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The Canadian Labor Market: Developments, Prospects, and Policy

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Abstract

This paper examines recent developments in the Canadian labor market. Using disaggregated labor market data, various hypotheses concerning the slow employment growth and rise in unemployment since 1990 are evaluated. The analysis indicates that a large part of the recent rise in the unemployment rate may reflect an increase in the structural rather than the cyclical component of unemployment. Various sources of labor market rigidities that may have contributed to the increase in structural unemployment are examined. In particular, the role of the unemployment insurance system in contributing to labor market rigidity and measures for reforming this system, including the recent proposals of the government, are discussed. Finally, this paper examines active labor market policies that could help to alleviate structural unemployment.

JEL Classification Numbers: E24, J20, J65

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### Summary

Since early 1990, the aggregate unemployment rate in Canada has risen by about 4 percentage points and, despite the recent cyclical rebound in output, has remained in a range close to 10 1/2 percent. The persistence of a high unemployment rate and subdued employment growth in this recovery relative to previous postwar recoveries suggests that there have been fundamental changes in the structure and functioning of the Canadian labor market. This paper seeks to shed some light on these developments by examining Canadian labor market data that are disaggregated by industry, skill level, province, and demographic classifications. The analysis corroborates a growing body of evidence that the increase in unemployment in Canada in the 1990s partly reflects an increase in the persistent or structural component of unemployment.

Some important structural problems that contribute to labor market rigidity are identified and described. Skill and geographical mismatch in the labor market as well as the unemployment insurance (UI) system appear to be important factors contributing to structural unemployment. Changes to the UI system recently proposed by the Government are briefly described, followed by an examination of various proposals for more fundamental UI reform. This paper then identifies some particularly vulnerable groups in the labor force--youth, unskilled workers, older dislocated workers, and immigrants. Active labor market measures that could foster their integration into the labor force and their absorption into employment are discussed.

The paper concludes that measures to remove structural distortions to labor supply and reduce job mismatch are necessary in order to significantly reduce structural unemployment and enhance the long-term growth prospects of the Canadian economy.



## I. Introduction

Unemployment is a major source of concern for policymakers in Canada. Since early 1990, the aggregate unemployment rate has risen by about 4 percentage points and, despite the recent cyclical upturn in output and a continued gradual decline in the labor force participation rate, it has remained in a range close to 10 1/2 percent. The persistence of a high unemployment rate and subdued employment growth in this recovery relative to previous postwar recoveries suggests that fundamental changes may have occurred in the structure and functioning of the Canadian labor market.

This paper seeks to shed some light on these developments by examining Canadian labor market data that are disaggregated in a number of different dimensions. For instance, substantial differences in unemployment and employment growth rates are documented across industries, provinces, and workers of different skill levels. These empirical facts are used to evaluate a number of alternative hypotheses that have been advanced to explain the recent weakness in employment growth and the persistently high unemployment rate. Factors such as skill-biased technological change and capital-labor substitution appear to have led to an increase in the proportion of long-term unemployed, particularly among workers with low skill levels. These findings corroborate a growing body of evidence that the increase in unemployment in Canada in the 1990s partly reflects an increase in the persistent or structural component of unemployment, i.e., the natural rate (see, e.g., Rose (1992), Alleyne (1993), and Williams (1993)). Thus, the unemployment problem would seem to require measures that address the structural rather than merely the cyclical determinants of unemployment.

This paper also reviews recent proposals for structural reform of the Canadian labor market. To set the stage for this description, some important structural problems that contribute to labor market rigidity are identified and described. The changing structure of labor demand appears to have contributed to an increase in skill mismatches between workers and available jobs. Geographical mismatch also appears to play a role, as evidenced by the persistent large differentials in regional unemployment rates. Another important factor contributing to rigidity in the labor market is the unemployment insurance (UI) system. Changes to the UI system announced in the February 1994 budget are briefly described, followed by an examination of various proposals for more fundamental UI reform.

This paper then identifies some particularly vulnerable groups in the labor force--youth, unskilled workers, older dislocated workers, and immigrants. Apart from income support, these groups appear to require active labor market measures that foster their integration into the labor force and their absorption into employment. Existing programs and proposals for new programs that are targeted to these specific groups are evaluated. Finally, the paper discusses short-term job creation measures such as job sharing and reductions in working hours that have recently been the subject

of some debate, especially in Europe. These measures may at best have a small effect on short-term employment growth and are unlikely to affect the structural component of unemployment.

## II. Recent Labor Market Developments

Although the last recession in Canada bottomed out in the first quarter of 1991 and output has grown at a faster pace since late 1992, employment levels in most industries remain below their previous cyclical peaks. The aggregate employment level continued to decline even beyond the trough of the cycle and reached its trough only twelve months later in April 1992. During 1992 and 1993, employment growth averaged only a little over 1 percent. In February 1994, about three years after the recovery began, aggregate employment had still not returned to the level of the previous cyclical peak.

The aggregate unemployment rate stood at 11.1 percent in February 1994 (Chart 1). <sup>1/</sup> Contrary to the pattern in most previous recessions, the unemployment rate continued to rise well after the recovery began. During 1991 and 1992, the unemployment rate rose by 1.3 percentage points and has since remained in a range close to about 10 1/2 percent. This followed an increase of about 2.7 percentage points in the unemployment rate during 1990, resulting in a total 4 percentage point increase since the first quarter of 1990.

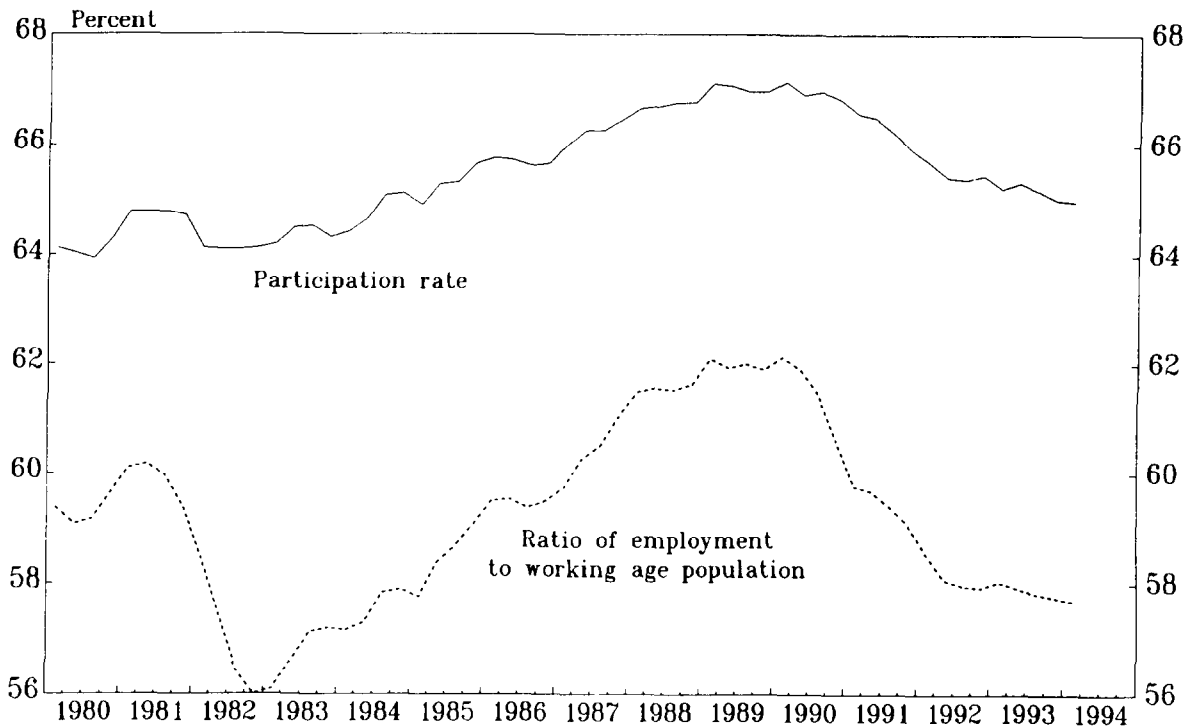
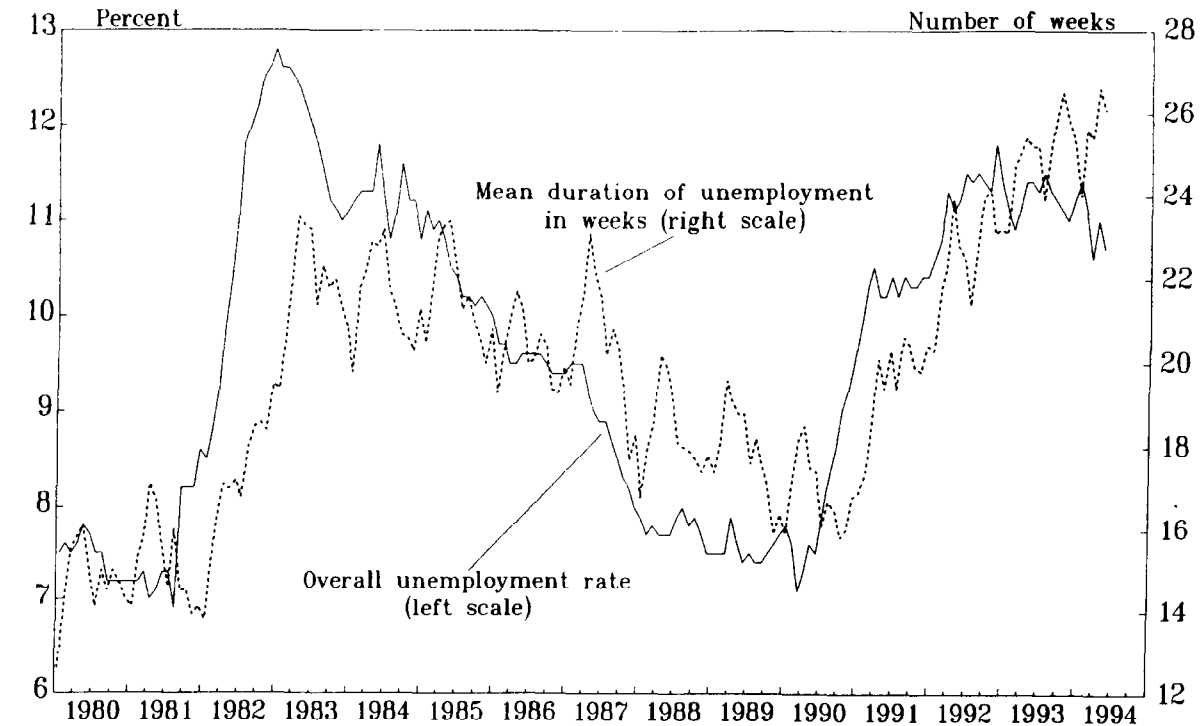
A potential explanation for part of the increase in the unemployment rate may be a rise in the labor force participation rate. The participation rate typically tends to rise in the first few quarters of a recovery as discouraged workers return to the labor force. However, since 1990, the participation rate has actually declined by almost 2 percentage points and stood at 65 percent in February 1994 (Chart 1). The lack of employment growth may have deterred the re-entry of many Canadians into the labor force and also slowed the entry of new labor force participants. Apart from the cyclical decline, recent immigration flows have also led to a decline in the participation rate. From 1990 to 1992, flows of less-skilled immigrants increased substantially and many of these immigrants have not yet successfully attached to the labor force. <sup>2/</sup>

