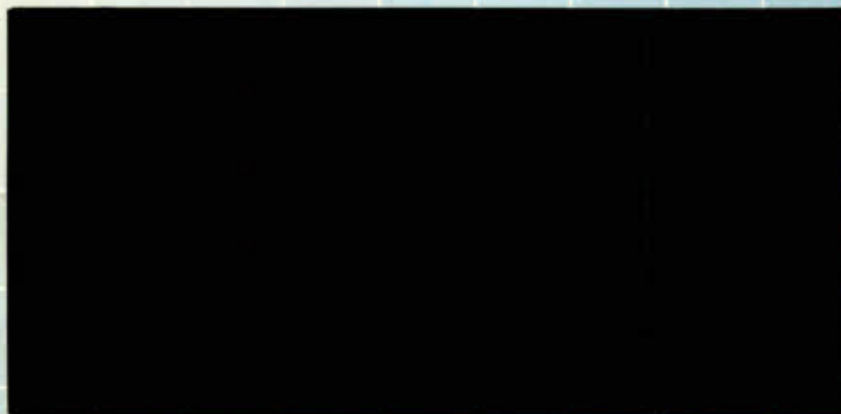




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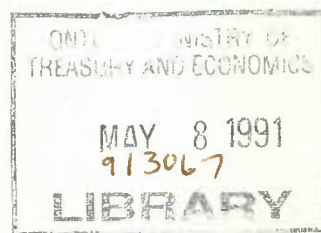
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The Anatomy of Disparities

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The Anatomy of Disparities

The findings of this paper are the personal responsibility of the authors and, as such, have not been endorsed by the Members of the Economic Council of Canada.

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Foreword

The problem of regional disparity has been one of the more persistent features of Canada's socio-economic landscape. Over the years the Economic Council of Canada has investigated the problem and made numerous contributions to the debate on regional economic imbalances through its publications – *Living Together* (1977), *Newfoundland: From Dependency to Self-Reliance* (1980), *Western Transition* (1984), and more recently *From the Bottom Up*, a statement the Council released in 1990.

This paper is one of a series which grew out of the research planning for *From the Bottom Up*. It surveys the extent of regional disparities in 1990, and their evolution during the postwar years. The conclusions are not reassuring. While a few improvements can be detected, the most serious disparity problem, that of wide regional differences in unemployment rates, appears to be worse than ever.

The authors are on staff at the Economic Council. Neil Swan is a senior project director, and John Serjak is a research economist.

Judith Maxwell
Chairman

Reader's Note

The reader should note that various conventional symbols similar to those used by Statistics Canada have been used in the tables:

- . . figures not available
- . . . figures not appropriate or not applicable
- amount too small to be expressed
- nil or zero
- e estimated figures
- x data confidential, to meet the secrecy requirements of the *Statistics Act*.

Details may not add up to totals because of rounding.

Introduction

In *Living Together*, a comprehensive survey of regional disparities conducted in 1977, the Economic Council concluded that:

In sum, regional disparities in incomes and job opportunities are indeed substantial and remarkably persistent in spite of the amount of labour migration that has taken place over the years.¹

Has the situation improved in the 12 years that have passed since those words were written? In this paper, we take another look at the data, not quite as comprehensively as we were able to in 1977, but in enough detail to answer this question.

It turns out that the situation is no better with regard to the kind of regional disparities that in the Council's view were the most serious, those in job opportunities.² If anything, matters may be a little worse than they were in 1977. In contrast, income gaps have in fact narrowed. Earned income differences for those employed are now arguably small enough that their further narrowing might no longer warrant being considered a top economic policy priority. But the emphasis should be on the words "for those employed." The chance of being employed if one wants a job varies very considerably by region. Disparities in unemployment rates remain shockingly large.

Some Difficult Issues

Studies of the issue of regional disparities frequently come to different conclusions based on the same data. A given difference in measured unemployment rates will be seen by some as a voluntary and perverse response to incentives in the unemployment insurance system, and by others as a tragic difference in job availability. For some people, equal incomes reflect a situation where no problem exists, while others believe that equal incomes signal only that the underlying problem has been unsatisfactorily masked by large and undesirable transfers. Some analysts consider moving elsewhere in Canada so as to better one's economic lot to be an adequate remedy for those facing economic difficulties in their own region, while others view this as quite unacceptable, even unconstitutional. Conceptual issues like these make it very hard to approach data on regional disparities neutrally and scientifically. We therefore begin by discussing the most difficult conceptual issues as a necessary prelude to evaluating the data.

Do Geographic Variations in Economic Opportunity Matter?

It has frequently been observed that there are far more people unemployed in Ontario than in Newfoundland. And there are far more poor families in British Columbia than in New Brunswick. In these four provinces, as in the others, society does lend a hand to the jobless through unemployment benefits and to the poor through lower taxes and welfare. But society helps some provinces more than others through the various programs for reducing regional disparities. It helps poor people in poor areas more than equally poor people in rich areas, and unemployed people in high-unemployment areas more than unemployed people in low-unemployment areas. Most paradoxically of all, it helps rich people if they happen to live in poor areas. How can all this be justified? Poverty and unemployment are equally traumatic for the individual, however well off others may be in the province. And why should a person already living comfortably be made even better off because others in the province are poor or unemployed? What is so special about geography as a cause of economic problems for people? Why does it merit special treatment relative to other problems, such as low intelligence, unstable personality, or the happenstance of being in an industry that has fallen on hard times? The answer given in the Council's 1977 study was that:

In order to achieve equity among people, it is necessary to adopt measures that apply to provinces and regions. To this end, regional policy goals are required.³

In rationalizing this view, the Council argued that it is the well-being of individuals that matters, not the well-being of collectivities called regions or provinces. At the same time, the Council recognized the importance of the socio-cultural milieu in which individuals live – identified *faute de mieux* with their province – to their well-being. This reasoning also led, not coincidentally, to a relatively narrow conclusion as to the range of policies that would be justifiable to ameliorate disparities.

Three conclusions from that discussion are worth reiterating: first, that equality in opportunities to find a job and earn income matters much more than equality in incomes received; second, that disparities in job opportunities matter much more than disparities in standards of living, because jobs bring dignity as well as material well-being; and third, that variations among provinces matter more than variations within provinces.

This latter point followed from the Council's concern that individuals bear partial responsibility for their own economic destiny. While they should not be forced to move between provinces to better their economic lot, they should accept the responsibility for moving within a province if necessary. So the Council wrote:

We believe that jobs ought to be available, not just anywhere, but within a prospective worker's accustomed socio-economic milieu. To accomplish this, it would be necessary to bring about a better match between job vacancies and unemployed persons in each province and to continue to provide relocation assistance, if necessary, for moves within a province or between provinces.... There should be no obligation on the part of the federal government to provide jobs equally among areas within individual provinces, however, since it does not seem too much to expect people to move about within a province to find work. And, if provincial governments wish to achieve a certain distribution of employment within their provinces rather than rely upon voluntary individual migration, they should employ their own funds for the purpose.⁴

The Dimensions of Economic Opportunity

Job Opportunities

Our focus will be on how the accident of birth and upbringing in a particular region affects an individual's economic opportunities. Perhaps the single most important manifestation of this relationship is regional variation in the chance of finding and keeping a suitable job.⁵ A job is important not only in order to earn a living, but also, and more importantly, to maintain one's self-respect.

The unemployment rate in a region is the best available single measure of job opportunities. Nevertheless, it is easy to imagine scenarios in which differences in unemployment rates overstate the differences in the chance of finding and keeping a suitable job. If the jobs were much better but took longer to find in one region than another, unemployment rates might differ among regions, while economic opportunities might be equivalent. If people in one region preferred to seek longer for a job, or were more ready to take advantage of the opportunities for leisure that a generous unemployment insurance system provides, or did not feel the stigma of unemployment as strongly, then unemployment rates could differ, consistent with equivalent job opportunities, although this seems unlikely. A look at vacancies will be useful in assessing these possibilities.

