	17,134	17,899	18,941	19,671	20,662
Ontario	18,698	18,704	18,659	19,087	18,987	19,594	20,327	21,218	22,685	22,977	23,692
Manitoba	16,018	16,034	16,254	16,730	17,243	17,181	18,022	18,505	19,344	19,967	20,739
Saskatchewan	14,189	14,615	14,582	15,605	16,486	15,684	16,367	17,258	18,013	18,643	19,004
Alberta	17,514	17,941	17,820	18,265	18,468	19,563	20,321	20,943	22,526	24,755	25,539
British Columbia	17,448	17,781	17,939	18,268	18,185	18,431	18,611	19,300	20,188	20,683	21,201
Yukon Territory	20,767	20,419	21,400	21,742	22,000	23,188	23,094	24,871	27,500	28,400	29,567
Northwest Territories	..	..	..	..	..	..	..	25,878	28,550	30,122	33,463
Nunavut	..	..	..	..	..	..	..	22,815	24,607	26,893	27,862
Northwest Territories and Nunavut	17,419	19,750	18,923	19,075	19,235	20,074	20,597	..	..	..	..
Canada	**17,022**	**17,239**	**17,273**	**17,696**	**17,782**	**18,208**	**18,801**	**19,610**	**20,825**	**21,511**	**22,268**

Are some regions more sensitive to business cycles?

Structural differences in provincial and territorial economies

by M. Salem

The industrial makeup of Canada's regional economies is so diverse that most changes in the general economic environment - the rising value of the Canadian dollar, for instance - almost always have sharply differential impacts on provincial and territorial economies. This article explores how the industrial structure of the provinces and territories renders some of them more, and others less, sensitive to business cycles.

This study uses the last recession in Canada (1990 to 1992) to identify industries that tend to amplify a downturn, and those that temper its impact on a province or territory. Next, it examines the industrial structure of the provinces and territories to identify where cyclical industries are over-represented and which jurisdictions tend to depend more on non-cyclical industries that have secular growth paths.

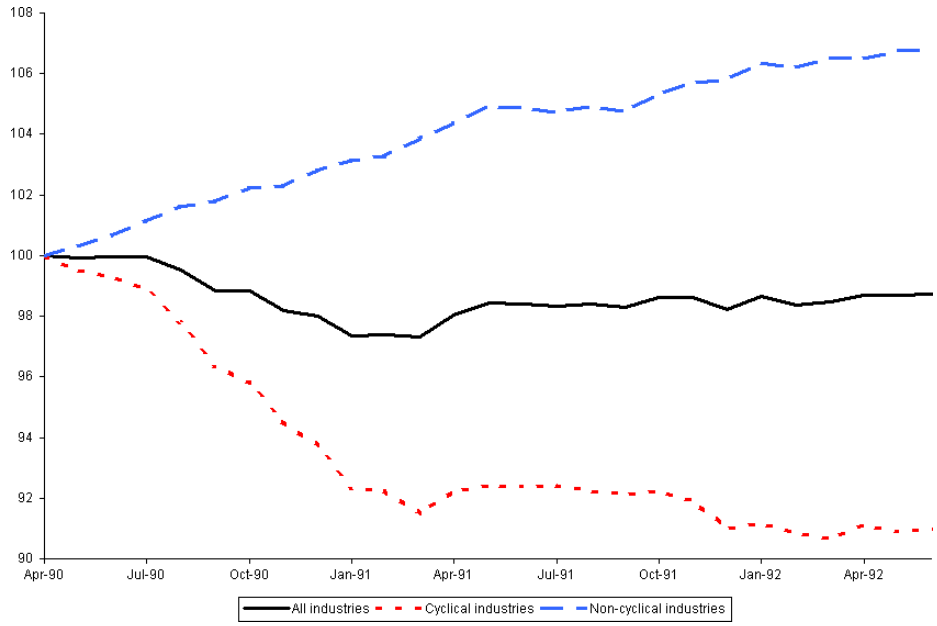
The analysis suggests that regions in which a high proportion of gross domestic product (GDP) originates from non-cyclical industries will be less affected by a general economic downturn, whereas a province with a high representation of cyclical industries will be impacted more adversely.

Recent data from the Provincial Economic Accounts suggest that, between 1997 and 2000, some provinces (Quebec, Ontario, Nova Scotia and New Brunswick) have seen an increasing share of their provincial GDP coming from cyclical industries, despite the fact that Ontario and Quebec already have the highest proportion of cyclical industries in Canada.

In contrast, jurisdictions that were less dependent on cyclical industries became even less cyclical during this period. These included Newfoundland and Labrador, Saskatchewan, Alberta, British Columbia and the territories.

The last recession in Canada is widely cited as the period between the second quarter of 1990 and the third quarter of 1992, inclusive. Chart 1 depicts the trend of national monthly real GDP, with April 1990=100. This study used a detailed breakdown of real GDP by industry that identifies more than 100 industries to analyse and compare the behaviour of each industry and the aggregate total over this cycle. For simplicity, industries are divided into cyclical and non-cyclical, to the exclusion of marginal or ambivalent cases. Specifically, an industry meets the criterion if its real GDP contracts more than the economy for at least one quarter over the cycle. If an industry's trend lies below the aggregate for three consecutive months, it is considered cyclical; otherwise it is not.

Chart 1: GDP trend of cyclical and non-cyclical industries during the 1990-1992 recession



It is important to do this examination at a fairly detailed level (using a 110 industry breakdown) because industries that are similar in many respects may behave differently over a business cycle. For instance, manufacturing industries are typically very cyclical. But a look at individual industries reveals important differences in how they are affected by a downturn. While most manufacturing industries contracted more than the economy as a whole during the last cyclical downturn, this was not the case for the food manufacturing industry, nor for the computer and electronic product manufacturing industry. Both continued to expand after the economy entered the downturn, and registered solid growth over the entire cycle. The computer and electronic industry was in the midst of a phenomenal technological innovation boom that may have offset recessionary influences of the broader economy[1]. Both industries are classified as non-cyclical, based on the above criterion.

The first step was to designate for this analysis those industries that tend to make a province's economy more prone to a downturn, and those that will likely moderate the impact of future business cycles on the province or territory. Once these industries were identified, the study measured their dominance in each provincial or territorial economy according to the industry group's share of the GDP of the province or territory in 1997 and in 2000.

If non-cyclical industries become more dominant in a province's economy, they would tend to make it more resistant to sharp declines in future business cycles. If cyclical industries occupy a larger share of a province's GDP, they would have the opposite effect.[2]

Table 1 shows how industries making up the national economy have been split into two groups based on the above analysis. In Chart 1, the total real GDP of each group is contrasted with the economy (marked All industries) as a whole over the 1990-92 recession. While the economy experienced a 2.7% pullback at the bottom of this cycle in early 1991, non-cyclical industries as a group expanded by about 4%, while cyclical industries suffered a contraction of about 8%.

1. The industry entered a significant cyclical downturn in late 2000, but this was not part of a broader economy-wide phenomenon.
2. These generalizations depend crucially on the assumption the industries that were cyclical in the 1990-92 cycle will behave similarly in a future cycle.

Table 1

Cyclical ndustries	Non-Cyclical ndustries
Agriculture, forestry, fishing and hunting	Oil and gas extraction
Mining and support industries (exc. oil and gas)	Utilities
Construction industry	Food manufacturing
Manufacturing industries[1]	Computer and electronic product manufacturing
Wholesale and retail trade industry	Pipeline transportation
Transportation, warehousing and storage[2]	Broadcasting and telecommunications
Postal services and couriers and messengers	Finance, insurance and real estate
Motion picture and sound recording industries	Educational services
Publishing, information, data processing services	Health care and social assistance
Professional, scientific and technical services	Public administration
Administrative, support, waste management	
Arts, entertainment and recreation	
Accommodation and food services	
Other services (except public administration)	