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<sup>1/</sup> This paper uses data available as of April 1994, when this paper was drafted. The unemployment rate remained in the range of 10 1/2-11 percent from March to May 1994 and dropped to 10.3 percent in June, partly due to a decline in the labor force.

<sup>2/</sup> Italiano (1993) estimates that recent immigration flows have lowered the participation rate by about 0.3 percentage points.

# LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT 1/



Source: Statistics Canada.

1/ All data are seasonally adjusted with the exception of mean duration of unemployment.





To abstract from the effects of variation in the participation rate on the unemployment rate, it is useful to examine the employment-population ratio. Since the last cyclical peak, the ratio of aggregate employment to the total working age population has declined by about 4 percentage points, reflecting that employment growth has not kept pace with the growth in the working-age population. This ratio has remained essentially unchanged at about 58 percent since the first quarter of 1992.

Apart from the aggregate figures, the composition of unemployment is also important. One of the more important aspects is the distribution of the duration of unemployment as it provides an indication of changes in the number of core unemployed relative to workers who are temporarily unemployed. The latter category of unemployed would include workers who are engaged in job search in the process of moving across sectors or to different jobs within their original sector. Such workers may represent a rise in frictional unemployment, as is typical during a recession, implying a temporary rather than a permanent increase in the unemployment rate. The tabulation below shows the annual flows into unemployment since 1990. From 1990 to 1993, the contribution of job losers to changes in total unemployment has increased by almost 50 percent. However, the number of job leavers, including workers who may have quit their jobs when switching sectors or looking for better jobs within their original sector, has remained roughly stable.

#### Flows into Unemployment

(In thousands)

	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u> <u>3/</u>
Job losers	603	837	931	911
Job leavers	214	234	225	227
New entrants	30	43	59	...
Re-entrants:				
Out for 1 year or less	149	160	161	...
Out for over 1 year	113	143	180	...

The mean duration of unemployment has increased from about 16 weeks in early 1990 to almost 27 weeks in the second quarter of 1994, indicating a substantial increase in the proportion of the long-term unemployed in total unemployment (Chart 1). It must also be noted that, in the early stages of a recovery, the mean unemployment duration often declines as discouraged workers re-enter the labor force and commence their job search. As the above tabulation shows, the number of re-entrants into the labor force,

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3/ Data on new entrants and re-entrants were not available for 1993.

particularly those who have been out of the labor force for over a year, has increased markedly from 1990 to 1992. Thus, the continued increase in the mean duration of unemployment implies an increase in the number of chronically unemployed. Further, the recent decline in the participation rate despite an increase in the number of labor force re-entrants suggests that there has been an increase in the number of potential first-time labor force participants who are not entering the labor force (see Italiano (1993)). The category of first-time labor force participants has a large proportion of youths and indicates that the youth unemployment problem (discussed below) may be understated by the unemployment figures.

The regional dispersion of unemployment rates remains high, ranging from 9.3 percent in British Columbia to 19.6 percent in Newfoundland. Ontario with 10.6 percent and Quebec with 12.8 percent unemployment are both relatively close to the national average. The maritime provinces (Nova Scotia, New Brunswick, Newfoundland, and Prince Edward Island) have the highest unemployment rates, while the western provinces (Alberta, British Columbia, Manitoba, and Saskatchewan) have unemployment rates below the national average (Chart 2). <sup>4/</sup> Virtually all of the provinces have experienced little employment growth over the last two years and, in this respect, are going through similar cyclical experiences. During 1993, only Ontario and the Western Provinces have experienced sustained, although modest, employment growth.

Unemployment rates also vary substantially across skill levels. Although unemployment rates for virtually all skill levels have risen since 1990, the change in unemployment rates has been affected by skill level. The tabulation below uses education levels as a proxy for skills. As is the case in most industrialized economies, unemployment rates are inversely related to years of schooling. The unemployment rate for workers with less than eight years of schooling is on average about three times that of workers with a college degree. From 1990 to 1993, the average unemployment rate for workers who did not graduate high school increased by about 4 percentage points, compared with a 2 percentage point increase in the unemployment rate for workers with a college degree.

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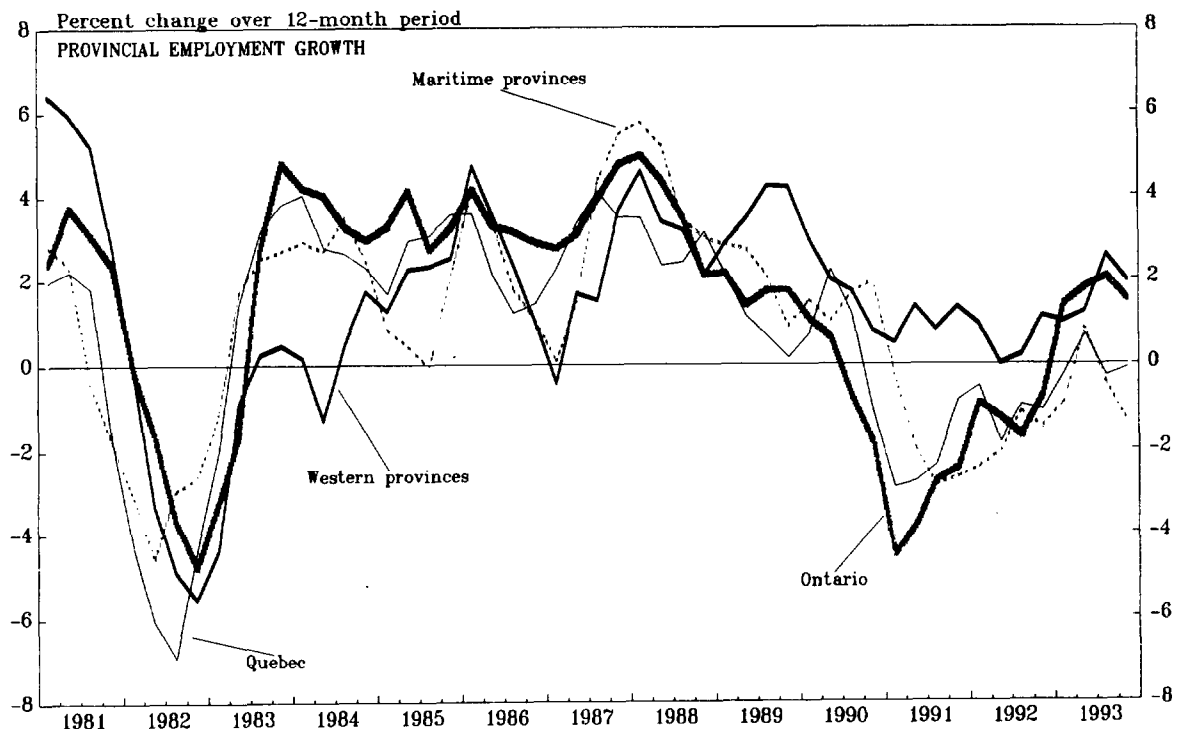
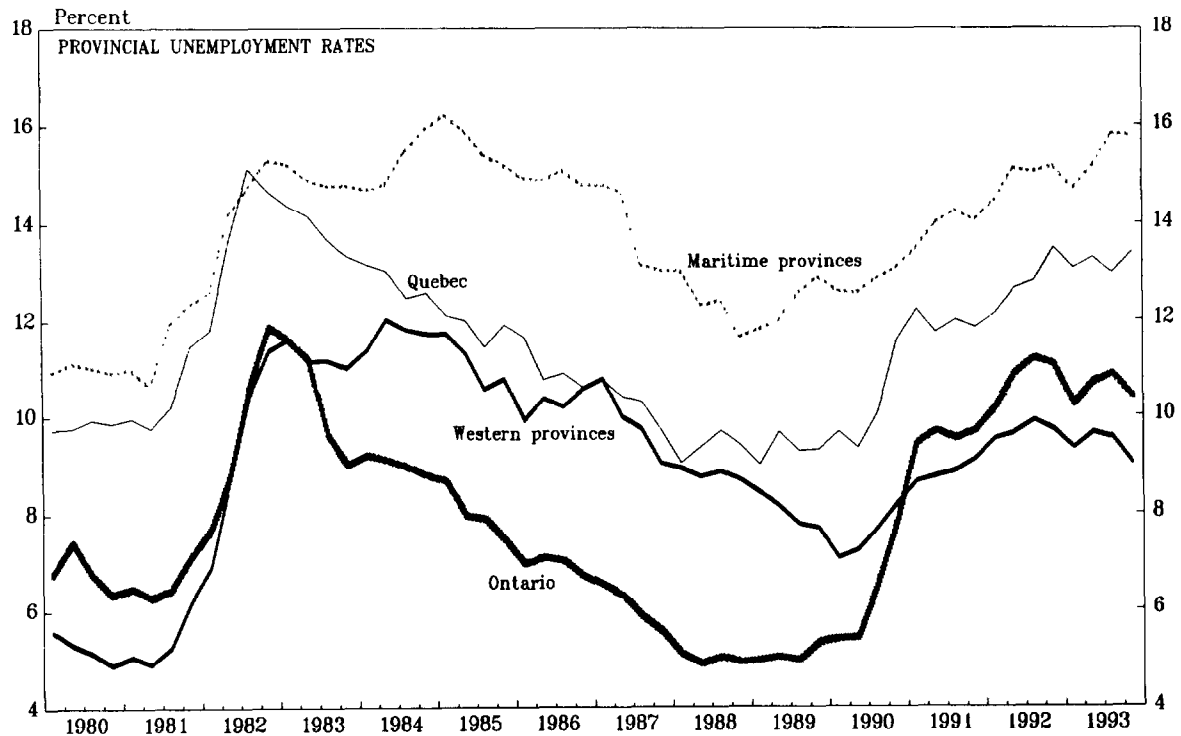
<sup>4/</sup> The total unemployment rate for the Maritime provinces was calculated as a weighted sum of the unemployment rates in its constituent provinces. The weights, representing respective labor force shares, are: Nova Scotia (40.6 percent), New Brunswick (30.6 percent), Newfoundland (22.9 percent) and Prince Edward Island (5.9 percent). Similarly, for the Western provinces, the weights are: British Columbia (38.5 percent), Alberta (34.3 percent), Manitoba (14.1 percent) and Saskatchewan (13.1 percent).