It is also easy to imagine scenarios in which differences in the unemployment rate understated the real differences in job opportunities. For example, long-standing high unemployment rates may sometimes discourage people from actively seeking work. They will not then be counted as unemployed, even if they would take work if it were available. Or the variety of jobs available may be less in some regions, forcing outmigration or entry into less preferred occupations. No one born and brought up in Saskatchewan is likely to make it to the top as a television anchor-person without moving out of the province. Even if suitable work is available somewhere, the need to move within the region to find it may be greater in some regions than others.

Earned Incomes

After unemployment, the most serious effect that the accident of birthplace can have on the economic opportunities facing similar individuals is on the income they can expect to earn in a job. Differences in earned income would matter, we think, even if they were fully compensated for by transfers (they are not), because self-respect as well as living standards are at stake.

A difficult question here is whether to count income inclusive or exclusive of taxes paid. Counting after-tax income means that something must be added back on account of the value of government services provided. Counting before-tax income implies that publicly provided goods and services are as valuable to people as privately provided ones – the assumption always made in national-income accounting. We shall follow the national-accounting practice and measure incomes inclusive of taxes paid.

The proper choice of divisor for gross provincial product is not obvious. Dividing by population confounds differences in income-creating opportunities with differences in rates of dependency, participation, and unemployment. Consequently, we shall divide by employment.

Another measure, which has advantages and disadvantages that differ from those of the gross provincial product measure, is wages and salaries per employed person. Its main advantage is that it is available from 1953, whereas gross provincial product is only available from 1961. Its main disadvantage is that wages or salaries are only about 70 per cent of all earned income. Another difficulty is that a substantial part of labour income is not counted as such in the data, but is counted as an unknown part of unincorporated business and farm incomes.

Disparities in Total Income

Although disparities in earned income are our preferred measure, it is interesting and important to also examine disparities in total income after transfers to persons – i.e., "personal" income. Since our interest with respect to total income concerns living standards rather than earning capacity, it is appropriate to divide by population to arrive at personal income per capita.⁶ Thus we shall use variations in personal income per capita as our measure of disparities in living standards.

There are three significant conceptual problems with this familiar measure, in our view. First, the portion of taxes levied to pay for the transfers included in personal income is not subtracted out, and so is counted twice in the aggregate. Second, indirect taxes, a significant and growing portion of national output, are excluded. In principle they should not be; observe that if they were

replaced by direct taxes they would have to be included. Finally, capital-consumption allowances are excluded, though they are normally included in income measures at the national level.

Individuals versus Averages

Our concern is with individuals, not averages. For example, if one region has a higher average unemployment rate only because it has a higher proportion of young people – who always experience more unemployment wherever they are – we will regard that as one consequence of a youth unemployment problem, not as a "regional" unemployment problem. In the same way, if a region has lower than average wages only because it has a higher proportion of females – who often earn less wherever they are – we would not regard that as a "regional" wage problem. Differences in averages across regions can thus overstate or understate the differences in economic opportunities facing similar individuals. As far as we can, we shall verify whether this is a problem with standardization techniques.

Deciding whether to standardize is straightforward.⁷ The question at issue is the relative success of the labour markets in one region, versus those in another, in providing regional residents with job opportunities and earned income. One should, therefore, standardize for those variables that are independent of, or exogenous to, the labour market. These would include age, sex, marital status, and similar variables, but exclude others such as occupation and industry, since these are intrinsic characteristics of labour markets themselves.

Voluntary and Involuntary Differences

Differences in unemployment rates could misstate the differences in opportunities for similar individuals if some people falsely claimed to be unemployed so as to draw unemployment income benefits, and if the proportions of such claimants differed by region. This seems implausible, but the regional differences that we measure should nevertheless be in involuntary rather than in total unemployment rates.⁸ It can also happen that some genuine unemployment is not captured even by the measured unemployment rate, but is reflected instead in low participation rates. If so, involuntary differences in participation rates should be added to differences in unemployment rates. In principle, techniques exist to make both adjustments; in practice, the techniques are imperfect and controversial. We shall do what we can.

A somewhat different problem is that real differences may exist but may be compensated for by noneconomic factors. We shall not enter into this controversy, but focus only on economic differences.

Interregional Price Level Differences

Price levels may differ regionally, but no official measures are available. We have constructed our own, unofficial measures, which we use to see if real income gaps differ significantly from nominal income gaps.⁹

Intraprovincial Differences

As explained above, the Council has argued in the past that disparities between provinces are a more serious matter than disparities within provinces. In this document we break with that tradition, for three reasons. First, provincial governments sometimes develop policies to deal with intraprovincial disparities. Data and commentary on the extent of such disparities, notably intraprovincial differences in unemployment rates, may be helpful to them. Second, if federal or provincial governments decide to give assistance to local development initiatives (provincially or federally funded), the benefit to individuals (our own criterion of what is socially worthwhile) could be increased by focusing on the localities with the most unemployment. Third, if individuals are more likely to have to move to find work, or better work, within one province than within another, then that province suffers from the additional regional disparity of "mobility obligation." Data on differences in intraprovincial differences in unemployment rates and earned incomes per employed person may permit some judgment to be made on how serious this kind of disparity might be.

Implicit Theorizing in Certain Measures

It is important to measure disparities themselves, not their putative causes. The presence of a low proportion of manufacturing industry in some regions, for example, has sometimes been thought to be a cause of disparities. While this may be true in some cases, we should avoid presupposing that truth by presenting differences in the proportion of manufacturing as an indicator of disparities. Doing so would be like using shots on net as an indicator of matches won; it is appropriate only if a debatable theory about how to win happens to be valid.

Another popular theory of differences in regional economic success hinges on differences in the ability to export. A region with strong exports can experience rapid employment growth and migration into the region, and conversely for a region with weak exports. In cases where this theory happened to be valid for all regions, interregional differences in the rate of employment growth and the rate of migration would be good substitutes for more direct measures of disparities, such as difference in real income per person and in the rate of unemployment. The problem is that this theory, too, will not always be

valid, making data on employment growth and migration unreliable indicators of regional disparities.

In both of these examples the validity of the measure of disparities is uncertain, depending as it does on whether or not certain implicit theoretical assumptions are valid. We have tried to avoid this trap, by using only measures that are free of implicit theorizing.

Job Opportunities

Direct Measures

Unemployment Rates

In 1989, unemployment rates ranged from 5 per cent in Ontario to nearly 16 per cent in Newfoundland (first column of Table 1) – an astonishing range. Only during the Great Depression has Ontario experienced unemployment rates as high as Newfoundland's was in 1989. And there is no record of Newfoundland's unemployment rates ever having been as low as the 1989 Ontario level, even though the latter was by no means a record low for Ontario itself.

After Newfoundland, the worst unemployment rates were in Prince Edward Island (14 per cent), New Brunswick (12 per cent), and Nova Scotia (just under 10 per cent). All of these provinces had rates noticeably above the national average of 7.5 per cent. Close to the national average were Quebec and British Columbia (just over 9 per cent), Alberta and Saskatchewan (7 per cent), and Manitoba (8 per cent). Only Ontario lay significantly below the national average, by 2 percentage points.

The 1989 ordering of unemployment rates is a little different from that typical of the last 37 years (Chart 1, and Table 1, column 3). Ontario averaged 1.4 points below the national rate in this period, but even so did not do as well as the Prairie provinces. Data for the period as a whole are available only for the three Prairie provinces as a group; they show that these provinces were 1.8 points below the national average. This is in contrast to that region's situation in 1989, when unemployment was much higher, both absolutely and relatively. We shall return to this point. British Columbia also fared rather badly in 1989 in comparison with its average relative position over the last 37 years. That province's unemployment rate has always slightly exceeded the national average, but usually by considerably less than in 1989, in both absolute and percentage terms.