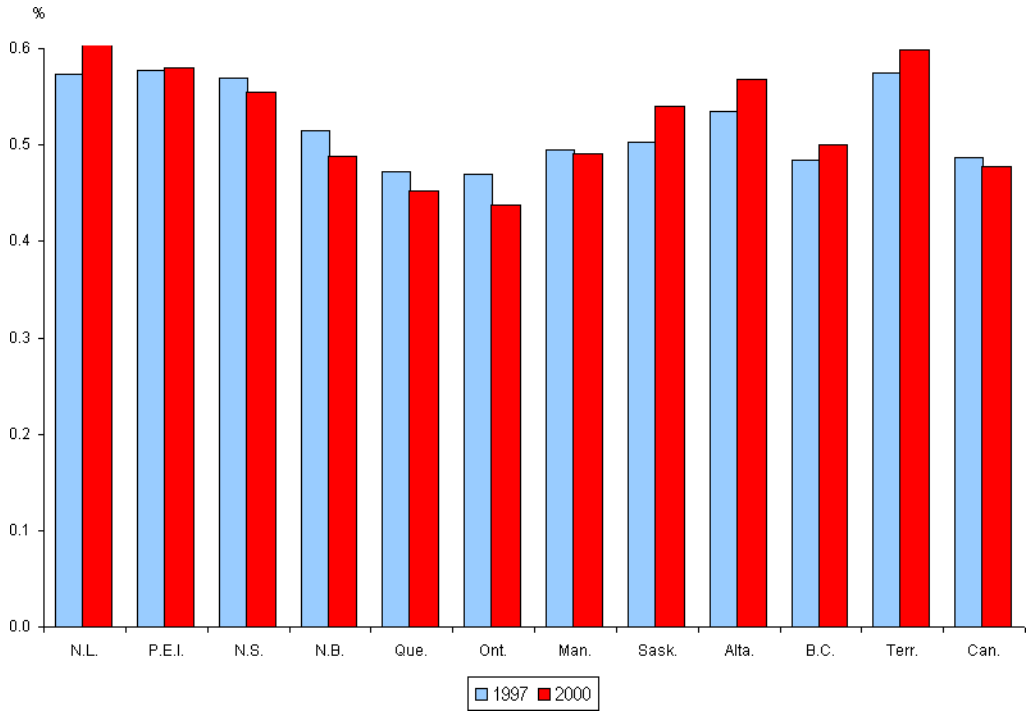
1. Except food manufacturing and computer and electronic product manufacturing that are listed as non-cyclical industries.
2. Except pipeline transport

As the cycle came to an end in September 1992, the two groups had diverged further, separated by about 15 percentage points. What this suggests is that a province or territory whose domestic economy is more based on non-cyclical industries is less likely to experience a sharp contraction in a future business cycle, all else the same. How a province or territory will fare in a future business cycle will depend critically on the proportion of its economy's GDP coming from cyclical rather than from non-cyclical industries.

This study analysed data from Provincial Economic Accounts to show the proportion of GDP coming from non-cyclical industries between 1997 and 2000, the last year this detail is available[3]. Using this data, Chart 2 shows how much of the GDP of each province or territory comes from non-cyclical industries that are likely to grow during a cycle, as suggested by Chart 1. It also shows how the structure of provincial economies changed between 1997 and 2000.

3. The data used to assess the share of cyclical industries in the GDP of provinces and territories is taken from current price input-output tables for reference years 1997 and 2000.

Chart 2: Provinces' and territories' reliance on non-cyclical industries



Less than one-half of the GDP of Quebec and Ontario originates from non-cyclical industries. In contrast, all other provinces and territories are more reliant on non-cyclical industries than the national average. In Ontario, Quebec, New Brunswick and Manitoba - provinces where more than one-half of the GDP originates from cyclical industries - manufacturing is a significant part of the provincial economy. In Ontario and Quebec, more than 20% of GDP comes from manufacturing industries that were classified as cyclical because they under-performed the overall economy for at least one quarter during the 1990-92 recession.

Between 1997 and 2000, provinces in western Canada and the territories became less dependent on cyclical industries. New Brunswick and Nova Scotia followed an opposite trend, as did Quebec and Ontario. Newfoundland and Labrador's economy became considerably more non-cyclical as the Hibernia offshore oil project came on stream and made the industry the largest single source of the province's GDP in 2000, accounting for more than 15%. While the oil and gas industry is well known for its exploration cycles, the extraction industry tends not to follow broad-based business cycles in Canada.

By far the most dramatic structural shift occurred in Newfoundland and Labrador. There, the share of oil and gas extraction in the province's GDP rose from a fraction of 1% in 1997 to more than 15% in 2000. While this certainly bodes well for the province should the economy encounter a downturn, it was partially offset by declines in the share of GDP of two important non-cyclical industries: finance, insurance and real estate (-3.6%) and public education (-2.0%).

The industrial structure of Prince Edward Island's economy did not change greatly. Most noticeable was a 3.5% rise in the share of food manufacturing - a non-cyclical industry - in the province's GDP.

Nova Scotia's economy became slightly more cyclical because the share of its finance industry declined, while at the same time, it saw expansions in several manufacturing industries, such as paper, petroleum and coal products and rubber and plastic product manufacturing. This occurred despite a 2.8% increase in the share of GDP held by the non-cyclical oil and gas extraction industry.

New Brunswick experienced a similar trend. There, cyclical industries such as construction, paper manufacturing, and petroleum and coal products, as well as administrative and support services industries, occupied larger shares of the province's GDP, while many of its non-cyclical industries showed declining shares.

Quebec and Ontario, the provinces with the most cyclical economies, saw more of their GDP coming from cyclical industries in both manufacturing and services. In Ontario, transportation equipment, fabricated metal and machinery manufacturing increased their share of the provincial economy. In addition, professional, scientific and technical services - a cyclical service industry - increased its share of Ontario's GDP to 5%, rivalling the province's retail trade industry in terms of size.

In Quebec, an increasing share of GDP came from cyclical industries in manufacturing, and professional, scientific and technical services and administrative and support services.

In Manitoba, growing shares in a number of cyclical industries were offset by growing shares in a number of non-cyclical industries, as well as contractions in machinery manufacturing and truck transportation, both cyclical industries. The province's structure did not change significantly between 1997 and 2000. Cyclical industries accounted for about 51% of its GDP, about the same as the national average (52%) in 2000.

Saskatchewan, Alberta and British Columbia became substantially more non-cyclical. The change was dramatic in Saskatchewan and Alberta. In Saskatchewan, oil and gas extraction increased its share of provincial GDP by 5.7 percentage points, while in Alberta this industry increased its share by 7.4 percentage points.

In Saskatchewan, the shares of mining and construction declined, as did shares of cyclical services industries, such as publishing, professional, scientific and technical services and administrative and support services.

Alberta's economy became considerably more non-cyclical because of a 7.4 percentage point increase in oil and gas extraction's share of GDP. This was helped by declining shares in cyclical industries, such as wholesale and retail trade and truck transportation.

British Columbia's economy also became more non-cyclical. However, oil and gas extraction played a more modest role, rising only 2.2 percentage points in the province's GDP. Increasing shares for electric power generation, computer and electronic product manufacturing, and significantly lower shares for forestry and logging and construction, were important factors.

The economies of the territories, combined for this analysis, also became more non-cyclical, principally because an increasing share of their GDP came from oil and gas extraction. This was partly offset by a higher GDP share held by mining.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Energy industry in Canada: impact on provincial economies

by Annette Laurent

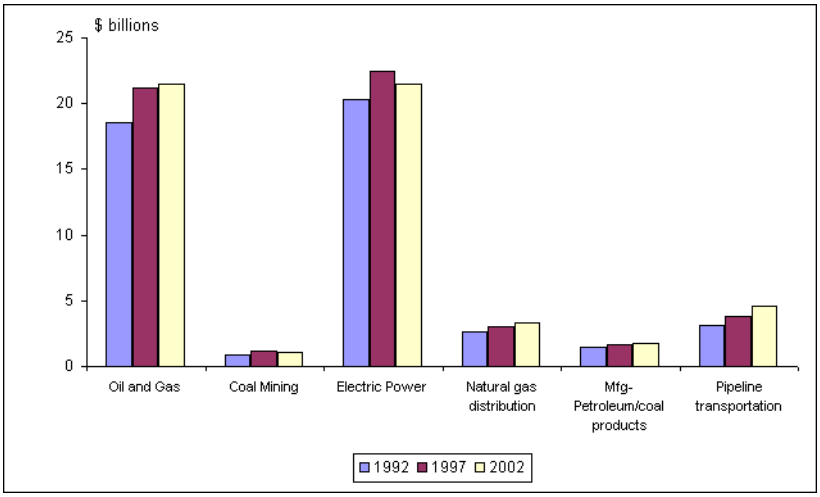
Introduction

Production in the Canadian energy sector[1] accounted for over $53 billion to total GDP in 2002[2], an important contribution. In addition, it also has made significant contributions to the Canadian economy in terms of exploration activity and capital investment. This is especially true in a regional context, where recent changes and discoveries in oil and gas have changed and impacted some provincial economies in a significant way over the last decade. Growth and change over the past years will be profiled and recent events in the sector will be discussed. The impact on provincial corporate profits will also be examined.[3]

Energy Sector in a Canadian context

Graph 1 shows the breakdown of the GDP of the energy sector in constant dollars in Canada for 1992, 1997 and 2002. The sector is typically considered to be composed of six sub-industries: oil and gas extraction, coal mining, electric power generation, transmission and distribution, petroleum and coal products manufacturing and pipeline transportation. As can be seen, for Canada, oil and gas extraction as well as electric power generation dominate energy, while the proportions of the other industries are much smaller. Also, the growth of the oil and gas industry has remained steady between 1997 and 2002, while electric power experienced a slight decline.