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CHART 2

CANADA

## UNEMPLOYMENT AND EMPLOYMENT GROWTH ACROSS THE PROVINCES



Sources: Statistics Canada and Fund staff estimates.



### Unemployment Rates by Education Levels

<u>Education Level</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>
Less than 8 years	12.5	15.4	16.0	16.5
Some secondary	12.2	15.3	17.5	16.8
Secondary graduate	7.7	10.3	10.9	11.4
Some post-secondary	8.0	10.2	11.4	11.6
Post-secondary	6.3	8.2	9.3	9.4
University degree	3.7	4.9	5.5	5.7
Total	<u>8.1</u>	<u>10.3</u>	<u>11.3</u>	<u>11.2</u>

The strikingly high unemployment rates for workers with lower levels of education partly reflects normal cyclical effects. However, given the process of restructuring by many firms and the mounting evidence of skill-biased technological change over the last two decades, there is reason to hypothesize that the employment probabilities of unskilled workers may have shifted downward secularly. The phenomenon of skill-biased technological change may in part be attributable to the attempt by manufacturers to improve their competitive position by switching to high value-added production processes, thereby increasing the demand for skilled workers. This change in the structure of labor demand is reflected in the increasing relative wage for skilled workers despite an increase in the relative proportion of skilled to unskilled workers in the labor force.

Another aspect of recent developments in unemployment is the dispersion of unemployment across demographic classifications. The unemployment rate for youths has risen by almost 5 percentage points since the last cyclical peak, much higher than the increases in the unemployment rates for adult men and women and despite a drop of about 6 percentage points in the labor force participation rate of youths (Chart 3). Since youths are relatively less skilled, both in terms of education and labor market experience, this echoes the results in the above tabulation. Another notable feature of the Canadian labor market over the last few years is the dramatic increase in the labor force participation rate of adult females, particularly prime-age females. Despite this increase in the participation rate, the unemployment rate for adult females declined from 1982 to 1989 and has remained below that of adult males since 1990.

Demographic and skill level differentials notwithstanding, the aggregate unemployment rate has risen steadily over the last three years and has shown no signs of a significant decline despite the above-trend growth of output in the first half of 1993. This suggests the possibility that the increase in the unemployment rate may partly reflect an increase in the natural rate of unemployment. Estimating the natural rate at the end of a sample period is a difficult task as the standard error bands around such

estimates are usually very large. Simple univariate estimates of the natural rate provide a useful starting point. Using a segmented linear trend with a break in 1978, the trend unemployment rate is estimated to be about 9 percent in 1993. Assuming an Okun coefficient of 2.5 (see Alleyne (1993) and Fortin (1993)), this is consistent with an output gap of about 5 percent. An alternative univariate measure is obtained using the Hodrick-Prescott (HP) filter. This filter, which may be sensitive to end points, suggests that the natural rate may in fact be around 10 percent. Most estimates suggest an increase in the natural rate from its level of about 8 percent in 1988-89. 5/

A key question that arises at this juncture is whether the recent increase in the natural rate represents a temporary or persistent phenomenon. Major policy initiatives such as the Free Trade Agreement (FTA) with the United States, the introduction of the goods and services tax (GST), and the prospect of the North American Free Trade Agreement (NAFTA) are believed to have led Canadian manufacturers to restructure their production operations. These structural changes have also had the effect of increasing the inter-industry flows of labor, particularly within the manufacturing sector (see Prasad (1993)). Consequently, frictional unemployment in the Canadian economy is likely to have increased in the last few years. This would translate into a temporary increase in the natural rate. However, as discussed above, part of the increase in unemployment among low-skilled workers and youths may reflect a more persistent phenomenon as skill-biased technological change may have permanently reduced their employment probabilities. 6/

The significant increase in the proportion of chronically unemployed workers, who may face increasing difficulty in being re-employed, also points to a longer-term increase in the natural rate. The sharp increase in the average duration of unemployment since 1990 suggests that a portion of the labor force is experiencing increasingly long spells of unemployment. Since the probability of exiting from unemployment into employment is negatively correlated with the length of an individual's spell of unemployment, an increase in the number of individuals with long unemployment spells could increase core unemployment in the economy. A number of studies have also found that structural factors such as the Unemployment Insurance system have introduced a number of rigidities in the labor market and may have had a considerable effect in terms of increasing the natural rate. In sum, recent increases in the unemployment rate may well reflect a permanent increase in the underlying natural rate rather than cyclical effects.

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5/ Econometric models used by the Department of Finance yield a lower estimate of about 8-8 1/2 percent for the natural rate in 1993.

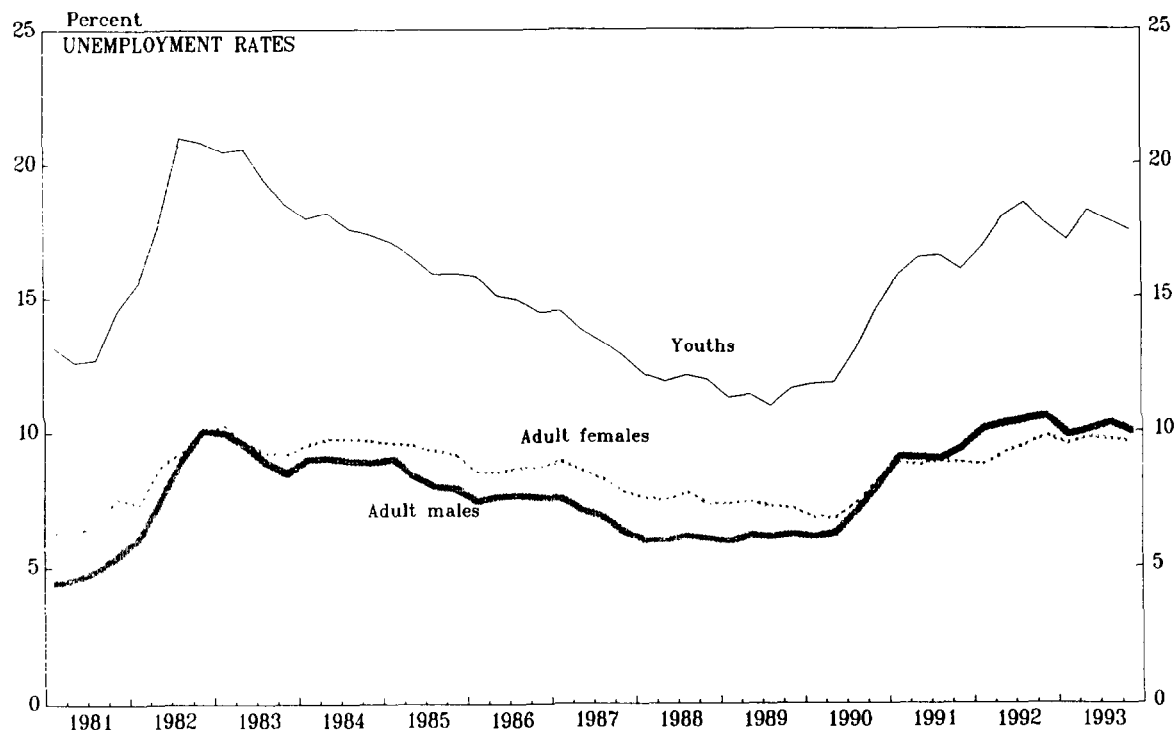
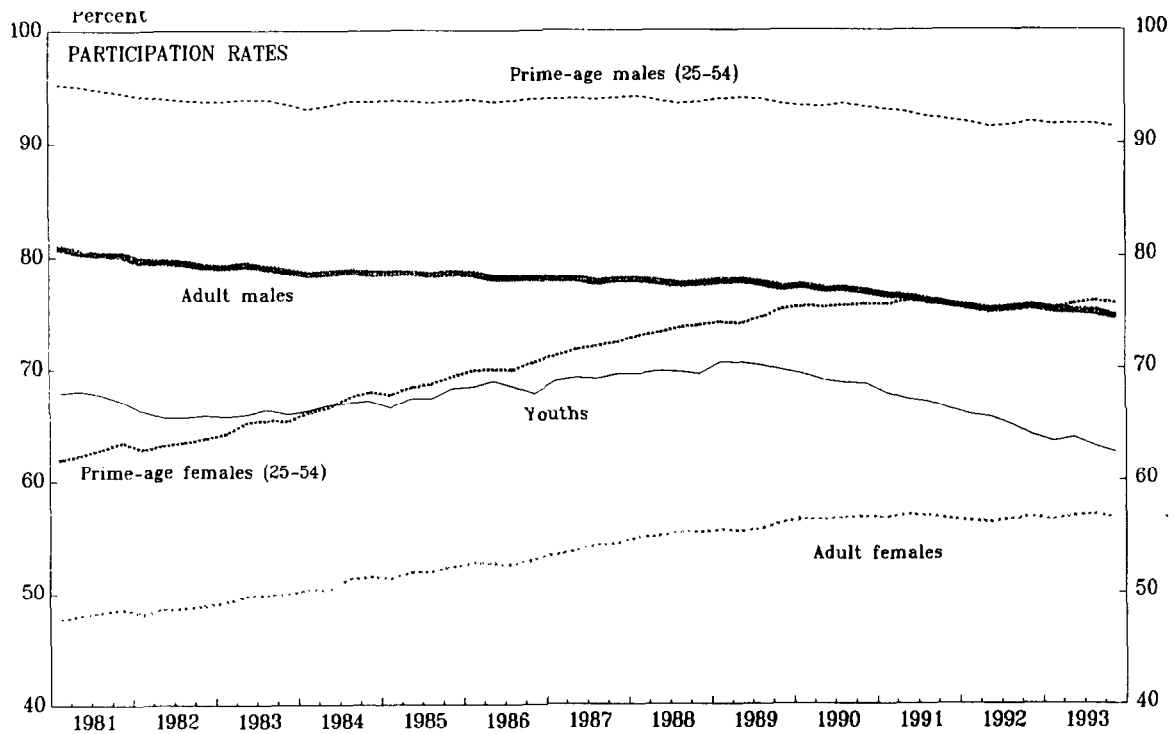
6/ The issue of skill mismatch between workers and available jobs is discussed in greater detail in the next section.