Table 1

Provincial Unemployment Rates, Canada, Selected Years and Periods¹

Provinces	1989		1953-89		1953-70		1971-89		1966		1983	
	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)
Newfoundland	15.8	2.11	..	..	..	..	15.1	1.86	5.8	1.71	18.7	1.58
Prince Edward Island ²	14.1	1.88	..	..	..	..	..	..	..	..	12.2	1.03
Nova Scotia	9.9	1.32	..	..	..	..	10.2	1.26	4.7	1.38	13.2	1.12
New Brunswick	12.4	1.67	..	..	..	..	11.5	1.42	5.3	1.56	14.8	1.25
Atlantic region	12.3	1.64	9.9	1.50	7.9	1.61	11.8	1.46	5.0	1.47	15.1	1.28
Quebec	9.3	1.24	8.2	1.24	6.4	1.31	9.9	1.22	4.1	1.21	13.9	1.18
Ontario	5.1	0.68	5.2	0.79	3.7	0.76	6.6	0.81	2.6	0.76	10.3	0.87
Manitoba	7.5	1.00	..	..	..	..	6.4	0.79	2.8	0.82	9.4	0.80
Saskatchewan	7.4	0.99	..	..	..	..	5.4	0.67	1.5	0.44	7.3	0.62
Alberta	7.2	1.96	..	..	..	..	6.4	0.79	2.5	0.74	10.6	0.90
Prairie region	7.3	0.97	4.8	0.73	3.2	0.65	6.2	0.76	2.3	0.68	9.6	0.81
British Columbia	9.1	1.21	7.7	1.17	5.8	1.18	9.6	1.19	4.6	1.35	13.8	1.17
Canada	7.5	1.00	6.6	1.00	4.9	1.00	8.1	1.00	3.4	1.00	11.8	1.00

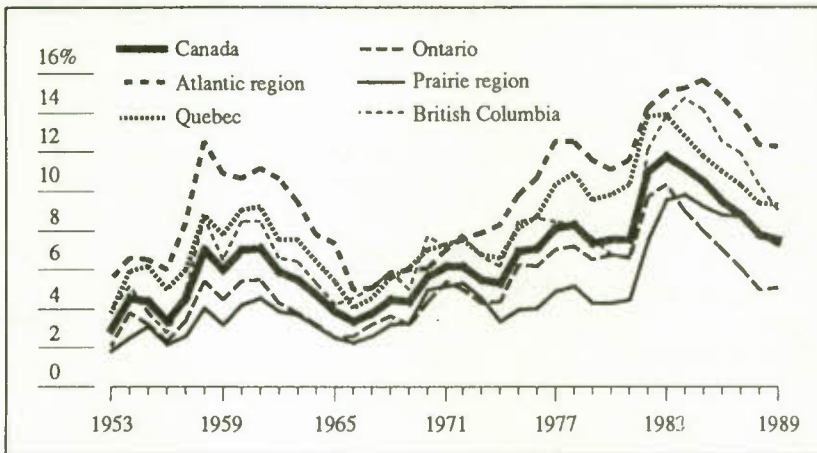
1 For each year or period, column (a) is the percentage of unemployment, and column (b) is the ratio of the percentage of unemployment to the national average percentage of unemployment.

2 Figures for 1971-89 and 1966 were omitted; the sampling error was too high.

Source Estimates by the Economic Council of Canada, based on Statistics Canada, *Historical Labour Force Statistics*, Cat. 71-201, various issues; and Economic Council of Canada, *People and Jobs: A Study of the Canadian Labour Market*, 1976, Table A-17.

Chart 1

Unemployment Rate, by Region, Canada, 1953-89



Source Estimates by the Economic Council of Canada, based on Economic Council of Canada, *People and Jobs*, 1976; and Statistics Canada, *Historical Labour Force Statistics*, Cat. 71-201, various issues.

Points east of Ontario show, in contrast, a certain stability. In 1989 Quebec's unemployment rate, for example, was 1.8 points, or 24 per cent, above the national average. Over the last 37 years it has also averaged 24 per cent above the national average. Similarly, the Atlantic region was about as much higher than the national average in 1989 as it was during the last 37 years (64 per cent versus 50 per cent).

It should be stressed that in provinces with greater than average unemployment rates – namely Quebec, Newfoundland, Prince Edward Island, Nova Scotia, New Brunswick, and British Columbia – a constant percentage excess over the national rate implies a greater absolute degree of difficulty in finding jobs when the national rate is high than when it is low. During the recession of 1982-83, unemployment in Quebec and the Atlantic provinces, though no greater relatively than it was over the period 1953-89, was thus higher than at any time since the Great Depression.

A trend to increasing severity of unemployment in general, and the implications of it for increasingly severe absolute regional differences, can be seen directly in Chart 1. It can be studied in more detail using Table 1, by comparing the first 18 years of the period (columns 5 and 6, 1953-70) with the last 19 years (columns 7 and 8, 1971-89). Broadly speaking, the relative positions of the regions did not change that much, but the absolute gaps widened. Between the period 1953-70 and the period 1971-89 the Canadian unemployment rate rose from 4.9 per cent to 8.1 per cent. Meanwhile, the Quebec rate, for example, rose from 6.4 per cent to 9.9 per cent. While the latter figure represents a slightly lower ratio to the Canadian rate, there was at the same time an increase in the absolute gap from 1.5 to 1.8 percentage points. Simi-

larly, in the Atlantic region the ratio fell slightly, but the absolute gap widened. In British Columbia, the ratio was steady, but again the absolute gap widened. By the same token, the absolute advantage of the low-unemployment provinces, though not their relative advantage, has been growing over the last 37 years.

The differing importance of the same relative differences, according to whether the national rate is high or low, can be seen in sharp relief by comparing a strong boom with a deep recession year. The last four columns of Table 1 do this, comparing the boom year of 1966 with the recession year of 1983. The relativities change between the two years, but not a great deal. In contrast, the absolute differences change considerably. Newfoundland, for example, shows a difference of 2.4 points in 1966, compared with a huge 6.9 points in 1983.

The data have one more important story to tell. A significant change in the structure of disparities is hinted at by the 1989 figures. In that year, Ontario was well below its historically normal rate of unemployment in relation to the national average. Meanwhile, the western provinces were well above their historically normal position. Perhaps Ontario is now relatively better off than it used to be, in terms of low unemployment, and the West worse off. The data appear to confirm this, although it may be a little early to be definite.

Chart 1 shows that between 1983 and 1989 the Prairies' unemployment rate has been significantly above the Ontario rate, whereas in the previous 31 years it was almost always below (there were only three minor exceptions, in 1970 and 1972-73). The recent behaviour of the British Columbia rate also seems atypical from the historical point of view; between 1985 and 1989 the proportion by which it exceeded the Canadian average increased considerably.

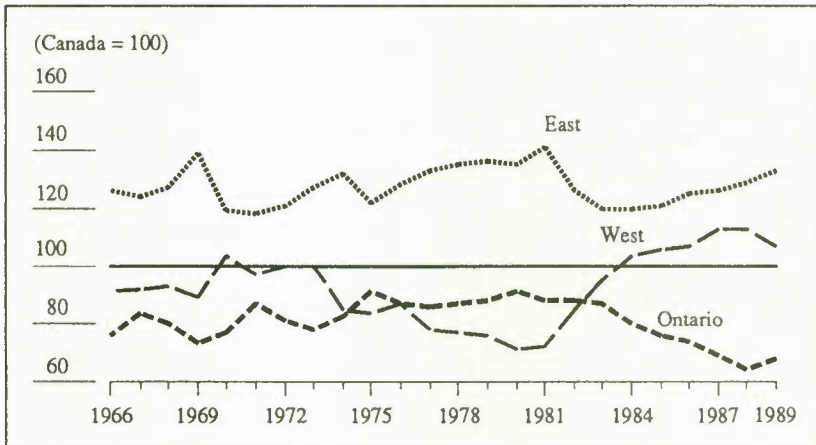
In sum, a major change seems to have occurred in the behaviour of unemployment rates in the West and Ontario over the period 1983-89. Western rates are now much higher in relation to the national average than they used to be, and Ontario rates are lower. Whether this represents a genuine structural shift or a shorter-term phenomenon is an analytical question that goes beyond the aim of this paper, which is only to describe. Readers interested in going further, however, should consult an earlier paper in this series, by Burns.¹⁰ That paper provides an introduction to some of the literature on the causes of regional unemployment differences, and puts forward a novel thesis regarding the changing importance of the contribution of the "natural rate" to interprovincial differences in unemployment rates.¹¹

The shift in the West and Ontario is worth verifying by means of a different diagram, developed specially for that purpose (Chart 2). In looking at the unemployment rate for 1966-89 in three broad regions – Ontario, the West (British Columbia and Prairies), and the East (Quebec and the Atlantic region), all indexed on Canada as 100 – three facts emerge very clearly. First, between

1984 and 1989 the West was significantly above the national average for the first time ever; second, Ontario's already good relative position improved rapidly during that same period; and third, no noticeable sustained change occurred in the East, whose relative position is as bad as it has always been, but unchanged.