Chart 1: Breakdown of the energy sector Canada, 1992 to 2002



Breakdown by province

The regional weight of the energy sector in GDP differs greatly by province or territory. The energy sector is a much more dominant part of the economy in Newfoundland and Labrador, Saskatchewan, Alberta and the Northwest Territories than in the other provinces (Graph 2). The proportion of GDP derived from energy has risen dramatically for Newfoundland, from 5% in 1993 to over 20% of total GDP in 2002. Alberta and the Northwest Territories' proportion of energy GDP have declined over that same period. Energy GDP remained relatively steady over this time period in all the other provinces and territories[4].

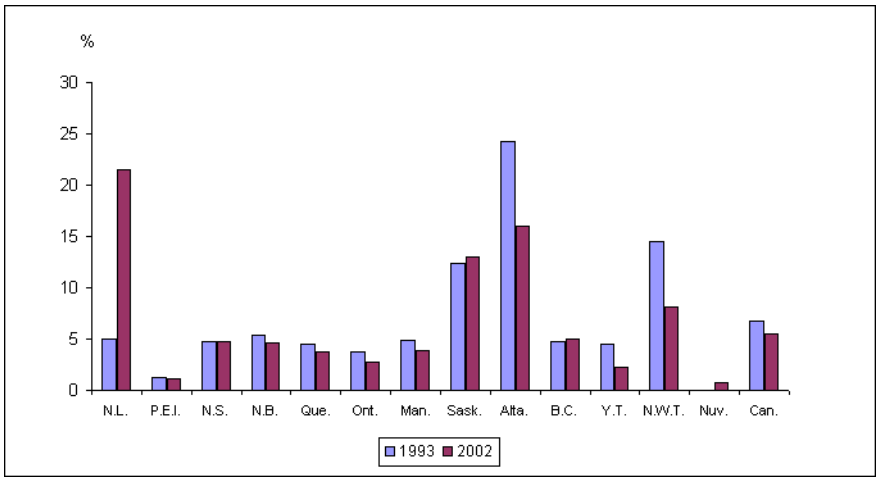
1. For the purposes of this discussion, the energy sector is defined to include: Oil and Gas Extraction (NAICS 2111), Coal Mining (NAICS 2121), Electric Power Generation, transmission and distribution (NAICS 2211), Natural Gas Distribution (NAICS 2212), Petroleum and coal products manufacturing (NAICS 324) and Pipeline transportation (NAICS 486).

2. All figures are in K$97.

3. For all graphs (except graph 1), refer to the tables in the attached Appendix for complete provincial data.

4. Graphs 2 and 3 use ratios expressed in constant dollars, using 1997 as the base year. It would be preferable for this analysis to use ratios expressed in current dollars. However, industry current dollar data, published in the provincial input-output accounts, is only available from 1997 - 2000 at the present time. Therefore, the ratios in this analysis are expressed in K$ and although useful, are somewhat arbitrary and dependant on the choice of base year. This should be taken into account in the interpretation of these results.

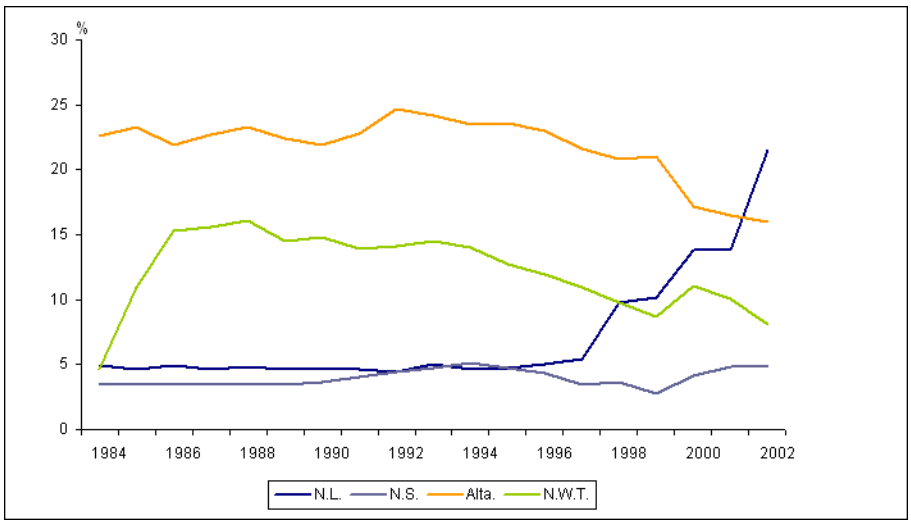
Chart 2: Energy GDP / total province GDP: 1993 and 2002 for all provinces



More detailed examination of the period from 1984 to 2002 shows that some provinces exhibit more volatility than others. Graph 3 shows the energy share of GDP for select provinces and territories. Newfoundland and Labrador, Alberta and the Northwest Territories show the most volatility and change over this period. Although it is not completely evident, some important compositional changes are taking place in Nova Scotia's economy as well.

Newfoundland experienced explosive growth in its energy sector, primarily due to new developments in offshore oil. Its share of energy GDP rose from just 5% to 21.5% of its total GDP. Conversely, Alberta and the Northwest Territories both experienced a decline in their share of energy. Although Nova Scotia did not experience a significant change in the overall growth of their energy sector, the composition changed significantly. Oil and gas extraction experienced significant growth over the past few years, while coal mining has undergone a significant decline.

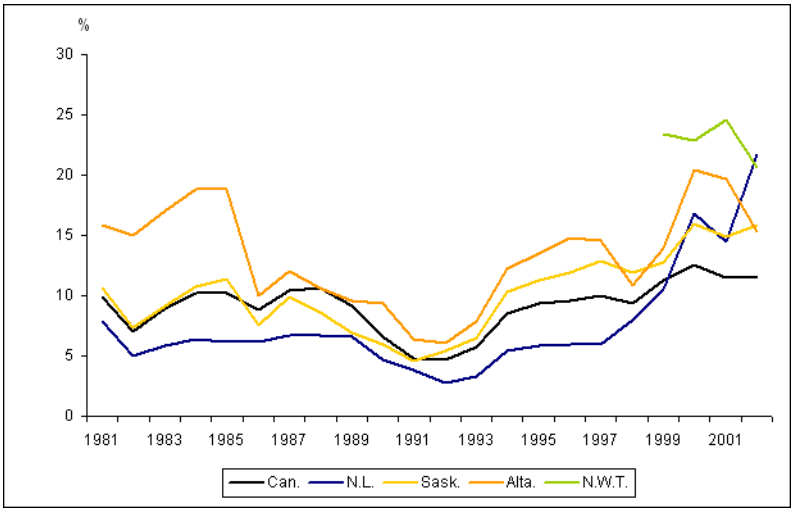
Chart 3: Energy GDP / total province GDP: 1984 to 2002 for selected provinces



Corporate profits[5]

The energy sector influences overall provincial corporate profits. The following graph shows the ratio of corporate profits in nominal GDP for all industries for the period 1981-2002 for selected provinces (that show profits generally higher than the national average). As can be seen, Saskatchewan, Alberta and the Northwest Territories have tended to have higher corporate profits than the national average. Similarly, Newfoundland and Labrador's corporate profits surpassed the national average in 1999, the second full year of Hibernia oil production. Energy prices have fluctuated during this time as well, from the highs of the early 1980s to a low in 1998, rising sharply in 1999 and 2000, falling slightly in 2001, and rising again since. Finally, the corporate profits of the Northwest Territories are influenced in a significant way by the recent developments in the diamond mining industry, and not just the oil industry.

Chart 4: Corporate profits / nominal GDP: 1981-2002 (all industries)



Newfoundland and Labrador has undergone tremendous change in its provincial economy in recent years. This has been primarily due to discoveries and developments in its oil industry, which have provided an enormous boost to its economy. Discoveries of offshore oil led to the construction of the Hibernia oil platform in 1997 and the beginning of oil production. 1998 was the first full year of output, with production soaring between 1999 and 2001 as Hibernia reached its full operation. Subsequent development of the Terra Nova oil field (2002) and White Rose (coming on stream in late 2005 or early 2006) continue to fuel the growth of Newfoundland and Labrador's oil industry. The future looks promising, with recent efforts to revive the Hebron-Ben Nevis oil project.