- 6a -

CHART 3

CANADA

## PARTICIPATION AND UNEMPLOYMENT RATES BY AGE AND SEX



Source: Statistics Canada.





Having examined various features of unemployment, this paper turns next to an examination of the patterns in employment growth. Employment growth in this recovery has remained skewed towards service-producing industries. As the top panel of Chart 4 shows, employment increases in service-producing industries have more than accounted for the increase in aggregate employment since 1990. Employment in the manufacturing sector has declined substantially since the first half of 1990 and has continued to decline, although at a slower pace, since the recovery began. Employment in the construction sector also has declined considerably since the last cyclical peak and levelled off only in the latter half of 1993. Within the services sector, the most notable increases in employment have been in the lower-paying jobs in community, business, and personal services. Employment growth in trade and finance, insurance, and real estate has been sluggish in this recovery. The secular decline in the share of manufacturing employment was exacerbated by the recent recession while the share of employment in community, business, and personal services has shown a steady increase from 25 to 37 percent since 1970 (Chart 5).

Blue-collar production workers have been especially hard hit in this recession as their employment fell steeply during the last recession and has not recovered since then (Chart 5). Employment levels of professional white-collar workers and workers in the service sector have been only marginally affected by the recession. It is worth noting that, despite the recession and the subsequent slow aggregate employment growth, the demand for skilled white-collar workers has continued to grow at a steady pace in the 1990s.

An important aspect of employment growth in this recovery is that part-time jobs have accounted for a substantial fraction of total employment growth (Chart 6). During 1991, part-time hiring increased substantially while full-time employment fell. Paradoxically, however, average weekly hours of both full-time and part-time workers fell in 1991. Towards the end of 1992 and during 1993, full-time jobs resumed growing but at a very modest pace. In response to improved demand conditions during 1993, average weekly hours worked by full-time workers in the aggregate as well as in manufacturing increased (Chart 7). However, reacting to uncertainty about the durability of aggregate demand conditions, employers responded by increasing part-time employment and the average weekly hours of part-time workers rather than increasing the hiring of new full-time workers. The diffusion index of employment change, which shows the percentage of industries with positive employment growth, reached 50 percent only in the latter half of 1993 and has not changed much since then, providing another indication that employers are reluctant to hire new workers.

Part of the weakness in employment growth in this recovery can be explained by the weakness in output growth and the uncertainty concerning short-run growth prospects. However, a number of structural factors also appear to have contributed to the weakness in employment growth. The process of restructuring in Canadian industry has led to lower levels of labor hoarding in this recession. Permanent layoffs, as a proportion of

total layoffs, were quite high in this recession, suggesting that firms were attempting to permanently reduce the size of their payrolls. Also, the increase in the relative price of labor has apparently led to a substitution of capital for labor. The increase in business fixed investment in machinery and equipment even during the recession supports this notion. The larger number of layoffs among less-skilled workers relative to skilled workers is consistent with the hypothesis that, in many industries, capital and unskilled labor are substitutes while capital and skilled labor are complements.

An implication of industrial restructuring and the substitution of capital for labor is that employment levels in certain industries and among workers with certain characteristics may have been permanently reduced. For instance, unskilled workers who have been displaced may find job search harder, particularly in industries such as manufacturing. As noted earlier, skill-biased technological changes over the last two decades may also have reduced the labor demand for unskilled workers, similar to what has happened in the United States and many European countries.

A more traditional explanation for the weakness in employment growth is that real wages did not fall appreciably during the recession and have remained high. The lower panel of Chart 7 shows that average real wages for manufacturing and for the total industrial sector did not fall much during the recession and then rose towards the end of 1992 before declining in the middle of 1993. This stickiness of real wages is attributable in part to the fact that wage settlements started to slow only after the first quarter of 1991 (Chart 8). Further, even after wage settlements in both the private and public sectors began to slow, declining inflation has kept the real wage from falling sufficiently to stimulate labor demand.

The large reduction in employment levels during the recession because of lower-than-usual levels of labor hoarding coupled with the lack of employment growth during the recovery despite a pickup in output has resulted in fairly strong productivity growth since the first quarter of 1991 (Chart 8). In particular, the manufacturing sector has experienced impressive productivity gains since 1991, but this is also the sector that had the greatest decline in employment levels. Once employers start hiring as the recovery becomes better established, some of these gains in productivity growth may be reversed. The growth in aggregate productivity has been moderate but more steady than in manufacturing. Although labor productivity has grown in this recovery, this may partly be an artifact of the capital-labor substitution discussed earlier, suggesting that total factor productivity may have shown much less impressive growth. Reflecting labor productivity growth and the decline in the rate of increase in wage settlements, unit labor costs have declined in manufacturing and in the aggregate economy since the latter half of 1992.

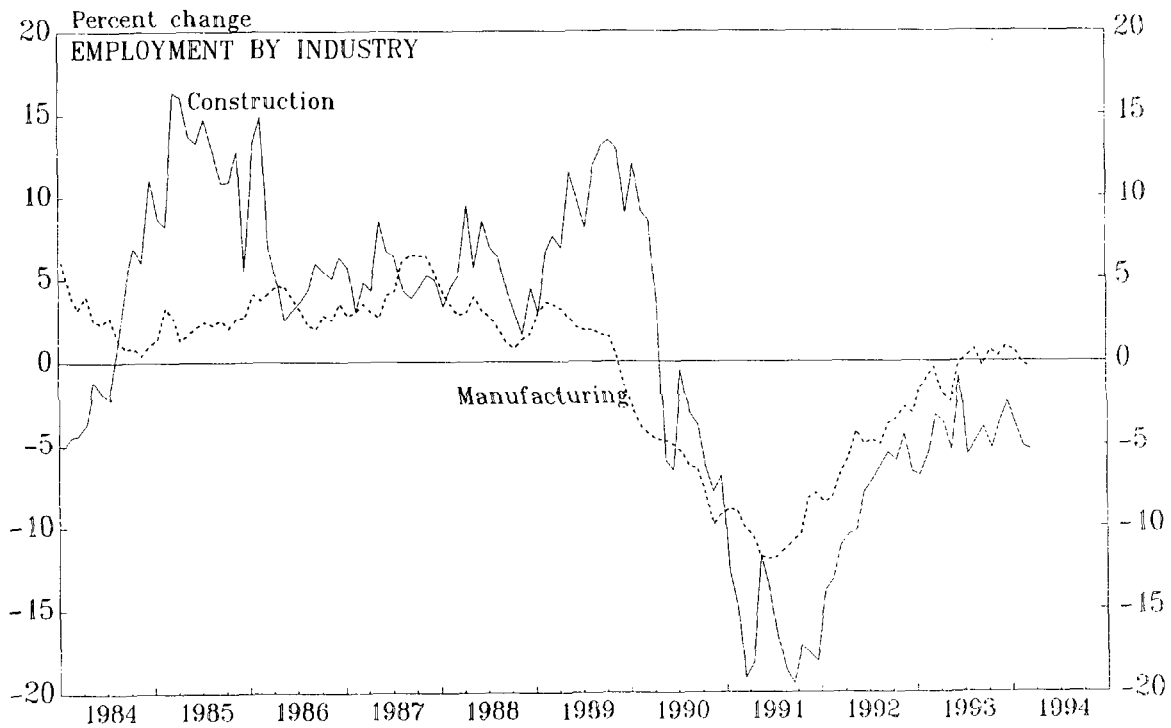
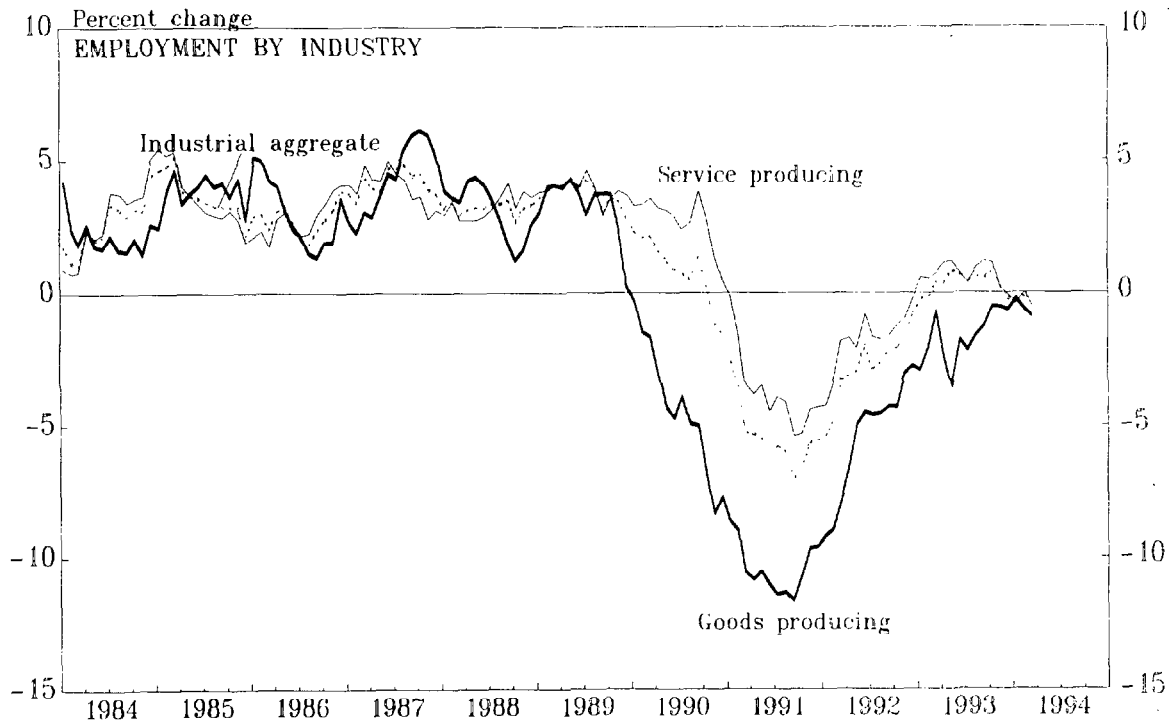
In summary, prospects for employment growth remain uncertain and recent structural changes in the economy may have led to a permanent decline in employment probabilities for less-skilled workers and an increase in the