Chart 2

Index of Unemployment Rates, Selected Regions, Canada, 1966-89



Source Estimates by the Economic Council of Canada, based on Statistics Canada, *Historical Labour Force Statistics*, Cat. 71-201, various issues.

Drawing the threads together, we conclude that regional disparities in unemployment rates remain wide and serious. No improvement is visible over the whole 37-year span for which we have reliable data. In one respect, disparities are even more serious now than they used to be. The relativities have not changed much, but the absolute differences that they imply are more serious now that the national unemployment rate is so much higher, even in good times, than it used to be. Within the broad picture of no overall change in relative disparities in unemployment rates, the position of the West worsened considerably between 1984 and 1989, while that of Ontario, already enviable, improved even further.

Standardized Unemployment Rates

In this section, we probe a little deeper and ask whether problems with the measurement of unemployment might modify the findings. Unemployment rates differ by age, occupation, industry, and level of education. Since the distribution of individuals by each of these variables differs by province and region, it is possible that some of the observed unemployment disparities are connected with such structural differences.

To check this possibility, standardized rates can be calculated. To check the effect of age, for example, one can estimate what unemployment would have been in each province if that province had had the national proportion of individuals, but its own unemployment rates, for each age group. We carried out such standardization exercises, which revealed that the disparities are virtually unaffected by standardization.¹²

Seasonality

Could some of the interprovincial differences in unemployment rates be explained by some regions having greater seasonal unemployment problems than others? To some extent, an answer is implicit in the results already found – that standardization by industry and occupation makes little difference. It is largely through these variables that seasonality manifests itself. However, a direct check of the importance of seasonality is useful. This could, in principle, be done fairly precisely using the seasonal factors produced by Statistics Canada, but the procedures are very time-consuming and the necessary resources were unavailable. Approximate methods were used instead.¹³ The results indicated that in a very recent year (1988), disparities in nonseasonal unemployment differed very little from disparities in total unemployment. Eliminating seasonal problems would not have changed relative unemployment rates in 1988, and would have decreased absolute differences in rates by less than half a percentage point in all cases except Prince Edward Island.

Using 1988 is probably reasonable, since that year had an unemployment rate that was neither unusually high nor unusually low in the context of the last two decades. In addition, the relative importance of seasonality has been declining so much – in Canada and in almost all the provinces – that it is no longer important enough to play a significant role in accounting for regional disparities in job opportunities.

The Unemployment Insurance System

It is possible that unemployment could be overstated, if some people who are not working claim falsely to be seeking work, for fear of losing unemployment insurance benefits. This problem could affect disparities if false claims are significant, and if they vary disproportionately among the regions. Moreover, false claims might be masking a trend towards smaller disparities. Until quite recently, the trend has been for the unemployment insurance system to become more comprehensive and generous, and more so in high-unemployment regions. Income replacement lasts longer, and shorter periods of work are required to qualify. If, as a result, the number of those falsely counted as unemployed has tended to increase, at least until recently, and if it has done so to a greater degree in regions with higher unemployment, the apparent constancy of measured disparities could be consistent with a narrowing in reality.

The effect of the unemployment insurance system on false claims should be distinguished from a related effect on true claims. More generous unemployment insurance can increase genuine unemployment by making it rational to search longer so as to find a really suitable job. Such extra unemployment is real, and perhaps socially efficient, whether or not it is viewed as involuntary.

It is not possible to estimate what proportion of observed unemployment each year is separately due to the impact of unemployment insurance on true and false claims. But it is possible to estimate the combined effect. A careful set of such estimates can be found in Burns, whose work shows that unemployment insurance has no impact on the unemployment rate in seven of the ten provinces.¹⁴ The three exceptions are Prince Edward Island, New Brunswick, and Saskatchewan, where between 1963 and 1988 the unemployment insurance system is estimated to have led to increases in unemployment rates of 1.4, 2.0, and 0.6 percentage points, respectively. What portion, if any, of these amounts represent false claims is difficult to judge, but it seems likely to be small or zero. Otherwise, how could one explain zero results elsewhere? Interprovincial differences in true claims could be explained by different circumstances; differences in false claims would have to rely on provincial differences in ethical standards, which seem extremely unlikely.

We conclude that our perception of disparities based on published unemployment rates is not falsified by any impact of the unemployment insurance system on those rates.

Vacancy Rates

A high unemployment rate need not always imply great difficulty in finding jobs, or great hardship. At the time of writing, the latest available monthly unemployment rate (April 1990) for males aged 15-19 years in Ontario was – at 11.2 per cent – rather high. Yet common observation suggests that there were a large number of vacancies in Ontario in that month. The inference is that the severity of a given level of unemployment may depend on how many suitable vacancies also existed at the same time.¹⁵ Interregional differences in the levels of unemployment could possibly overstate the severity of regional differences in job opportunities, if they were partially or wholly offset by large enough differences in the number of vacant jobs available.

Data to check this possibility are only moderately good.¹⁶ The best current source available is the register of vacancies maintained by Canada Manpower Centres (the Statistics Canada Vacancy Survey fell victim to economy measures and doubts about its credibility many years ago).

The first column of Table 2 shows the average number of vacancies registered with Canada Employment Centres at the end of each month in fiscal year

Table 2

Vacancies Reported to Unemployment Centres, and Unemployed Persons, Canada, 1988-89 and 1981-82¹

Province	1988-89			1981-82		
	Average vacancies	Average unemployed	Unemployed per vacancy	Average vacancies	Average unemployed	Unemployed per vacancy
Newfoundland	1,931	37,000	19	2,012	29,000	14
Prince Edward Island	521	8,000	15	431	6,000	14
Nova Scotia	3,044	40,000	13	2,701	38,000	14
New Brunswick	2,550	38,000	15	2,027	34,000	17
Quebec	25,632	313,000	12	14,749	326,000	22
Ontario	29,245	255,000	9	24,600	308,000	13
Manitoba	2,289	42,000	18	2,466	30,000	12
Saskatchewan	1,776	37,000	21	2,153	20,000	9
Alberta	5,933	101,000	17	8,710	51,000	6
British Columbia	10,330	156,000	15	10,586	103,000	10
Canada	83,251	1,027,000	12	70,434	947,000	13

¹ Fiscal years.Source Estimates by the Economic Council of Canada, based on special tabulations, Employment and Immigration Canada, Canada Employment and Immigration Commission, 1990; and Statistics Canada, *Historical Labour Force Statistics*, Cat. 71-201, 1989.

1988-89. The total of 83,251 for Canada was far lower than the number of unemployed, which was 1,027,000. On average, there were 12 unemployed persons for every vacancy available at any time. This may be less serious than it sounds. To illustrate, there may often be many persons in line for each cashier at the supermarket or bank, but everyone will still be served without too much waiting. Similarly, an average of 12 unemployed persons for every vacant job means a considerable waiting time before finding a job, but the average time one waits may not be as desperately long as the 12:1 ratio seems to imply.

Consistent with the foregoing caveat, longer lines of unemployed persons seeking vacancies are certainly less desirable than shorter lines. As the third column of the table shows, lines in 1988-89 were longer in those provinces where unemployment rates were well above the national average – namely the Atlantic region, British Columbia, and Quebec – than they were in Ontario, the one province where the unemployment rate was well below average. The higher unemployment rates in the Atlantic provinces, British Columbia, and Quebec than in Ontario do not therefore seem to be misleading as indicators of poorer job opportunities.