The composition of Nova Scotia's energy sector has changed over the most recent years, with gas extractions outpacing and replacing the contributions to the economy formerly made by coal mining. During the period 1997 to 1999, the Sable Island natural gas project was in construction, followed by production of natural gas, with increasing output and contribution to exports.

The last couple of years have seen lower natural gas prices and production levelling off after the two years of rapid growth. This particularly affected Alberta and Saskatchewan as well as Nova Scotia. However, the future looks bright, with the promise of new discoveries and planned developments.

5. Corporate profits are defined as the net earnings of privately-held corporations, before taxes.

Appendix

Table 1: Energy GDP / total GDP by province

	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nuv.	Can.
							%							
1984	4.9	0.9	3.6	5.6	5.1	4.3	4.3	9.8	22.6	4.9	3.4	4.6	..	**6.7**
1985	4.6	1.0	3.5	5.4	5.1	3.9	4.2	9.8	23.3	5.0	3.5	11.0	..	**6.7**
1986	4.9	1.1	3.5	5.9	5.2	4.0	4.4	9.3	21.9	4.7	3.4	15.3	..	**6.5**
1987	4.6	1.1	3.6	5.6	5.2	3.8	3.9	9.5	22.7	4.9	3.1	15.6	..	**6.4**
1988	4.8	1.1	3.5	5.8	4.9	3.9	4.0	11.0	23.3	4.9	3.1	16.1	..	**6.5**
1989	4.6	1.1	3.5	6.0	4.5	3.5	4.0	10.6	22.4	4.8	3.0	14.5	..	**6.2**
1990	4.6	1.1	3.7	5.9	4.4	3.3	4.0	10.4	21.9	4.8	3.0	14.8	..	**6.1**
1991	4.6	1.1	4.0	5.8	4.6	3.8	4.4	10.5	22.8	5.0	3.4	13.9	..	**6.5**
1992	4.4	1.1	4.4	5.3	4.5	3.7	4.5	11.7	24.7	4.8	3.8	14.1	..	**6.7**
1993	5.0	1.2	4.7	5.4	4.5	3.8	4.9	12.4	24.2	4.7	4.5	14.5	..	**6.8**
1994	4.6	1.2	5.1	5.3	4.5	3.7	4.9	13.1	23.5	4.5	4.2	14.0	..	**6.8**
1995	4.7	1.4	4.7	4.2	4.6	3.7	4.8	13.5	23.6	4.7	4.7	12.7	..	**6.8**
1996	5.0	1.2	4.3	4.8	4.8	3.5	5.1	13.3	23.0	4.8	3.2	11.9	..	**6.7**
1997	5.4	1.2	3.5	5.0	4.6	3.4	5.0	13.5	21.6	4.6	2.7	11.0	..	**6.5**
1998	9.8	1.2	3.7	4.9	4.3	3.1	4.5	14.6	20.8	4.6	2.0	9.8	..	**6.4**
1999	10.2	1.2	2.8	4.7	4.2	2.9	4.3	12.4	21.0	4.6	3.0	8.7	1.0	**6.1**
2000	13.8	1.1	4.1	4.4	4.1	2.7	4.2	12.5	17.2	5.0	3.2	11.1	0.9	**5.6**
2001	13.8	1.2	4.8	4.9	3.8	2.7	4.1	13.3	16.5	5.0	2.9	10.1	0.8	**5.5**
2002	21.5	1.1	4.8	4.6	3.8	2.7	3.9	13.0	16.0	5.0	2.3	8.1	0.7	**5.5**

Table 2: Ratio of corporate profits / nominal GDP by province (all industries)

	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nuv.	Can.
								%						
1981	7.9	10.3	8.8	10.2	7.3	10.1	9.2	10.6	15.9	7.8	9.3	..	..	**9.9**
1982	5.0	7.0	6.0	5.5	4.6	6.7	5.5	7.3	15.0	3.7	7.4	..	..	**7.0**
1983	5.8	8.1	7.2	6.5	6.5	9.1	6.9	9.2	17.0	5.2	-3.6	..	..	**8.9**
1984	6.4	8.8	7.7	7.5	7.5	10.4	7.4	10.7	18.8	6.1	-0.7	..	..	**10.2**
1985	6.2	9.2	7.4	7.3	7.7	10.3	8.3	11.4	18.8	6.5	-0.8	..	..	**10.2**
1986	6.2	9.6	7.5	8.4	7.3	10.1	8.2	7.6	10.0	7.5	13.1	..	..	**8.8**
1987	6.7	8.9	8.4	10.9	8.9	11.1	8.9	9.9	12.0	10.3	27.9	..	..	**10.4**
1988	6.7	8.3	8.0	10.3	9.9	11.5	9.1	8.6	10.6	10.4	28.4	..	..	**10.6**
1989	6.6	8.3	7.5	8.5	8.7	9.8	7.6	6.9	9.6	7.8	28.7	..	..	**9.1**
1990	4.7	6.5	5.1	5.8	6.0	7.0	5.4	6.0	9.4	4.6	22.1	..	..	**6.6**
1991	3.8	5.6	3.7	4.0	4.4	5.2	3.7	4.6	6.4	3.6	12.5	..	..	**4.8**
1992	2.8	5.5	3.4	3.5	4.1	5.1	3.3	5.4	6.1	3.8	8.1	..	..	**4.7**
1993	3.3	5.7	4.0	4.0	5.0	6.1	3.5	6.5	7.9	4.6	3.7	..	..	**5.7**
1994	5.4	8.3	5.8	6.8	7.7	9.0	4.9	10.3	12.2	6.7	5.3	..	..	**8.5**
1995	5.9	8.6	6.4	8.6	8.5	10.0	5.2	11.3	13.5	7.0	6.3	..	..	**9.4**
1996	6.0	8.7	6.6	8.1	8.4	10.1	6.4	11.9	14.8	6.7	8.4	..	..	**9.6**
1997	6.0	8.7	7.2	7.4	8.7	10.4	7.8	12.9	14.6	7.2	7.5	..	..	**10.0**
1998	8.0	10.2	7.1	7.4	8.9	10.5	7.7	11.9	10.9	6.3	5.2	..	..	**9.4**
1999	10.5	10.9	7.9	9.3	10.9	12.2	8.1	12.8	13.9	7.7	3.4	23.4	12.6	**11.3**
2000	16.8	10.6	9.4	9.5	10.7	12.4	8.8	16.0	20.4	8.7	5.6	22.9	12.9	**12.6**
2001	14.5	10.8	9.9	8.8	9.6	10.7	8.4	14.9	19.7	8.5	7.9	24.6	8.4	**11.5**
2002	21.7	9.7	9.5	8.8	10.2	11.8	8.8	15.9	15.3	7.8	4.8	20.6	5.0	**11.5**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Information and communication technologies

by Hans Messinger

The new economy

Explosive demand for cell phones, personal computers and internet access over the past decade propelled the growth of industries producing ICT (Information and Communication Technologies) goods and services. Services account for the largest share of the ICT sector (about 80% in 2002) and have expanded steadily over the 1997-2002 period examined. ICT services include telecommunications (by far the largest component), pay and speciality TV, software publishers, information services, data processing services, computer systems design and repair services.

The manufacturing of ICT products is heavily concentrated in central Canada with output mostly exported abroad. These industries produce electrical and electronic equipment including computers, office and business machines, telecommunications equipment, semiconductors and electronic components, broadcasting and other wireless communications equipment, instruments for navigation, measurement medicine and control and communications and energy wire and cable.

Years of stellar growth ended abruptly in late 2000 as global demand for investment in ICT infrastructure waned. This had a devastating effect on many ICT manufacturers. The ICT boom and subsequent “Tech-Wreck” in 2001-02 had a significant impact on the economic performance in central Canada vis-à-vis other provinces and territories.

The rise and fall of ICT manufacturing

Ontario accounts for more than half of all ICT manufacturing in Canada. Quebec and Ontario combined make up over 85 percent of this industrial sector, while much of the balance is located in British Columbia and Alberta.