- 8a -

CHART 4

CANADA

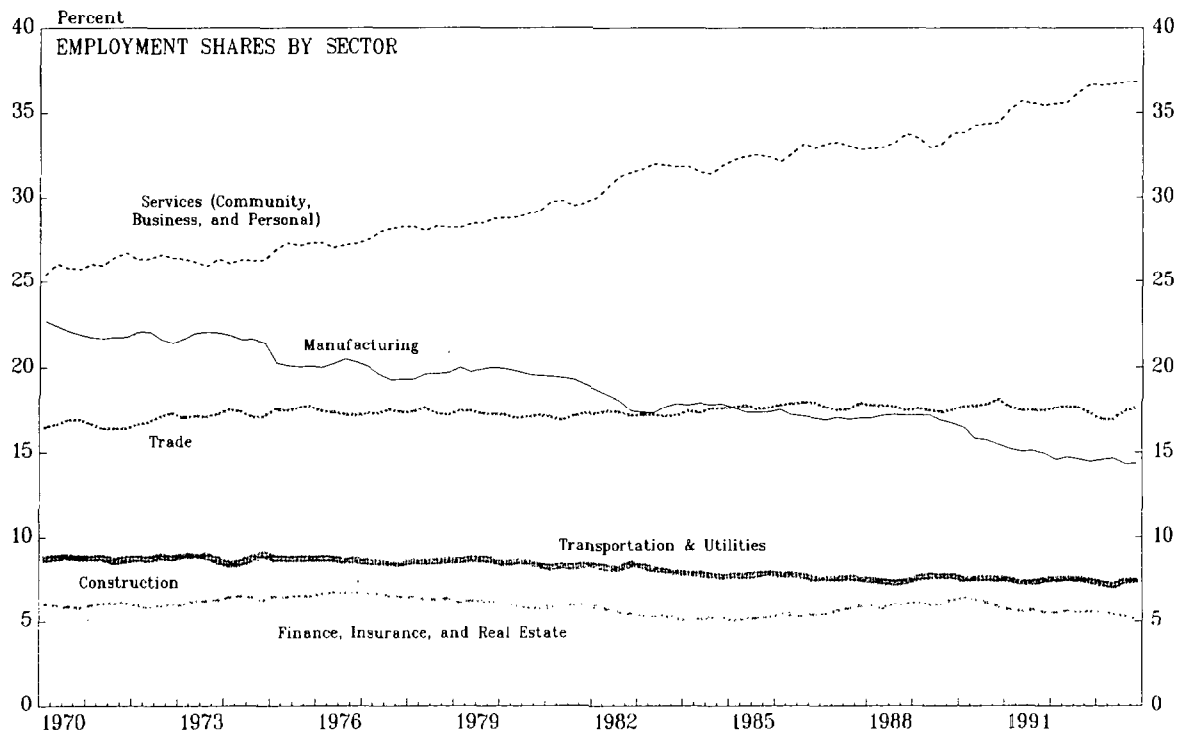
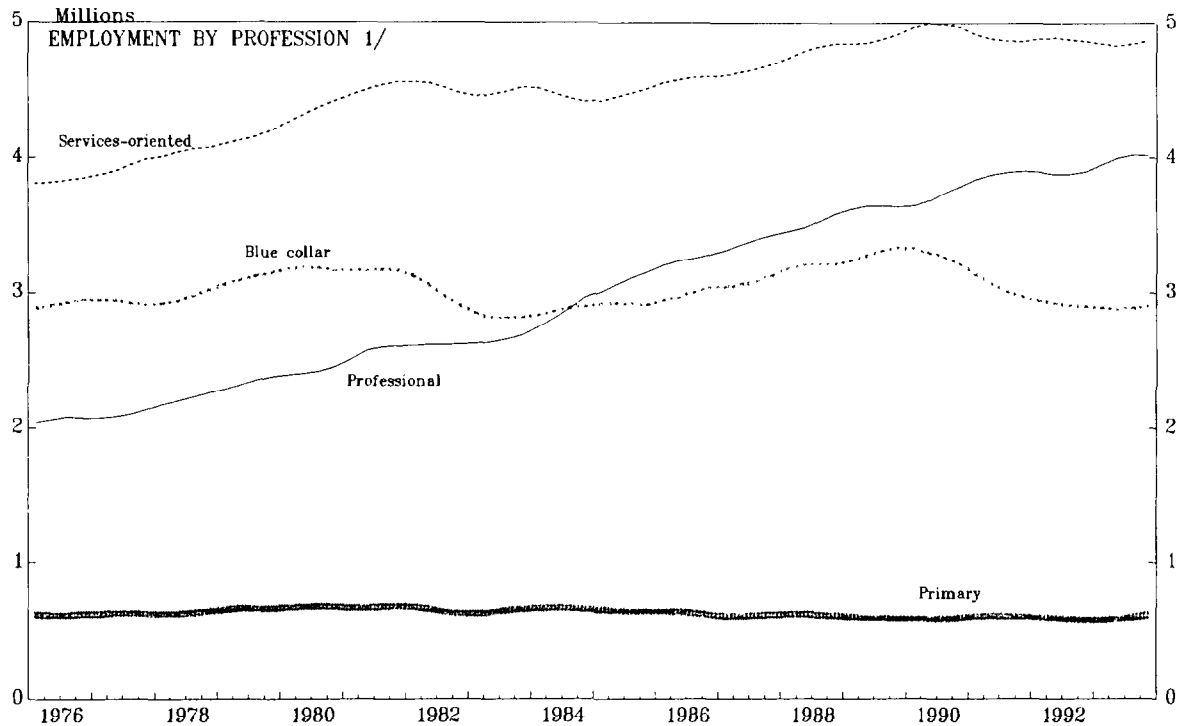
# EMPLOYMENT BY INDUSTRY 1/



Source: Statistics Canada.

1/ All data are monthly, seasonally adjusted, and are given in percentage changes over a 12-month period.

# EMPLOYMENT BY PROFESSION AND SECTOR



Source: Statistics Canada (Labor Force Survey).