In the Prairie provinces, however, the lines in 1988-89 were much longer than the national average, or even than in Quebec, despite the fact that their unemployment rates were at or below the national average. The Prairie lines were considerably longer, on average, even than in the Atlantic region, where the unemployment rates were very much higher; in fact, they were roughly equal to those in Newfoundland, which has far and away the highest unemployment rate in the country. If one were to judge only by the size of the lines of unemployed persons per vacancy, the Prairie provinces in 1987 would appear to have been as badly off as Newfoundland, and worse off than either the Maritime provinces or Quebec.

Since the unemployment-rate data suggest that the Prairies are better off, we have a clear case of conflicting evidence. We conclude, tentatively because vacancy data are both poor and hard to interpret, that job opportunities are not nearly as good nowadays in the Prairie region compared with the rest of Canada, as would be implied by a comparison based on unemployment data alone. Further West, British Columbia's lines of unemployed per vacancy also seemed unusually long in 1988-89. The province's unemployment rate was close to Quebec's, but its unemployed per vacancy was much higher. These vacancy data on the Prairie provinces and British Columbia lead one to the view that the West as a whole is in worse straits today than one would think if one looked at unemployment data alone.¹⁷

The unreliability of the unemployment data as an indicator of job opportunities in the West does not seem to extend to earlier years (see the last three columns of Table 2, which give data for 1981-82). The poor availability of vacancies in the West was not a serious problem in 1981-82. This change in the relative availability of vacancies reinforces our earlier finding, based on unemployment data alone, that the relative position of the West has worsened sharply in recent years.

In sum, combining insights from vacancy data with those from unemployment data, we conclude that disparities in job opportunities have in fact worsened in recent years, contrary to what one might think looking at unemployment data alone. The West currently has severe problems, perhaps as severe as those of the Atlantic region. It remains to be seen whether this is a temporary or permanent change. Ontario has become the only region where job opportunities are better than average. Quebec remains roughly as it has always been, close to the national average.

Selected other Aspects of Job Opportunities

Subregional Unemployment Rates

The unemployment rate for a province in a given year is not the same in every corner of that province; within all provinces there are some economic regions that experience levels of unemployment that are persistently higher or lower than the provincial average.

The Labour Force Survey distinguishes 67 economic regions in Canada. They vary considerably in size and population density from vast and sparsely populated regions – mainly in the northern reaches of most provinces – to the heavily concentrated urban regions. Some regions provide home to merely 32,000 souls, while others have populations of more than one million.

Labour market conditions vary both among provinces and within them, and job opportunities can differ dramatically. How does one subregion stack up against the others? Should we compare a provincial subregion to the provincial average, or the national average?

This presents a problem. In the case of a deprived province with poor and inadequate job opportunities, a subregion may suffer from very high levels of unemployment that are nevertheless relatively close to the provincial average. Such a region may, therefore, be regarded as not doing too badly relative to the rest of the province. However, if we juxtapose the unemployment rate of this same subregion with the national average, the contrast is much more pronounced and shows the subregion to be very badly off relative to the rest of the country.

Let us take Newfoundland as an example. That province's average unemployment rate over the last 15 years has been around 16 per cent. A subregion with a rate of 18 per cent; i.e., only 11 per cent higher than the provincial average, would not seem to be widely out of line in the context of the province. However, compared with the national average, an 18 per cent unemployment rate looms huge and disturbing.

There is no easy answer to this problem. We have opted for comparisons *within* provinces, leaving the reader to make mental corrections, as needed, for the relative situation of the whole province within the Canadian landscape.

Using this "provincial" yardstick, we identify 12 areas in Canada that, relative to the provinces where they are located, are seriously depressed.¹⁸ We define a depressed subregion as any region where the average unemployment rate is at least 20 per cent above the provincial mean. Conversely, relatively prosperous regions, of which we find four, register unemployment rates that are more than 20 per cent below the provincial average.

Newfoundland has only one relatively depressed subregion out of four, stretching along the west coast from Port-aux-Basques to Belle-Isle and including Labrador. Its unemployment rate is 20 per cent higher than the provincial average.

The unemployment rates of three of the five subregions in Nova Scotia are close to the provincial mean. The two exceptions are Cape Breton Island, with an unemployment rate of over 50 per cent higher than the provincial average, and the county of Halifax, which, in contrast, has had an unemployment rate of about 20 per cent below the provincial average for a number of years.

New Brunswick has five subregions, one of which is seriously depressed. It is located in the northeastern part of the province, and comprises the counties of Northumberland, Restigouche, and Gloucester. Here the average unemployment rate is around 33 per cent above the provincial mean.

The northern and northeastern reaches of Quebec and pockets of central Quebec contain several deprived subregions where the average unemployment rate is dramatically higher than the provincial mean. The Gaspé peninsula, including Îles-de-la-Madeleine, has a 65 per cent higher rate; Lac Saint-Jean Ouest and Est, including Territoire-du-Nouveau-Québec, has a 33 per cent higher rate; in the northwest, the Témiscamingue region and parts of Pontiac and Abitibi have unemployment that is 40 per cent higher than the provincial mean; and unemployment in most of Saguenay county, including Schefferville, is 27 per cent higher than the provincial average. Only five out of nine aggregated regions are "normal," although they contain roughly 90 per cent of the population.

Ontario has four subregions with chronically high levels of unemployment. The area consisting of the counties of Peterborough, Pembroke district, and Haliburton, has, over time, had unemployment rates over 20 per cent higher than the provincial mean. Another pocket with scarce employment opportunities, tucked away in southern Ontario around London, is that comprising Oxford, Elgin, and Middlesex counties. Northern Ontario, including North Bay, Sudbury, and Thunder Bay, has been a depressed area for a long time,

with an unemployment rate close to 30 per cent higher, on average, than the provincial mean.

An entirely different picture emerges in the more prosperous regions of the Greater Toronto Municipality area, including Peel region and the City of Burlington. Here the employment opportunities have traditionally been plentiful, as reflected in an unemployment rate that is, on average, more than 20 per cent below the provincial mean. In Ontario we also observe a number of subregions that are sometimes above, sometimes below the provincial average, underlining the volatility of local labour markets and the frequently changing job opportunities. Areas with normal or better employment conditions account for about 87 per cent of Ontario's population.

The Prairies in general display a relatively more homogeneous panorama. There are no chronically depressed subregions, and neither are there areas with substantially low unemployment rates relative to the provincial average.

In British Columbia we find two regions where the unemployment rates have persistently been much higher than the provincial mean. They are Central Kootenay, where the rate is about 27 per cent higher, and the district around Kamloops, which has a rate more than 30 per cent higher than the provincial average.

What, then, are the conclusions? First, as noted, there are some 12 subregions that are almost always relatively more depressed than the provincial average, and four that are more prosperous. Regarding the 12, however, it should be noted that less than 10 per cent of Canada's population inhabits those regions. This is a small percentage, although the situation is very serious to the people concerned.

It follows that intraprovincial disparities in job opportunities are quantitatively much less important than interprovincial disparities. In fact, if intraprovincial disparities were totally eliminated by bringing unemployment in each depressed subregion down to the provincial norm, this would have very little impact on provincial unemployment rates. Even more importantly, the impact on interprovincial disparities in unemployment would be negligible. In this sense, unemployment-rate disparities are mainly between provinces, not between subprovincial regions.

Participation Rates

A person is counted as unemployed if he or she has not worked at all during the week of the survey, and has actively sought work in some way during the last four weeks. Active seeking is the criterion used in the published count of

numbers of unemployed to determine whether a person really wants a job and is therefore truly unemployed.

One could argue that this criterion is too rigorous in provinces where work is difficult to find and is known to be difficult to find. Active seeking might then make no sense, even if one were truly unemployed. If so, the official count would understate the number of unemployed by the number of people who are truly unemployed but have not sought work in the last four weeks. Unemployed people in this category are indeed conceptually considered in the LFS to be unemployed, even though they are not so counted but are included instead in a group referred to as "discouraged workers."