The rise and fall of ICT manufacturing was most pronounced in Quebec where output in this sector shot up 136% from 1997-2000 then tumbled to 58% of its 2000 peak by the end of 2002. This had a profound impact on Quebec’s manufacturing sector. In 1998 and 1999 ICT industries contributed approximately 40% of overall manufacturing growth. The effect of the “high-tech meltdown” was devastating, dragging down an otherwise growing manufacturing sector in 2001 and chopping half the growth in the 2002 recovery. Producers of telecommunications equipment represent the dominant ICT industry expanding nearly two and half times in Quebec from 1997-2000. In the subsequent two years, however, output fell 41% in 2001 and a further 33% in 2002.

In Ontario the effects of the high-tech meltdown on the ICT manufacturing were somewhat less dramatic, but the gains and pains were severe for selected industries. From 1997-2000 the GDP of ICT manufacturing industries shot up 116%, led by producers of semiconductors and electronic equipment where output expanded threefold. During the slide in 2001-02, the effects were hardest felt by producers of telecommunications equipment where the value of output in 2002 was a mere 17% of its 2000 peak. This had a rippling effect on fabricators of electronic components. With the exception of communications and energy wire and cable, other ICT industries fared relatively well over this period.

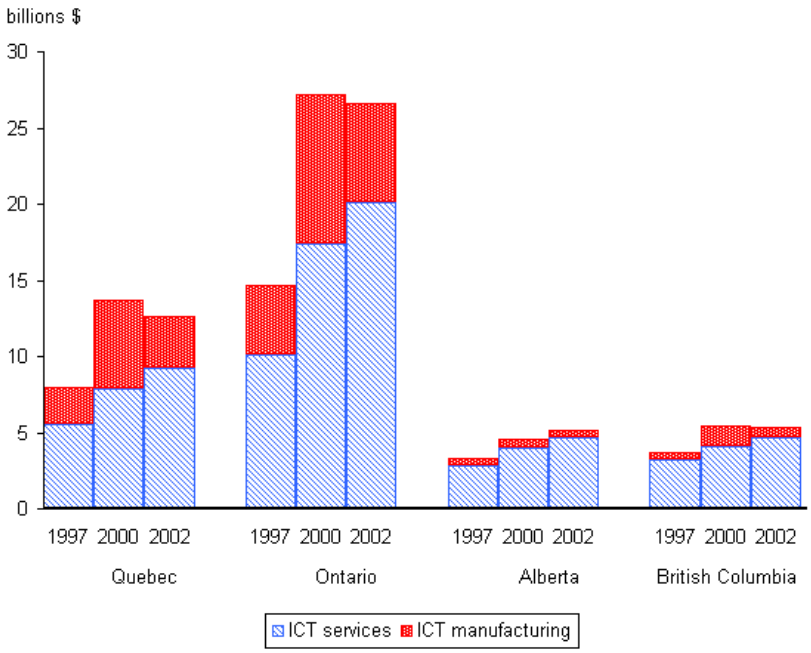
ICT Manufacturing in British Columbia is concentrated in the production of semiconductors and electronic components and computers and peripherals. These two industries were responsible for more than tripling the output of this sector between 1997 and 2000. By the end of 2002, output was less than half of the 2000 peak. Telephone apparatus is the dominant ICT industry in Alberta. With the exception of a 19% slide in 2001, output of ICT manufacturing was relatively stable compared to central Canada.

Even though ICT manufacturing is concentrated in Canada’s four largest provinces, there are important pockets of specialization in the smaller provinces, for example, navigational instruments in the Atlantic Provinces, communications and energy wire and cable in Saskatchewan and Manitoba.

Steady growth in ICT services

ICT services, unlike manufacturing, continued to expand at a brisk pace over the entire 1997-2002 period. The production of ICT services, with few exceptions, is consumed within Canada. There is a modest amount of inter-provincial trade from larger to smaller provinces and the territories. The growing demand for ICT services has been particularly strong in the household sector where purchases of personal computers, cell phones and other electronic devices (mostly imported) have greatly increased domestic demand for ICT services such as telecommunications and cable internet access. The expansion of wireless communications has facilitated access to internet and television and other communications services to remote regions of the country. Canada boasts one of the highest rates of household internet access. The proportion of households using internet regularly reached 60% in 2001 - nearly doubling since 1997. In 2002, 7.5 million households had at least one member who used the internet regularly at home, work, school or library. Among OECD countries Canada is second only to Korea for per capita broadband connectedness. Broadband (high speed internet access) has emerged as the standard for business and government. In 2001 about half of all households using internet at home (2.8 million), subscribed using broadband. It is of no surprise that household purchases of personal computers and related equipment have soared, more than doubling in every province from 1997-2001, before easing back modestly in 2002.

Chart 1: GDP of the ICT sector, billions of 1997 dollars



Provincial distribution of ICT services production closely resembles the distribution of the Canadian population as telecommunication, cable TV distribution and computer related services are largely provincially based. Consumer demand for telecommunications services in Canada surged 57% from 1997-2002 led by Ontario and Alberta with growth of 75% and 57% respectively. Over the same period, personal spending on Cable and Pay T.V. jumped by almost one-third with particularly strong expansion in Alberta, Manitoba, Ontario. For almost all years (1997-2002) in all provinces, the production of ICT services exhibited robust growth rates providing a major source of growth to the service sector as well as total GDP. In most provinces there was a sharp increase in computer systems design services in 1999 reflecting concerns and needs to redesign for Y2K compliancy.

Current trends

Demand for ICT services are continuing to expand within the household, business and public sectors, but are showing some sign of abatement as growth of household internet use has levelled off. New technologies and the continued transition to digital information and communications are showing some sporadic signs of renewed activity.

Table 1: Gross domestic product of ICT sector

		1997	1998	1999	2000	2001	2002
		GDP millions (1997 $)					
Newfoundland	Goods	3.6	6.3	10.3	17.7	9.5	10.4
	Services	296.2	339.7	350.7	400.9	437.3	477.4
Prince Edward Island	Goods	1.6	2.3	0.6	2.0	2.4	1.9
	Services	62.9	71.3	81.2	87.5	89.2	97.3
Nova Scotia	Goods	36.7	54.5	59.1	73.4	80.1	81.1
	Services	562.6	635.9	718.8	753.5	825.2	904.8
New Brunswick	Goods	13.8	12.4	19.2	28.8	21.0	20.0
	Services	481.9	550.7	610.6	638.4	698.0	763.4
Quebec	Goods	2,473.3	3,145.5	4,949.8	5,827.0	4,371.1	3,391.4
	Services	5,532.9	6,340.2	7,386.8	7,905.3	8,581.1	9,260.6
Ontario	Goods	4,535.4	5,260.4	6,872.1	9,799.1	7,172.3	6,487.8
	Services	10,119.6	11,570.1	15,395.9	17,399.7	19,005.2	20,073.4
Manitoba	Goods	88.3	89.2	95.8	144.4	112.9	86.0
	Services	660.2	758.5	815.0	885.7	965.8	1,032.0
Saskatchewan	Goods	82.5	89.1	202.3	278.7	205.9	135.9
	Services	638.1	704.0	788.6	817.6	828.7	860.1
Alberta	Goods	560.9	616.9	689.6	650.9	524.8	524.4
	Services	2,772.9	3,318.6	3,560.2	3,936.9	4,337.9	4,635.3
British Columbia	Goods	433.2	509.5	777.2	1,371.1	950.2	681.5
	Services	3,252.2	3,575.3	3,913.4	4,075.4	4,426.1	4,620.9
Yukon	Goods	0.0	0.0	0.0	0.0	0.0	0.1
	Services	22.5	32.8	33.3	39.8	38.4	39.9
NWT	Goods	0.0	0.0	0.0	0.0	0.0	0.0
	Services	74.8	60.5	53.3	54.3	61.3	67.7
Nunavut	Goods	0.0	0.0	0.0	0.0	0.0	0.0
	Services	0.1	0.1	15.0	18.6	21.3	23.6
Canada	**Goods**	**8,229.2**	**9,786.2**	**13,676.0**	**18,192.9**	**13,450.3**	**11,420.4**
	Services	**24,476.7**	**27,957.6**	**33,722.7**	**37,013.6**	**40,315.3**	**42,856.3**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A glance at provincial investment in residential structures 1981 - 2002

by Brenda Bugge

Introduction

Real residential investment[1] experienced strong growth in the last four years, with the biggest gains in 2001 and 2002. Positive growth in four consecutive years had not been seen since the 1980s, during the boom that took place between 1983 and 1989. Housing starts soared in 2002, with a national growth rate of 26%. There were robust gains in new housing investment in 2002 and expenditure on renovations experienced a very healthy 16% growth rate in 2001. With such impressive growth, this sector has received much attention as of late. On a national basis, investment in residential structures accounted for 5 to 6% of nominal Gross domestic product (GDP). With little import leakage, there are many spin-off effects on feeder industries which are also helping boost the Canadian economy. Residential investment is probably the biggest financial investment a household will make and the trade off that households face between new housing investment and renovations is dependent on many outside influences.