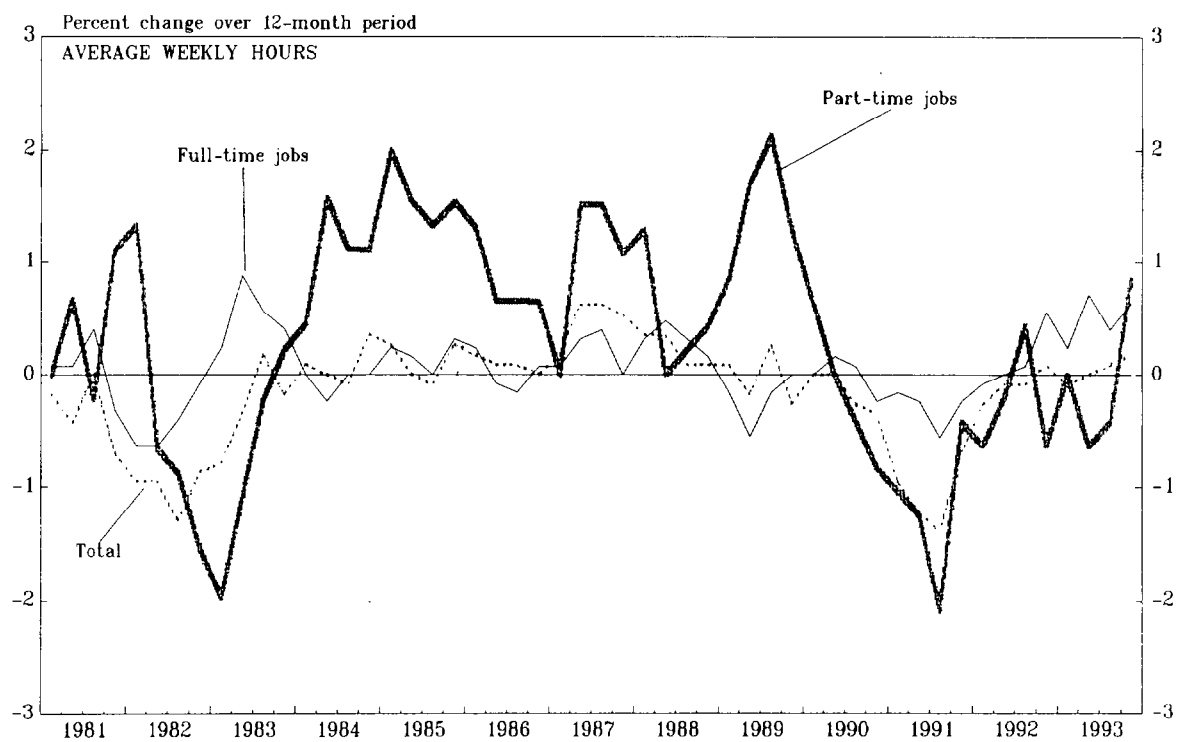
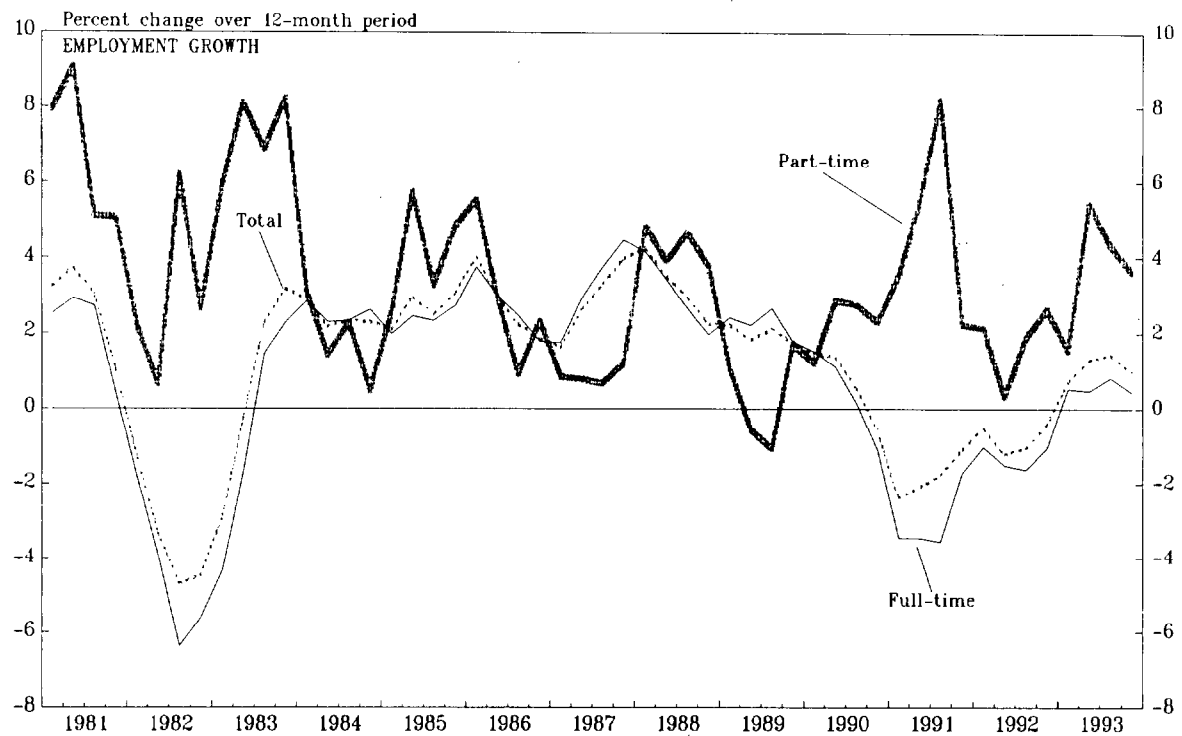
1/ Employment data are 12-month moving averages.

- 8c -

CHART 6

CANADA

## COMPOSITION OF EMPLOYMENT



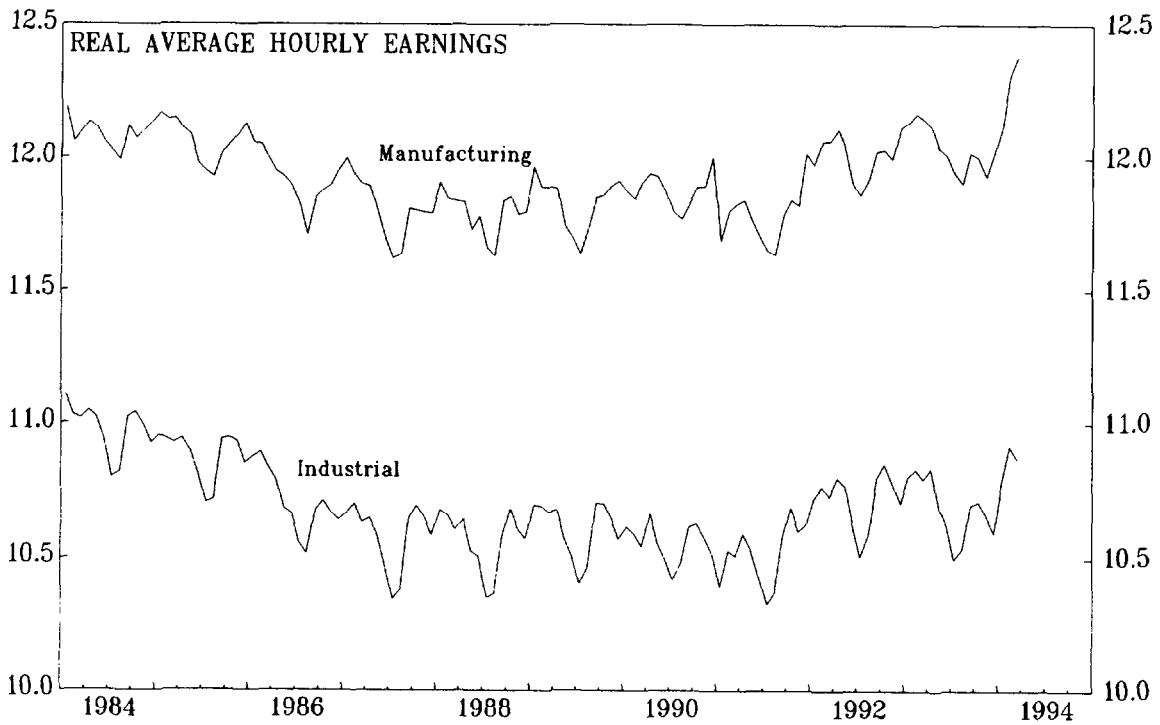
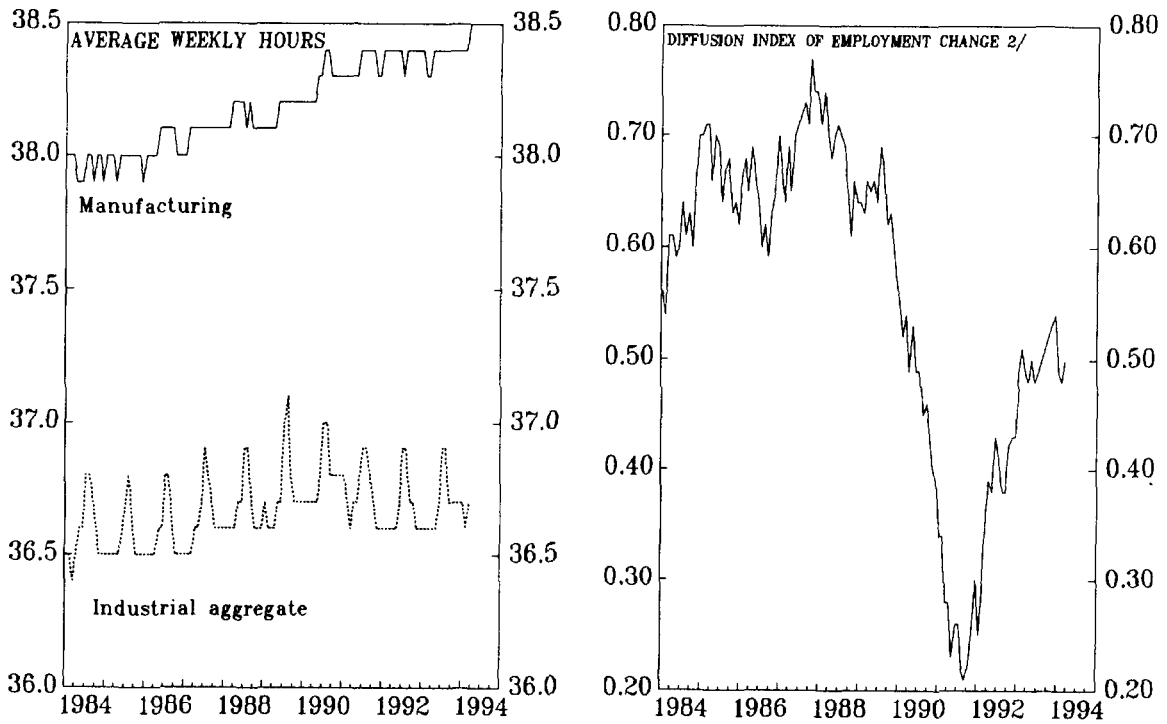
Source: Statistics Canada.