Differences in job opportunities among provinces could be misstated if the proportions of discouraged workers differed. In particular, if there were proportionately more discouraged workers in provinces with higher unemployment, regional disparities in unemployment would be more serious than indicated by regional differences in unemployment rates. The fact that participation rates (the sum of the employed and measured unemployed divided by the working-age population) are sometimes lower where unemployment rates are higher is commonly cited as evidence that this is in fact so (compare Tables 1 and 3). One explanation could be that there are relatively more discouraged workers in the high-unemployment provinces. Another explanation could be that proportionately fewer people want to be in the labour force, so that the differences in participation rates are based on voluntary decisions. Voluntary differences could arise, for example, if the proportion of women wanting jobs varied regionally, or if age structures differed regionally.

The best evidence is direct evidence. Statistics Canada asks whether a person who is not working and has not looked for work in the reference week did look sometime in the last six months. Those who did are then asked why they have not looked recently, with the option to respond that "they did not believe work was available." On the fairly reasonable presumption that the absence of any job search in a six-month period is valid evidence of not wanting work, this question yields an accurate estimate of the number of discouraged workers.

In April 1990, for example, discouraged workers so measured comprised 3.1 per cent of the Newfoundland labour force. If we add them to the official unemployment rate of 18.6 per cent, we get a total of 21.7 per cent. In Ontario, there was a negligible 0.1 per cent of discouraged workers. In the same month, however, the difference between participation rates in Ontario and Newfoundland was 15.7 percentage points. As discouraged workers accounted for only one fifth of this gap in participation rates, the remaining four fifths was presumably voluntary.

Looking over all regions, we find that the understatement of unemployment due to the discouraged-worker effect is uniformly higher in areas of higher unemployment. At the same time, the understatement is always small, and

Table 3

Some Interprovincial Changes in Participation Rate Gaps Between a High and a Low Unemployment Year, Canada

Province	1974		1984		Change in difference of participation rate from high unemployment year (1984) to low unemployment year (1974)
	Participation rate	Difference between province's participation rate and Ontario's	Participation rate	Difference between province's participation rate and Ontario's	
	(Per cent)	(Percentage points)	(Per cent)	(Percentage points)	(Percentage points)
Newfoundland	49.2	14.2	53.0	14.6	-0.4
Nova Scotia	55.8	7.6	59.4	8.2	-0.6
New Brunswick	53.3	10.1	55.2	12.4	-2.3
Quebec	58.0	5.4	61.5	6.1	-0.7
Ontario	63.4		67.6		
British Columbia	60.3	3.1	64.1	3.5	-0.4

Source Estimates by the Economic Council of Canada, based on Statistics Canada, *The Labour Force*, Cat. 71-001, various issues.

usually very small relative to the much larger regional differences in participation rates.

On the basis of this direct evidence, we conclude that differences in participation rates do not reflect differences in job opportunities, except to a very minor degree. This conclusion from the direct evidence may be reinforced by two observations. First, the percentage of women in jobs has been rising rapidly in all provinces for many years, including the high unemployment provinces (in New Brunswick, for example, the proportion of women holding jobs rose from 35 to 45 per cent between 1975 and 1989). Yet unemployment rates have not been in decline, just the opposite, and this suggests there has been no improvement in job opportunities. We may infer that the lower rate of job participation in early years must have been voluntary. Second, if gaps in participation rates are due to a perceived unavailability of jobs, they ought to be narrower in boom times than in recession times, as is the case for regional differences in unemployment rates. They are, but by very little. To illustrate, it is instructive to look at how the gaps among the participation rates of Ontario and five high unemployment provinces changed between 1974 and 1984 (Table 3). While 1974 was a boom year with low unemployment, 1984 was a recession year with high unemployment. As can be seen, the changes are in the expected direction, but very small.

We conclude that regional differences in participation rates are mainly voluntary. Hardly any change would be made to our judgements about regional differences in job availability if we were to make corrections for the involuntary portion of regional differences in participation rates.

Incomes

Earned Incomes

Variations in job opportunities are the most important single indicator of regional disparities. Variations in the income one can earn, once employed, are the next most important. We examine two indicators of earned income variation: gross provincial product per employed person, and wages and salaries per employed person.

Gross Provincial Product per Employed Person

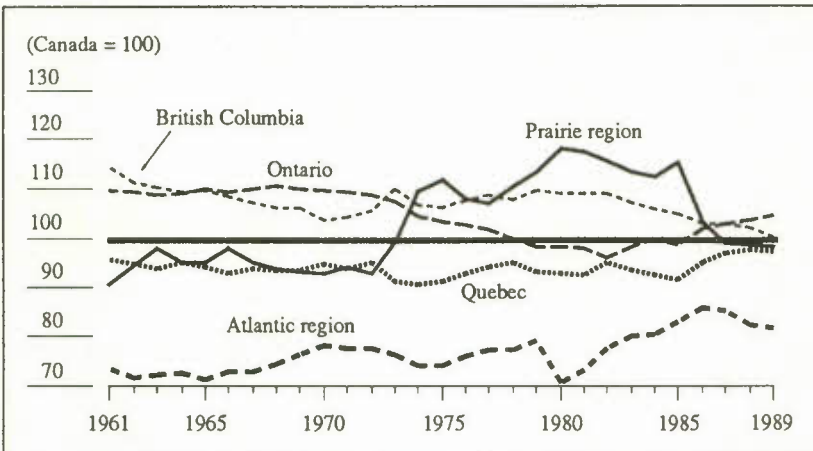
With respect to gross provincial product per employed person indexed on Canada as 100 for the 29-year span 1961-89, two major facts emerge clearly (Chart 3). First, the Atlantic region has been well below the Canadian average during all of the 29 years shown. In the early 1960s, its earning capacity per employed person was just over 70 per cent of the national average. Starting in the late 1960s, a mild convergence can be seen. By the second half of the 1980s, the Atlantic region had eliminated about one third of the initial gap, closing

the decade at just over 80 per cent of the national average. This means that today the Atlantic region has an income-generating capacity per employed person that is roughly equivalent to what Canada's was in the late 1960s. This is obviously a very substantial lag, but it is by no means a situation of desperate poverty. The second fact to emerge is that no other region suffers from significant disparities in earned incomes, according to this particular measure. A range of 10 per cent around the mean covers most regions in most years.

In sum, data on gross provincial product per employed person suggest very small disparities in earned income, except for the Atlantic region. Even there, the disparity is not dramatic, and it is smaller than it used to be. All in all, it is a surprising and encouraging picture.

Chart 3

**Gross Provincial Product per Employed Person, by Region,
Canada, 1961-89**



Source Estimates by the Economic Council of Canada, based on Statistics Canada, *Provincial Economic Accounts*, Cat. 13-213; and *Historical Labour Force Statistics*, Cat. 71-201, various issues.

Wages and Salaries per Employed Person

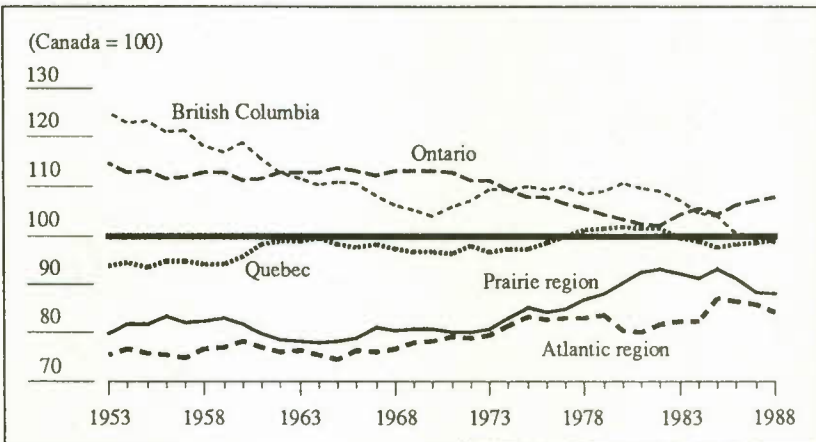
Because of the statistical and conceptual problems associated with the data on gross provincial product, it is worth checking whether an alternative measure – wages and salaries per employed person – would give the same results. For the most part, it does (Chart 4). The only significant difference between this measure and the gross provincial product data arises with respect to the Prairie region, which lies significantly below the mean at 88 in the most recent year. A good part of this gap between the two results seems likely, however, to be due to relatively greater counting of what conceptually should be labour income as part of farm and unincorporated business income. Correction for this would bring the Prairies closer to the national average, as they are when the gross provincial product measure is used.