This article will look at the importance of investment in residential structures to provincial and territorial economies, the variation between new housing and renovations, and some of the factors influencing investment over the 1981 to 2002 time period.

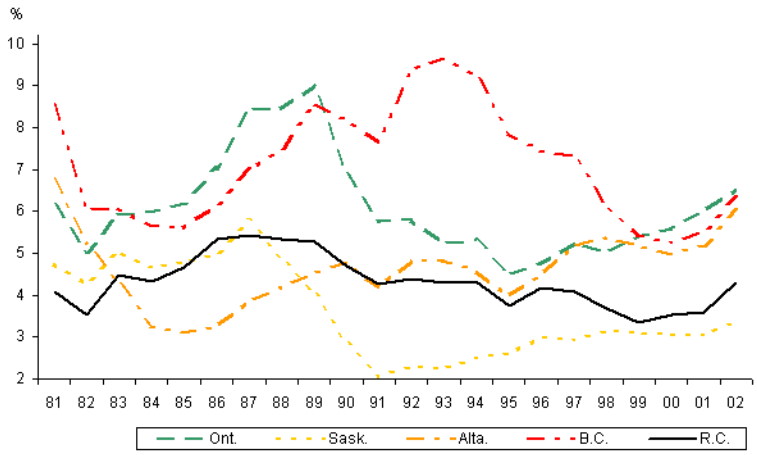
Contribution to final domestic demand

Final domestic demand (FDD) is the sum of personal expenditure on consumer goods and services, government current expenditure on goods and services, and government and business investment in fixed capital[2]. The impact of residential investment on FDD varies widely across provinces and over time. From 1990 onward, Saskatchewan had the lowest residential investment to FDD ratio, followed by Manitoba. Ontario experienced a peak in residential investment in the mid to late 1980's, and housing starts in 1987 were at the highest level since 1973. This boom ended in 1990, when housing starts fell over 30%. British Columbia had the highest residential investment to FDD ratio of all provinces and territories, strongly influenced by immigration driven population growth between 1988 and 1994. Alberta experienced a slowdown in residential investment in 1984, followed by downturns in the mid 1990's, but jumped in 1997 and 2002.

1. Residential investment includes all expenditures for new housing, major improvements and renovations, and transfer costs.

2. FDD includes a mixture of domestic and foreign production, since domestic production and some imports are included and exports and physical change in inventories are excluded.

Chart 1: Investment in residential structures as a percent of nominal FDD[3]



As shown in table 1, growth in real residential investment is more important to the growth of FDD in recent years than in the past. All provinces, except for Saskatchewan and Nunavut, had over 20% growth in real residential investment between 1999 and 2002. Saskatchewan has not experienced the same growth as the rest of the country during the period 1999 to 2001, with housing starts decreasing in 2000 and 2001. However, Manitoba and Saskatchewan saw high growth rates in residential investment between 1993 and 1996, as a result of good income and population growth.

Table 1: Growth in real residential investment compared to growth in real final domestic demand

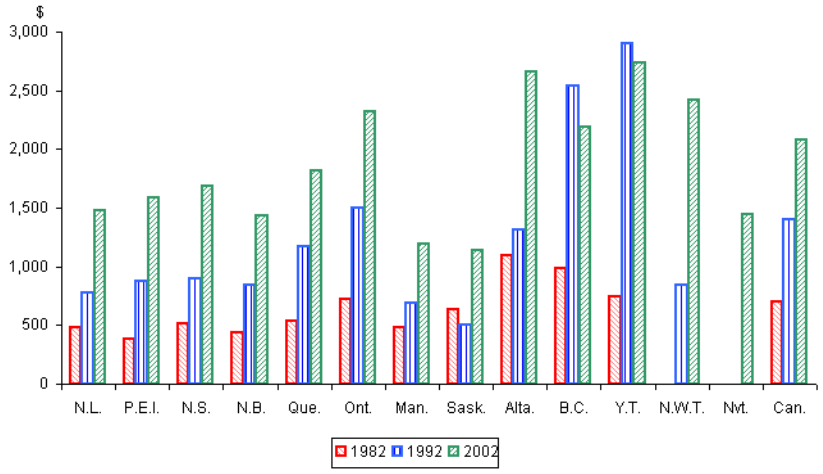
	1993-1996		1996-1999		1999-2002	
	Residential investment	FDD	Residential investment	FDD	Residential investment	FDD
	%					
Newfoundland and Labrador	-12.5	-1.5	17.6	16.8	38.7	6.7
Prince Edward Island	-1.5	12.5	12.6	9.3	35.5	9.7
Nova Scotia	3.9	1.2	6.1	16.7	31.0	5.9
New Brunswick	-3.6	3.5	8.6	15.1	48.6	3.1
Quebec	0.7	4.0	-5.3	10.1	47.0	9.3
Ontario	-3.9	6.0	25.6	15.1	28.0	10.6
Manitoba	15.9	5.3	-13.9	8.9	27.8	7.3
Saskatchewan	39.0	9.2	10.1	9.0	14.7	3.4
Alberta	0.5	8.0	29.0	20.3	32.2	18.2
British Columbia	-10.1	7.5	-16.0	6.4	28.9	9.8
Yukon Territory	9.7	8.9	-19.1	10.2	36.4	9.4
Northwest Territories	..	..	..	..	157.5	41.2
Nunavut	..	..	..	..	17.2	13.2
Canada	**-2.9**	**5.7**	**8.0**	**12.8**	**32.5**	**10.4**

3. Selected provinces compared to the rest of Canada, full table of all provinces and territories in appendix.

Residential investment -1982, 1992, 2002

Nominal residential investment is influenced by many factors, some of which include population changes, interest rates, personal income and local economic conditions. As shown in chart 2, there was much lower per capita spending on housing in 1982 than in 1992 or 2002, with the exception of Saskatchewan which experienced a decline in 1992. British Columbia and Yukon were the only jurisdictions to have lower per capita spending in 2002 relative to 1992. The Atlantic Provinces had approximately the same per capita spending on residential investment during each of the three time periods, with all four provinces showing strong increases in 2002. Manitoba and Saskatchewan invested the least amount per capita in 1992 and 2002. Per capita spending in 2002 for Alberta soared, more than double the amount of 1992.

Chart 2: Per capita nominal investment in residential structures



Components of residential investment

Investment in residential structures includes new housing investment, expenditure on renovations and transfer costs. Transfer costs, consisting primarily of real estate commissions, are the smallest of the components, about 15% of the total. Nationally, new housing investment is the largest component, representing approximately half of the total, with renovations being the second largest.

As can be seen in table 2, some provinces tend to spend more on new housing than on renovations; for others it was the reverse. In provinces with growing population or high levels of movement within the province, a higher portion may be spent on new housing; whereas, provinces experiencing stable or declining population, more may be invested in maintaining the existing housing stock. For example, Ontario and Alberta have experienced high rates of population growth and both provinces invest a higher share of the total in new housing construction. In 1982, 7 out of the 12 provinces and territories spent more on renovations than on new housing. This may be partially due to historically high mortgage rates during the early 1980's. For all three years, Newfoundland and Labrador, Manitoba and Saskatchewan spent more on renovations than on new housing. From 1982 to 2002, there were only four years when Newfoundland and Labrador spent more on new housing than on renovations, while Manitoba had five years and Saskatchewan only two, 1981 and 1983. Alberta had the highest percentage of total residential investment spent on new housing.