- 8d -

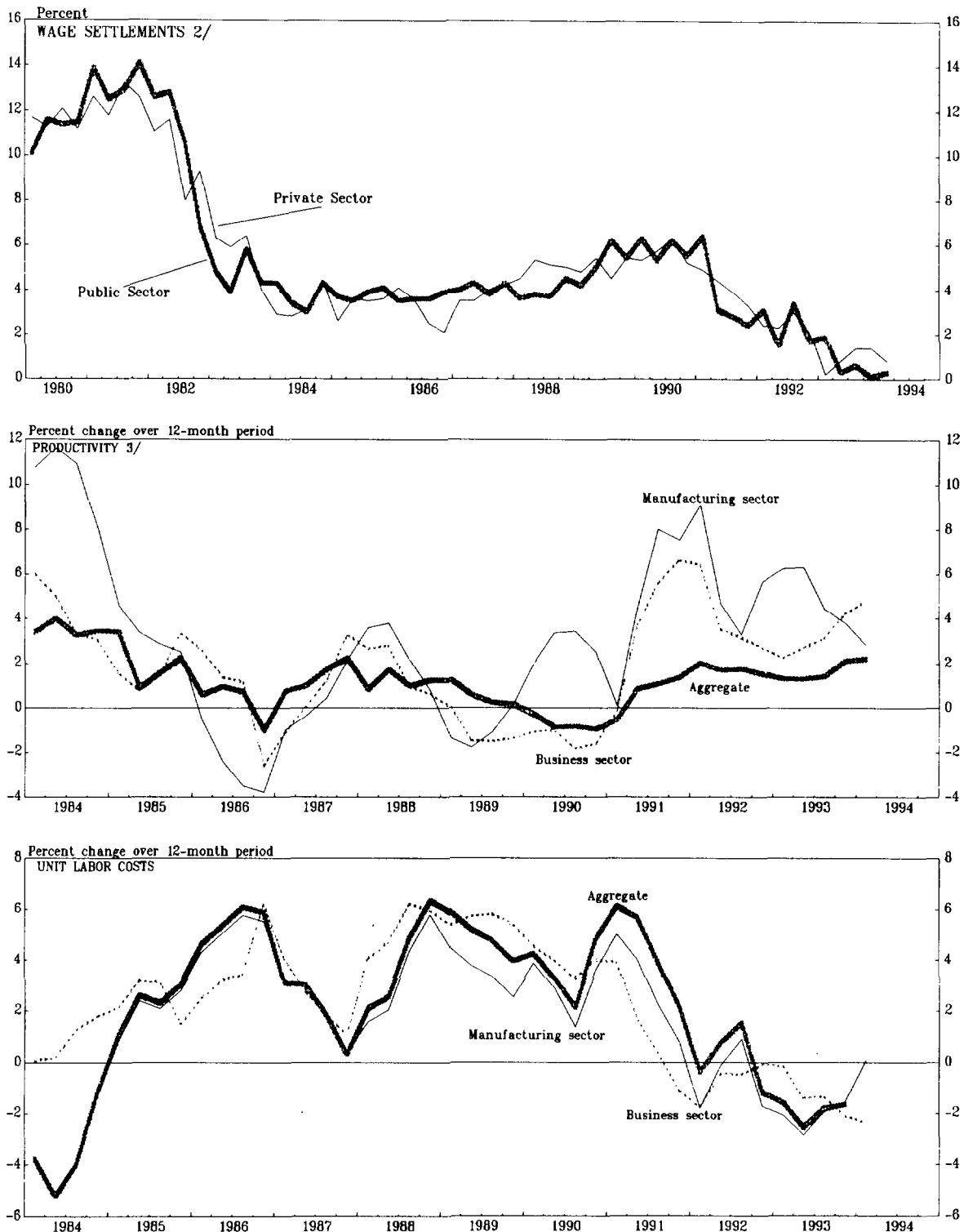
CHART 7

CANADA

# SELECTED LABOR MARKET INDICATORS 1/



# WAGE SETTLEMENTS, INDEXES OF PRODUCTIVITY, AND UNIT LABOR COSTS 1/



Source: Statistics Canada.

1/ Indexes are not seasonally adjusted.

2/ Compound average annual increase in base rates of pay provided under agreements reached in reference period in firms with 500 or more employees. (excl. COLA)

3/ Output per employee.





persistent noncyclical component of unemployment. The next two sections of the paper discusses in greater detail some of the structural problems that appear to have inhibited the efficient functioning of the Canadian labor market.

### III. Structural Problems in the Canadian Labor Market

Although the labor market in Canada is relatively more flexible than in most other G-7 countries in many dimensions (see Layard, Nickell, and Jackman (1991)), some important sources of inflexibility exist and have been increasing in importance in recent years. The major sources of labor market rigidity are skill and geographic mismatches between unemployed workers and available jobs. One indicator of the overall degree of mismatch in the economy is the Beveridge curve, which traces out the relationship between the aggregate unemployment rate and the vacancy rate (usually proxied for by the help-wanted index). Movements along the curve reflect cyclical variations in labor market conditions while shifts of the curve indicate changes in the degree of mismatch between labor demand and supply. A decline in the efficiency of the labor market matching process could imply an increase in the natural rate.

Although estimates of the Beveridge curve (see Rose (1992)) suggest that the extent of mismatch has been lower in Canada than in European countries, it appears to have been increasing over the last few years. Estimates of the natural rate constructed using the unemployment-vacancy relationship also indicate an increase in the natural rate, i.e., an outward shift of the Beveridge curve, which suggests an increase in occupational mismatch. An indication of geographical mismatch is provided by the persistent large differences in regional unemployment rates. These differences reflect the lack of sufficient geographical mobility of labor which, as discussed in the next section, is attributable in part to the UI system. <sup>1/</sup> The remainder of this section will focus on skill mismatch.

Several recent developments such as the Free Trade Agreement with the United States and the appreciation of the Canadian dollar in the early 1990s forced Canadian firms to attempt to enhance their competitiveness by increasing the value-added component of their production operations. Also, within broadly defined sectors of the economy, there has been a move toward higher value-added industries that are more competitive. This move towards higher value-added production processes has led to an erosion in the demand for unskilled workers, compounding the effects of the recession which, as is

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<sup>1/</sup> This source of rigidity reduces the ability of the economy to respond to region-specific shocks. Blanchard and Katz (1992) find that, in the United States, inter-region population flows constitute the principal adjustment mechanism in response to large region-specific shocks.

typical, disproportionately affected less-skilled workers. <sup>8/</sup> The structural change in the composition of labor demand may have led to a permanent downward shift in the employment probabilities of unskilled workers. In other words, many unskilled workers who have been laid off may no longer be able to compete as effectively for employment since the pool of jobs available to them has declined permanently. <sup>9/</sup> The inability of workers to provide the skills that employers require has led to an increase in job mismatch that may persist until unemployed workers can be retrained and acquire skills that match the profile of labor demand.

The persistent decline in the employment probabilities of unskilled workers was hastened in the last few years by a decline in the relative price of capital. The decline in the user cost of capital was much larger than the decline in real wages, possibly leading to capital-labor substitution as indicated by the strength of business investment in machinery and equipment during and after the recession. The increased capital intensity may have further affected the relative demand for unskilled workers since, in many industries, unskilled workers and capital tend to be substitutes while skilled workers and capital are complements.

The problem of skill mismatch is heightened for older workers with low skill levels or nontransferable skills, especially those previously employed in declining sectors. Many older workers who were employed in the shrinking manufacturing sector find that their skills have little applicability to the service sector, where a majority of new jobs are being created. Older workers are, in general, less proficient at acquiring new skills and firms are less willing to invest in the training of older workers as the returns from their human capital are available to the firm for a shorter period of time than for younger workers. These factors reduce the opportunity as well as the incentives for the upgrading of skills of older workers.

At the other end of the spectrum, youth unemployment, which is currently over 17 percent, has also become a major problem in Canada.

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<sup>8/</sup> The term "unskilled worker" must be interpreted with caution. The skill component that is referred to here is general human capital, such as education, which is transferable across firms or, to a lesser extent, even across sectors. Firm- or industry-specific human capital, on the other hand, does not appear to significantly reduce the sensitivity of less-skilled workers' employment probabilities to the business cycle.

<sup>9/</sup> This secular phenomenon of skill-biased technological change leading to a decline in the relative as well as absolute employment probabilities of unskilled workers is not unique to Canada and has been well documented for the United States and other industrialized economies. For instance, Murphy, Juhn, and Topel (1991) find that, over the last two decades, there has been a structural shift in aggregate labor demand in the United States in favor of skilled workers. This phenomenon is often reflected in the persistence of otherwise typical recessionary changes in relative employment levels of skilled and unskilled workers.

Recent first-time entrants into the labor force, mainly youths, face increasing difficulty in finding employment. Apart from the effects of the business cycle, some survey evidence suggests that many youth do not have adequate skills or the kinds of skills that employers are looking for. This skill mismatch, coupled with the effects of slow net job creation, has led to a decline in the job search effectiveness of unemployed youth. This decline may in part reflect a decline in job search intensity due to weak labor market conditions. The youth labor force participation rate has declined by almost 5 percentage points since 1989, implying that the youth unemployment rate may understate the magnitude of the problem. <sup>10/</sup>

The discussion above has not touched upon the effects of other commonly cited factors such as union density (the proportion of workers who belong to unions) and the wage determination process on wage and employment rigidity. Union density as well as nominal and real wage rigidity are higher in Canada than in the United States but lower than in most European economies (see Layard, Nickell, and Jackman (1991)). These factors no doubt contribute to the natural rate but the relative contribution of these two factors to labor market rigidity is unlikely to have increased in recent years.

In many ways, the problems identified in this section interact with and are exacerbated by the UI system. Hence, before examining the possible remedies to some of the structural labor market problems discussed above, this paper turns next to an examination of the UI system and discusses possible reform measures.

#### IV. The Unemployment Insurance (UI) System

A substantial body of literature has documented the negative incentive effects of the UI system as it is currently structured. <sup>11/</sup> Rather than review this evidence, the discussion in this section will highlight some of the key problems, review changes proposed in the February 1994 budget, and focus on broader proposals for reform.

The UI program in Canada has to some extent taken on the character of a social assistance program, rather than providing temporary income replacement during job search. Numerous attempts have been made in the past to reform the UI system. For instance, the 1978 UI reform reduced the benefit replacement rate and increased eligibility requirements. However, the duration of benefits was made dependent on the absolute unemployment rate in a region rather than the unemployment rate in that region relative

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<sup>10/</sup> The decline in the youth participation rate is partly associated with increased school and college enrollment, possibly as a response to weak labor market conditions.

<sup>11/</sup> Some of this evidence is reviewed in Ebrill (1991).

to the national average. This revised system of regionally extended benefits introduced an element of feedback between total benefit payments and the unemployment rate. That is, in a cyclical downturn, lower wage offers for vacancies (reflecting procyclical real wages) coupled with an increase in the duration of unemployment benefits could lead to persistence in unemployment. Another adverse effect of this change was that regional mobility of labor was hampered and, rather than fostering geographical mobility of labor, the system encouraged wider dispersion of regional unemployment rates.

Another issue is the incidence of repeat participation in the UI program. The Forget Commission (1986) identified this as the "10-40 syndrome", whereby some workers would work the minimum amount of time needed to qualify for benefits (10 weeks), collect benefits for the longest period possible (40 weeks), and then repeat the cycle. <sup>12/</sup> In a recent study using longitudinal data from 1971 to 1989, Corak (1993) finds that participation in the UI system is characterized by a considerable amount of repeat use, although there does not appear to be a strong relationship between the generosity of benefits and the probability of being a UI repeater. However, an individual's labor force history, particularly past receipt of UI and a history of short employment spells, are strongly associated with a greater chance of future UI participation.