The most important new insight here is a clear trend, when a long perspective is taken, to smaller gaps in earned income. In 1953, the range was from 75 (the Atlantic region) to 125 (British Columbia), a 50-point spread. By 1988, there was only a 24-point spread – from 84 (the Atlantic region) to 108 (Ontario).

Taking both sets of data together, we conclude that disparities in earned income are modest. Certainly, they are far less serious than disparities in job availability. Outside the Atlantic region, income disparities today are negligible, in sharp contrast to the situation in the early 1950s. Even in the Atlantic region the ability to earn income, once one is employed, is as good as it was in the rest of Canada in the early 1970s. All in all, earned-income disparities can no longer be regarded as a major problem.

Chart 4

**Index of Wages and Salaries Plus Supplementary
Labour Income per Employed Person, by Region, Canada, 1953-88**



Source Estimates by the Economic Council of Canada, based on Statistics Canada, *National Income and Expenditure Accounts*, Cat. 13-201.

Correcting for Interregional Price-Level Differences

It is often claimed that interregional differences in price levels compensate in part for income disparities. It is important to check whether price-level differences imply that income differences would be narrower if they were measured in real terms. No official interregional price indexes are available to do this check, but some approximate indexes are. We have estimated these intercity price indexes in another paper; they are reproduced here (Table 4).¹⁹ We consider the indexes in final row of Table 4 to be the most appropriate estimates. They show that interregional differences in price levels are quite minor. Thus, our earlier conclusions about income differentials do not need to be modified.

Table 4

Intercity Differences in Price Levels, Canada, 1988

	St. John's	Charlottetown	Halifax	Saint John	Montreal	Toronto	Winnipeg	Regina	Edmonton	Vancouver
Estimated from published data - 60 per cent of the basket	104	97	98	99	101	103	95	94	95	100
Estimated index, total basket including housing, ¹ Concept 1	94	89	93	88	96	111	90	87	88	99
Estimated index, total basket including housing, ² Concept 2	113	101	106	102	99	95	106	106	109	102
Average, Concepts 1 and 2	103	95	100	95	97	103	98	97	99	101

1 Includes housing but makes no allowances for capital gains.

2 Includes housing and capital gains.

Source Estimates by the Economic Council of Canada, based on Statistics Canada, *Consumer Prices and Price Indexes*, Cat. 62-010, July, Sept. 1988; and John Serjak and Neil Swan, "Interregional variations in the general level of prices in 1988," Working Paper no. 15, Economic Council of Canada, 1991.

Other Corrections

It has not been possible to check whether, for recent years, disparities would differ if standardized income measures were used instead of unstandardized ones. It is known that standardization by age, sex, education, and occupation (using census data) has very little impact on income disparities in 1960 and 1970 – the last two years for which such an exercise was carried out in detail. It seems likely that this would still be true. We were able to test this surmise for one variable – education – using the 1980 census data (Table 5). The test showed that there is almost no difference in income disparities in that year if the comparisons are made after standardizing for education. We consider this a good indication that standardizing for other variables would also make little difference.

Table 5

Standardized Unemployment Rates, and Actual Unemployment Rate in 1988, by Province and Region, Canada

	Actual unemployment rate 1988	Standardized ¹ for			
		Age ²	Educational attainment ³	Occupation ⁴	Industry ⁵
(Per cent)					
Newfoundland	16.4	16.1	16.4	..	..
Prince Edward Island	13.0	14.5	13.4	..	..
Nova Scotia	10.2	10.3	10.2	..	..
New Brunswick	12.0	11.8	11.2	..	..
Atlantic region	12.4	..	..	11.8	12.0
Quebec	9.4	9.4	9.3	9.5	9.4
Ontario	5.0	5.0	5.0	5.1	5.1
Manitoba	7.8	7.5	7.7	..	..
Saskatchewan	7.5	7.6	7.3	..	..
Alberta	8.0	8.1	8.2	..	..
Prairie region	7.8	..	..	8.1	8.0
British Columbia	10.3	10.5	10.4	10.2	10.3
Canada	7.8				

1 Against Canada; i.e., unemployment rate in the region if it had Canada's distribution by occupation, industry, education, and age group.

2 Age groups are: 15-24, 25-44, 45-64 (male and female).

3 Levels of schooling are: 0-8 years, 9-13 years, some postsecondary schooling, postsecondary certificate, university degree.

4 Occupational groups are: managerial; clerical; sales; service; primary occupations; processing; machining, etc.; construction; transportation equipment; material handling.

5 Industries are: agriculture; other primary industries; manufacturing industries; construction; transportation; communications, etc; trade, finance, insurance, and real estate; public administration.

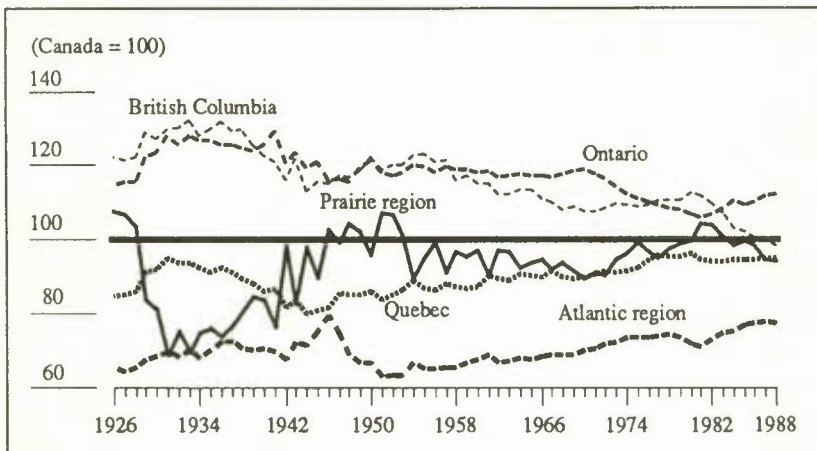
Other Types of Income Difference

Personal Income per Capita

Personal income per capita is a good measure of material living standards. It can vary across regions in a way that is different from the way that earned income per worker varies across regions, as a result of differences in rates of unemployment, participation, and dependency, and in transfer payments. As it happens, these differences appear almost to offset one another. Disparities in personal income per capita are very similar to those in earned income per worker, the only difference being that the former are just a little wider (Chart 5).

Chart 5

Personal Income per Person, by Region, Canada, 1926-86



Source Estimates by the Economic Council of Canada, based on Statistics Canada, *National Income and Expenditure Accounts*, Cat. 13-201.

Intraprovincial Income Variations

Data for recent years on the gross national product per employed person and personal income per capita are not available for subprovincial regions. While the personal income data could be obtained by special request from Statistics Canada, time and resource constraints precluded this. Gross provincial product data cannot be obtained at all on a subprovincial basis.

Data for earned income per capita by census division for the year 1987 are available, however, in a publication of the Regional Development Secretariat of Industry, Science and Technology Canada.²⁰ They show that within any one province, a range of 20 per cent on either side of the provincial average includes the vast majority of the census divisions. By following a similar procedure as we used above with respect to intraprovincial unemployment rate

differences, it is possible to show that only a small percentage of Canada's population lives in areas where the disparity in earned income per capita is serious in comparison to the provincial average. Thus, pockets of relatively low income within provinces are not very common, meaning that intraprovincial disparities in earned income per capita are not very important in comparison with interprovincial disparities.

We conclude on the basis of this admittedly very partial evidence that the picture of spatial disparities in incomes yielded by comparing provincial averages will be quite accurate, despite its not taking account of subprovincial variations.

Conclusions

Geographical variations in economic opportunity do matter, even though the freedom to move exists. The most important potential differences, from the point of view of individual well-being, are in two areas: first, with respect to the availability of suitable jobs, and second, with respect to what a person can earn once a job is found.

Regional differences in unemployment rates are as large today as they have ever been. In some respects, they are larger. Specifically, relative rates of unemployment are just as widely dispersed as they have been during the whole postwar period, but in absolute terms, disparities are worse.