Table 2 Investment in new housing and renovations, percent of total investment

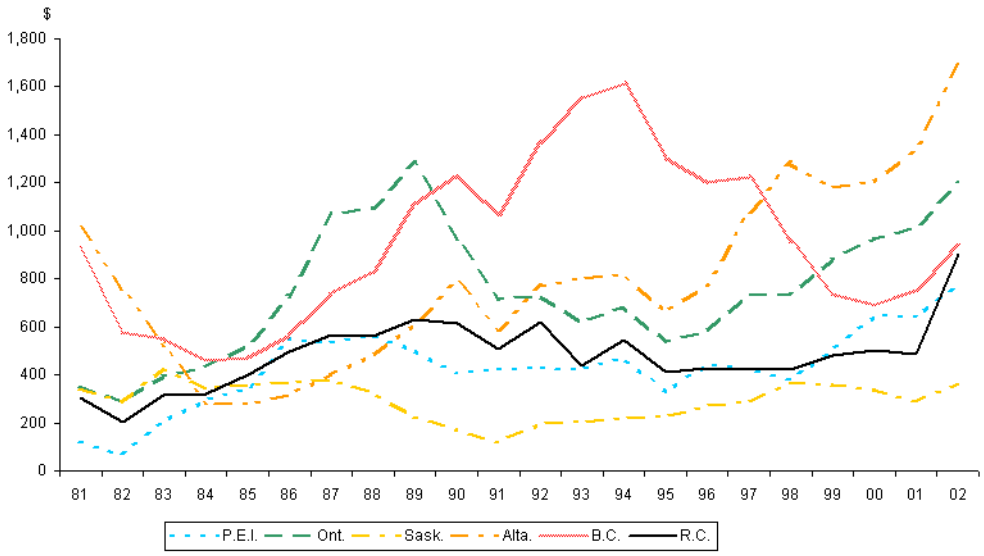
	New Housing			Renovations		
	1982	1992	2002	1982	1992	2002
			%			
Newfoundland and Labrador	45.4	48.0	44.5	50.7	49.3	49.1
Prince Edward Island	17.0	48.7	48.6	70.2	38.3	41.7
Nova Scotia	38.4	50.3	46.4	52.1	41.4	42.3
New Brunswick	25.9	45.6	47.6	61.0	46.3	43.9
Quebec	36.2	50.0	47.6	48.5	37.7	41.3
Ontario	39.5	48.8	51.6	38.4	31.6	30.8
Manitoba	21.0	32.1	35.8	55.4	44.2	50.7
Saskatchewan	45.5	39.4	32.1	48.0	49.5	55.4
Alberta	68.7	58.4	63.6	21.5	30.3	24.4
British Columbia	58.2	53.9	42.7	28.7	20.2	31.1
Yukon Territory	50.0	63.2	40.2	44.4	35.6	53.7
Northwest Territories	71.4	59.6	68.7	19.0	32.7	26.3
Nunavut	..	..	71.4	..	..	28.6
Canada	**45.6**	**50.6**	**50.1**	**38.2**	**31.3**	**33.8**

New housing investment

Housing starts soared in 2002, with seven out of ten provinces experiencing growth rates of over 20%. Nationally, housing starts have not been this high since 1989. New housing investment in Newfoundland and Labrador, Quebec and Yukon grew by over 40% from 2001.

Alberta experienced very low per capita spending in the mid 1980's but since 1998, the province has the highest per capita spending on new housing (chart 3). In recent years, population growth and a growing economy spurred housing investment. Ontario experienced a burst of new housing investment during the mid 80's, as the economy was growing at a good pace with high population and income growth. In 1990, population growth slowed and GDP decreased, resulting in a decrease in housing investment. British Columbia experienced a prolonged period of increased investment in new housing which was partially due to high international and interprovincial immigration.

Chart 3: Per capita new housing investment[4]



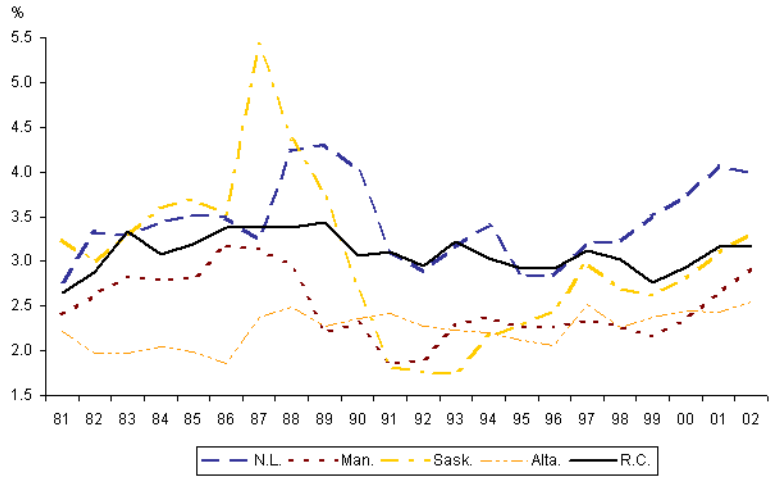
Renovations

Renovations expenditure includes spending on major improvements and alterations. During the period 1981 to 2002, Yukon spent the most per capita on renovations, whereas Manitoba spent the least. Similar to new housing investment, real expenditure on renovations experienced significant growth over the last few years, growing 16% in 2001 and 5% in 2002. After a downturn in 1990, it was not until 2000 that real expenditure on renovations made a full recovery. Both Newfoundland and Labrador and Saskatchewan have yet to fully return to the high points in renovations expenditure in the late 1980's. Parallel with new housing expenditure, Ontario experienced a peak in renovations spending in the late 1980's before a downturn in 1990.

The following chart shows the share of renovations spending to personal disposable income. In 2002, Manitoba and Alberta had the lowest ratio, Newfoundland and Labrador the highest. Saskatchewan peaked in 1987 when personal disposable income decreased, while renovations expenditure increased. The opposite occurred in the following four years.

4. Selected provinces compared to the rest of Canada, full table of all provinces and territories in appendix.

Chart 4: Renovations expenditure as a percent of personal disposable income[5]



Transfer costs

Transfer costs are the smallest component of investment in residential structures, representing approximately 15% of the total in 2002. This was lower than the historical highs of almost 20% in the mid 1980's. Real estate commissions is the biggest component of transfer costs, thus this series fluctuates with the resale market. Expenditure on real transfer costs had very strong growth in the mid 1980s, with a 22% gain in 1983. The early 1990's saw a slowdown in sales of existing homes and related transfer costs, decreasing 24.6% in 1990, and rebounding with 23% growth in 1996. In the last two years transfer costs experienced strong growth, as did the other components of residential investment. Low interest rates in later years allowed more people to purchase houses. Ontario and British Columbia spent more per capita on nominal transfer costs than any other province, reflecting higher resale prices and a booming resale industry in those provinces. Newfoundland and Labrador spent the least amount.

Conclusion

Investment in residential structures is an important component of Canadian and provincial economies. In most provinces, growth in this sector has buoyed GDP growth. Residential investment is sensitive to many dynamic factors, including demographic changes and economic variables. As an element of GDP that varies differently between provinces, the decision to invest either in new housing or in renovations is also dependent on these factors. Recently, all three components of residential investment experienced strong growth on a national basis. However, this did not hold true for every province and territory.

5. Selected provinces compared to the rest of Canada, full table of all provinces and territories in appendix.

Appendix

Table 1: Investment in residential structures as a percent of nominal FDD

	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nvt.	Can.
							%							
1981	4.6	3.2	3.7	3.9	5.0	6.1	4.3	4.8	6.8	8.6	3.8	..	..	**5.9**
1982	4.0	3.2	3.6	3.5	4.1	5.0	3.6	4.3	5.2	6.0	2.7	..	..	**4.7**
1983	4.3	4.0	4.1	4.9	5.4	5.9	4.8	5.0	4.3	6.1	3.7	..	..	**5.4**
1984	4.0	4.5	4.1	4.5	5.7	6.0	4.8	4.7	3.3	5.6	2.8	..	..	**5.3**
1985	4.1	4.7	4.6	4.9	5.7	6.2	5.2	4.8	3.1	5.6	3.6	..	..	**5.4**
1986	4.4	5.5	5.1	5.6	6.5	7.0	6.1	5.0	3.3	6.2	4.2	..	..	**6.1**
1987	4.2	5.2	5.0	5.1	7.4	8.4	6.1	5.7	3.9	7.0	4.9	..	..	**7.1**
1988	4.9	5.6	4.5	5.0	7.1	8.4	5.6	4.9	4.2	7.5	4.7	..	..	**7.0**
1989	5.4	5.0	4.0	4.7	6.3	9.0	4.6	4.0	4.5	8.5	6.8	..	..	**7.2**
1990	5.1	4.3	4.3	3.8	5.9	6.9	3.9	2.8	4.8	8.2	5.6	..	..	**6.1**
1991	4.5	4.5	3.7	3.6	5.1	5.8	3.0	2.0	4.2	7.7	5.4	..	..	**5.3**
1992	3.8	4.1	3.8	3.8	5.0	5.8	3.0	2.3	4.8	9.4	7.1	..	..	**5.6**
1993	3.8	4.5	4.0	3.9	4.8	5.3	3.5	2.3	4.8	9.7	5.5	..	..	**5.4**
1994	3.9	4.2	4.1	4.0	5.4	5.3	4.1	2.5	4.6	9.3	4.6	..	..	**5.6**
1995	3.1	3.9	4.1	3.2	4.2	4.5	3.5	2.6	4.0	7.8	4.3	..	..	**4.7**
1996	3.4	4.1	4.3	3.6	4.7	4.8	3.9	3.0	4.5	7.5	5.1	..	..	**4.9**
1997	3.7	4.3	4.1	3.7	4.4	5.2	3.4	2.9	5.2	7.3	4.9	..	..	**5.1**
1998	3.5	3.8	3.5	3.3	4.1	5.0	3.4	3.1	5.4	6.1	4.3	..	..	**4.8**
1999	3.3	4.1	3.9	3.3	4.1	5.4	3.1	3.1	5.2	5.4	3.8	1.8	2.6	**4.8**
2000	3.6	4.7	4.3	3.9	4.1	5.6	3.1	3.0	5.0	5.2	4.3	1.1	2.6	**4.8**
2001	3.9	4.6	4.4	4.3	4.7	6.0	3.3	3.0	5.2	5.5	4.3	1.4	1.3	**5.2**
2002	4.4	5.0	4.9	4.6	5.7	6.5	3.7	3.4	6.0	6.3	4.8	2.8	2.8	**5.9**