Repeat UI usage has been on an upward trend and has increased sharply over the last two decades. A possible solution to the problem of UI dependency would be to make the nature of benefits contingent on the number of claims an individual has made. For instance, first-time claimants could receive passive income support while repeat claimants could receive a more active form of support through training, job search assistance, etc. A distinction must, of course, be made between workers who may experience a spell of employment in each cycle and workers who experience repeated spells of unemployment independent of the cycle. The process of active support that breaks this cycle of dependence on UI would have the added advantage of helping to identify and target those with a propensity for long-term unemployment.

A portion of the UI fund is dedicated to the developmental uses plan, which supplements UI benefits to laid-off workers while they acquire new skills or improve their existing skills. The Forget Commission, among others, recommended that UI funds for training be increased or even financed from other funds as training is viewed as a vital component of any attempt to get labor force participants to use UI as only a temporary income replacement program. It has also been argued that the developmental uses program, which currently represents 10 percent of the total cost of the UI program, may need to be expanded to provide better job search assistance for

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<sup>12/</sup> The "10-40 syndrome" refers, of course, to eligibility requirements and the benefit period extant in 1986. The nature of the problem has since remained the same.

persons who undertake such training. In the absence of job search assistance, the incentive for laid-off workers to undergo such training may be reduced. Following such training, using stronger job-search tests (see Layard, Nickell, and Jackman (1991)) as a determinant of UI benefits would also induce more intensive job search and reduce the moral hazard inherent in the UI system.

Virtually all commissions and studies on UI reform (e.g., the Macdonald Commission (1985), the Forget Commission (1986), and various studies done by the Economic Council of Canada) have recommended the abolition of regionally extended benefits, which link the duration of benefits to the regional unemployment rate. Apart from more fundamental reform, changes in the benefit rate and eligibility requirements could also significantly affect the contribution of UI to structural unemployment. The UI replacement rate in Canada in 1990 was 47 percent compared to 36 percent in the United States. Generous benefit rates and loose eligibility requirements create a disincentive for intense job search activity. Also, the UI premium paid by employers reduces labor demand by raising nonwage labor costs.

In the February 1994 budget, the government proposed the following changes to the UI program:

- strengthen eligibility requirements, for example, by requiring a minimum of 12 rather than 10 weeks of work for UI eligibility and change the method used to determine how long a person can receive benefits;
- reduce the effect of regional unemployment rates on the length of the benefit period;
- reduce the basic benefit rate to 55 percent from 57 percent but make benefits means-tested and increase benefits to 60 percent for low-income households; and
- amend and clarify the application of Voluntary Quit and Misconduct provisions governing UI eligibility.

In addition, the UI premium rate of \$3.07 in 1994, which would have increased to \$3.30 in 1995, has been rolled back to \$3.00 for 1995 and 1996. <sup>13/</sup> These measures are likely to have an added positive effect on job search intensity and, consequently, on labor market flexibility.

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<sup>13/</sup> The premium rate is the amount contributed by employees per \$100 of insurable earnings. The employer contribution is fixed at 1.4 times the employee rate. Maximum insurable earnings are \$780 per week in 1994 and about 79 percent of Canadian workers have incomes at or below this level. In the absence of any government action, the provisions for UI financing under the Unemployment Insurance Act would have led to an automatic increase in the 1995 premium rate.

Further reductions in the benefit rate and tightening of eligibility requirements would enhance this process.

Apart from the measures announced in the budget, a pilot project has recently been initiated to help laid-off workers move to regions where job prospects are better. The program will cover costs associated with a job move including transportation, real estate fees, land-transfer taxes, etc. However, the program is limited to workers who have been employed for over three years in a particular firm or industry and have been permanently laid off and who also have a firm job offer of at least 20 weeks of work in a region other than the one that they currently reside in. The conditions of the program appear to skew eligibility towards skilled workers. Further attempts to increase the geographical mobility of labor may have a better chance of success if they eliminated the distortions that reduce mobility rather than attempt to override such distortions with additional measures.

An alternative proposal is to replace income support for unemployed workers with employment subsidies that would, in principle, provide employers with an incentive to hire new workers. <sup>14/</sup> In particular, it has been suggested (see, e.g., Snower (1994)) that such employment subsidies could be structured in a manner that would encourage employers to hire workers with relatively longer spells of unemployment and provide them with suitable training. However, this proposal may not be straightforward to implement as the training provided by firms to workers would be hard to monitor and, further, employment subsidies may be used by firms to hire workers that they would have hired anyway or to displace their existing workers with cheaper labor. Thus, the practical merits of this proposal remain uncertain.

To sum up, the results of various studies indicate that the objective of UI reform should be to reorient it from being a passive income support program to one that provides temporary income replacement for workers between jobs. For this, as noted in the draft OECD Employment/Unemployment Study (1994), the active component of the UI system, including training and job search assistance, would need to be strengthened and expanded and linked with other active manpower policies targeted to specific groups. These policies are the subject of the next section.

## V. Active Labor Market Policy

This section reviews a number of existing labor market programs and also the government's new proposals as outlined in *Creating Opportunity: A*

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<sup>14/</sup> For instance, the OECD (1994) report suggests the use of more direct instruments for supplementing income, such as targeted employment subsidies and tax credits for earned income.

*Liberal Plan for Canada*, which spelt out the Liberal Party platform for the October 1993 elections, and in the February 1994 Budget.

One of the main structural changes in the Canadian economy over the last two decades has been the declining employment share of manufacturing and the concurrent marked increase in the share of services employment. In addition, even within broadly defined sectors of the economy, there have been large inter-industry shifts in the composition of sectoral output and employment in the last few years. This has led to an increase in the number of dislocated workers who have been permanently laid off from their original sectors and who have had to look for employment in other sectors. Much of the retraining that such workers receive is influenced by the eligibility requirements for training as determined by the UI program. A better targeted program that retrains workers laid off from declining industries without a mandatory waiting period could help to facilitate the transition of dislocated workers to other sectors. These programs might also be complemented with improved placement services and job search assistance.

Older workers are particularly vulnerable to the effects of inter-sectoral shifts as they tend to have a relatively large amount of firm- or sector-specific capital. Given the inherently more difficult re-employment prospects of dislocated older workers, some commissions on labor market reform have suggested that these workers be exempted from any waiting period for retraining programs. The de Grandpre Commission (1989) also recommended that POWA or other similar programs for older workers be augmented and expanded.

Immigrants represent another group with specific problems. Immigration has been an important source of increase in the labor force in Canada. In recent years, the average skill level of new immigrants appears to have declined. This is reflected in the increasing number of new immigrants who do not attach to the labor force soon after entering Canada (see Italiano (1993)), although the recent weak employment growth in the economy may also have abetted in discouraging their entry. New immigrants appear to be more hesitant about entering the labor force and also have less success at finding jobs. These problems may be alleviated by providing language and skill training for new immigrants, thereby accelerating their assimilation into the labor force, and providing job search assistance.

Another significant problem in the Canadian labor market is youth unemployment. It is in this area that *Creating Opportunity* offers the most proposals. In addition to strengthening the educational system, the government proposes, with the cooperation of industry and labor, to establish a number of apprenticeship programs that will forge stronger school-to-work linkages for youth. Apart from providing youth with appropriate vocational and technical skills, these programs are intended to assist new labor force entrants in finding their first jobs, thereby enhancing their prospects for future employment. The government has also proposed the creation of a Canadian Youth Service Corps.

It is often perceived that the minimum wage exerts a significant downward influence on labor demand, particularly for entry level jobs. A reduction in the mandated minimum wage, especially for youths, is often mentioned as a device for reducing the unemployment of unskilled and young workers. However, it should be noted that recent literature on the employment effects of changes in the minimum wage is far from conclusive (see, e.g., Katz and Krueger (1991), Neumark and Wascher (1993), and the references therein).

The common thread running through the proposals for the various demographic groups identified above is the need for suitable training in order to match workers' skills with the skill requirements of employers. As noted in the OECD (1994) report, this would require a broad-based training system that is flexible and responds to the structure of labor demand. This and other reports suggest that government support for training in industry should focus on high-level, long-duration programs for technical and trades occupations. Government-run training programs would complement workplace training programs that facilitate on-the-job training and upgrading of skills. *Creating Opportunity* notes that such workplace training programs in the private sector could be encouraged with tax-based initiatives.

A majority of the programs and measures discussed above have dealt with the supply side which, in the long term, is the dominant factor in determining employment. Certain microeconomic measures to increase labor demand, such as job sharing and reductions in working hours, have also been the subject of debate lately. As argued by Layard, Nickell, and Jackman (1991) and others, there does not appear to be a sound economic basis for the hypothesis that a generalized mandated reduction of working hours and increased job-sharing would alter structural unemployment. Measures such as mandated early retirement are also likely to have at best a marginal and transient impact. In particular, these measures would not affect the natural rate or the inflation-unemployment tradeoff.

## VI. Concluding Remarks

This paper has reviewed recent developments in the Canadian labor market and attempted to identify factors that have led to a persistent increase in unemployment. A significant proportion of the recent increase in unemployment appears to be structural and its alleviation may require major policy initiatives to improve the functioning of the labor market. Reforming the UI system in order to reduce its distortionary effects on the labor market is an important priority. The February 1994 budget notes that UI is likely to be significantly restructured by 1996-97 as part of a broader social security reform. The core of this reform would involve shifting the orientation of this program away from being mainly a passive income support program. These measures could be supplemented with active labor market policies that enable workers to obtain training to upgrade



their existing skills and acquire new skills, as well as to assist them with job search.

In addition to the government's proposals for improving general literacy, programs targeted towards specific groups such as youth, immigrants, and workers with low skill levels might form part of an active labor market strategy. However, attempts to increase short-term job creation are unlikely to have a significant effect on unemployment. Measures to remove structural distortions to labor supply and reduce job mismatch are more likely to have a sustained effect on structural unemployment and could thus enhance the long-term growth prospects of the Canadian economy.

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