In the Atlantic region, unemployment rates are usually about 50 per cent higher than the Canadian average, in good times and in bad. Within the region, Newfoundland and Prince Edward Island are worse off than the average, but even in New Brunswick and Nova Scotia unemployment rates are nearly always unacceptably high.

In Quebec the unemployment rate has always been somewhat above the national average, though not by nearly as much as in the Atlantic region. That situation has not changed.

Moving to the West, the unemployment rate in British Columbia has always been higher than average, and it is still so, by about the same proportion. The situation of the Prairie provinces, however, has changed for the worse. Until five years ago, the Prairie provinces almost invariably had unemployment rates well below the national average. During the last five years, the Prairie rates have been rising, in relative terms, to the point that they are now as high as the national average. The effect is that unemployment in western Canada as a whole is now well above the national average, and has been since 1984. This new development, if it persists, represents a major shift in the pattern of unemployment disparities as compared with the past.

Ontario's position with respect to unemployment has also changed in the last few years. Although always below average, the province has been even better placed recently. For the first time ever, it has a considerably lower unemployment rate than the Prairie provinces.

It short, unemployment-rate disparities are as wide as ever, but the pattern has changed to the relative disadvantage of the Prairie provinces, and to the relative advantage of Ontario. Eastern Canada remains where it has always been, with above average unemployment that becomes worse the further east one moves.

These conclusions about unemployment disparities are not invalidated when one digs deeper, by estimating the effects of age/sex differences and seasonality, by considering the impact of the unemployment insurance system, and by looking at vacancy data. On the contrary, the conclusions are somewhat strengthened. Nor does consideration of two other aspects of job opportunities – subregional differences and participation rates – make any substantial difference.

The picture is brighter with respect to the earned incomes of those who do manage to find employment. A narrowing of gaps in both wages per employed person and gross domestic product per employed person has occurred during the last 25 years. Differences among Quebec, Ontario, and the four western provinces are now relatively minor. A range of approximately 10 percentage points covers them all. The Atlantic region remains significantly below the national average, however, by about 20 per cent. Even that gap is less than it used to be, and it could not be strongly argued that it represents severe economic hardship.

From the policy point of view, three conclusions matter. First, unemployment disparities are as severe as ever, perhaps more so. Removing them remains an urgent priority. Second, the West has become relatively worse off and Ontario relatively better off, in terms of unemployment rates. If this situation does not correct itself soon, it implies a somewhat different set of relative priorities for regional unemployment policy. Third, income disparities among those who do have work are now small enough that a further narrowing of them can no longer be regarded as a top economic policy priority.

In sum, unemployment disparities are as bad or worse than ever, and it is on these that future policy urgently needs to focus.

Notes

- 1 Economic Council of Canada, *Living Together: A Study of Regional Disparities* (Ottawa: Supply and Services Canada, 1977), p. 60.
- 2 Economic Council of Canada, *Living Together*, p. 19. The Council acknowledged that its decision to opt for reducing unemployment differences rather than income differences, whenever there was a trade-off, was a pure value judgement. We share the Council's bias on that trade-off, but have nothing to add to its 1977 discussion of the matter.
- 3 Economic Council of Canada, *Living Together*, p. 11.
- 4 Economic Council of Canada, *Living Together*, p. 13.
- 5 A referee suggested the following definition of a suitable job, which we agree with: "A job in the highest paying occupation for which a given individual is deemed by the local labour market to be qualified."
- 6 It could be argued that for comparing living standards, family units would be preferable. These are only available, however, since 1967. Moreover, they are difficult to interpret, given the changing nature and size distribution of families and unattached individuals.
- 7 We originally did not think so, and are indebted to a referee for the formulation in this paragraph.
- 8 A referee finds it *very* implausible, commenting as follows: "The validity of the proposition that a significant number of respondents report non-existent job search depends on two, admittedly untestable, assumptions.

"Firstly, since that data is derived from the LFS, it assumes that the respondents to that survey fail to accept the LFS interviewer's assurances of confidentiality, i.e., that the respondents' answers to the survey's questions will not go beyond the walls of Statistics Canada. This disbelief may seem plausible in light of the inability of some Canadians to distinguish among the three levels of government, let alone between two federal government departments. However, I have yet to see any studies to support the contention that respondents lie to LFS in the belief that the truth will threaten their UI benefits. If there were much substance to this proposition, surely some evidence would have come to light by now.

"Secondly, it may well be that in the areas of concern in this study, there may be no need for lying. For many years now, in individual labour markets with very limited job opportunities, local Unemployment Insurance offices have waived the job search requirements for continued UI eligibility. Exactly where and when the requirement of job search has been waived is information which is not, to my knowledge, available in statistical form."
- 9 J. Serjak and N. Swan, "Interregional variations in the general level of prices in 1988," Working Paper no.15, Economic Council of Canada, 1991.

- 10 Andrew Burns, "The natural rate of unemployment: A regionally disaggregated approach," Working Paper no. 2, Economic Council of Canada, 1990.
- 11 In "Unemployment disparity: An analysis of the role of economic structure" (a paper prepared for the Economic Council of Canada, 1991), Burns also undertakes a novel analysis - as opposed to description - of interprovincial income differences.
- 12 It could be argued that standardization exercises by several variables simultaneously would change the picture, and Burns' paper, "The natural rate of unemployment," might be interpreted this way.
- 13 The method was based on using the monthly seasonal factors (both multiplicative and additive), published by Statistics Canada, to estimate what percentage of unemployment during the year was seasonal. We assumed that in the three months with lowest seasonal factors, there was no seasonal unemployment. In the other nine months, seasonal unemployment existed in any month whose seasonal factor exceeded the average seasonal factor for the three months with "no" seasonality.

These assumptions allowed us to estimate, in a given year, how much unemployment during the year was seasonal, and how much was not. The method is clearly an approximation, but equally clearly likely to be a good approximation. We applied the method to all provinces for the year 1988, and also checked for significant changes through time in the degree of interprovincial seasonal differences. In all cases, seasonality in 1988 and the effect of changes in its importance on interprovincial unemployment differences were found to be of minor importance.
- 14 Burns, "The natural rate of unemployment."
- 15 By "suitable," we mean that the degree of matching between the skill requirements of the vacancies and the skill endowments of the unemployed should be similar from one region to another.
- 16 A referee thinks they are not even "only moderately good," commenting: "They may be considerably worse than that. Firstly, there is no legal requirement that employers register their vacancies with their local Canada Employment Centre. The employers' use of the centres will therefore vary according to the extent that they find these centres effective as recruitment mechanisms. This in turn is likely to vary according to the extent to which potential employees find the centres effective as job search mechanisms. The alternatives for both parties are private employment agencies, job advertisements, and 'networking.' The fact that private employment agencies and job ads are both flourishing industries attests to the popularity of these alternatives. One has to wonder at the regional variations in the use of the Canada Employment Centres by employers seeking employees. Given that the business clients of both private employment agencies and help-wanted ads are not evenly distributed across the industry and occupation spectra, one has to suspect that the clientele of the CEC is a mirror image for this."

"Secondly, the validity of the 'registered vacancies' is subject to the vagaries of administrative diligence. Employers are obviously motivated by something to place their vacancies with the centres since they have no compulsion to do so. However, they have no corresponding motivation to notify the centre once the vacancy has been filled, i.e., it no longer exists. I am not familiar with the administrative practices of the centres but it would be reasonable to suggest that one of the primary means of learning of filled (but not so notified) vacancies would be reports from disappointed job seekers. The higher the unemployment rate, the greater the number of CEC referrals and therefore the greater the likelihood of invalid vacancies being stricken from the books. This would tend to exaggerate the unemployment/vacancy relationship in high unemployment areas."

- 17 It would be useful to buttress this conclusion – or perhaps refute it – with further refinements of the descriptive analysis. One might consider, for example, as one referee has suggested, long term unemployment and involuntary part time unemployment. This paper being already long, we leave these extensions to future research.
- 18 The data covered the period 1975-89.
- 19 The methodology is described in Serjak and Swan, "Interregional variations in the general level of prices in 1988."
- 20 Industry, Science and Technology Canada, "Regional disparity in Canada, 1989," Occasional Paper no. 3.

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