Table 2: Per capita investment in new housing

	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nvt.	Can.
								$						
1981	285	121	232	173	285	355	190	344	1,010	929	667	..	..	**443**
1982	221	65	198	114	195	286	101	291	754	576	375	..	..	**322**
1983	303	208	344	302	351	395	284	427	523	551	292	..	..	**403**
1984	272	291	349	252	400	435	311	341	285	457	333	..	..	**393**
1985	299	344	479	345	444	523	386	358	280	468	458	..	..	**449**
1986	342	547	571	385	592	727	518	369	316	568	583	..	..	**588**
1987	336	535	558	386	839	1,068	536	381	400	736	731	..	..	**805**
1988	393	566	501	408	816	1,094	467	324	481	830	778	..	..	**823**
1989	502	500	468	403	707	1,281	406	225	610	1,113	1,296	..	..	**907**
1990	486	405	493	341	707	966	335	170	790	1,232	1,321	..	..	**816**
1991	472	423	422	320	607	717	214	120	586	1,067	1,000	..	..	**651**
1992	376	427	449	382	584	733	221	199	767	1,370	1,833	500	..	**711**
1993	359	424	437	427	526	618	258	204	801	1,551	645	406	..	**682**
1994	384	470	503	445	582	686	347	221	818	1,612	633	923	..	**742**
1995	301	333	500	327	404	541	258	226	665	1,309	742	328	..	**583**
1996	333	441	503	380	410	585	257	274	775	1,203	1,031	88	..	**604**
1997	386	423	508	428	457	734	308	288	1,080	1,226	844	29	..	**709**
1998	369	380	422	381	440	733	350	365	1,280	957	562	448	..	**690**
1999	351	500	559	401	488	883	347	357	1,181	735	452	439	815	**726**
2000	383	647	621	506	486	967	343	335	1,209	689	700	75	893	**760**
2001	450	642	637	604	570	1,014	353	290	1,340	751	667	366	250	**824**
2002	659	774	781	685	868	1,196	428	366	1,694	935	1,100	1,659	1,034	**1,043**

Table 3: Per capita expenditure on renovations

	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nvt.	Can.
							$							
1981	186	177	194	194	225	277	222	299	250	320	333	83	..	**256**
1982	247	266	269	270	261	279	267	307	236	284	333	80	..	**270**
1983	252	264	257	273	316	334	287	330	238	308	667	137	..	**309**
1984	276	299	293	305	362	369	322	386	255	332	417	189	..	**344**
1985	302	320	318	319	377	387	349	421	274	329	583	389	..	**361**
1986	319	297	342	430	409	402	406	442	258	293	792	309	..	**376**
1987	329	302	375	380	423	471	411	628	333	293	885	400	..	**420**
1988	464	411	392	397	450	552	413	541	382	313	889	661	..	**465**
1989	509	400	355	419	464	621	326	494	370	378	1,185	649	..	**496**
1990	507	420	453	374	487	518	363	384	398	422	786	424	..	**470**
1991	407	477	378	365	391	473	291	263	418	447	1,138	197	..	**422**
1992	386	336	370	388	440	474	305	250	398	512	1,033	274	..	**441**
1993	433	417	446	361	455	499	364	255	400	507	1,258	234	..	**459**
1994	473	343	410	385	552	469	385	314	392	466	1,100	323	..	**469**
1995	405	467	406	344	453	457	377	357	387	497	1,032	269	..	**443**
1996	406	346	427	373	577	485	389	404	379	446	1,000	250	..	**479**
1997	460	467	470	406	510	508	400	469	493	537	1,125	265	..	**501**
1998	479	467	431	400	516	506	409	441	460	505	1,156	403	..	**493**
1999	552	507	493	441	522	529	400	452	497	536	1,258	488	333	**515**
2000	619	596	591	545	566	582	452	506	551	608	1,433	575	286	**572**
2001	709	613	643	577	696	695	529	576	602	642	1,500	683	393	**665**
2002	726	664	711	632	753	715	605	632	649	681	1,467	634	414	**704**

Table 4: Renovations expenditure as a percent of personal disposable income

	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nvt.	Can.
							%							
1981	2.8	2.4	2.4	2.6	2.6	2.7	2.4	3.3	2.2	3.0	2.9	..	..	**2.7**
1982	3.3	3.2	3.0	3.2	2.8	2.5	2.6	3.0	2.0	2.5	2.9	..	..	**2.6**
1983	3.3	2.9	2.7	3.1	3.3	2.8	2.8	3.3	2.0	2.7	5.8	..	..	**2.8**
1984	3.4	3.2	2.9	3.2	3.4	2.9	2.8	3.6	2.0	2.7	3.2	..	..	**2.9**
1985	3.5	3.3	2.9	3.2	3.4	2.8	2.8	3.7	2.0	2.6	4.3	..	..	**2.9**
1986	3.5	2.7	3.0	4.0	3.5	2.8	3.2	3.5	1.9	2.2	5.5	..	..	**2.9**
1987	3.2	2.7	3.1	3.3	3.4	3.1	3.1	5.4	2.4	2.1	6.0	..	..	**3.1**
1988	4.2	3.3	3.0	3.2	3.4	3.4	3.0	4.4	2.5	2.1	5.3	..	..	**3.2**
1989	4.3	3.0	2.5	3.2	3.2	3.5	2.2	3.8	2.3	2.3	6.2	..	..	**3.1**
1990	4.0	3.0	3.1	2.7	3.2	2.9	2.3	2.7	2.4	2.5	4.0	..	..	**2.8**
1991	3.1	3.3	2.5	2.6	2.5	2.6	1.8	1.8	2.4	2.6	5.7	..	..	**2.5**
1992	2.9	2.3	2.4	2.7	2.8	2.5	1.9	1.8	2.3	2.9	5.0	..	..	**2.6**
1993	3.2	2.7	2.9	2.4	2.9	2.7	2.3	1.7	2.2	2.9	6.2	..	..	**2.7**
1994	3.4	2.3	2.6	2.6	3.5	2.5	2.4	2.2	2.2	2.6	5.1	..	..	**2.7**
1995	2.8	3.1	2.5	2.2	2.8	2.4	2.3	2.3	2.1	2.7	4.7	..	..	**2.5**
1996	2.9	2.3	2.7	2.4	3.5	2.6	2.3	2.5	2.1	2.5	4.5	..	..	**2.7**
1997	3.2	3.0	2.9	2.5	3.1	2.6	2.3	3.0	2.5	2.9	4.9	..	..	**2.7**
1998	3.2	3.0	2.5	2.4	3.0	2.5	2.3	2.7	2.3	2.7	5.0	..	..	**2.6**
1999	3.5	3.0	2.7	2.5	2.9	2.5	2.2	2.6	2.4	2.8	5.1	1.9	1.5	**2.6**
2000	3.7	3.4	3.1	3.0	3.0	2.6	2.3	2.8	2.4	3.0	5.2	2.0	1.2	**2.7**
2001	4.1	3.4	3.3	3.1	3.5	3.0	2.7	3.1	2.4	3.1	5.3	2.3	1.5	**3.1**
2002	4.0	3.5	3.5	3.3	3.6	3.0	2.9	3.3	2.5	3.2	5.0	1.9	1.5	**3.2**

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